WE ALL LIVE TOGETHER IN A GOOD WAY WITH MANOOMIN STEWARDSHIP GUIDE

First Edition | **FEBRUARY 2025**

About the Organization

The Michigan Wild Rice Initiative is a collaboration between the twelve federally recognized Anishinaabe nations that share geography with the state of Michigan and several Michigan state agencies. Since 2017 this group of managers and specialists has worked together to protect, preserve and restore Manoomin and its culture for the benefit of current and future generations. Co-chaired by a state and Tribal representative, the Michigan Wild Rice Initiative also has sub-committees to address education and outreach, monitoring and restoration, and policy and protection and draws members from both the Initiative and federal agencies, conservation NGOs, colleges and universities.

Citation

Manoomin Writing Collaborative (2025). We All Live Together in a Good Way with Manoomin. Michigan Wild Rice Initiative.

Cover photo: Manoomin camp water ceremony. (Credit: Todd Marsee, Michigan Sea Grant)

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Executive Summary

The Michigan Wild Rice Initiative (MWRI) brings together Tribal (Anishinaabe) government and state agency personnel, academics, knowledge holders, and other environmental and cultural experts to revitalize Manoomin culture and abundance. MWRI and the greater Manoomin community in Michigan have shared their experience and passion to shape this living document—***We all live together in a good way with Manoomin: Stewardship Guide***.

We all live together in a good way with Manoomin describes the close relationship our Anishinaabe relatives of the Ojibwe, Odawa, and Bodéwadmi nations have developed with Manoomin after many generations of living with and caring for them. Manoomin seed provided crucial calories to nurture social cohesion and cultural flourishing through many winters. Access to Manoomin enabled the Anishinaabe people to thrive and establish a lasting influence in the Great Lakes region.

This Stewardship Guide describes how Manoomin is a teacher of life. They offer their gifts of seed to nurture many relatives, both human and non-human, resident and migratory, to sustain the web of life. Manoomin beds provide shelter for winged-ones, fish and other non-human relatives. Because they are foundational for this biodiversity, Manoomin are a keystone species. For these reasons, our Anishinaabe relatives view Manoomin as a sacred relative. To acknowledge the appreciation and respect our Anishinaabe relatives have for Manoomin, this document recognizes the personhood of Manoomin and refers to them in the third person plural (e.g. they/them).

We all live together in a good way with Manoomin: Stewardship Guide provides an overview of how Anishinaabe relatives are spreading awareness of Manoomin and their gifts. This includes having community events and learning opportunities, such as rice camps, open to everyone, as well as hosting educational sessions for governmental staff, academics, and other professionals. For decades, Anishinaabe relatives have been advocating for the State of Michigan to protect Manoomin beds, and aid in their restoration and revitalization. Recently, Anishinaabe advocates guided the State of Michigan to recognize Manoomin as the state native grain. With this recognition, many Anishinaabe relatives are eager for the State of Michigan to legalize protections and regulations for Manoomin. More Anishinaabe communities are restoring and revitalizing Manoomin beds to reinforce food sovereignty for their people. They are also upholding their Treaty rights to harvest Manoomin located in their ancestral territories. The Anishinaabe community invites others to join in caring for and appreciating Manoomin and their gifts.

We believe that Manoomin offers a path for Anishinaabe and non-Anishinaabe communities and governments to learn how to work together in a good way. The lessons that collaborators learn through this effort will be insightful for guiding future collaborations in caring for other non-human relatives. In the face of climate change and accelerating environmental degradation, we need to use the strengths of both ways of knowing —Traditional Knowledge and Western science—to nurture a path that is both practically effective and ethically just. Through interviews, focus groups, and workshop discussions, the MWRI and Manoomin community agreed on a common understanding for overarching goals. By spreading awareness and acceptance of these principles, the MWRI and the Manoomin community promote a future in which we, as those sharing these two peninsulas, all live together in a good way with Manoomin.

Our Shared Future with Manoomin/Mnoomin/Mnomen

Manoomin/Mnoomin/Mnomen is a sacred relative. We seek a shared future where they are restored and flourishing in all ecosystems across the state where there are environmental and social conditions to protect, support, and enhance thriving communities such that…

- Manoomin/Mnoomin/Mnomen fulfill their spiritual, cultural and ecological roles and responsibilities within regional ecosystems;
- All Indigenous People who want to, are able to harvest Manoomin/Mnoomin/Mnomen sustainably for safe consumption in a traditional / good way;
- Manoomin/Mnoomin/Mnomen are not defined or treated as an agricultural commodity for industrial cultivation.

This guide offers direction for our collaborative efforts, providing goals and objectives in three crucial areas: education & outreach; stewardship; and policy & protection. MWRI shares this guide to better support Anishinaabe relatives in their efforts and encourage non-Indigenous Michiganders to kindle deep, lasting relationships with Manoomin.

Education and Outreach Goals

1. Indigenous and non-Indigenous community members in Michigan, especially youth, as well as out-of-state visitors embrace the cultural, spiritual and ecological value of Manoomin.
2. State and federal land managers value Manoomin and seek opportunities to protect, restore and enhance them on state and federal lands.
3. Professional wetland and other restoration/conservation professionals receive technical training and information that enables them to contribute to the protection, restoration and enhancement of Manoomin on public and private lands.
4. Riparian landowners (lakes and rivers), their technical support (consultants, Cooperative Extension), and surrounding Michigan communities recognize and respect the cultural, spiritual and ecological value of Manoomin.
5. Michiganders braid Manoomin into their cultural identity, ensuring they care for Manoomin across generations, similar to the way the Great Lakes are a common cultural connection in Michigan.

Stewardship Goals

1. Tribal departments of natural resources and culture, traditional ricing communities, state and federal research agencies, and universities maintain a common research agenda initially related to Manoomin protection and restoration, later investigating the effectiveness of education and public engagement approaches (practices, messages, tactics).
2. Tribal departments of natural resources and culture, traditional ricing communities, local, state and federal land management agencies, non-governmental organizations, land conservancies and private landowners maintain a suite of shared best practices for supporting Manoomin protection and restoration. These would include but not be limited to: restoration practices, such as site selection (bio-physical conditions and other site traits), seed sourcing, methods for sowing; approaches to monitoring; and social practices, such as cultural teachings, ceremonies and community consent, to integrate the genuine participation of local communities.
3. Facilitate discussions among Tribal departments, traditional ricing communities, and local, state and federal agencies to clarify jurisdiction, responsibilities and expectations for Manoomin protection and restoration. These will likely vary within and across time and space, such as seasonally or regionally.

4. Tribal departments of natural resources and culture, traditional ricing communities, and state management agencies develop a suite of best practices for Manoomin harvest. These would include, but not be limited to: a process for determining harvest season, allowable equipment.
5. Work with Tribal, state, federal and private partners to identify restoration goals for Manoomin and appropriate ways to track them.

Policy and Protection Goals

1. Ensure the recognition of the importance of Manoomin among non-Indigenous communities and institutions.
2. Federal, State and local governments with relevant regulatory authority, e.g., for permitting activities with potential impacts to Manoomin, respect Treaty rights, recognize Tribal authorities, and collaborate with appropriate Tribal authorities when reviewing permits. These governments have the responsibility to respect Tribal input, the obligation to protect Tribal interests, and the authority to act on Tribal insights. They should uphold Tribal decisions and avoid any attempts to override them.
3. Maximize harvest access to Manoomin beds on public and private bottomlands.
4. State employees who have policing authority, e.g., conservation officers, fully understand Treaty usufruct rights, are sensitive to the cultural importance of Manoomin, and are knowledgeable about appropriate harvesting practices.
5. Tribal government and state agency personnel work together to develop an approach to Manoomin harvest on state and federal lands that include how and when rice beds will be declared open to harvest, how non-Tribal harvesters will be licensed, and specifications for harvest equipment.
6. Tribal governments work with local and regional management organizations, such as land and water conservancies, as well as state and local governments to influence land use management policy.
7. Tribal governments work with local, state and federal institutions to secure consistent funding for various Manoomin-related activities.
8. Governance and collaboration dynamics across the landscape, potentially impacting Manoomin, are concretely illustrated/outlined to support stronger inter-Tribal and agency collaboration.

Credit: Todd Marsee, Michigan Sea Grant

Statement of Intention

Credit: Todd Marsee, Michigan Sea Grant

Many Michiganders want to feed their families and communities with their own hands. Many desire more autonomy to live from the gifts of the lands, waters, and non-human relatives. Many others wish to offer their communities healthier, more joyful lives. Still others wish to heal their air, lands, and waters. Many seek to restore the abundance of non-human neighbors and limit their suffering. Others want to enjoy creation's beauty and integrity while hunting, fishing, kayaking, or hiking. Many want to invite more non-human guests near their homes to enjoy their charm and their songs. Others seek to fulfill these needs to help those they care for. You, the reader, may resonate with one or more of these desires.

To support these desires, and more, this document is intended to gather allies and kindle friendships to restore Manoomin/Mnoomin/Mnomen (wild rice); to build coalition with one another with Manoomin as a bridge; to help bond communities in this shared place and broaden collaboration in a good way.

This document is different because it includes ways of conveying important information through traditional stories and Anishinaabe-centered language. It prioritizes an Anishinaabe/Nishnaabe/Neshnabé perspective because they are the original people in this region to enjoy relationship with Manoomin. The language you will read and the ideas you will see may come from a world view you do not recognize or understand at this moment. This document intentionally uses words such as "caretaker," "relative," and "non-human," instead of "manager," "resource," and "wildlife," to describe the roles humans and non-humans serve in this place. We understand that this is not the conventional worldview. Some may view this approach as overly romantic. That is not our intention. It is a deliberate choice to share a different perspective that will help readers understand how many in the Anishinaabe community view the world. At the same time, to

be more welcoming, this document also deliberately does not use words such as “settler” or “colonial” to describe the Euro-American people who inhabit this place and who may have ancestors from other continents. We understand that this may offend some Anishinaabe relatives, as it may appear to invalidate their experiences and those of their ancestors. That is also not our intention. We are using language that prioritizes and encourages relationship and reciprocity.

Many Anishinaabe people view Manoomin as a leader for sovereignty and liberation. For generations, Manoomin supported the Anishinaabe nations in their resistance to colonialism and erasure. At this time, restoring Manoomin offers a path to empower Anishinaabe and non-Indigenous communities in the face of climate change, ecological degradation, and environmental injustice that colonialism reinforces. This document can be a crucial strand of braiding ourselves - Anishinaabe and non-Indigenous - together with our responsibilities to this place, these lands, and these waters. With Manoomin as the centerpiece strengthening this braid, we can build a good home for the well-being of all. It can also be an initial step in braiding the Anishinaabe traditional way of knowing with western knowledge. This document is a gathering of perspectives and insights from various community voices, coming together to offer a path that is one way forward for restoring and expanding Manoomin and growing this community. As we learn and adapt to one another, this path and this document will change too. This path may also branch out in a variety of ways that form a web of diverse reciprocity.

We ask and encourage anyone who reads this document to stick with it to the end. If you find yourself struggling, we encourage you to take a break. You can always return at a later time. Remember that change is inevitable. The strengths of adaptation, evolution, and growth come with struggle - physical, emotional, intellectual, spiritual. We thank you and welcome your thoughts, both positive and constructive, and hope that what you choose to take from this encourages your growth.

Introduction

Credit: Todd Marsee, Michigan Sea Grant

Gizhe-Manidoo/Gzhe-mnidoo/Gzhémnedo, the Great Mystery, breathed life into this world, organizing harmony and balance into four orders. First came the spirits of the elements: earth, water, air, and fire. Sharing their gifts, they provide for the second order of beings, the plants. Using the gifts of the elements, the plants provide for the third order of animals. Many of the animals then use the gifts of the plants and the elements to help more animals. Lastly, all beings from the first three orders offer their gifts to the weakest being, humans. Gizhe-Manidoo formed the First Treaty with each nation of beings, or "species." Each nation is responsible for respecting and caring for the others. Each becomes the web of their relations. By helping others, each nation finds meaning and purpose in themselves. Nurturing and reciprocating gifts in this web of relationships ensures that all nations of life flourish.

The Anishinaabe people are among the original caretakers of the lands and waters across the two peninsulas commonly known as "Michigan." Sharing the Anishinaabe identity, the Ojibwe, Odawa, and Bodéwadmi are nations who hold ancestral, cultural, and legal ties to the lands and waters throughout this place. They also share cultural, moral, spiritual, linguistic, and historical roots. Each nation recognizes one another as close sibling nations, forming the Council of Three Fires, or Niswi-mishkodewinan/ Nswe Pshkooden Egimadabijig/ Nswë shkwëdéniyêk.

The Ojibwe, Odawa, and Bodéwadmi follow the seven original instructions of humility, bravery, honesty, wisdom, respect, truth, and love in order to live with non-humans in a good way. By closely and respectfully observing non-human relatives, the Anishinaabe people learned humbly to use and honor the gifts of non-humans. The Anishinaabe people also learned to reciprocate and be accountable to non-human persons.

By nurturing and growing their web of relations, the Anishinaabe people nurtured holistic knowledge systems, moral frameworks, social cohesion, political stability, economic networks, and cultural enrichment. The Anishinaabe people intertwined both their sovereignty and quality of life with the responsibility of fostering and nurturing relationships with non-human relatives. This empowered the Anishinaabe people to flourish for many generations. Today, the three sibling nations continue to hold one another accountable to living in a good way with each other and with this place. Together, they honor the First Treaty with non-human nations by advocating, protecting and promoting the rights of non-humans to a clean, healthy place.

Manoomin, the “good berry”, are the foundation of the Anishinaabe way of life. For many generations, both Manoomin and the Anishinaabe people have supported and grown with one another, side by side. While facing colonization and attempted erasure, the Anishinaabe people persisted thanks, in part, to the gifts of Manoomin. The close relationship between Manoomin and the Anishinaabe people empowered both to resist, survive, and resurge. Manoomin also provides nutrition and belonging for many non-human relatives, including ducks and others who also feed the Anishinaabe people. Manoomin are a cultural and ecological keystone species. For these reasons, Manoomin are sacred relatives for the Anishinaabe people.

Today, many Anishinaabe communities dedicate themselves to remembering, healing, and strengthening connections with their ancestral homelands, waters, and non-human relatives. The federal government is acknowledging and upholding the Treaty rights of Anishinaabe communities to

Cortney Collia reseeding a Manoomin bed. (Credit:Todd Marsee, Michigan Sea Grant)

hunt, fish, and gather on their ancestral lands. Many Anishinaabe descendants of all ages are relearning how to walk the path of their ancestors. As they strengthen, several Anishinaabe communities and Elders seek to guide non-Anishinaabe communities to form relationships with Manoomin and other non-humans in their own unique ways. Fortunately, many non-Anishinaabe individuals and communities are seeking to nurture identity and purpose with the places they reside in. By healing and revitalizing Manoomin together with humility, bravery, honesty, wisdom, respect, truth, and love, the communities sharing this place can nurture kinship and build a shared home.

Since 2017, the Michigan Wild Rice Initiative (MWRI) has taken some key first steps. With State and Tribal governments supporting the goal of revitalizing Manoomin, MWRI brings together specialists and managers from all twelve federally recognized Tribes and state agencies. The goal is to protect, preserve, and restore Manoomin and its culture in order to support ecosystem health for the benefit of current and future generations. MWRI members share information, coordinate approaches, and elevate awareness about Manoomin. The collaborative is co-chaired by a Tribal and a State representative. It also supports subcommittees which draw in others from federal agencies, conservation NGOs and colleges and universities. They focus on specific topics: education & outreach, monitoring & restoration, and policy & protection. An important priority MWRI recently identified is the development of a guiding document to help ground, but not determine or dictate, protection and restoration efforts for Manoomin. This document is the result of that effort.

Manoomin work has come a long way since MWRI members first came together. They work together to discover and then share about Manoomin habitat preferences and other aspects of their well-being. They also consider how Michigan policies and legislation can support the restoration effort.

In November 2023, for example, several members of the MWRI worked with the Anishinaabek Caucus to secure support for Public Act 247 which designated Manoomin the official native grain of Michigan. This title of being the state “native” grain is the first such designation in the United States.

At the same time, there has also been a resurgence of interest in, and understanding of, Manoomin’s cultural and spiritual importance. The greater Manoomin community has gone from seeing Anishinaabe nations hosting their first rice camps in decades to a growing abundance of rice camps overlapping each other. Many of these camps, such as ones hosted by Keweenaw Bay Indian Community, or Saginaw-Chippewa Indian Community have been open to members of the broader community to share and learn about Manoomin. In Detroit, the urban Anishinaabe community welcomed Black and Brown community members to prepare Manoomin seed together.

With the understanding of Manoomin being a key bridge between Anishinaabe and other communities, this document is titled with our ultimate goal:

We all live together in a good way with Manoomin.

This document is informed by interviews and conversations with members of MWRI, traditional ricers, Elders, Traditional Knowledge holders and non-Indigenous partners whose work or activities can support and sustain Manoomin. It provides essential information needed to understand Manoomin and their current state. It provides important context for the goals and objectives that have been developed related to education, research, policy, and stewardship that are critical to advancing Manoomin protection, preservation and restoration.

Working with the broader Manoomin community, the MWRI developed this statement to reflect commitment to Manoomin and our love for them.

Our Shared Future with Manoomin/Mnoomin/Mnomen

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Bodéwadmimwen

Kwansëgé ktthė piténdagwet i mnomen. Nëkmëk shna nde ndo kowabdamen odë mnomen athë mno mathigémgëk nigan wa në wthi igwan. Minė gé nde ndo kowabdamen ėwi nizhokmëwawat nwithneshnabénanêk…

Mnomen is really thought highly of. We protect this Mnomen everywhere so that it will be able to grow well now and into the future. We also protect it to help our fellow Neshnabék…

- Mnomen athë yowat gi neshnabék ė shtthëgéwat. Minė gé zhé wéwénė ėwi mathigék i mnomen
  Mnomen so that the Neshnabék will be able to use it for ceremonies. And also so Mnomen will grow in the way it was meant to.
- Thayék Neshnabék wa mnomnëkéwat ėwi mithwat
  All Neshnabék that will harvest Mnomen in order to eat it.
- Ėwi bwa byé ktthėmnomnëkéwat
  So that Mnomen will not be industrialized.

The plan currently does not share transliterations for Ojibwemowin and Odawamowin. Later efforts will collaborate with language experts to incorporate a version for each dialect.

The Manoomin community welcomes people of all backgrounds and histories to come together. People work together in a good way when they bring their authentic selves to this work. People can also have open hearts, creating space to receive others coming as they are. It is important to respect each other's perspectives and ways of knowing. Despite differences, communities are connected by living in the same place. These shared lands, waters, and air both ground and interweave our lived experience. Manoomin can help do this too. In a Manoomin bed, many different relatives build on one another's gifts to help form a plentiful, biodiverse garden. Likewise, community members can help one another recognize and improve each other's abilities to benefit Manoomin for all. All people come with unique talents and strengths. There is a great diversity of expertise and creativity, and people are encouraged to use their talents and skills where they feel best. Ongoing discussion and engagement will identify the diversity of roles and responsibilities necessary to the work in a given location.

This effort is another step for coming together, recognizing that no individual or community is complete. There is always room for growth. This is a time of healing; for these lands and waters, for non-human relatives, for communities, for individuals. All are migrants to this shared place. Together, we can nurture the harmony and fulfillment our ancestors have strived to achieve for generations. May Gizhe-Manidoo, the Great Mystery, guide us with love, courage, empathy, and humility as we elevate the Manoomin garden as the beloved centerpiece of our shared home.

Miigwech/miigwech/migwėtth, thank you, reader, for taking the time to sit with this information. It is all right if you don't understand at first. Be patient with yourself and allow yourself to grow. If you need to come back another time, that is fine as well. You may grow to understand after learning more from your own personal experiences. There is no right path. All go at their own pace. Please enjoy this document with all the love, joy, and passion that we, the Manoomin community, wished to share with you. We who share this place with you hope to one day meet you at the Manoomin camps.

> *"Just standing out in the [lake] and thinking about what's possible and what does that annual celebration and community gathering look like in the future out there. And how does that fit into the regular seasonal activities? I mean, many people sugar bush. Wouldn't it be cool if rice camps were just a thing? I'm off this week, we're ricing." "* –MWRI Team member
>
> *"I would love that."* –Tribal Member
>
> *"That would be awesome."* – Another Tribal Member

Credit:Todd Marsee, Michigan Sea Grant

A Few Key Thoughts

Living Document

This living document will incorporate new knowledge as it is shared, as well as input and feedback from the broader Manoomin community as MWRI receives it. MWRI does not want to see this document become just "another document on the shelf." They will explore ways to keep breathing life into the document, such as periodic gatherings of the Manoonim community, continued community engagement, and ongoing advocacy from various perspectives. There will be many conversations among the various communities and partners to come. Learning from partner experiences, successes and challenges, future iterations can build on improving stewardship practices and strengthening reciprocal relationships.

Language

In full transparency, there are more than three dialects of the Anishinaabe language. Because of differences in geography and history, many dialects developed and were nurtured at local and regional scales. Therefore, this document does not, and cannot, fully encompass the diversity of language or vocabulary. Instead, it captures some vocabulary of a specific moment in time and place(s) that were available to the team during writing. The language is not definitive.

In order of the three siblings (Ojibwe, Odawa, and Bodéwadmi), they refer to themselves as the Anishinaabe, Nishnaabe and Neshnabé people. In the same order, each refers to wild rice as Manoomin, Mnoomin, and Mnomen. This work respects Niswi-mishkodewinan, the Three Fires Council, and their deep and long-lasting relationship with one another and with Manoomin. Therefore, the document incorporates a dialect from each sibling nation when introducing key terms. For simplicity, it then uses one version of Ojibwemowin for following instances of the same word. Because Manoomin are sacred relatives, this document uses animate, rather than inanimate, pronouns when referring to them.

Naming Shared Lands and Waters

In a conversation, Howard Kimewon, an Ojbwe Elder, suggested replacing the name of "Michigan" within the document. While acknowledging more conversation is needed to identify a shared name(s), this document intentionally and vaguely uses "this shared place" to refer to the same collection of land and inland waters. Some sources say "Michigan" may come from the Anishinaabe word, "Mishigamaw" or "Michigami" meaning "big lake." But "Michigan" now also embodies the idea of strict territorial borders dividing sovereign lands and waters. The name upholds the concept of a political institution, the State, that is supreme and enforces authority over various peoples and places. This view does not belong to traditional Anishinaabe understanding. Also, a diversity of communities with various cultural and historical backgrounds have established themselves here since the name's institutionalization in the early 1800s. For now, using "this shared place," provides room to discuss new names to use in this document that reflect a sense of shared identity, belonging, and relationship among the various communities here.

Expressing Gratitude

We at the University of Michigan Water Center must express much gratitude. Offering gratitude is a way of respectfully acknowledging that this document has benefitted from so many teachers and those learning along with us. This document would not be possible without the many people who have guided us with patience and caring. Please see the acknowledgement statement towards the end of the document for an expanded list of our appreciation. We understand the people mentioned there did not learn all they had to share on their own. We

are therefore also grateful for all their teachers and ancestors who helped set them on their paths. We also thank Mother Earth, Gizhe-Manidoo and all non-human relatives for kindly sharing their gifts of knowledge, sustenance, and belonging. We spent many hours listening carefully to many friends. We slowed down to sit with these lessons and deeply reflected on them. It took us multiple tries to genuinely understand. We took care and time writing down these lessons in a good way.

Antonio Cosme harvesting in a plentiful Manoomin bed. (Credit: Antonio Cosme)

Father and Son Harvest. Shane Morseau (2024)

Who are Manoomin?

Manoomin are an annual grass. They live in the shallow depths of streams, lakes, and wetlands throughout the Great Lakes basin. Regardless of differences in spelling or pronunciation, their name roughly translates to “the good berry.” Although simple, their name captures their social, cultural, nutritional, and spiritual significance. Manoomin are the foundation of the Anishinaabe way of life. So, Manoomin are good.[1]

In the Great Lakes region, the spirits of Manoomin are incarnate in two physical forms: *Zizania palustris*, known as northern wild rice or lake wild rice, and *Zizania aquatica*, known as southern wild rice or river wild rice. *Z. palustris* is a shorter grass who often chooses to live in shallow lakes and rivers. *Z. aquatica* is a taller grass who prefers shallow rivers and wetlands. Although Western science finds them distinct species, Anishinaabe language does not separate them. There is one Manoomin spirit incarnate in two physical forms; two manifestations of love from Gizhe-Manidoo, the Great Mystery.

People sitting show the relative height difference between *Zizania aquatica* (left) and *Zizania palustris* (right). (Left credit: Barb Barton) (Right credit : Lisa Herron, EGLE)

> *“...I believe that the spirit of Manoomin is a very, very strong spirit. It holds itself very, very high. I consider Manoomin as my brother... who also has a destiny of the Anishinaabe people related to it, if it was not for that spirit of Manoomin being gifted to us by the Creator, we wouldn’t be here today. We wouldn’t have survived those hard winters...”* –MWRI Team Member

1 To learn more about the cultural importance of Manoomin, see “**Guide 1: Manoomin-Anishinaabe Relationship**.”

Physical Preferences for Living

Both embodiments of Manoomin do well in slow moving, clean water. This can include lakes or wetlands with both inflow and outflow, or river bends. Although they have their preference, Manoomin can adapt and are content with water flows that may seem too slow or too rapid. They grow stronger in water with lower turbidity. The extra light gives them more strength to germinate and grow. Manoomin prefer waters with depths between one-half and three and one-half feet. They are most satisfied with water depth around one-and-a-half feet. Manoomin can grow in deeper waters, but they need to work harder to emerge above the water. This weakens them, and they will have less energy for producing seeds. Manoomin are most satisfied with silty sediment. They prefer sediment depths from several inches to a foot on the bottom. When the sediment is too shallow, water disturbances are more likely to uproot them. When sediment is too deep, more of their seeds are likely to sink too deep. This makes it harder for the next generation of Manoomin to embrace the sun. Manoomin navigate all these parameters to fulfill their responsibilities to life.

The Journey of Life

In the late summer, the spirits of Manoomin physically manifest as seed. The seed know they are there to sustain life. They offer themselves for the feast. Relatives will come to prepare themselves for the coming winter. Winged-ones come to eat from the seedheads, and the swimmers come to eat from the seedbank. By providing for these visitors, Manoomin also invites hunting and fishing relatives to gather in this place.

A bed of lake Manoomin. (Credit: Todd Marsee, Michigan Sea Grant)

The seed who are not eaten wait to be knocked into the water. Perhaps they will fall with a light wind, during a thunderstorm, or by a humble ricer tapping their parent. Eventually, many seeds fall into the water and spin their way towards the aquatic sediment that will shelter them. There, the seed wait for winter to arrive. Then, in the winter, ice over the water covers them with a near-frozen blanket. Cold water protects the seed from molding, ensuring they stay intact and fertile. Manoomin can wait multiple years here. When they decide a suitable spring has come, they will burst forth. For now, the seed slumbers peacefully.

At the dawn of that suitable spring, the awakening Manoomin seed sprout. They grow thin roots to collect nutrients from the soil. Towards the end of spring, these young relatives have long, ribbon-like leaves. These leaves reach for and float on the surface to better receive the sun's caress. For weeks, Manoomin strengthen their stems to rise from the sediment. Their stems grow to break the water's surface and welcome the summer. A single Manoomin plant often has a single primary stem that forms a seed head. Some individuals can form extra stems, known as tillers. Each tiller will have a distinct seed head. When Manoomin have more space in shallow waters, they have more energy to grow more tillers. Once emerged from the water, Manoomin also grow stronger, thicker roots to better anchor themselves and prop up their stem(s). Coincidentally, they release their ribbons. Those standing will now learn to dance with the wind.

By the middle of summer, Manoomin begin to prepare for the great feast. Individuals throughout a bed mature at their own pace. This varied timing helps with cross pollination. They extend branching clusters of flowers to display their white, female flowers. They form at the top of each stem. For a few days, the wind will bring their female flowers gifts of pollen from their neighbors. Many of these female flowers will eventually bear seed and form the seed head(s). Although early bloomers may not receive much pollen, they are the first to share their gifts. Below the female flowers, male flowers soon appear. These come in a mix of vibrant pinks, reds, and purples. As they dangle in the wind, the male flowers share pollen with their neighbors. Individuals with tillers are also likely to self-pollinate. The tillers often develop more slowly than the primary stems. After fertilization, they nurture their next generation for several weeks.

Near the end of the summer, Manoomin offer their abundant seed for other relatives, such as birds and humans, so that they may also flourish.[2] After the greater community has satisfied their needs, Manoomin release any remaining seed into the water. The next generation will begin the bed anew in a future spring. Manoomin once again slumber with the coming winter. They have served their purpose of continuing life. The water comforts them as they wait to rejoin Gizhe-Manidoo, the Great Mystery.

Developing Manoomin seed (top) and male Manoomin flowers (bottom). (Credit: Todd Marsee, Michigan Sea Grant)

Manoomin beds tend to vary over time. One year many seeds will germinate, then a year will follow with low numbers, and then some years with medium levels. After a good season, there may be poor presence. After a poor season, there may be strong numbers. As a result, it is important to be patient with Manoomin to understand the health of a bed over the longer term.

2 In Anishinaabe philosophy, all forms of life have a responsibility to promote the greater web of life. The health of a species is intertwined with serving their purpose. For generations, Manoomin was the foundation for human life in the region. They were plentiful and widespread as they fed the Anishinaabe people across centuries. In turn, the Anishinaabe people helped Manoomin expand as they seeded new beds. The harvest also promoted the abundance of Manoomin within existing beds. Knocking increases the amount of seed that falls into the water and joins the seedbank. Therefore more plentiful Manoomin beds have the healthiest relationships with people.

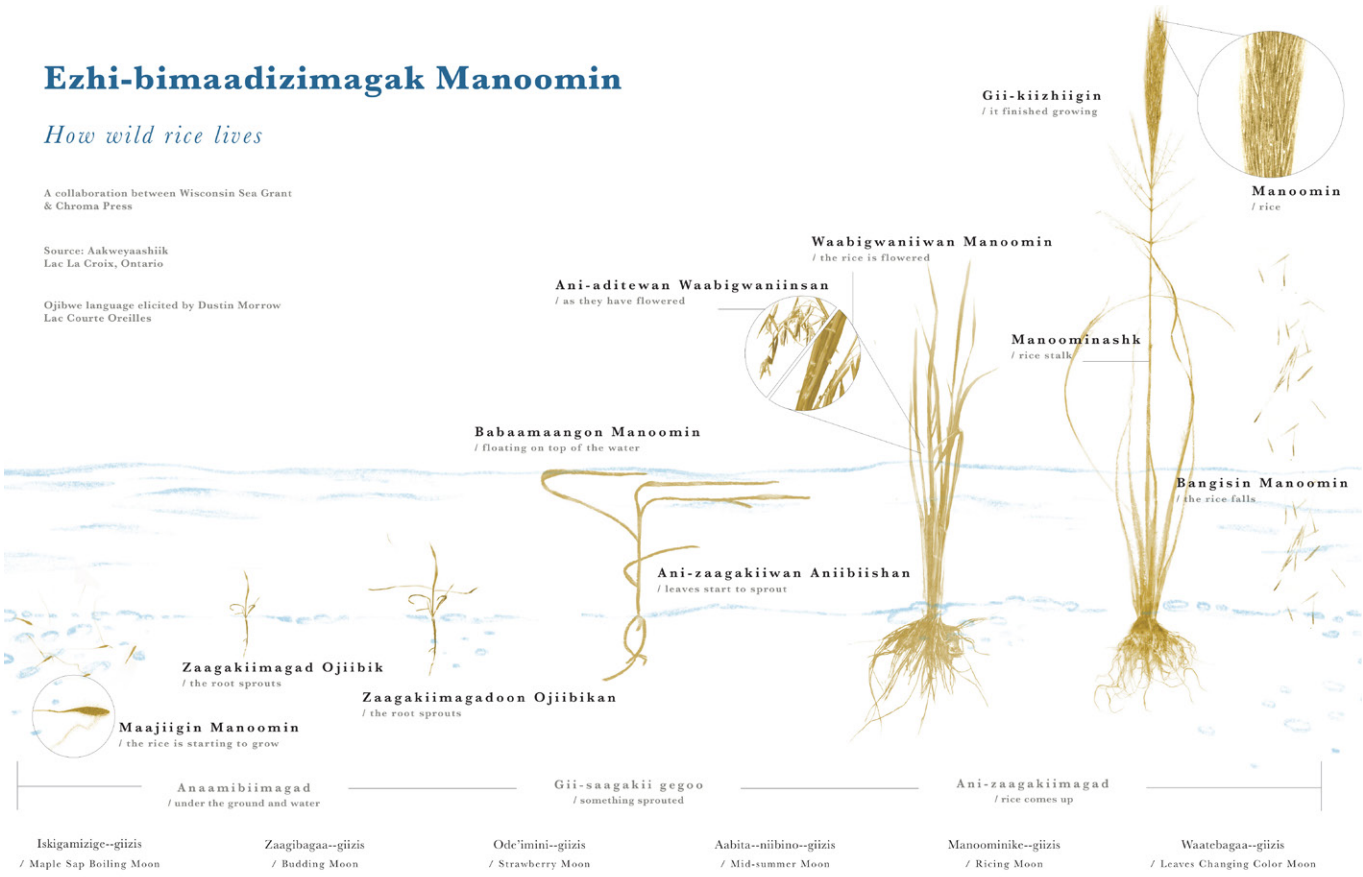


Figure 1: The annual life stages of Manoomin. (Credit: Wisconsin Sea Grant & Chroma Press)

Heart of the Community

The Anishinaabe people consider each Manoomin bed as a "spirit garden," or Manidoo Gitigaan/Mnidoo Gtigaan/Mnedo Gtegan, because they are the center of ongoing life and community. Manoomin live where the spirits of wind, water, earth, and fire, in the form of the sun, come together. Each shares their gifts to nurture and care for Manoomin. With their love, Manoomin grow strong and produces their bountiful seed. Manoomin then bridge water, land, and sky. They invite relatives from each realm to join in feast. For all kin, human and non-human, eating from Manidoo Gitigaan is sacred. For many Anishinaabe people, this act enhances one's spiritual connections to Gizhe-Manidoo and all of life's web. The sacred relative selflessly promotes life and helps other relatives share their gifts.[3] Manoomin *are* good.

3 In Anishinaabe cosmology, Gizhe-Manidoo arranged the world in four orders. Gizhe-Manidoo gave life in order from most to least self-reliant. The elemental spirits of earth, wind, water, and fire, which includes the Sun, form the first order. Plant and other relatives can live from the gifts of the first order. Plants form the second order. Some four-legged, winged, crawling and swimming relatives can live from the gifts of the second order. They are the base of the third order. Their gifts nurture others and expande the third order. Finally, the youngest, two-legged siblings (humans) comprise the fourth order. Anishinaabe philosophy defines strength as gift-giving and generosity. This understanding of Creation and definition of strength contrasts with the common understanding of self-rule and dominance. To the Anishinaabe people, those who share more while taking less are the "higher" beings of life. They share without expecting anything other than respect in return.

"...this role that rice plays as the overall single most nutritious food stuff that was available in this part of the world. And so it was present, literally one of the first solid foods given to babies, present through all important ceremonies throughout a person's life and provided for the journey to the afterlife."
–GLIFWC Retired Wildlife Biologist

Manoomin offer themselves to sustain other relatives, such as waterfowl. These waterfowl kin include mallards, Canada geese, and trumpeter swans. They are common visitors, especially before or during migration.[4] Mallards and other ducks feed from the seed head and scavenge the seedbank. Geese and swans eat Manoomin's green tissues. Manoomin also welcome white-tailed deer, muskrats, moose and beavers to consume their green tissue.

The spiders, bees, beetles, moths and other tiny relatives also thrive among Manoomin leaves. They take their fair share of nutrition. Their presence invites insect-eating birds, such as red-winged blackbirds and blackterns. The insects also share their abundance with amphibians and the fish, such as walleye, northern pike and bass. In return, the smaller birds and fish offer themselves to support bald eagles, ospreys and other raptors. Fish and amphibians also offer themselves to assist the blue herons, loons, and minks. All these relatives thrive through compassion and self-sacrifice. Gifts upon gifts upon gifts for generations to come.

"...Remember discovering the spiders?...And then, thinking back to the ancestors, they must have known about the spiders that are unique to rice and the sound it made when it hit the bottom of the canoe. A ding-ding—I'd thought that maybe that's what your ancestors just heard as well, of course they didn't have aluminum canoes. But so, [recognizing] there were sounds and specific insects, specific birds...[is] how you made that connection back to the ancestors." –MWRI Team Member

Manoomin offer themselves as homes for their other relatives. During the floating leaf stage, Manoomin begin to provide shade. This cools the water and helps aquatic relatives be comfortable. Manoomin also provide places to hide for aquatic relatives. As they stand in the water, Manoomin provide refuge for fish nursery habitat. Many waterfowl kin use Manidoo Gitigaan as resting areas, nesting sites, and cover to raise young. Manoomin gladly receives them. Manoomin provide their leaves to loons, muskrats, and grebes. They build nests with these gifts. Manoomin and muskrats work together to form a solid surface on the water. This gives raptors a perch for their hunt, turtles a place to sunbathe, and swans a site to nest. Muskrats also assist in creating more open spaces between Manooomin stands. This provides other relatives greater access throughout Manidoo Gitigaan.

4 Appendix 2 offers the names for these beings in three dialects of the Anishinaabe language.

A muskrat nest in a Manoomin bed. (Credit: Vincent Salgado)

Harmony with Place

In addition to providing food and shelter, Manoomin also trap loose sediment. This limits it from mixing into and dirtying the water. With their fine hairs, the roots also absorb nutrients from the water column. This helps filter the water. Manoomin help even after their spirits move on and their bodies slowly decay. Their roots continue to serve by holding onto the sediment. Upon decaying, the nutrients Manoomin collected while living are deposited to the lake or river bed. This fertilizes the sediment to support future generations.

During the floating leaf stage, the shade cast by ribbons helps to maintain the water's coolness and higher levels of dissolved oxygen vital to swimming relatives and other aquatic life. Once above the waterline, Manoomin stems buffer against strong winds and wakes. This helps to reduce bank erosion and associated build up of sediment. Both the roots and stem help to improve water quality. Similarly, Manidoo Gitigaan slows down water flow. When there is heavy rain, they reduce the strength of peak flows. This helps limit flooding and associated damage downstream. Manoomin are sensitive to water pollution, so changes in their presence can reflect changes in water health. The declining health of a Manidoo Gitigaan can indicate worsening water quality. But, a Manidoo Gitigaan blooming, resurging, or expanding can show that the water is healing.

"Paddy Wild Rice" is not Manoomin

Many in the Anishinaabe community distinguish Manoomin from commercially cultivated varieties, calling the latter "paddy rice." You may see "wild rice" on the shelves of grocery stores or on a restaurant menu, but it is likely not Manoomin. In the 1950s, Minnesota farmers began experimenting with commercially grown "wild rice." Farmers cultivated seed in paddies they flooded, using dikes. In early attempts to farm "wild rice," farmers had smaller yields because much of the seed shattered and dropped prior to mechanical harvest. To reduce losses, seed companies selectively bred strains that held onto ripe seed for as long as possible, such as by crossing Manoomin with long-grain white rice. Soon "wild rice" became popular among American households. In the 1970s, California farmers began to grow "paddy rice." The lack of summer storms in California prevents losses from rain knocking down seed. Also, the lower levels of humidity reduces the severity and spread of disease, such as fungal brown spot disease. California's favorable climate greatly magnified yields. Today, California controls around 95 percent of the commercial "paddy rice" market.

To the Anishinaabe and non-Indigenous community members who know Manoomin, cultivated "paddy rice" is a corruption of the sacred relative. Selective breeding interferes with Manoomin's inherent diversity and integrity. Many people have

Paddy rice (left) vs. Manoomin (right). (Bergo 2024)

source-related concerns related to other foods, such as corn, wheat, and other grains. Source conscious consumers seek non-GMO, organic, and fair trade foods. Manipulation of Manoomin into cultivated, "paddy rice" brings these concerns to the forefront, such as the possible reduction in nutritional value, potential harm to consumer wellbeing, and harm to the environment.

Very few states have regulations about the labeling of "wild rice." Therefore, companies are able to mislabel their product as "wild." The State of Minnesota, however, legally requires producers to label their rice according to how they grow. "Natural" rice, grown in lakes and rivers, and cultivated "wild rice" are two legally separate and distinct products (Minnesota Statute 30.49: Wild Rice Labeling). The Minnesota labeling law requires that all "wild rice" sold within the state must show the place of origin. Packaging must also indicate if the seed is commercially cultivated and/or machine harvested. However, they do not require this for the product Minnesota farmers sell out of the state. Unless the State of Michigan takes similar action, Michigan grocery shelves will continue to hold mislabelled cultivated seed. And unwitting Michiganders will think they are eating real "wild rice." They will still have yet to meet Manoomin.

Cultivated "paddy rice" desecrates the gifts of Gizhe-Manidoo. "Paddy rice" is property, advancing corporate profit over the realization of autonomy. Commercial agricultural practices are about efficiency and maximized yield, not relationship. Mechanized processes and chemical pesticides prevent Manoomin from sharing their gift of life with other non-human relatives. There is no spirit garden.[5] Commercially grown "paddy rice" places Manoomin within the Manidoo Gitigan at risk. The presence of cultivated varieties near Manoomin beds creates the potential risk of cross pollination. If this occurs, it could corrupt the genetic authenticity of Manoomin.

There is also a concern of commercially cultivated seed escaping and establishing themselves in Manoomin beds. Here, they may be able to outcompete and displace Manoomin. These concerns increase when considering potential genetic modification. Recently, some academic researchers have successfully mapped the entire genome of Manoomin for the purpose of agricultural advancement. They identified genes related to seed shattering and disease resistance. This helps them to track and develop more successful seed varieties for cultivation and sets the stage for genetic engineering. Although there is continued

5 In appendix 4, "Rights of Manoomin - White Earth Band," the White Earth Nation, located in geography currently known as Minnesota highlights the fundamental rights Manoomin inherently possess. The White Earth Nation asserts that upholding these rights is essential for respecting the integrity of Manoomin.

debate about the level of risk of cultivated varieties contaminating Manoomin populations, many Anishinaabe people want the risk to be reduced to zero. For these many reasons, cultivation insults and pains the hearts of those who care for Manoomin. From this view, cultivated "paddy rice" is neither spiritually nor emotionally fulfilling.

> *"It should be called Mnomen more. Just calling it by its name more and speaking our language is another way of putting it into the world. So, the more we say Mnomen, Mnoomin, or Manoomin, there's that positive energy for it. I feel like calling it 'wild rice' is a form of colonizing it."* –Tribal Youth

> *"One more comment I'd like to make ... that I think is very important... is that, the major companies out there in the world that are doing food production, they're looking at genetically modifying, we need to take whatever action is necessary to protect those original wild beds of rice, the original genome, and then everything else about it. If we don't, we'll have a hybrid out there. Many, many, many varieties that are not wild rice anymore, they are genetically modified."*
>
> –Tribal Elder

Manidoo Gitigaan/Mnidoo Gtigaan/ Mnedo Gtegan

From the buzz of little spirits to the songs of winged-ones, Manido Gitigaan is a vibrant home. Manoomin sway with the caress of a cool breeze. Their tassels paint stripes of yellow towards the horizon. Sunlight sparkles across the water on its way to embrace them. The swimmers shyly hide around their roots. Muskrats swim with a mouthful of Manoomin to build their nests. Although not always around, humans have their place here as well. Some may come to fish for the swimmers hiding among their roots. Some may come to hunt the winged-ones floating on the water's surface or exploring the seed bank. Some may simply pass by as they kayak or canoe. Manoomin are happy when their youngest siblings visit them. Manoomin rejoice when harvesters return in the late summer to receive their sacred gift. Manoomin look forward to forming and nurturing relationships with people of all backgrounds. With open arms, Manoomin love and welcome all as they are.

> *"...being able to go somewhere and see that it's there [Manoomin], it gives me a feeling of happiness and community because it survived and it's part of that place, which means everything connected to it has survived and is part of that place all the way up to the people, so very simply stated to me, rice is an indicator of life and thriving life and beauty."*
>
> –Tribal Knowledge Holder

Harvesting Manoomin no.3. Jamie John (2024)

Challenges to Manoomin

The general public remains largely unaware of the existence of Manoomin and their cultural and ecological duties. This, plus simple indifference, fundamentally threatens them. Uninformed members of the public are likely to accidentally, and sometimes deliberately, harm them. Although the total number, or percentage, of Manoomin bed acreage lost in this shared place is unknown, it is safe to say a vast majority has disappeared. Of 198 historical sites, many of which were hundreds of acres, only six remain (Barton 2018). One bed that historically was at around 10,000 acres is now at 200 acres, and another that was around 4,000 acres fully disappeared (Barton 2018). At least 139 other beds exist today, such as restoration sites, but many are not close to the size of historical beds (Barton 2018). The State of Michigan has yet to adopt legal protections to ensure Manoomin and their beds are safe and respected. There are not yet legal standards for appropriate harvesting, such as equipment rules, or seed distribution, such as labeling laws. There are also no legal consequences for those who harm or exploit Manoomin.

Despite these seemingly unfavorable circumstances, the Anishinaabe community has come a long way in promoting Manoomin efforts. They have led much restoration, built partnerships, educated communities, promoted harvesting camps, and shared much knowledge. They have successfully advocated for the State of Michigan to designate Manoomin as the native state grain. They and their allies in the Manoomin community continue to work toward resolving the following concerns.

Careless Destruction and Negligent Harvest

Non-Indigenous community members admire and love the lakes and rivers of this shared place. They often connect to the waters through fishing, boating, swimming and sightseeing. Manoomin beds can restrict these activities. When they do, many people see them as a nuisance. They often flatten sections of the Manidoo Gitigaan, spirit garden, with their boats. The propellers cut down and uproot many stalks. Boats also cause wakes that rip roots from the sediment. Many misunderstand Manoomin as being weeds. At other times, community members mistake Manoomin for competitive newcomers, such as *Phragmites australis* or *Phalaris arundinacea*.[6] Mistaken identity sometimes leads concerned individuals to try applying herbicide directly to their beds. Lake-wide applications of pesticide to "treat" competitive newcomers, such as Eurasian milwater milfoil, can also kill Manoomin. And, unfortunately, some non-Indigenous individuals intentionally target Manoomin beds. These people destroy them using various techniques. Sometimes they rip them out of the sediment. Other times they mow or trim standing stalks. Some have even used a plow to tear apart the seed bed.

Awareness about Manoomin is spreading among non-Indigenous community members. With that, there is also growing concern about overharvesting and improper harvest. Many beds are still recovering. They are unable to provide sufficient seed for taking. Large numbers of harvesters can take too much seed and hamper the ability of Manoomin to adequately reseed their beds. The high market price can entice harvesters to take as much seed as they can.

6 This document intentionally uses "competitive newcomers" in place of "invasive species" because Anishinaabe philosophy views all non-human relatives as having purpose. These newer beings are not malicious conquerors. They are just over competitive and can learn to be a good neighbor. To learn more about the cultural importance of Manoomin, see "**Guide 1: Manoomin-Anishinaabe Relationship**."

Non-Indigenous individuals intentionally destroying a Manoomin bed in Wisconsin. (Morey 2023)

Improper harvest is also a concern. Improperly striking stalks can break the seed heads. This can prevent the plant from producing mature seed. Improper striking can also force unripe, green seed to fall out before being ready. This is exacerbated when people harvest too early. Also, improperly pushing a boat, such as using a paddle with too much force, can uproot or run over stalks. The impacts are more concerning when there are too many harvesters at a bed. The cumulative damage of improper harvesting can greatly reduce the bed's potential fertility. Persistent overharvest and improper harvest can greatly deplete a bed's size and health. If severe enough, it can wipe out a Manidoo Gitigaan. This likelihood increases when repeated in sequential years and at growing levels.

Disrupting Community Balance

Dams restrain waterways and rivers from naturally fluctuating across the years. This transforms Manoomin habitats into ones that better suit perennial relatives and competitive newcomers, such as non-native Phragmites australis. In the spring, these other relatives can settle into Manoomin beds. Their dense and rapid growth can restrict access to sunlight. This causes fewer Manoomin seeds to germinate. Native perennial plants and competitive newcomers expand their range over time. This fragments and displaces the Manidoo Gitigaan. With increased competition, Manoomin are more stressed. They then have less energy to produce seed and resist becoming sick. Brown spot disease covers their leaves with brown lesions. Weakened photosynthesis reduces their sugar production. Ergot grows into hardened fungal balls at the base of stems, and it can destroy ovaries. Diseases, with other little spirits, harm Manoomin and weaken the Manidoo Gitigaan.

Bird, animal and insect relatives also limit the ability of Manoomin to rebound and spread. Some relatives are taking more than their fair share, depriving others of seed. This is often because of their overpopulated numbers. Swan and geese, for example, have increased significantly in numbers in recent years. They, in turn, consume much green tissue of Manoomin. This is often before Manoomin have the chance to produce any seed. Carp, a competitive newcomer, diligently scours the bottom sediment for food. They diminish the seed bank and uproot many Manoomin in their way. Rice worm moth larvae consume seeds throughout Manoomin ovaries. This reduces the total of available seed. Incidents of "ghost rice" can also be a concern. This occurs when Manoomin stalks seemingly produce a lot of seed, but much of it is only empty husks. The cause(s) of ghost rice are currently unknown.

"Lane clearing" from lake shore development. (Credit: Kathy Smith)

Landscape Changes

The intensity and spread of land use changes has increased in recent decades. It has caused considerable stress on Manoomin. For example, hydrological changes are widespread. Dams have significantly altered water levels and water flow. This displaced many spirit gardens by flooding upstream beds and depriving water from downstream beds. Those able to survive in such areas are greatly stressed. They are likely to produce less seed. They are also more susceptible to illness from little spirits. Networks of bridges and culverts act as choke points that reduce water flow. This can prolong flooding on the upstream end during storms, uprooting or drowning the Manidoo Gitigaan. Water flow restricted by inadequately sized culverts worsens with build up of obstructive debris. Expanding road infrastructure will further disrupt the water flow Manoomin prefer.

Increasing urban density results in more stormwater and wastewater runoff that contributes to declining water quality. Urban areas commonly release excess sulfates, nitrogen and phosphorus into nearby water systems during heavy storms. In rural areas, there is growing concern over improperly maintained septic tanks. They can leak into local water supplies and harm water quality.

The modern Michigan economy is impacting Manoomin. The intensity of Michigan's agriculture continues to make it difficult for Manoomin. Commercial crop monocultures expose spirit gardens to pesticide runoff, poisoning them. Nutrient runoff from commercial fertilizer or animal manure promotes algal blooms. The reduction in dissolved oxygen stresses and displaces Manoomin. Mining operations and mine tailings release heavy metals that can significantly alter the acidity of nearby water systems. Factories can release industrial chemicals directly into the water and the air. Once in the air, they precipitate into nearby waters and riparian soils. Industrial production and thermoelectric generation release hot water into waterways. This thermal pollution raises the water temperature and stresses nearby Manoomin. These stressors may

not always displace or limit Manoomin. There are some beds that can grow well in contaminated areas. However, this raises the concern that their seed may absorb harmful chemicals. If so, there is potential to pass them to non-human relatives and harvesters who eat them.

The World is Changing

Human activity is changing the world at a global scale. As a result of this, the climate is also working against Manoomin. As Mother Earth warms, so do her waters. Increasing temperatures make Manoomin uncomfortable. Also, increasing water temperatures reduce dissolved oxygen levels. This further stresses spirit gardens. Warmer water and reduced oxygen impact Manoomin's ability to grow stalks and produce seed. Warming winters shorten the duration of ice blankets that cover Manoomin. More seed will lose life before opening up to this world. Additionally, reduced ice coverage makes it more likely that perennial plants will persist in a bed across years. Warming summers bring more humid nights. This promotes greater levels of disease throughout the Manidoo Gitigaan. As climates migrate northward, Manoomin will have to follow. However, because their seed drop near them, it is difficult for them to disperse. Without human aid, migrating will be challenging for them.

The changing world is bringing more frequent and more intense summer storms to Michigan. This is especially concerning during the floating leaf stage. At this time, beds are most vulnerable to being uprooted by waves and strong currents. During the flowering stage, male flowers expose their pistils. Powerful storms during the flowering stage can wash the pollen away from the flowers and from the air. This reduces pollination success. More frequent and increasingly intense storms also promote the occurrence of flash floods. This increases the chance of an entire Manidoo Gitigaan being uprooted within a single season. More frequent and severe summer storms will also increase pollutant exposure from stormwater runoff.

Seed drying on a front lawn in Detroit. (Credit: Antonio Cosme)

Defend the Wetlands. Jamie John (2023)

Blood Memory: Coming Full Circle

***Kathy Smith**, Ganawendang Manoomin "She Takes Care of Manoomin," Keweenaw Bay Indian Community*

I'm a product of the relocation program. My mother was sent to the Twin Cities to become a hairdresser. She didn't want to go, but the BIA put her on a bus anyway. Taken away from her culture and her people, she had to learn a different way of being. My dad came to the Twin Cities to become a phlebotomist after he graduated. She met him there. We lived in the city for sometime. We grew up with a lot of prejudice and racism in our community. They reminded us we were Ojibwe, or "Chippewa." All I knew were pow wows and moccasins. I did not practice the language, the songs, or the ceremonies. They did not allow us to practice them. Many relatives were discouraged from practicing our ways of life. I grew up distracted from the traditional way of life. And that's how my life has been, full of trauma. Didn't really know what trauma was.

My mother was from Red Lake Nation. She told me many stories of her childhood. They were not allowed to sing their songs in public. Our people went into hiding. She and her family would go out and collect berries and other food on the landscape. They used to go from patch to patch. They would pick whatever was ripe and eat it. They would then bring some back, process it, and can it for later. They would use what they found for pies, jams and jellies. They also fished, hunted, gardened, and tapped maple syrup. So that was their way of life.

Later on, we would visit Red Lake. My grandmother exposed more Ojibwe culture to me. She spoke Ojibwemowin. I would hear her speak to Elders she cared for. She would dance at pow wows. My sister, Lisa, and I would sometimes dance with her. She would bead while listening to pow wow music. It was a beautiful way of being from her generation. My family showed me their ways of hunting, fishing, trapping, gathering, and gardening. My grandmother

Kathy overlooking a lake. (Credit: David Cournoyer)

and grandfather had a garden. I remember putting fish guts in the garden. My uncles were fishermen. They would set nets, and we would sometimes help straighten them out. Some time passed, and we moved to Keweenaw Bay Indian Community. Here, I also learned to snare waabooz (rabbit) and fur trapped. My grandfather was a commercial fisherman and trapper. I would help him skin the animals for meat and furs. I was still young. But, I still did not feel like I had the culture. I did not feel I thought in a traditional way. So, I left. When I was older, I moved out West. I formed a career there and spent some time away.

I eventually found my way back home. I later joined the Great Lakes Indian Fish and Wildlife Commission and the Wisconsin Conservation Corps at Bad River Tribe. I was a corps member working with plants and wildlife, including lamprey. Bad River reintroduced me to Manoomin. They taught me how to harvest seed with some nice knocking sticks. But, I still felt like I needed closure. So, I went to the Midewin lodge with all these questions of who I was in my

heart. The lodge took all the things I already knew and put them in alignment. They helped me realize the culture has been inside me all along. The times I hunted. The times I fished. The times I gathered. It was in my blood memory.

Around 10 years ago, I got a job here at KBIC as a habitats specialist. We did a lot of Manoomin restoration. But, I was learning about Manoomin backwards. People usually learn restoration last. Restoration kept me so busy, I did not have time to harvest for myself. The seed I collected went towards reseeding beds. I eventually got the chance to go to Roger's rice camp. Here, I learned how to make the knockers and the push pole. I have been ricing to feed myself and others for the past three years. Despite the short time, I know all other aspects about Manoomin. My backwards learning now helps me show the youth how to respectfully harvest seed. I guide them to sustain their way of life and be a provider. Putting food on the table is the biggest thing. My grandmother lovingly showed me that.

This was a great way to come full circle.

Kathy holding Manoomin seeds. (Credit: Todd Marsee, Michigan Sea Grant)

Red Sticks, Red Spirit: Lighting Our Path

***Roger LaBine**, Manoomin Chief, Lac Vieux Desert Band of Lake Superior Chippewa*

Manoomin is part of who I am, but it also is an identity of the Anishinaabe people, just like our language that enables us to communicate among one another. Manoomin, as told in our migration story, brought us here to the heart of Turtle Island. Without this precious gift from Mother Earth, our ancestors and us would not be here today. It's very spiritual to me. I'm very grateful for it, I honor it, and I need to work to ensure that my grandchildren's grandchildren have the opportunity to form a relationship with Manoomin like I did. When I was taught how and asked to preserve Manoomin, my mentor said you need to protect and preserve the sacred resource and this gift from the Creator. I'm eternally grateful that my ancestors taught me to share and to guide others in revitalizing this sacred resource.

But, the Creator works in mysterious ways, because I almost didn't have Manoomin in my life at all. Growing up, my parents kept my siblings and me distant from my relatives, my culture, my traditions, and my spirituality. They did not want us to suffer like they did. They worried my grandparents would be a bad influence by teaching us who we were, opening the door to the challenges others in my community faced. They struggled with alcohol, keeping them from fulfilling their roles as spiritual advisors and healers of the Midewiwin lodge. So, I rarely saw them. At funeral ceremonies, I saw my grandfather play the drum and sing. My parents tried to keep me as a God-fearing Baptist boy, but I often wondered if I could and would be able to do what my grandfather did. The spark in my blood memory lingered. We weren't poor because the Creator made sure we had food and everything we needed. But, our house lacked plumbing except for a kitchen sink running water from the neighbor's house. It had an outhouse. When the city banned them, it condemned our house until we added a bathroom. My father recently had a heart attack and could not work while recuperating. Reluctantly, my parents decided to temporarily move near my grandparents. I started seeing them more often.

Roger proudly showing his grandmother's ricing sticks at 2023 MWRI Workshop. (Credit: David Michener)

One day at my grandmother's, I was looking at these sticks standing in the corner. They were painted red. I got up and I started playing with them. I was trying to be Bruce Lee with nunchucks. She came out of the bedroom and saw me wailing away with those sticks. She goes, "You put them away." We put them away and so, I said, "Oh, why Grandma? What are they?" She goes, "Those are mine. I use them every fall." And so, she sat down and told me about what she does with them and going on and collecting the wild rice. She also told me about how it used to be on our traditional lands, but she said, "We have to go in northern Wisconsin, and we have to harvest it because we still need it in our daily lives."

So I asked, “Grandma, can you take me?” Back in 1972, I went with them for the first time down on that lake. We camped there for 12 days, and we went out and harvested. It was beautiful. And so when I went down there and did my rice camps, I went down to the harvest and gathering. We started by drying the Manoomin, parching it, jigging it, all that stuff so that we could process it, and it was ready for storage when we’d come home. And, so that was how I was introduced to ricing. Another thing I liked about wild rice camp and going to harvest in Northern Wisconsin was the socializing, the family gathering, the connectedness. As we processed Manoomin, took care of it, sorted it, and feasted on it, we not only connected to one another, but also to Mother Earth.

Years later, our family experienced a great tragedy, so my grandparents decided they needed to return to their Midewiwin ways. Part of the Midewiwin ways was to share with their family the teachings of the lodge and inform us that we had a place there. But, this was based on if we first had all those answers. I had to work my way to the lodge. After a few years, my uncle brought me in. I was called upon to visit other communities to share what Manoomin means to my community and what it meant to the community of Three Fires People. My grandma, grandpa, my mentor, they are all Midewiwin, and they gave me those teachings. They were reaffirmed and confirmed by my other elders and my people in the lodge. I work to restore Manoomin to honor my grandmother and grandfather. If not for Manoomin, I would not have been brought to them, to my culture, or my spirituality. When my grandma walked on towards the Western horizon, they were given to me. I have my grandmother’s red sticks in my white bag that I carry around to this day. People ask me today why they’re painted red. I never asked her. I jokingly say, “It means you keep your hands off,” because that’s what she told me.

Roger instructing students as Cortney Collia dances on Manoomin seed. (Credit: Todd Marsee, Michigan Sea Grant)

Anishinaabe Cultural Relationship with Manoomin

At the 2023 Manoomin Summit in Roscommon, the Michigan Wild Rice Initiative invited many Anishinaabe voices and others who care for Manoomin to engage in discussion about this document. At the start of the first day, MWRI asked participants, “What is one word for what Manoomin mean for you?” Here is a list of twenty-five responses, in no particular order:

Family	Home	Relationship	Love	Respect
Community	Sacred	Reciprocity	Patience	Gratitude
Medicine	Healing	Purpose	Balance	Yummy
Nourishment	Water	Sustainability	Wildlife	Resilience
Beautiful	Peace	Sovereignty	Culture	Future

These words are only a glimpse into the living, holistic relationship the Anishinaabe people have with Manoomin. Manoomin, meaning “the good berry,” is the foundation for the Anishinaabe way of life in this shared place. It is important to understand how this relationship began.

Long ago, the Anishinaabe people, before they went by that name, resided along the great salty waters toward where the sun rises. This area is near to what is now known as the Gulf of the St. Lawrence, Maine and New Brunswick. One day, Elders warned the people about the need to migrate and seek a place where food grows on water, to provide a better life for future generations. So, for hundreds of years, many of them migrated towards the direction of the setting sun. Eventually, they arrived at the Great Lakes and found Manoomin growing on the water. Manoomin welcomed and provided for the migrants. These people decided to settle in this place, establishing a new home. Here, they became the Anishinaabe people.

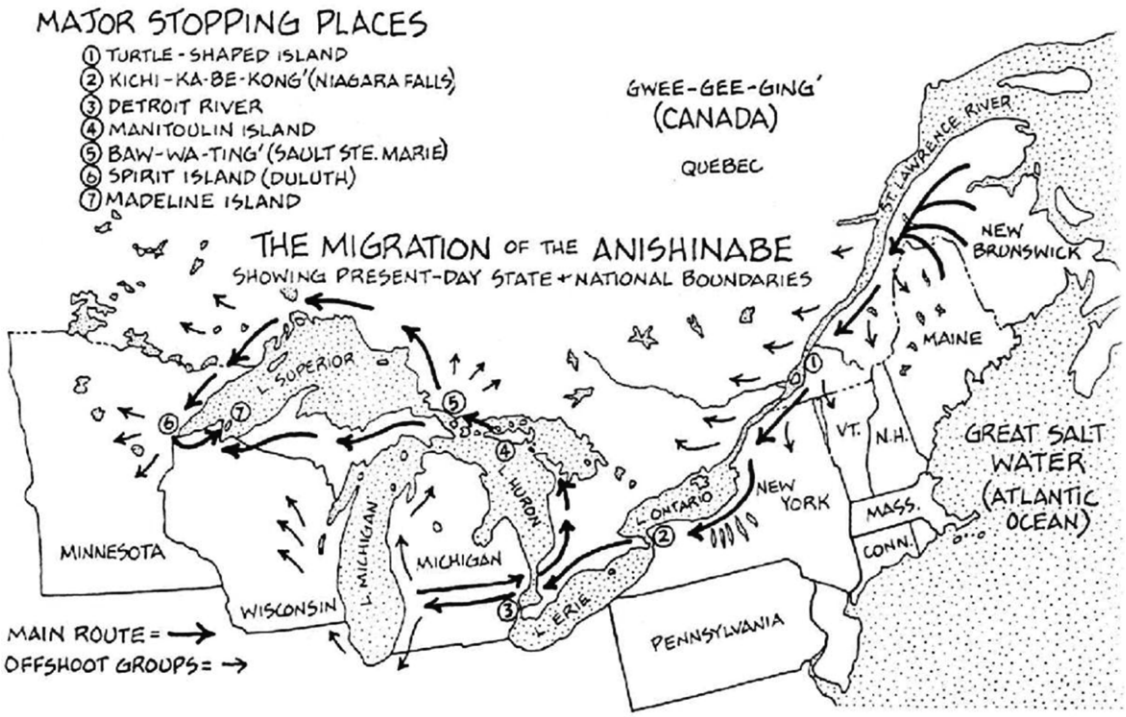


Figure 2: Migration of the Anishinaabe people. (Benton-Banai 1988)

"It was brought to me that Creator had sent us to the Great Lakes and the rivers here to have us find Mnomen. To help us survive. It was our biggest source of food that helped us survive the winter time. That's why Mnomen is sacred to us, especially with the restoration efforts we're doing today. I'm grateful that my Tribe here and other Tribes are taking time to restore it now. I know it's a long process, but they've come a long way with it." –Tribal Youth

Over time, Manoomin became intertwined with many aspects of Anishinaabe culture. Manoomin became an essential food to include at all social and cultural events. Water and Manoomin are the only relatives who are brought to every ceremony. Manoomin is often the first solid food an Anishinaabe child eats, and Manoomin is often the final meal for Anishinaabe Elders as they prepare to walk from this world to the next. This close bond with Manoomin nurtures a heightened spiritual relationship with the relative. Thus, Manoomin are sacred medicine who nourish mind, emotion, body, and spirit.

A ceremony to honor water and Manoomin. (Credit: Todd Marsee, Michigan Sea Grant)

> *"I feel a strong connection to it because it's been here since we've been here. Longer than that, and it's extremely significant to our people and why we're here, so the fact that it has that much importance to our people...and it has a lot of lessons to teach us. There's a lot that we can learn from that spirit, and it provides a lot of...nutrition, not just physical nutrition, but as they were saying, spiritual and emotional and mental."* –Tribal Member

> *"Some of these plants, some of these seeds, have come from generations of their plants, of their Mnomen ancestors, who have had physical contact with my ancestors as well. And so, in a very literal sense, having that connection, not just with the present, but with the past, and hopefully with the future while we're interacting with these plants. As we plant them and set them on their path, on their way."* –Tribal Youth

The Anishinaabe people share gratitude, love, and respect for Manoomin. They demonstrate this love by harvesting Manoomin in a respectful manner, sharing what they take, and (re)seeding areas to help Manoomin grow strong in future years. When Manoomin return each spring to share their gifts, the Anishinaabe people know their families and the community will be fed. With full bellies, there will be much more laughter, compassion, and joy to share. Their sovereignty, their culture, their resilience, their resistance as a people will continue for another year. With Manoomin, there is a better future. And so, Manoomin are good.

> *"...[Manoomin is] a means to recover our history, our sovereignty, not only in food sovereignty, cultural-wise. It enables us to bring back those teachings that were forbidden or against the law, federal law, in rebuilding our culture. Our way of life. Our spiritual well-being. Camaraderie... membership coming together and participating in a centuries old tradition of gathering food... if you find Manoomin, you're gonna find encampments... [and maybe] burial grounds, so there's a correlation and a migration pattern to all this."* –Tribal Elder

To respect the Anishinaabe people in this shared place, helping to preserve and revitalize their relationship with Manoomin is central to this Manoomin restoration effort. To learn more about the Anishinaabe people's relationship with Manoomin, such as social and political structures, see "**Guide 1: Manoomin-Anishinaabe Relationship**" below.

Manoomin and Nme. Jamie John (2024)

Governance Landscape

As this Manoomin restoration and protection effort works to resolve challenges to Manoomin and promote access for harvesters, it must operate within the confines of the current legal and governance landscape. While acknowledging that much applicable law, such as water quality law, is out of the scope of this document, this section provides a general overview of some legal factors that affect our work throughout the state.

Treaty Rights

The State of Michigan is composed of land ceded through several Treaties with Anishinaabe nations. In exchange for ceding, or given, control over a specific area of territory, the respective nation retained certain rights, such as those to hunt, fish, and/or gather in ceded areas. **The United States did not grant rights** through Treaties; rather, the Treaties recognize that Anishinaabe nations are sovereign, inherently possessing and retaining their rights. The language varies from Treaty to Treaty. Each provides different conditions or limitations to Treaty rights.

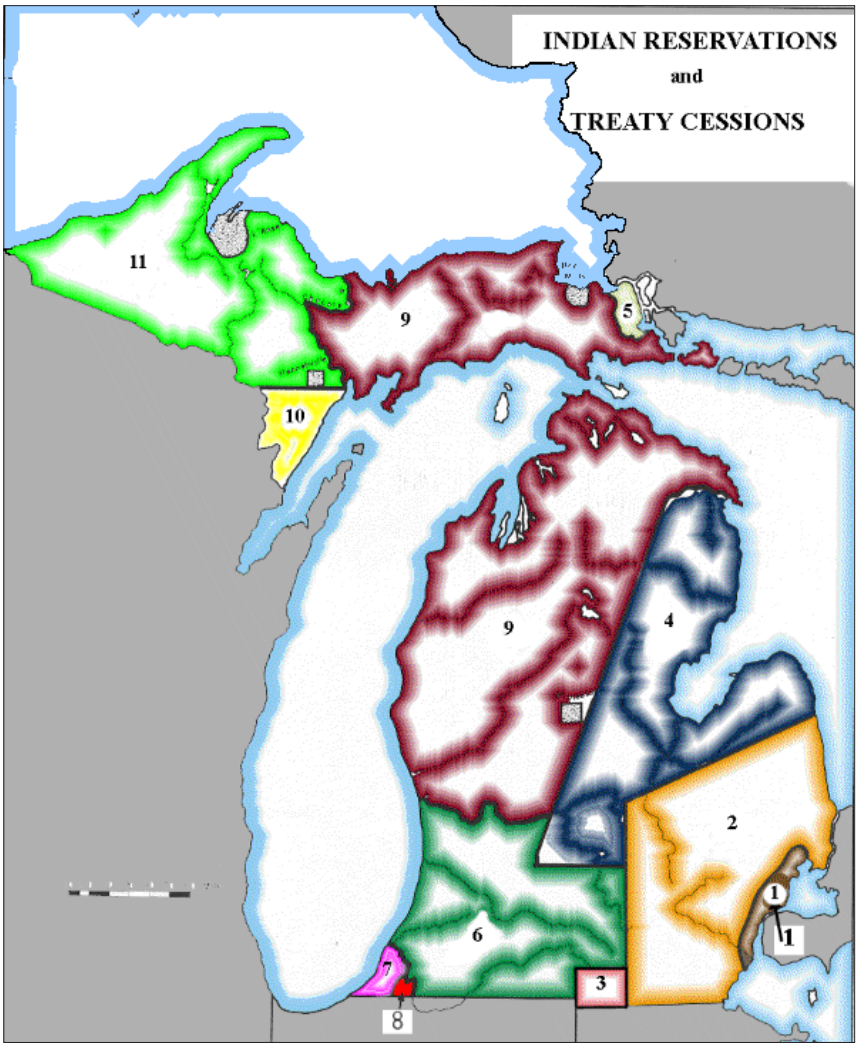


Figure 3: Overview of Treaties reflecting territory overlapping the State of Michigan's current boundaries. (1) Greenville Treaty,1795; (2) Detroit Treaty, 1807; (3) Foot of the Rapids Treaty, 1817; (4) Saginaw Treaty, 1819; (5) Sault St. Marie, 1820; (6) Chicago Treaty, 1821; (7) Carey Mission, 1828; (8) Chicago Treaty, 1833; (9) Washington Treaty, 1836; (10) Cedar Point Treaty, 1836; (11) La Pointe Treaty, 1842. (Credit: **Central Michigan University**)

Because Treaties are in equal standing to federal law, all Treaties are above the laws and interests of the state governments. Therefore, the State of Michigan must regulate its agencies and private residents to ensure they do not interfere with Tribal members as they exercise their Treaty rights.

Two court cases, both related to the 1837 Treaty of St. Peters (not shown on the map), have upheld Treaty rights. In the case of Lac Courte Oreilles Band of Lake Superior Chippewa Indians v. State of Wisconsin (1983), the U.S. 7th Circuit Court of Appeals ruled that, through their Treaty, the Tribe retained rights to hunt, fish, and gather off-reservation. In the case of State of Minnesota v. Mille Lacs Band of Chippewa Indians (1999), the Supreme Court reaffirmed that the Tribe retained rights to hunt, fish, and gather in ceded territory. These decisions demonstrate some progress in the federal and state governments acknowledging and understanding Treaty rights.

For more about the history, context, and language of the Treaties related to this shared place, here are some resources from Central Michigan University's Clarke Historical Library:

- **Understanding Indian Treaties in American History and Law**
- **Michigan-Related Treaties 1795 - 1864**
- **Treaty Rights and the Great Lakes Fishery**
- **A Brief History of Land Transfers between American Indians and the United States**

Status of Manoomin

In late 2023, after years of Anishinaabe advocacy, the State of Michigan designated Manoomin, or "Michigan wild rice," as the native state grain (**Enrolled House Bill No. 4852**). The State of Michigan is the first state to recognize both *Zizania palustris* and *Z. aquatica*, two distinct species, as two forms of the same cultural being—Manoomin. By recognizing both forms as Manoomin, the state balances Anishinaabe and Western ways of knowing. This recognition status became effective in February 2024. Although this legislation does not carry regulatory authority, this is a major step in increasing awareness about Manoomin among both the general public and state government agencies. Growing recognition and support by the state government for Manoomin provides momentum for the actions called for in this guiding document.

Roger LaBine and Governor Gretchen Whitmer at the signing of Public Act 247. (**Clean Water Action**)

Harvesting and Distribution Regulations

The State of Michigan currently does not have Manoomin-specific regulations for overseeing the harvesting, processing, or distribution of "naturally-occuring" Manoomin. Although *Zizania aquatica* does have restricted harvest (see below), such restrictions will be gone once their populations recover. At this time, *Zizania palustris* lacks any type of harvesting restrictions. The lack of harvest regulations in Michigan means that anyone can gather as much seed as they choose in any manner. There are no repercussions for practices that harm Manoomin beds, such gathering unripe (green) seed, recklessly breaking stalks, or using inappropriate equipment or enhancements to maximize harvest. There is general agreement among the Manoomin community of the need to establish and enforce harvesting regulations for the general public. Further discussion is needed to agree on the extent of restrictions. See Appendix 3 for a list of harvesting regulations employed by the State of Wisconsin, the State of Minnesota, and various Tribes in this shared place, in addition to implementation advice from Wisconsin and Minnesota agency personnel.

There are also no regulations related to processing and distributing Manoomin for consumption. Although harvesters must follow existing state and federal regulations for food, such as state labelling laws for packaged foods (**MDARD Food Labeling Guide**), there are yet to be any Manoomin-specific requirements. In contrast, both Wisconsin and Minnesota require vendors to have a dealer's license (**WI Statute 29.607: Wild Rice; MN Statute 84.152: Wild Rice**). The State of Minnesota also requires vendors selling within the state to follow labeling laws (**MN Statute 30.49: Wild Rice Labeling**). Further conversation is needed

to reach agreement about whether and how the State of Michigan might adopt and implement these policies.

Endangered Species Protection Act

While there are not any Manoomin-specific protections, river wild rice, *Zizania aquatica* is currently a threatened species under state law, but not federal law. At this time, lake wild rice, *Zizania palustris*, does not have the classification. The State of Michigan's Endangered Species Protection Act enables the Department of Natural Resources (DNR) to establish protections for species that are unable to sustain themselves within state boundaries (**MI Endangered Species Act)**. Any restrictions associated with this law apply to the non-Indigenous public, because retained Treaty rights allow Tribal members to access these species

Under state law, once the DNR designates a species as threatened or endangered, no person may "take, possess, transport, import, export, process, sell, offer for sale, buy, or offer to buy" said species. The DNR is able to treat any non-listed species as a listed species if it closely resembles a listed species and makes enforcement too difficult. Here are some legal exceptions to related protections.

- Restrictions only apply to populations within the State of Michigan's boundaries. A person can still transport, possess, and sell a Michigan-listed species entering from another state, in accordance with federal permissions and those of the other state.
- For threatened species, the DNR has the discretion to permit taking through a controlled harvest when it has determined the species is abundant enough within state boundaries.
- For threatened or endangered species, the DNR may permit it to be taken, possessed or transferred for scientific, zoological, educational, or restoration purposes.

In relation to Manoomin, the State of Michigan regulates the taking, possession, and transfer of *Zizania aquatica*. Currently, the Department of Natural Resources (DNR) can permit and control harvesting of *Z. aquatica* if populations are healthy enough. However, the general public cannot purchase or sell *Z. aquatica* from beds within Michigan boundaries unless for scientific, zoological, educational, or propagation purposes as the DNR permits. If *Z. aquatica* reaches endangered status, then harvest of their seed, for use other than for DNR-permitted scientific, zoological, educational, or propagation purposes, will cease until the DNR determines their populations have sufficiently recovered. The DNR also retains discretion to expand threatened species protections of *Z. aquatica* onto *Z. palustris*, considering the similarity of their seed. If this happens, all regulations and noted exceptions will then also apply to *Z. palustris*.

Water Laws and Access

Important to Manoomin protection and restoration are waters that allow general access to the public. A public inland stream includes, but is not limited to, streams that can support floating logs (even if not year round) or can support boat navigation for travel or trade (Madkour 1997). Recreational boating is not a sufficient standard. Public streams must be reasonably capable of supporting conventional commerce. A public lake includes those which the public can enter through publicly-owned land or through a public stream (Madkour 1997). Such a lake must also be reasonably capable of supporting public use.

In 1860, the Michigan Supreme Court determined that the State of Michigan holds Great Lakes bottomlands in trust for the people of Michigan to the international border with Canada. However, bottomlands of inland lakes and rivers are a different story. There the beds of lakes and streams are owned by riparian landowners. Each riparian owner holds the title of the lake or stream bed from their shoreline to the center point of the lake or middle of the river (Madkour 1997). For example, with lake beds, each riparian owner has their own "slice of the [bottomland] pie." By extension, anything attached to the lake or riverbed is also property of said riparian owner. For Manoomin beds in inland lakes, this results in webs of ownership that will vary in complexity on a lake-by-lake basis.

Within public waters, the public has the right to wade through, stand in, and/or float on the water over private lake or river beds,if they accessed the water with the permission of a riparian landowner or via a public access site (Madkour 1997). It is illegal for anyone, including riparian owners, to prevent or restrict general access to any part of the surface of a public lake or river, such as by using fences or buoys. Riparian owners may build docks and other improvements on their lake or river bed in order to improve their property. However, they cannot do so at an unreasonable distance into the body of water to avoid preventing or restricting access (Madkour 1997).

For further reading into the legal understanding of public right to access inland waters in the State of Michigan, visit Michigan State University's **Public Rights on Michigan Waters**.

These legal factors need to be considered when pursuing Manoomin restoration and revitalization efforts with the Anishinaabe community. As more projects are developed, there is also the need to understand relevant local and federal laws on a site-by-site basis. Additionally, it is important to pay close attention to relevant legislative and judicial developments. As MWRI and partners in this effort gain more political capital, they will be able to help change government policy and practice to be more favorable for Manoomin restoration, revitalization, and protection.

Attendees of the August 2023 Manoomin summit. (Credit: Lisa Herron, EGLE)

The Heart is Pulling: Healing Our True Selves

***Cortney Collia** - Gichi Aanakwadkwe, Manoomin Educator, Sault Ste. Marie Tribe of Chippewa Indians*

Growing up, I didn't give much thought to my culture. If anything, I knew we had some Italian descendancy. We would make homemade ravioli and pizza. I remember my great-grandma (Maria Antonia Collia), who mostly spoke Italian, pushing food toward me saying "mangiare." Sharing food was sharing love in our family. My father's mother and her sister, we later found out, had tribal affiliation. When my father learned that our tribe had opened enrollment, my two older siblings and I had already left the house. So, only my father and two younger siblings were enrolled at that time.

Many years later, I moved back to Michigan. Working in ecological management, I was drawn to a conference with a wild rice track. I had never heard of wild rice, but had this strong heart pull that said, "You need to go to this." However, I was strict with myself and stuck to sessions relevant to my job. When one presenter didn't show up and fearing being late to another session, I simply went next door. It turned out Roger LaBine and Barb Barton were talking about climate change effects on Manoomin. I had this strong heart pull again to talk to Roger. I waited for everyone else to leave, but, not knowing what to say, chickened out. Roger and I would cross paths many times after that and have become lifelong friends.

For fifteen years, I've been working alongside Roger assisting with rice camps, workshops, conferences, and school programs for both tribal and non-tribal communities in Michigan. So, in being introduced to Manoomin, I was also introduced to my Anishinaabe communities. I think it's important to listen to those "heart pulls," because your heart takes you where you are meant to be and where you can heal. Manoomin sent out a heart call to me, and I followed it. It was a catalyst that brought me to myself and to a good path in life connecting with

Cortney and Roger next to a lake. (Credit: Cortney Collia)

the heartbeat of Earth. I have found that if you let your fears of judgment or not being enough stop you from following those heart pulls, you may never find out who you are or your full potential.

It can be difficult to walk into a culture you are unfamiliar with at first. Historically, being as light-skinned as I am, I have encountered some challenges as a descendant without an official tribal membership. How I appear can cause individuals to be somewhat "stand-offish" or hesitate to be themselves.Regardless of official membership, I have been entrusted with traditional knowledge. It has been given to me to give to others. That is my responsibility and my honor. But, I'm still always a little fearful of others' judgment. Fortunately, I have so many great advocates who know my knowledge, who know my heart, who know that I walk in a good

way. They welcome me, introduce me to people, and share how confident they are in me. I think once people see my heart, my true self, and my intentions, they are much more accepting. I've been welcomed into so many communities, which has been so wonderful and such a beautiful gift to me because of Manoomin. I'm so grateful for that. It is only this year that I have become an enrolled member of the Sault Ste. Marie Tribe and I don't know if being an enrolled member will have any effect on how people see me, but I hope that I always walk in a good heart way and continue to get the chance to be myself and speak for Manoomin and to share love in food as an Italian-American and an Anishinaabekwe.

To reciprocate all the love and support I have received, I try to help be a bridge for all people connected by Manoomin. I've heard it said that it can be intimidating to ask the Elders or knowledge keepers questions. People can be nervous about getting it wrong or asking something inappropriate. I want to encourage everyone from every culture to feel comfortable about having wonder, and then be there for the questions that come. I think it's important for the people here who are closer to their memories of this land to be the catalysts for others that say, "Okay, come with us and learn about Manoomin." Hopefully this sparks blood memories in them from wherever they descend and helps them on a path of discovery and healing like it did for me. If we help people to remember to be connected to Earth with respect, humility, courage, honesty, and love, that can help us all heal from the inside out to the world around us. Providing us all with the opportunity to find our true heart and walk as who we are meant to be. We all have something unique in our cultures to share and connect with. Manoomin has shown me that sharing knowledge and being kind to yourself and being kind to others in that process of sharing ripples out a beautiful life. That is mino-bimaadiziiwin. That's dolce vita. That's the world we can make together here in Michigan.

Cortney and Donnie Dowd on a Water Walk. (Credit: Cortney Collia)

Our Existence is Resistance: Re-Membering the Path

***Jared Ten Brink**, Educational Researcher, Nottawaseppi Huron Band of Potawatomi, University of Michigan*

Growing up, my grandmother made sure I always knew I was Bodéwadmi. Euro-American culture dominated my world, so I knew little about my Indigenous cultural heritage. I knew I lived on my ancestral land, which gave me a strong connection, but I didn't fully understand. In highschool, I started learning about our treaties and who we are. Feeling excited and proud, I shared this with my friend. He became upset; he said hurtful things about my ancestry. He, with others, began to tease and taunt me around school. While my kwé friend and others stood up for me and encouraged me, I felt small. I made the choice to hide my ancestry, I put it away, burying it deep inside of me. I set things down on the path and walked away, creating a gap in my heart. I grew, went to college, and started my life. Yet, I always felt something was missing. Many years later, I entered grad school. I was drawn to papers on Native science, identity, and issues around tribal sovereignty. I spoke with peers who encouraged me to learn more, which motivated me to volunteer for my Tribe and to participate in cultural activities, such as sweats. I researched my ancestry, finding amazing ancestors such as Chief Topinabee who fought alongside Tecumseh in the War of 1812. They resisted against the US empire, fighting for our sovereignty and working to protect the lands they belonged to and loved. My ancestors called to me, but I still did not feel Native enough. Those slurs and jibes still haunted me.

Although hesitant, I joined U-M Water Center to engage with the Mnomen community. The people welcomed and embraced me as I was: lost and unsure but seeking the red road. As they passionately shared their stories, I realized I had to pick up what I set down and re-walk the red road. Part of this meant meeting Mnomen. Friends and I canoed to a spirit garden along a river. The rice was giant. It was

Jared pushpoling his canoe on the day of his first Manoomin harvest. (Credit: Jared Ten Brink)

quiet. You see the wind blowing through, making Mnomen sway. You hear it. You smell it. It's special. There's no other way to describe it. You can't really appreciate Mnomen until you meet it. There is much to pick up on the red road. The knowledge from our Elders is within us, rattling around our brain and DNA. Mnomen is guiding me in remembering, filling that hole in my heart. I now understand why people dedicate their lives to this plant. I need to be involved in this. When I sit on the canoe, I like to think about how my ancestors canoed these rivers 500 years ago to harvest this same rice. Topinabee harvested rice, but the American empire robbed my grandmother of the chance. I know she is proud of me. Just like Mnomen, we never left. The rice is still

here in the muddy seed banks, just waiting for the water to be clean enough. They tried to get rid of us, yet here we are. Like Mnomen, we're coming out of the seed banks. Our survival is resistance. Our ancestors are proud we're still here.

I try to teach that to my kids. They know it's our job as Anishinaabeg to protect these sacred lands. Humans have a role to play in nature, and we always have around the Great Lakes. People have done a lot of harm trying to control and change nature. Mother Earth needs our voice more now than ever. I can speak English, Mnomen cannot. I work to empower my children to appreciate and care for Mnomen. Sitting at rice camp, I watched them make tools and process rice. My young son, who struggled in so many ways with who he is and who wants to be, came up to me afterwards and asked, "When can we go ricing?" When we go, I'll show him to offer tobacco to give back and respectfully ask for permission. I'll guide him to enter with good intentions and leave two-thirds of the rice behind; one third for next year's crop and one third for the birds. I'll remind him that he does not control or own Mnomen, and all other beings have a right to the rice as he does. He's a good kid, and I'm so thankful for Mnomen for bringing us back to the red road.

Jared Ten Brink canoeing by a sacred garden and recording **VR video** for a cultural practice series. (Credit: Jared Ten Brink)

Manoomin Processing for Anishinaabeg in the 21st Century. Jamie John (2024)

Overview of Goals for Restoring Manoomin

To overcome the many challenges Manoomin face, the Michigan Wild Rice Initiative worked with the broader Manoomin community. Together, they developed the following set of goals and objectives. They will help guide collaborative efforts across the state. The goals and objectives encompass three main focus areas: Education & Outreach, Stewardship, and Policy & Protection. The MWRI has a sub-committee for each to help advise efforts in their respective focus. “Goals” identify specific endpoints that will help this initiative collectively reach Our Shared Future with *Manoomin/Mnoomin/Mnomen*. “Objectives” describe concrete steps to reach those endpoints. The Goals and Objectives guide below contains the objectives for each goal, with an individual section for each focus.

Although provided in a list format, the goals are not intended to be addressed sequentially. Many will need to be advanced concurrently. It is important to remember that this guide is a living document. Some goals and objectives may change over time as they are accomplished or new priorities are identified. Please come back to this document periodically to see how the Michigan Wild Rice Initiative is revitalizing the health and well-being of Manoomin.

Canoe by Manoomin bed. (Credit: Todd Marsee, Michigan Sea Grant)

Education and Outreach Goals

1. Indigenous and non-Indigenous community members in Michigan, especially youth, as well as out-of-state visitors embrace the cultural, spiritual and ecological value of Manoomin.
2. State and federal land managers value Manoomin and seek opportunities to protect, restore and enhance them on state and federal lands.
3. Professional wetland and other restoration/conservation professionals receive technical training and information that enables them to contribute to the protection, restoration and enhancement of Manoomin on public and private lands.
4. Riparian landowners (lakes and rivers), their technical support (consultants, Cooperative Extension), and surrounding Michigan communities recognize and respect the cultural, spiritual and ecological value of Manoomin.
5. Michiganders braid Manoomin into their cultural identity, ensuring they care for Manoomin across generations, similar to the way the Great Lakes are a common cultural connection in Michigan.

*See "**Guide 2: Michigan Wild Rice Initiative Goals and Objectives, 2.1 Education & Outreach**" for the full list of Education & Outreach Objectives accompanying these goals*

Elder teaches youth to use draw knife (top). Cortney teaches students to make knokers (bottom).
(Credit: Todd Marsee, Michigan Sea Grant)

Stewardship Goals

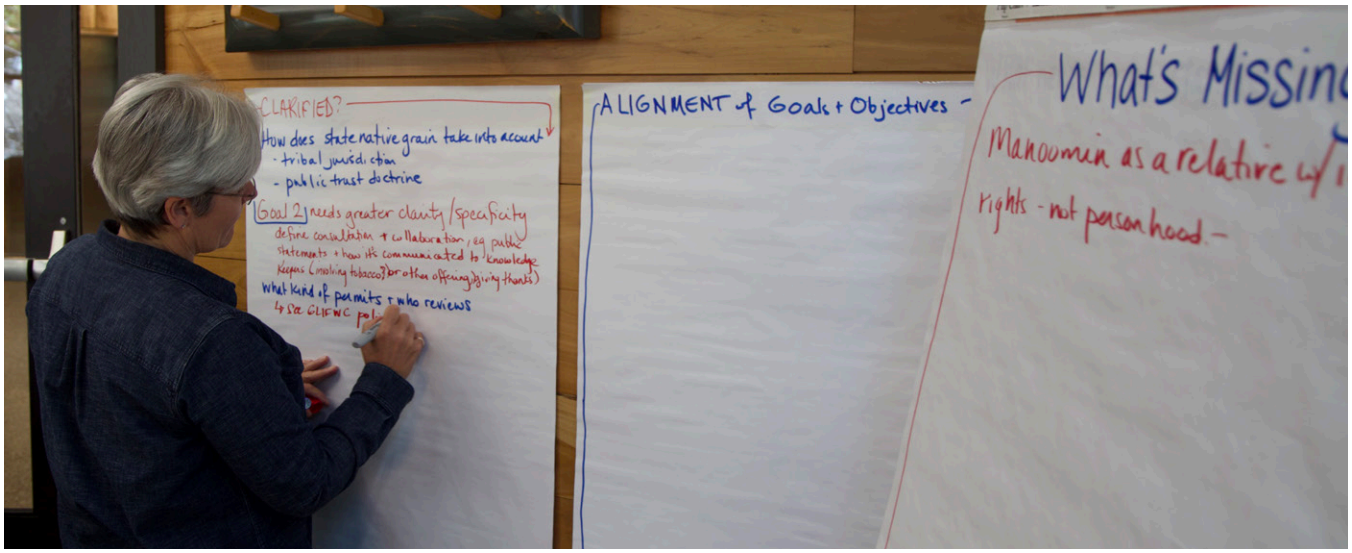
1. Tribal departments of natural resources and culture, traditional ricing communities, state and federal research agencies, and universities maintain a common research agenda initially related to Manoomin protection and restoration, later investigating the effectiveness of education and public engagement approaches (practices, messages, tactics).
2. Tribal departments of natural resources and culture, traditional ricing communities, local, state and federal land management agencies, non-governmental organizations, land conservancies and private landowners maintain a suite of shared best practices for supporting Manoomin protection and restoration. These would include but not be limited to: restoration practices, such as site selection (bio-physical conditions and other site traits), seed sourcing, methods for sowing; approaches to monitoring; and social practices, such as cultural teachings, ceremonies and community consent, to integrate the genuine participation of local communities.
3. Facilitate discussions among Tribal departments, traditional ricing communities, and local, state and federal agencies to clarify jurisdiction, responsibilities and expectations for Manoomin protection and restoration. These will likely vary within and across time and space, such as seasonally or regionally.
4. Tribal departments of natural resources and culture, traditional ricing communities, and state management agencies develop a suite of best practices for Manoomin harvest. These would include, but not be limited to: a process for determining harvest season, allowable equipment.
5. Work with Tribal, state, federal and private partners to identify restoration goals for Manoomin and appropriate ways to track them.

*See "**Guide 2: Michigan Wild Rice Initiative Goals and Objectives, 2.2 Stewardship**" for the full list of Stewardship Objectives accompanying these goals.*

Loading green seed for reseeding. (Credit: Todd Marsee, Michigan Sea Grant)

Policy and Protection Goals

1. Ensure the recognition of the importance of Manoomin among non-Indigenous communities and institutions.
2. Federal, State and local governments with relevant regulatory authority, e.g., for permitting activities with potential impacts to Manoomin, respect Treaty rights, recognize Tribal authorities, and collaborate with appropriate Tribal authorities when reviewing permits. These governments have the responsibility to respect Tribal input, the obligation to protect Tribal interests, and the authority to act on Tribal insights. They should uphold Tribal decisions and avoid any attempts to override them.
3. Maximize harvest access to Manoomin beds on public and private bottomlands.
4. State employees who have policing authority, e.g., conservation officers, fully understand Treaty usufruct rights, are sensitive to the cultural importance of Manoomin, and are knowledgeable about appropriate harvesting practices.



2023 Manoomin summit participants listening so they can provide input to the Guide (*top*). Getting lots of feedback at the 2023 Manoomin summit (*bottom*). (Credit: Lisa Herron, EGLE)

5. Tribal government and state agency personnel work together to develop an approach to Manoomin harvest on state and federal lands that include how and when rice beds will be declared open to harvest, how non-Tribal harvesters will be licensed, and specifications for harvest equipment.
6. Tribal governments work with local and regional management organizations, such as land and water conservancies, as well as state and local governments to influence land use management policy.
7. Tribal governments work with local, state and federal institutions to secure consistent funding for various Manoomin-related activities.
8. Governance and collaboration dynamics across the landscape, potentially impacting Manoomin, are concretely illustrated/outlined to support stronger inter-Tribal and agency collaboration.

*See "**Guide 2: Michigan Wild Rice Initiative Goals and Objectives, 2.3 Policy & Protection**" for the full list of Policy & Protection Goals and Objectives.*

2023 Manoomin summit participants preparing to enter the water (*top*).
2023 Manoomin summit participants visiting a Manoomin bed (*bottom*). (Credit: Lisa Herron, EGLE)

Land Defender Elder. Jamie John (2023)

Manoomin Chose Me: Building Our Community

***Cassandra Reed-VanDam**, Graduate student, Dutch & German descent, Michigan Tech*

I grew up eating wild rice, but I didn't really know anything about it. I grew up in the Keweenaw peninsula, and I would eat it, and I knew it was from the area, but I never had any kind of concept of the cultural background of it and the importance of it being a native grain. When I was younger, I led a farm-based youth program in lower Michigan, and many units discussed Manoomin's cultural importance and role in food sovereignty. Teaching about Manoomin's decline made me want to come back home to help with restoration. But what really deepened my relationship with Manoomin was going to rice camp last fall and being on a Manoomin bed and hearing about the struggle of restoration and the importance of doing this work so that in case conditions change in the future, Manoomin can thrive again. Going on the rice lake, reseeding the bed, and seeing the plants and being there, really lit a fire in me. And so I think that's what really inspired me to deeply engage in this work, to not just study Manoomin, but really build a relationship with Manoomin as a being.

The rice camp was really this intense, multi-day moment where you're just in community with people going out and seeding and processing and hearing the stories. And I danced on the rice, I jigged on the rice for the first time at that camp, and I completely fell in love with it. Like, I love jigging, it just feels so right to be dancing on the rice in this rhythm, with all these people laughing and talking and sharing stories. My hips were sore after doing that for a few hours though. One mentor taught me how to jig, and I'm always going to have this bond with her because

Cassandra resting in a spirit garden while out conducting field research. (Credit: Cassandra Reed-VanDam)

of that. It was a really great moment, to feel like I've found my place, my role with Manoomin surrounded by all these people moving around and processing it. It was something that I wasn't expecting, it all feeling so right to be there at that moment.

In doing this restoration work, it also feels like it's also healing part of me, too. Before, I felt so frozen in guilt or shame because I can't change what my ancestors did. But, Manoomin choses you and, like little awls, sticks all over you, embedding themself in your brain, heart, and spirit. Now, Manoomin is guiding me in fulfilling my responsibility in honoring those who have been here and helping to heal how my ancestors harmed the landscape. Through love and accountability, Manoomin is helping me to find my own place in being a good citizen of this land. So, this work becomes very personal. It's all because of Manoomin. Manoomin creates this center where it requires we all come together, and we're all working on this together, and we humble ourselves. It's really about building relationships with our land and people who are engaged in this work, and making sure that those relationships are rooted in accountability and respect.

Go out and find the Manoomin camps that are around you and participate in it and offer to volunteer your time and service in building those relationships. If a community is open to non-Indigenous people attending their events, it's on someone of European descent to get over any kind of anxiety of not being in the right space or not being personally invited and just go there and be humble and listen and be in community with people and participate so that you can learn from others and you can learn the teachings. Be in community while you're doing your homework, so you're not feeling isolated while doing it. So that it's not just you and Manoomin, but it's you and Manoomin and your community of people. Being at rice camp and being part of that work is what really started the transformation of my relationship with Manoomin. Even if I had gone out by myself in a canoe, it would not have been the same relationship.

Cassandra dancing on Manoomin seed as an Anishinaabe child watches. (Credit: Cassandra Reed-VanDam)

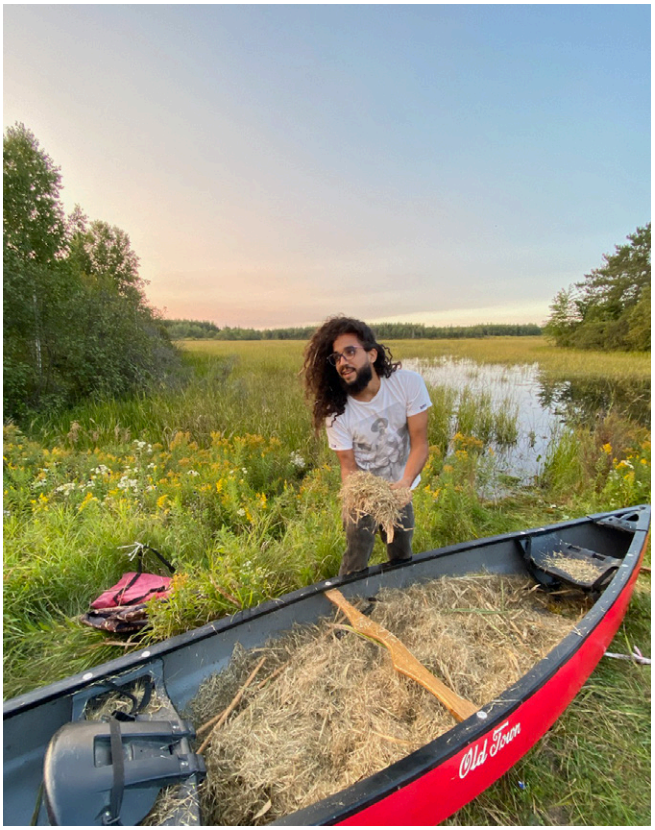
From the Hood to the Rez: Nurturing Our Solidarity

***Antonio Cosme**, Land Steward and Organizer, Boricua & Coahuiltecan descent, Friends of Rouge Park & Black to the Land*

I did not know about Manoomin until I graduated from college. I co-founded a Chicano & Indigenous hip-hop and art collective, called RAIZ UP, and a handful of Anishinaabe people in the group were the first to tell me about Manoomin. After attending Anishinaabe gatherings in the Detroit area, the community introduced Manoomin to me as food. Some time later, I finally attended a Tribal rice camp. I just loved how family-oriented the whole thing was and the reverence spoken about Manoomin. I later connected with Roger LaBine and attended his camp to make push poles and rice knockers. Off-season, they live on display in my living room because they're an honor for me. They've moved through a lot of rice beds. I'm proud of those knockers and am grateful for my Anishinaabe mentors.

I've done hands-on education around Detroit, bringing seed to show youth in schools. I would put some in their hands so they can try to unwrap the husk. It's compelling for them to see how rice comes from a grain instead of plastic bags and grocery stores. When I show older students at local gatherings, people are impressed that Manoomin can be something we harvest ourselves, and they love the images and stories around wild rice because it's just beautiful work. I enjoy seeing people eating Manoomin for the first time and liking it. We're starting to do rice camps. It's been small, and we're keeping it small to grow in a good way with Anishinaabe leadership.

Manoomin restoration is in line with the Detroit community's efforts to promote food sovereignty, so I would like to promote 'Hood to the Rez' collaboration. We have to reduce the distances, hands and dollars that bring our food to us by promoting direct connection to food source, to land, to soil, to water, and to Creator. A lot of Native



Antonio holding some Manoomin from a pile of harvested seed. (Credit: Antonio Cosme)

people living in the Metro Detroit area deserve to develop a relationship with Manoomin near them. It's also important to grow relationships and share culture with Black and Brown communities around Detroit. These frontline communities that are greatly impacted by environmental racism should have a say in how land, waters, and non-human creatures are cared for and accessed. We'll need a coalition of Indigenous, Black and Brown communities for advocating and building political power to make the future revival of and access to Manoomin beds actually happen. What better way to connect urban and reservation communities than through traditional ecological activities where we get to work with, eat with, share with, and talk to one another. These grass roots level spaces are where we grow

genuine relationships, and I appreciate leaders like Roger and Greg Johnson (LDF) who are incredibly welcoming to people like me in their rice camps to learn and work.

The Palestinian community, who are going through a lot of pain, often joins us with restoration projects, such as planting pawpaw trees and sugar bushing alongside Anishinaabeg. Like many on Turtle Island, many Palestinian, Afghani, and Iraqi community members were violently displaced from their homelands. As refugees, they're trying to make home. Many came or descended from fellaheen (نيحالف), farmer or rustic, peoples who admire living in a traditional way and enjoy seeing grain being processed. I would love to welcome Palestinian and Arab community members to the rice camps.

Many in the Black community seek to divorce themselves from the colonial lifeways that were imposed on them. In one gathering I attended, Indigenous folk who were adopted out and grew up outside their culture shared their stories of reconnection, and it brought some of the Black attendees to tears. It's hard for them to reconnect with their lands, foods, traditions, and languages that were stolen from them. I hope Tribes can help guide us in belonging to this land so we may help care for Manoomin and strive for mutual liberation. Black Seminoles, who were escaping slaves who found refuge and liberation in Indigenous communities, helped undermine the American empire and maintain Seminole sovereignty. I think we need to tell and create more of these stories. I hope we'll have more moments to foster traditional ecological norms and intercultural relationships, such as harvesting and gardening together, hunting and fishing together, caring for the environment together, and, ultimately, caring for each other. The rice camps are a fine place to start.

Shakara Tyler and her son resting in a Manoomin bed. (Credit: Antonio Cosme)

Values for Partnership

Accomplishing these goals and their associated objectives will require partners to kindle and nurture respectful relationships with one another. Growing and reinforcing accountability and reciprocity among partners is critical, especially for long-term, widespread success. Trees with strong roots grow tall and firm, and are able to withstand strong winds. The ethical roots that this network chooses will ground and nourish collaboration.

Seven Grandfather Teachings

The Seven Grandfather Teachings are a set of foundational lessons that Anishinaabe people have passed down orally for many generations. Each lesson guides students to live a good life in balance with the circle of life. The specifics of each value vary across different Anishinaabe communities. This is one glimpse into these core teachings:

- **Humility** calms people to appreciate life's gifts as they come and let go of being in control. Humble people can accept their place as an equal to all relatives in the circle of life with gratitude. They seek to balance their own needs and interests with those of everyone else.
- **Honesty** encourages people to accept and express their authentic heart and character. They openly share who they are to avoid deceiving others or themselves. By knowing themselves, people can seek to improve their own gifts rather than mimic or steal from others.
- **Bravery** inspires people to face life's challenges and fears. With courage, people empower themselves to embrace and make the most out of the difficulties of life. People can then learn to honor the inevitable times of change and death that are inherent to life's cycle.
- **Respect** leads people to be aware of their impacts on others when fulfilling their needs. People can wisely use the gifts of others and, in turn, generously offer their own gifts to help others. This mindfulness helps people limit harm and suffering.
- **Wisdom** guides people to constantly learn from the lessons and perspectives others share. People learn to reflect on and grow from their mistakes and those of others. They can then teach others and help them live in a good way with their relations.
- **Truth** encourages people to trust that the teachings will help them live a good life. With reassurance, people can continue trying to live these teachings in their everyday actions and relationships. Despite inevitable shortcomings or set-backs, people can focus on long-term growth.
- **Love** empowers people to be at peace with themselves, with others and the circle of life. They can have empathy and be kind to help others heal. People can have the strength to carry all the teachings to best care for those close to them.

The Seven Grandfather teachings are not mandates. Individuals and communities apply the lessons differently to best fit their needs. There is no single, correct way to carry out each lesson. All the lessons intertwine with each other and are inseparable. The lack of one greatly diminishes the others and limits the potential of the whole. By keeping all these lessons in mind, partners in the effort to restore Manoomin can grow a strong web of respectful and reciprocal relationships. Because no single relationship lives in isolation, how partners bond with one another inevitably influences their interactions with Manoomin and their larger web of relations. People can be kind to each other and help one another grow in order to do the same for Manoomin. Overlapping lessons from the Seven Grandfather teachings and the medicine wheel point to the importance of healing.

Medicine Wheel Framework

The Medicine Wheel is a traditional Anishinaabe tool that aids those on a path of healing to live the good life. Each color represents a Sacred Direction with its own set of lessons. While specific lessons can vary across communities, the Medicine Wheel embodies a set of Original Instructions to live in reciprocity with the cycle of life. All relatives interconnect with and sustain one another through the sacred cycle of creation and destruction, birth and death. When people attempt to escape this cycle, they jeopardize the land's harmony.

While there are no strict mandates for the application of the Medicine Wheel, those who use the tool must follow each part of the wheel, because removing one part compromises the whole. Additionally, they must work towards living these values in their personal life. How they treat all their relations inevitably influences how they relate to and work with Manoomin. As an individual learns, they can guide others to join and strengthen the path, building community. Then, when they inevitably make a mistake or slip up, the community will help them stay on the path of growth and healing. To support the resurgence of Manomin, each color offers insights to guide restoration efforts in a good way. They are as follows:

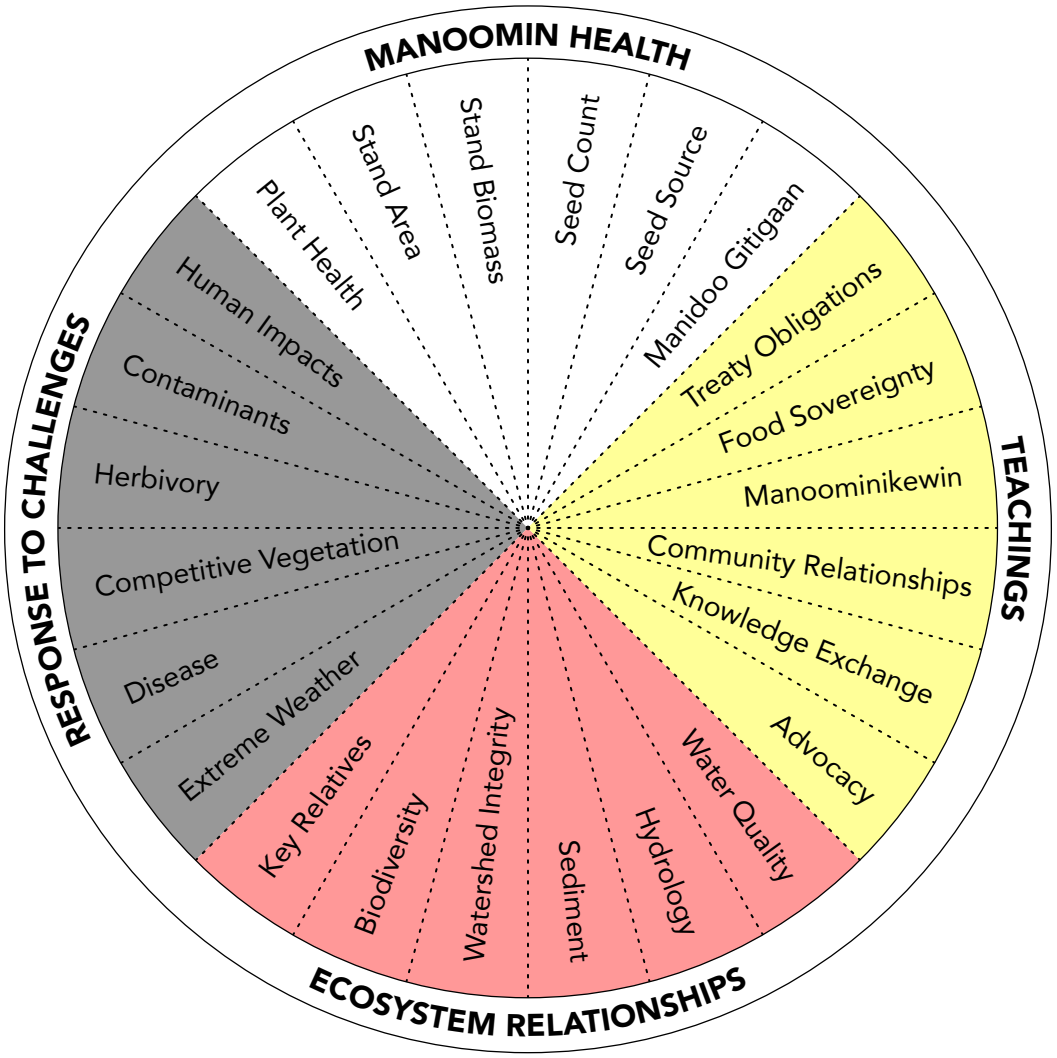


Figure 4. Medicine Wheel Framework for Manoomin Restoration (Reed-Vandam 2024). This specific diagram was created in partnership with the Keweenaw Bay Indian Community to assess their efforts of bringing this relative back to their homelands.

EAST	Representing Spring, sunrise, and infancy, East teaches people to appreciate the gift of life. People should give thanks for new breath and another chance to live in a good way. People should remember that one is a small part of the greater whole and equally hold all beings in high regard. All beings have room for growth and learning. Humility and gratitude are the foundation for establishing reciprocity with the circle of life and the spirit of all relatives.
	When feeling unappreciated, Manoomin may choose to leave a place. They may not return until human communities seek to heal their relationships to their place and with each other.
SOUTH	Representing Summer, noon, and youthfulness, South teaches one to cultivate and radiate one's authentic heart. People should be true to their strengths and weaknesses as they act, speak, and share one's gifts. People should be mindful of oneself to better understand and accept others as they are and who they become. All individuals are the intertwinement of all their relations. Honesty is the basis for healthy relations with community and oneself.
	People should learn more about their greater web of relatives. Manoomin are the interweaving of all their relations. They are healthiest when their relationships are healthy.
WEST	Representing Autumn, sunset, and adulthood, West teaches people moderation and courage to respect death. People should limit their taking, wisely use what they have, and give away their excess to limit suffering. People should have the courage to accept repeated challenges and loss. Life is an inevitable force of change. Self-restraint and forgiving loss are central to honoring life's cycle of destruction and renewal.
	People must understand greater trends of change shaping Manoomin. It is inevitable they will experience times of loss. People can aid Manoomin to make the most of these challenges.
NORTH	Representing Winter, night, and Elderness, North teaches people to rest and reflect. People should share teachings and stories to guide youth in fostering relationships with ancestors and carrying their legacies. People should learn to interpret and incorporate the views and gifts of others in a good way. Those who have learned must help others grow. Generosity of wisdom guides reciprocity within and between communities across generations.
	People should learn to listen to Manoomin. Manoomin are teachers who can help guide many communities to live with one another and this shared place in a good way.

As the Sun rises on the eastern horizon, this effort to revitalize Manoomin starts with building strong, healthy, respectful, and reciprocal relationships. Manoomin health is inevitably tied to their relationships with humans. If human communities do not heal relations to their place and to each other, Manoomin will struggle to flourish. As a result, the foundation of collaboration and community can make or break the revitalization of Manoomin. This is especially true in the long term. For now, it is important to understand the foundational steps to work with Anishinaabe relatives in a good way. Readers are encouraged to dig deeper into the specific sections of the Medicine Wheel Framework and learn how they can use it to track the holistic health of Manoomin beds (Reed-VanDam 2024).

From the beginning of the Michigan Wild Rice Initiative, Anishinaabe nations and non-Indigenous partners, such as state agencies, have taken steps to collaborate with one another to help Manoomin. Relationship-building is an ongoing process. It continually evolves as partners build trust, respect, responsibility, accountability, and reciprocity with one another. It takes time to grow strong comradeship. To learn more about helpful steps to grow relationships with Anishinaabe nations in a good way, turn to "**Guide 3: Working with Anishinaabe Nations in a Good Way**" for additional guidance.

Nooshen and Mishomis Harvesting Manoomin. Shane Morseau (2024)

Preparing the Next Seven Generations

Frank Sprague | *Mnomen Mentorship Coordinator, Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians*

Mnomen, the Good Berry, Wild Rice. Our ancestors told us if we wanted to live, we needed to go where the food grows on the water. Wild rice is who we are, as part of our migration story. I grew up second generation urban, and not speaking the language frequently. So growing up not knowing about culture, tradition, and our language, being Gun Lake Bodwéwadmi, I always thought about what it was like pre-contact. It's not our fault we didn't grow up having these things. But, I do believe it is our responsibility to study, read, and learn with the help of mentors. We are learning who we are, where we have been, and I believe we are heading into a good direction. Migwétth.

Some of Frank's students share their stories below.

Frank and his partner ricing together.
(Credit: Frank Sprague)

Annalee Bennett | *Tribal Historic Preservation Technician, Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians*

The first time I went to harvest, it was too early. The seed was not ready. So, we made bundles. Basically, you bundle a bunch of stems together, but not too tightly. You wrap the bunch with ribbon, yarn, or twine around a couple times. Once you reach the ends of the stems, you would tie a tobacco tie to give an offering to the bundle. This shows we appreciate that we're able to come out and check the rice. We also thank Creator that we traveled safely to the bed, that we're able to come back to harvest the bundle when it's ready, and that we'll travel safely back home.

I think bundling is my favorite part about harvest; just being able to give an offering with tobacco ties, taking the time to appreciate the Mnomen beds and

Annalee standing next to a Manoomin bundle she tied together.
(Credit: Annalee Bennett)

care for them. But, I did not know the significance of the bundling until we went out there and learned how to do it correctly. You don't want to hurt the beds or the seeds in any way.

So, I feel that our role as youth is to take the time to actually come out and go through the process of each step. From harvesting, to seeding, to checking on the Mnomen beds. Getting that experience in and just taking in the whole experience. Once you're doing it, you can learn so much more. Come out here with the community and experience each step of learning.

***Malcolm McDonald**, Mthebnéshini | Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians*

The first time I went ricing, I remember them bringing back seed and drying it out. Processing it, dancing on it. The dancing, the jigging, moving your feet on it. That really stuck with me. It's actually one of the moves I use while I'm dancing. It's kind of like that physical archiving of that experience. That memory of interacting with Mnomen. That's a unique part of my identity.

Originally, it was just a plant that was available to my people. We were able to grow a relationship and connection with it because that's what we had. I think anybody can have that connection if they spend enough time with Mnomen. If they spend enough time understanding how important it is to the environment. It's got a lot of great qualities and properties, not just for us humans, but for the wildlife, for habitats, for all of these things. I think ongoing research only helps us further to establish that.

Malcolm by the entrance sign to a Bodéwadmi lake. (Credit: Malcolm McDonald)

I feel closest to Mnomen when I swim with it, as odd as that sounds. Physically being on an equal level to it. Breathing with it and existing inside of the bed, not above it on a canoe. Remaining in contact with our relative as it is in the water in its natural environment, not pulling it out of the ground to put it under a microscope or displayed on something. It's important to meet Mnomen at that level while it's still connected to Mother Earth, physically breathing, and working with it.

***Ramsey Garza**, Gardener | Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians*

I grew up disconnected from the culture. I wasn't connected at all. When I was about to be 18 years old, I wanted to get involved with my Tribe. I started to slowly force myself to go to events and volunteer around the community. Even starting a garden is something that is really easy to get to feeling your culture. It's different for everyone, but I feel more in tune with my ancestors when I'm doing something they would have been doing everyday for hundreds of years before colonization. I later applied for an environmental internship. I found my passion in life helping my Tribe and Mother Earth.

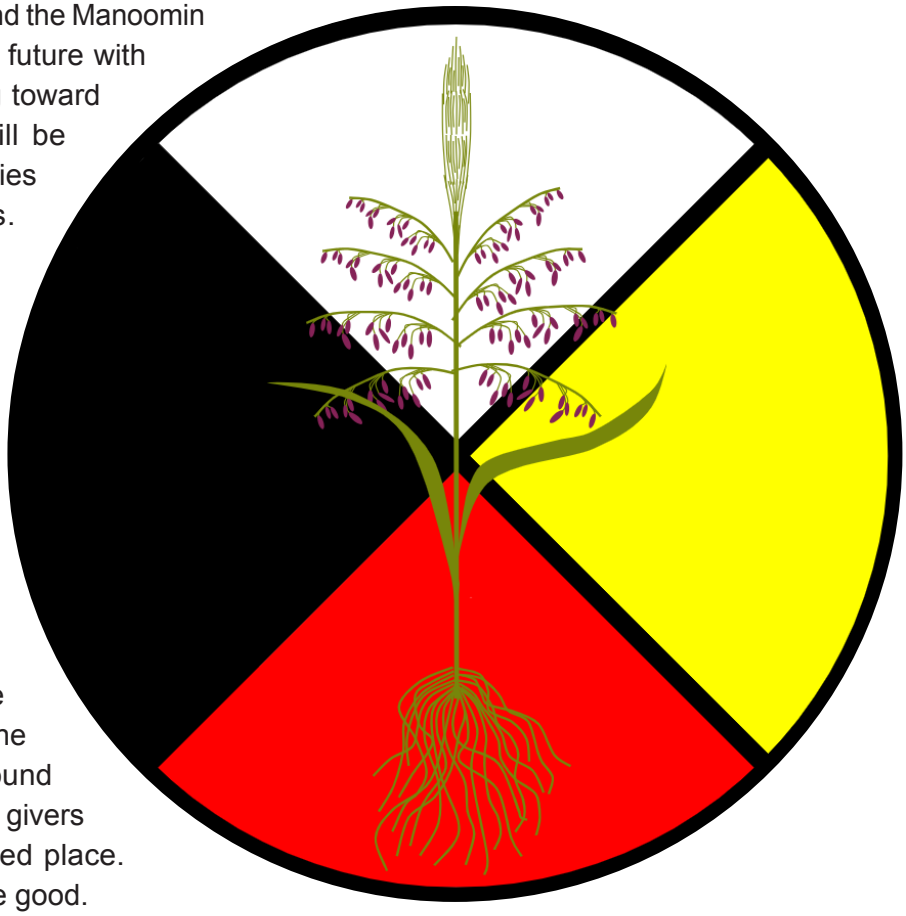
A lot of people are afraid of water and canoes, so I wouldn't necessarily say go right away to ricing. It does require a little bit of skill. You have to do things with positive intentions and positive feelings, then put all that into what you're doing. Because, if you have a bad day or you're not in the right mindset, you're going to put that into what you're doing, and then it's not good anymore.

Ramsey resting near a cage protecting Manoomin. (Credit: Vincent Salgado)

I remember harvesting two years ago. We were just pulling up to our spot to enter the river. There were these very tall telephone poles, like a hundred feet tall. On top, a bald eagle, the ruler of the sky, was sitting there. He watched us pull in then flew away. Eagle is sacred. We knew that was a good sign. We harvested very well that day.

Canoeing through a Manoomin bed to harvest seed. (Credit: Vincent Salgado)

Coming Together for Manoomin



The Michigan Wild Rice Initiative and the Manoomin community seek to bring about a future with many Manoomin beds flourishing toward the horizon. Manoomin beds will be abundant with seed to fill the bellies of many non-human relatives. Manoomin will host the coming together of many non-human relatives from air, water, and land. Human relatives from the youngest nation will pass through the beds as they collect their share of seed. Manoomin will not feel lonely or neglected. The rice camps will be filled with laughter and chatter with many jokes and stories shared from various walks of life. Many more mouths will taste Manoomin, and the gift will be shared with those around them. Manoomin will be cherished givers of life for the people in this shared place. Everyone will know Manoomin are good.

Manoomin can be leaders who bridge various communities.
Many people seek to build home, yet they feel disconnected from where they are. The Anishinaabe people originally did not belong to this place either. They ventured far to find a new home. They learned to live here in a good way through hard work and patience. It was not easy for them. They also made mistakes along the way. With the kind help, lessons, and gifts of non-human relatives, the Anishinabe people rooted themselves here. Many of them are happy to guide and assist other communities to also ground themselves and be good neighbors. Together in this shared place, we can achieve the liberation and sovereignty of our shared lands, waters, and peoples. Together we can resist and overcome those who reinforce the path of domination and destruction. Together we can build a shared home here for the next seven generations. We will all live together in a good way with Manoomin.

Miigwech, thank you, reader, for opening your heart to listen to the knowledge, emotion, and spirit in this document. The story of Manoomin is far from over, and you can play a role in sharing their gift for all. We, the Manooomin community, would like to meet you at the rice camps one of these coming seasons, if not sooner. Until next time.

To all sacred relatives before this time and to those yet to come, miigwech/ miigwech/ migwėtth, thank you for your gifts of life. Miigwech for guiding communities, human and non-human, to live in a good way in this shared place. Baamaapii giwaabamin/ Baamaapii ga-waabmin/ Bama wpi gwi wabmen, see you later, Manoomin, both in your spirit garden and beyond the Western horizon.

Cortney and Kathy laughing together at rice camp. (Credit: Todd Marsee, Michigan Sea Grant)

"Listen to your heart. Where your heart takes you is truly where you're meant to heal. If you walk with a strong heart, a kind heart and a loving heart, it'll take you anywhere. One can help another to find their real, true heart. I believe that Manoomin does that, water does that, and being connected to this Earth does that. So if we help people remember to stay connected to all those things, then it can help them find who they are."

- Cortney Collia

"Sit with Manoomin on the landscape. Sing and pray for the water. Feast on our beautiful medicine. Bring that enhanced awareness to our people and those who are away like I once was. It's okay if we are taken away and distracted from our way of life, because when you come back, you will remember and appreciate it so much more.

Bi-giiwen enji-zaagigooyin.

Come back home where you are loved."

- Kathy Smith

Roger instructing Antonio how to properly carve a push pole. (Credit: Antonio Cosme)

"Establish relationship with the plants, relationship with the ecosystem, relationship with the watershed, relationship with the Native people. Always ask the plants for permission before you harvest them. Ask the Tribe and community. Always give back. Leave the plants and ecosystem some tobacco. Gift-give food to local Elders.

Be humble. It's ideal to believe all that in your spirit if you really want to make the harvest meaningful."

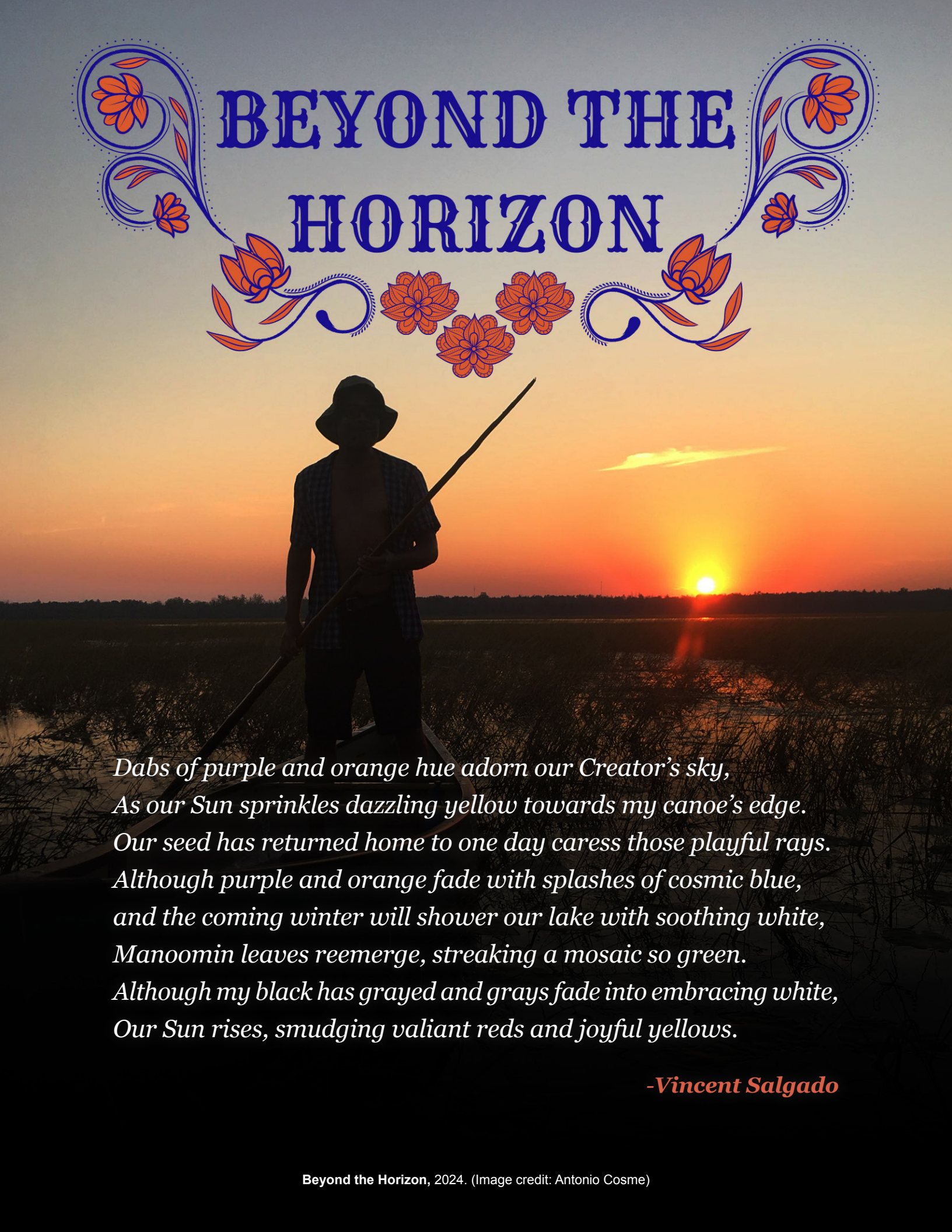
- Antonio Cosme

"Always remember the migration story. Gizhe-Manidoo brought us here to care for this place as our home. We never gave up this responsibility from the First Treaty. Keep harmony with the first three orders. Speak up and care for them. Always defend our Treaty rights to use the gifts of non-human relatives.

Help guide other communities to grow respectful relationships with Manoomin. Manoomin offers its gifts of seed to all. Sharing our gifts nurtures abundance."

- Roger LaBine

BEYOND THE HORIZON



Dabs of purple and orange hue adorn our Creator's sky,
As our Sun sprinkles dazzling yellow towards my canoe's edge.
Our seed has returned home to one day caress those playful rays.
Although purple and orange fade with splashes of cosmic blue,
and the coming winter will shower our lake with soothing white,
Manoomin leaves reemerge, streaking a mosaic so green.
Although my black has grayed and grays fade into embracing white,
Our Sun rises, smudging valiant reds and joyful yellows.

-Vincent Salgado

Beyond the Horizon, 2024. (Image credit: Antonio Cosme)

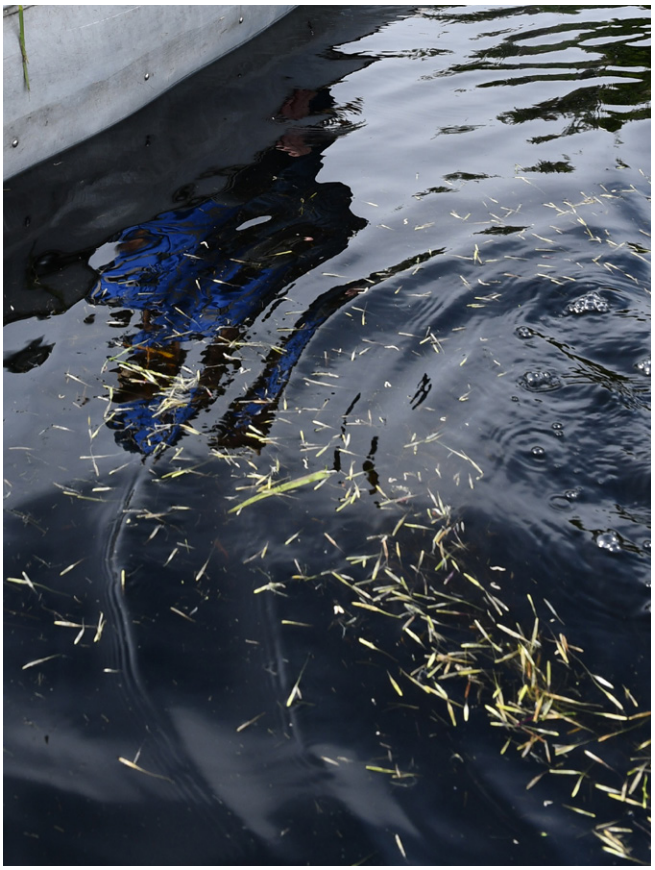
Guide 1: Manoomin-Anishinaabe Relationship

Manoomin, both prior and after contact with Europeans arriving on Turtle Island, was a central food for Anishinabe society. This guide discusses how Manoomin influenced and shaped Anishinabe society, including how Manoomin affected adaptation to colonization. A better understanding of this relationship nurtures cultural sensitivity and opens more room to discuss how the Anishinaabe-Manoomin relationship can respectfully flourish in today's context.

Food sovereignty is foundational to a people maintaining political and cultural sovereignty. Food security ensures that a people can provide for and sustain their communities across generations on their own terms. Without food sovereignty, communities depend on external interests and any conditions those interests seek to place, for survival. Given their history with American colonization, the Anishinaabe people are diligently pursuing food sovereignty.

Arrival and Interweaving

Many generations ago, the ancestors of the Anishinaabe people lived along the Atlantic coast. One day their course as a people shifted. Several prophecies envisioned the coming of great change. The visions foretold giant logs with large clouds would land on their shores. They would bring a new civilization of people from salt waters beyond the horizon. If the people did not leave the coast, they would perish. A refuge, where food grows on the water, awaited them toward the setting sun, the prophecies continued. They searched for generations. They finally came upon beds of Manoomin in the Great Lakes region. Dancing Manoomin welcomed the ancestors to their new homeland and sanctuary. Here, in the two peninsulas commonly known as "Michigan," the ancestors became the Anishinabe people—Ojibwe, Odawa and Bodéwadmi peoples of the Great Lakes region.



Reseeding Manoomin. (Credit: Todd Marsee, Michigan Sea Grant)

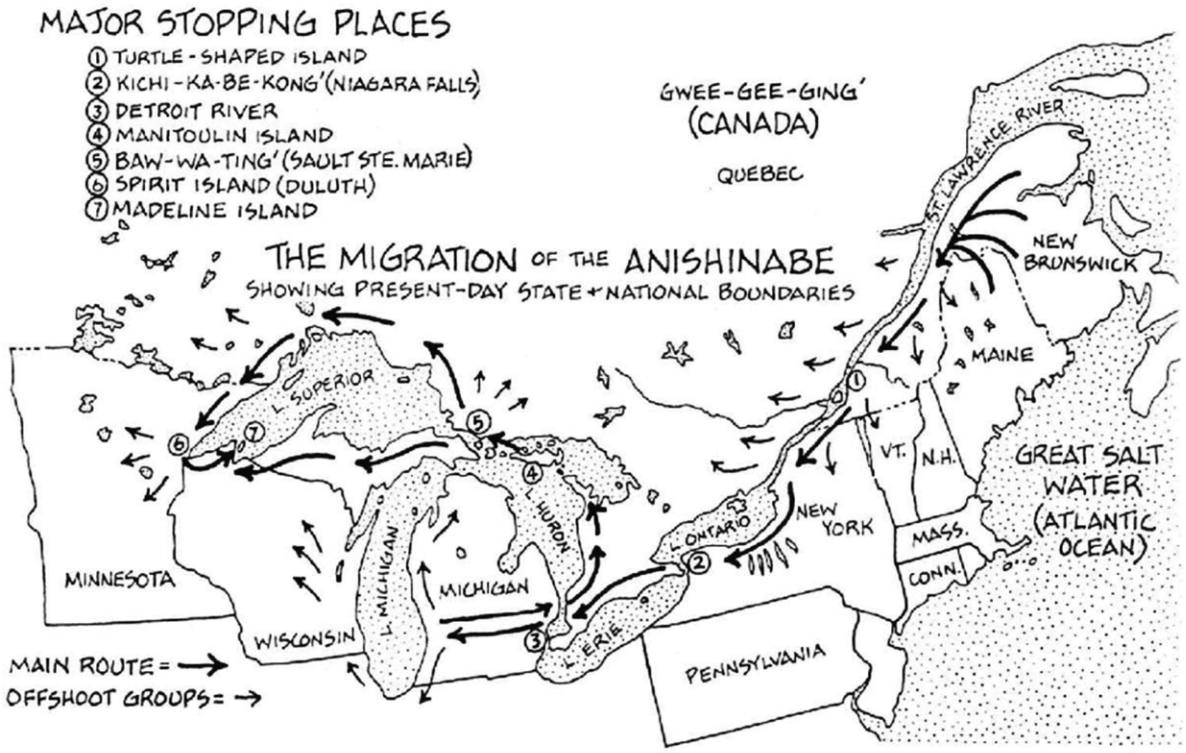


Figure 5: Migration of the Anishinaabe People. (Benton-Banai 1988)

> *"...the Ojibwe are where they intended to be because they're where the wild rice grows, and I think there's a lot of value in thinking about prophecy and geography and belonging as all intermixed when it comes to thinking about Anishinaabe connections to Manoomin."*
>
> –Tribal Cultural Writer

The Anishinaabe people embraced the gift of Manoomin.[7] They learned to live with and care for them and their greater habitat.[8] They learned to gather, prepare, and consume Manoomin in respectful ways to

7 Many Anishinaabe community members assert that Gizhe-Manidoo, the Great Mystery, kindly gifted Manoomin. This gift founded Anishinaabe civilization in their new home. Additionally, Gizhe-Manidoo gave the Anishinaabe people the responsibility to care for their sacred relative. Therefore, many believe that Gizhe-Manidoo is directly insulted when people reject the gifts of Manoomin. They are rejecting the benevolence of Gizhe-Manidoo. People also insult him when they deny their duty to care for Manoomin. They are disrespecting their duty, as outlined in the First Treaty, to care for Mother Earth and her non-human children.

8 In Anishinaabe philosophy, all beings have a purpose to fulfill. For example, the Ojibwemowin word Manidoonsag, means "little spirits," refers to insects and other relatives humans cannot see. They generally avoid using "pests" or "pathogens," both of which terms carry stigma. This is because these relatives can also promote environmental health and biodiversity. Similarly, the Ojibwemowin phrase "Bakaan ingoji gaa-ondaadag," roughly translates to "that which comes from somewhere else and now resides here." They generally avoid using the term "invasive species." They recognize that these newcomers are not malicious. They are not scheming to upend the ecosystem. They are only seeking to make a home. They just do not know how to be good neighbors yet. Anishinaabe philosophy emphasizes the need to learn the respective purposes, gifts and talents of newcomers. This way, humans can aid the newcomer in carrying out their role in their new place. Although respecting native species may require putting some restrictions on newcomers, pursuing balance does not mean a migrant relative deserves to be erased completely.

A young Bald Eagle soaring over a rice camp. (Credit: Todd Marsee, Michigan Sea Grant)

honor their spirit.[9] They also learned to only take their fair share so more non-human relatives can feast. This also helps replenish seed banks that grow into healthy Manoomin beds. Far and wide, Anishinaabe communities traveled to where Manoomin resided. Anishinaabe communities also spread Manoomin seed wherever they went. The success of one grew to depend on that of their relative. They wove a relationship of sacred reciprocity.

Manoomin ensured the Anishinaabe people thrived during the region's long winters. As Mother Earth slept, it was a time to rest and reflect on the previous year in order to prepare for the next. The Anishinaabe people shared traditional stories and instructed youth. They kindled friendships and healed offenses. They breathed new life into their culture. Manoomin provided the nourishment that enabled them to focus on these essentials. Additionally, the Anishinaabe people traded Manoomin seed with other Indigenous nations across sophisticated trade networks. They also negotiated mutually beneficial treaties with other peoples who wanted to harvest Manoomin. Both helped the Anishinaabe people promote supply chains and healthy relationships. Manoomin nutritionally, economically, and spiritually empowered them to retain, reinforce, and expand their sovereignty. They established a thriving presence and influence in the region.

Losing Manoomin meant physical, social, cultural, economic and spiritual death. The Anishinaabe people fought other Indigenous nations to secure a place for their future generations. They shed their own blood to safeguard and nurture their sacred relative's home. Many sacrificed themselves to protect and grow their sacred relationship with the gift from Gizhe-Manidoo, the Great Mystery. Manoomin became the Anishinaabe people—the Anishinaabe people became Manoomin; they intertwined.

9 In Anishinaabe philosophy, humans are the youngest relative of Creation. All other relatives are their elders. Non-human relatives have freewill, and they consciously learn and adapt. They are not fixed, mechanical parts. They have had more time to shape their own knowledge systems. They have practical wisdom and stories from millennia of direct, in-the-field experience. Therefore, the Anishinaabe people respect them as teachers. People can learn how to listen and understand their respective languages. To understand gifts of knowledge, people must refuse being masters or manipulators. By patiently watching without intruding, one can receive wisdom from non-human relatives. They will teach the people how to live in harmony with Mother Earth, within life's circle.

> *"There are ceremonies that it's difficult, if not impossible, to complete without Mnomen. Because, it is a part of who we are, part of our offering. Same level that we would put tobacco, sweetgrass, sage, all these other beings. I would put Mnomen on the same level and offer it sometimes in my practices as something equal to that. As a piece of me, a piece of my identity, a piece of my people, as Bodwéwadmik Neshnabék.*
>
> –Tribal Youth

Growth and Stability

From the First Treaty, the political, legal, and social structures of the Anishinaabe people centered on respecting, caring for, and promoting non-human relatives, in order to maintain healthy webs of relationships. From a young age, Anishinaabe children were raised to responsibly and respectfully use the gifts of non-human relatives for medicine, sustenance, and/or ceremony. Additionally, youth learned to reciprocate these gifts in advance to ensure their non-human relatives remain healthy. These moral and social teachings provided the basis for living a good life. Because Manoomin are fundamental to the Anishinaabe way of life, practices that serve Manoomin became sacred law. Adhering to the traditional ways was necessary to maintain healthy relations with Manoomin. In turn, healthy relations promoted plentiful harvests. If the harvest was poor, Anishinaabe communities would have a very difficult time that winter. As a result, any actions that unnecessarily harmed Manoomin were unacceptable and illegal.

> *"...when we say the community or the tribe comes together [for the harvest], that's everybody. I mean, the elders, the in-between generation and the younger generation, they all have to know that process of collecting that wild rice to survive. So that's passed down from generation to generation. And if there's any time slot that was lost, that endangers the next generation, because if they do not learn that process of collecting that food, then they're going to perish. And so it was a way of survivability in that everybody was engaged in the activity, so that ensured survivability of the tribe, so that the next generation can flourish from one generation to the next."*
>
> –Tribal Ricer

To protect the integrity of Manoomin, the Anishinaabe community publicly shamed those who committed minor offenses, such as striking the rice too roughly or breaking stems. For larger infractions, such as harvesting an unripe bed, they would sink the person's canoe. Social pressure and stigmatization therefore encouraged many to form mindful relationships with Manoomin. It was important that they only took what they needed, while minimizing harm to a Manoomin bed and the seed bank. For repeat offenders, however, the community exercised corporal punishment. And gross negligence resulted in banishment from the community for the remainder of the year. This forced an individual to develop a good relationship with Manoomin if they wished to gather and prepare enough seed to survive the winter. If they did, the community welcomed them back in the spring. As long as the Anishinaabe people held one another accountable, Manoomin continued to provide abundance for their people.

> *"...I actually share that knowledge that I do have, but that's that connection for that I could hopefully pass on to my kids, my next generation for who they are, because they're still distracted by that Western Road and hopefully we can rebuild those connections and for them to see me doing this work, you know, that's all I need them to do is to see what I'm doing here right now. And then hopefully, they'll remember that. For who they are."*
>
> –Tribal Rice Caregiver

Social control over Manoomin was predominantly distributed among Anishinaabe women, or Anishinaabekweg/ Nishnaabe-kwek/Neshnabé kwék. Anishinaabe philosophy holds that the spirits of Anishinaabekweg are close to the spirit of water, because Anishinaabekweg hold water that gives life in their wombs. As caretakers of water, they were also caretakers of plant relatives that grew in the water. Thus, Anishinaabekweg were responsible for caring for Manoomin beds, such as by reseeding seed banks. In turn, Anishinaabekweg had the honor of being the primary harvesters of Manoomin seed. Traditionally, Anishinaabe men had a limited direct role in gathering and preparing Manoomin seed. They would focus on hunting to support the Anishinaabekweg during the processing period. In respect for their labor, Anishinaabekweg retained control over the distribution of processed seed. Anishinaabekweg were responsible for wisely using and sharing the stored seed to ensure the community would be fed, especially during winter when calories were limited. This control was also a source of equalizing power for Anishinaabekweg. Anishinaabe men could not harm or exploit Anishinaabekweg, or else they would risk losing access to Manoomin and go hungry. Thus, the deep relationship between Anishinaabekweg and Manoomin was central to social stability and gender equality.

> *"...having two daughters that are Tribal members, I wanna make sure that I carry this knowledge on to them. So when they're ready, that as they get older, they wanna learn from me... So I kinda do it for my daughters so I know that they're gonna have that connection to land and the water..."*
>
> –Ricer

"...I started ricing with my cousins, we would... First, we would just play ricing, we would take knocking sticks and we would just play in the grass that we were knocking, and then when I was like in fifth grade, we tried to go out and we would get a boat and we would make it up to the first rice bed and just... And get a little bit of rice and bring it in and we get a bread baggie full...we were just kids playing then, and we would be around our grandparents a lot, and they would be doing ceremonies and they would be ricing for real, they would pick the rice and parch it up. So then when I got into seventh grade, my mom needed a ricing partner, so I was the oldest, so I would pole her around in the canoe, paddle her around, so I was her ricing partner she could always count on..."

–Lifelong Ricer

These social and political relations with Manoomin have been weakened due to the United States colonizing Anishinaabe ancestral lands and removing many Anishinaabe people. Here are some resources to help understand how colonialism has disrupted the relationship between the Anishinaabe people and Manoomin, as well as some good sources on colonialism in general:

- **Whose Knowledge Matters? Shifting Knowledge Systems and Gender Roles in Manoomin (Wild Rice) Revitalization in the Great Lakes**
- **Manoomin: The Story of Wild Rice in Michigan**
- **Anishinaabe Aki: an Indigenous Perspective on the Global Threat of Invasive Species**
- **First We Must Consider Manoomin//Psiŋ: Impacts of Climate and Land Cover Change on Wild Rice (pgs 88 - 112)**
- **Settler Colonialism, Ecology, and Environmental Justice**
- **Changes in the Land: Indians, Colonists, and the Ecology of New England**
- **Decolonization is not a Metaphor**

Youth learning how to jig.
(Credit: Todd Marsee, Michigan Sea Grant)

> *"...I do know that the assimilation and civilization attempts of the federal government to the Indigenous people, had a severe impact on communities. And so my reason for being so emotional about it is because my grandparents were taught by their grandparents, and my grandparents gifted me with a lot of the knowledge as well as my uncle and mentor.... When I talk about Manoomin, my ancestors come [and] stand beside me. They give me the strength to be able to share...I turn it over to my ancestors to help guide me and give me, and enable me to do what I need to do for the people that come..."*
>
> –MWRI Team Member

> *"...maintaining our cultural activities is very good for continuation of our sovereignty in a legal way...[because] when you're...reporting [to the Bureau of Indian Affairs] on what the tribes are doing culturally, what events we're doing, what we're doing with cultural significance to prove that we're a [close-knit] tribe."*
>
> –Tribal Member

Resistance and Revitalization

In more recent memory, Manoomin have helped the Anishinaabe people to solidify their legal rights to hunt, fish and gather on their ancestral land and waters as retained in numerous treaties. Manoomin also promote nutritional security and autonomy. Manoomin strengthened Anishinaabe communities to resist removal. During the formation of reservations, the distribution of Manoomin beds greatly influenced the sites that Anishinaabe communities would accept during forced relocation. Manoomin also helped many to evade removal. The sacred relative nurtured those who escaped and returned home. During the boarding school era, Manoomin empowered many families to avoid the boarding school agents. Manoomin helped hold off starvation and the desperation that pressured others to send their children away. As the Great Mystery intended, Manoomin are a liberator. Today, Manoomin helps many Anishinaabe community members, who have lost their way, return to the red road. They learn and practice the traditional lifeways that were stolen from their families. Manoomin continue to provide economic stability for many Anishinaabe families. Through selling processed seed, families can acquire what they need. The sacred relative continues to provide sanctuary and strength to their beloved Anishinaabe kin.

Throughout the heart of Turtle Island, many Tribes have brought Manoomin to the forefront of public discussion. Manoomin reinforce their Treaty rights, which include the right to gather culturally important plants. Protecting Manoomin health helps to protect the integrity of their ceded lands and waters from industrial pollution and exploitation. As a result, the sacred relative remains a beacon. Manoomin are a reminder for the Anishinaabe people that they have always belonged and will always belong here in this shared place. Manoomin are leaders for the Anishinabe people's unwavering pursuit of sovereignty and liberation.

> *"I think [Manoomin] being re-established, replanted in our area is so encouraging to our community members that it's coming back, it's another way of saying, 'Ha! You can't wipe us out.'...We're still here ..."* –Tribal Member

Because of colonization, though, many Indigenous communities and individuals have not yet met Manoomin. In our shared place Anishinaabe nations are taking the initiative to rekindle these relationships. By restoring Manoomin beds near their communities, Anishinaabe nations are ensuring their citizens are better able to build and strengthen this relationship. More people will become familiar with Manoomin. Additionally, Tribes are teaching students of all ages how to gather and process seed in a good way. As youth, adults, and elders gather on the water and on the shore, they share lessons, stories, memories, and laughter. The harvest season serves as a time for Tribal members and others to bond with one another as they work with and celebrate Manoomin. Together, they strengthen connections to their community, their heritage, their land, and Gizhe-Manidoo, the Great Mystery.

> *"I did not grow up ricing because it was kind of eradicated in our area through no fault of our own... But that is something that we grow up learning about, there's legends about wild rice and ricing, and you see all these other communities, or at least I have, doing it and being a part of bringing it back, I've done all those things that our community has offered... Just trying to re-establish the relationship..."* –Tribal Member

> *"...it ties back to that migration story, I wasn't raised in it, but my relatives live that, and so I'm just reconnecting back to that culture, cultural identity, because I struggled with that because I had a foot in both worlds, one in the Western world, and one for who I really am, and so that's that fine balance of being able to get these teachings..."* –Tribal Rice Caregiver

"I'd like to see self-sustaining populations that are managed and protected and governed by our own government, ...by all the tribes in Michigan.... My vision is that our assertion of jurisdiction is ever, increasingly expanding in a powerful grounded way...We never gave up our right to protect and maintain the water and the land, we only agreed to share side by side, so we never gave that up, so that's a lot bigger than our reservation." –Tribal Member

Manoomin are a growing fire burning in the hearts of many Anishinaabe people. Yet, the broader public still remains largely unaware. Fortunately, more people and communities seek to reconnect to and heal their lands and waters. Many seek to enhance access to healthy, local food to nourish and protect their families. Manoomin are returning to the collective memory. More and more people now wish to witness the revitalization of the vast Manoomin waters.

Kathleen Smith smudging David Michener, a curator of European descent, to cleanse his heart, spirit, mind and body before entering the bed. (Credit: Todd Marsee, Michigan Sea Grant)

Guide 2: Michigan Wild Rice Initiative Goals and Objectives

2.1: Education & Outreach

> *"[We need] education too, to let everybody know - Tribal and non-Tribal - how sensitive [Manoomin] can be and its importance."* -Tribal Member

> *"We've taken citizens out on the water a lot, with some of them being very elderly individuals. It's really cool to see them on the water and see them knocking rice into the canoe for the first time in their entire life and they are in their 60s or 70s, and they're just becoming one with [our] environment and they're just finding their groove as they're out there on the water. Just getting back into it, and almost as they would say, having blood memories of what's been done in the past. They're recalling what maybe their ancestors have done…."* –Tribal Government Employee

> *"I've done the cooking and all the different things with wild rice, and I've done everything that our communities provided in replanting and all of that. But I like to use it as a teaching tool as well. Because it is still a part of who we are…maybe we don't have it growing right here for us to harvest, but we're still surrounded by it, and we do still have access to it… So I do bring it in and show [the youth] and cook with it…we still make sure that it's around in our community, our youth, our outside communities, learn about it"* -Tribal Member

"Eating makes me feel closest to Mnomen. Yup, I'm big on food. That's culture for me. When I travel, I want to eat because that's the culture. My favorite dish is Mnomen with blueberries with syrup. I like it cold. It sticks together better. I tell my friends it tastes really good. I'm like, 'Hey, have you guys ever tried this?' And they're like, 'No?' And then they ask me a lot of questions about what Mnomen is. I typically talk about how much I like the taste of it and how beneficial it is for you. We would survive on smaller amounts of food than what we eat today. Mnomen is like a superfood. It's packed full of everything you need." –Tribal Youth

"I've watched people make some really interesting dishes with Mnomen, more modern stuff. And, I want to see that continue to happen, being brought into places, into restaurants, where it's appropriate, where's there's been a conversation, where we're not taking from its sources where its still growing and recollecting. But, I think it would be really cool to see that make it onto more plates and more dishes, be incorporated into more contemporary ways. Because our practices, they're traditional, they come from a long line of practice, but they change with times and still can be incorporated and used" –Tribal Youth

"When talking with my friends, I only spare the information I give because of how sensitive and sacred the information is. Nothing against the person who is wanting to hear more about the culture. It's important for me to give certain information to certain people. But, here and there, I will bring up Mnomen, and they will ask about it. I share my experiences of being with Mnomen on the local river and learning about its history. I tie Mnomen with my teachings and beliefs.; how our culture revolves around and cares for it. It's fun to talk about my culture with my friends." –Tribal Youth

One of the biggest challenges Manoomin face are their disappearance from broader societal awareness. So many of the dangers to Manoomin exist because they are not recognized when present. So, activities endangering Manoomin continue without considering their safety. In order to achieve Our Shared Future with Manoomin/Mnoomin/Mnomen, it is necessary to cultivate the broadest societal awareness of and respect for them. These goals and objectives relate to establishing and maintaining a broad appreciation for the cultural, spiritual and ecological importance of Manoomin.

Goals and Objectives:

1. **Indigenous and non-Indigenous community members in Michigan, especially youth, as well as out-of-state visitors embrace the cultural, spiritual and ecological value of Manoomin.**

Objective 1.1: Identify, collect and assess existing Manoomin education and other resources developed by Tribes or Tribal groups that provide appropriate cultural, spiritual and ecological context, including Anishinaabe cultural and/or spiritual identity. Prioritize resources specific to teaching or helping parents and elders teach youth.

Objective 1.2: Develop a resource "clearinghouse"/database of curated collection of resources for use by Tribal communities and organizations.

Objective 1.3: Contribute to a network of Tribal and Tribal Youth program leaders and participants who can share best practices to improve cultural and spiritual programming for their communities.

Objective 1.4: Collaborate with the Michigan Department of Education to train teachers, and expand experiential, place-based learning that incorporates lessons of Anishinaabe culture and ecology surrounding Manoomin in K-12 schools.

Objective 1.5: Network with academics/researchers and research entities to elevate Indigenous perspectives in the natural sciences, the social sciences, and the humanities to influence general conservation attitudes.

Objective 1.6: Develop a public engagement strategy to: identify and prioritize key audiences upon which to focus engagement resources; include the key messages that appeal to specific audiences; and identify the appropriate mechanisms (partners, communication platforms, etc) by which the education and engagement will occur. Example strategies include:

- Develop 30-60 second "elevator pitches" for a general audience and specific target audiences that explain why people should care and how they can help;
- Enhance the perceived value or appeal of Manoomin through harvesting and seeding events with key figures, such as state celebrities;
- Use general access websites and media outlets, such as free newspapers and social media, to provide updates to projects, additional resources, and contacts.

2. **State and federal land managers value Manoomin and seek opportunities to protect, restore and enhance them on state and federal lands.**

Objective 2.1: Identify and find alignment with state, federal and regional wildlife, habitat and other stewardship and management plans where implementation can affect Manoomin.

Objective 2.2: Recruit key points of contact/coordinators of stewardship and management plans to participate on the MWRI Team to ensure ongoing alignment with these initiatives.

3. **Professional wetland and other restoration/conservation professionals receive technical training and information that enables them to contribute to the protection, restoration and enhancement of Manoomin on public and private lands.**

Objective 3.1: Work with professional associations and other initiatives, such as the Michigan Natural Shoreline Partnership that promote continuing education opportunities to develop Manoomin-related modules. These modules should include resources to ensure sensitivity to cultural norms among Anishinaabe communities.

Objective 3.2: Identify a group of Tribal resource stewards and knowledge keepers who are willing to provide continuing education training for these key non-Tribal partners.

Objective 3.3: Find and develop case studies about projects in which those involved synergized Indigenous and non-Indigenous ways of knowing to resolve an issue to provide tangible understandings of how to integrate both perspectives in this work.

Objective 3.4: Facilitate the gathering and/or development of resources that identify and differentiate important qualities of Manoomin, such as the identification and abundance of disease and concerning herbivores, types of damage to stalks or beds, or seed ripeness.

4. **Riparian landowners (lakes and rivers), their technical support (consultants, Cooperative Extension), and surrounding Michigan communities recognize and respect the cultural, spiritual and ecological value of Manoomin.**

Objective 4.1: Work with state-level leadership, e.g., Michigan Lake and Stream Association, and local lake associations, lake boards, Cooperative Extension and local units of government, e.g., townships and counties, to find opportunities to share information about the benefits of Manoomin as well as provide guidance to limit harm to Manoomin beds.

Objective 4.2: Identify and train groups of local stewards and community leaders who are willing to regularly watch over Manoomin beds and remind people of a bed's social and ecological importance, in addition to any legal requirements and associated repercussions that develop; this would be like the idea of a "neighborhood watch program."

Objective 4.3: Develop a portfolio of various practices that provide reminders about avoiding harm to Manoomin beds, such as using specific designs and messaging for on-site information and warning signs, or technologies such as "virtual fencing."

Objective 4.4: Create a list of key individuals and organizations, especially funders and city/county officials, who should be at the table within and across various localities.

5. **Michiganders braid Manoomin into their cultural identity, ensuring they care for Manoomin across generations, similar to the way the Great Lakes are a common cultural connection in Michigan.**

Objective 5.1: Celebrate Manoomin with a festival(s) that gathers people from many walks of life. Provide many avenues for people to experience Manoomin and Anishinaabe tradition, such as through Indigenous activities/games/competitions, food, harvesting, music, and vendors. Hold annual Manoomin Summits at or near the festival so people can build connections at meetings then bond through festival activities.

Objective 5.2: Leverage the momentum of mainstream campaigns, such as "Pure Michigan," to increase exposure of Manoomin; facilitate key messaging by learning from the successes and failures of other public outreach campaigns, especially those related to conservation.

Objective 5.3: Identify additional ways to integrate Manoomin into the regular life of Michiganders to keep people engaged with Manoomin year-round.

Objective 5.4: Recruit ambassadors or advocates from Michigan communities located near Manoomin beds to help spread messages about their value. Empower them to teach and inspire their communities. Develop a web of networks so that ambassadors/advocates can work with other Michiganders across communities and larger scales. Emphasize that Manoomin restoration is a team effort that supports communities as a whole.

Objective 5.5: Collaborate with other public media, such as 'Under the Radar,' to showcase collaborative restoration efforts as well as the ways Indigenous and non-Indigenous community members are building relationships with one another and with Manoomin.

Checking jigged seeds. (Credit: Todd Marsee)

2.2: Stewardship

> *"When we were little, we were instructed to take care of our wild rice and the lake by our parents."* -Lifelong Ricer

> *"One of the things I liked about my introduction into wild rice camp and going to harvest in Northern Wisconsin was the [socializing], the family gathering, the connection not only to one another, but to Mother Earth. And as we processed it and took care of it and sorted, we feasted it. Those are the things that I pass on..."* -Tribal Elder

> *"It's a lot of work, but it was also really enjoyable and I just really feel like I was again, building a relationship and just sort of handling this gift with the most care, because... it's not just for me. That it's for the family and the community, and I just think that that's really important not just for Manoomin, but other beings that we receive those gifts from the Creator."* -Tribal Department Committee member

> *"**Q:** What else needs to be in the Stewardship Plan? **A:** I think proper education on how to harvest. The techniques, all of that. I'm sure there's a lot, but in order to protect what we are going to be establishing...to get it established and to go in and just wreak havoc on our rice beds...[we need] proper education on how to enter the rice bed, how to harvest sustainably."* -Tribal Member

Manoomin are gifts from Gizhe-Manidoo. People have the responsibility to care for them, their home, and their other relations in a good way. To fulfill this obligation, recognizing when Manoomin are present in an area is necessary. Ensuring that people nearby consider the well-being of Manoomin in their activities is also necessary. The Michigan Wild Rice Initiative is compiling and sharing best stewardship practices. They also are developing a shared research agenda to better understand how to support Manoomin well-being. This stewardship section is built upon that initial work.

Goals and Objectives:

1. **Tribal departments of natural resources and culture, traditional ricing communities, state and federal research agencies, and universities maintain a common research agenda initially related to Manoomin protection and restoration, later investigating the effectiveness of education and public engagement approaches (practices, messages, tactics).**

Objective 1.1: Work with regional partners to confirm an initial protection and restoration-oriented research agenda and use mechanisms, such as a review process aligned with regular Manoomin symposiums, to update it.

Objective 1.2: Determine whether it is necessary to expand the protection and restoration-oriented research agenda to incorporate the protection of other non-human relatives who are either part of the Manoomin-Anishinaabe relationship, such as cedar, or have a reciprocal relation with Manoomin, such as arrowhead.

Objective 1.3: Identify social science researchers and other experts who can help develop and address a research agenda addressing the effectiveness of education and public engagement approaches.

Objective 1.4: Encourage and facilitate discussion among Tribal and non-Indigenous institutions about constructing a shared data-system for appropriate and protective sharing of Manoomin data, and coordinating Manoomin research throughout the state. This will also help avoid the consequences of research isolation, such as reinventing the wheel and highlight direct points of contact for Tribal institutions.

2. **Tribal departments of natural resources and culture, traditional ricing communities, local, state and federal land management agencies, non-governmental organizations, land conservancies and private landowners maintain a suite of shared best practices for supporting Manoomin protection and restoration.[10] These would include but not be limited to: restoration practices, such as site selection (bio-physical conditions and other site traits), seed sourcing, methods for sowing; approaches to monitoring; and social practices, such as cultural teachings, ceremonies and community consent, to integrate the genuine participation of local communities.**

Objective 2.1: Expand the existing suite of shared best practices working with regional partners and use mechanisms, such as regular Manoomin symposiums, to update them. This may include constructing one-two page fact sheets or other products that summarize the variety of best practices for a more general audience.

Objective 2.2: Facilitate the development of metrics for analyzing the health of Manoomin beds and restoration success. Such metrics should balance both Western and Indigenous ways of knowing and methodology, such as using both quantitative and qualitative metrics, and find ways for them to build on one another. The framework of ethics should take into account both how Manoomin inevitably influence ecological diversity and relations as well as how environmental variation influences fluctuation of Manoomin populations.

10 The Anishinaabe way of knowing rejects the idea that non-humans have predetermined, mechanistic behavior. Every being has a spirit, intelligence, and consciousness. These do not depend on human ability to perceive them. This understanding encompasses flora, fauna, water, stone, and elements. These beings choose how and when to help their community. As a result, humans should not attempt to dictate or restrict where they will live and grow. The spirits of Manoomin have the final say. They may decide to grow in areas humans think are "unsuitable." On the other hand, they may choose to reject "prime" sites. It is important to respect and learn from the choices of Manoomin. Those who care for Manoomin must be willing to adapt restoration approaches accordingly.

Objective 2.3: Tribal Youth programs and Manoomin restoration partners involve youth in restoration activities. For example, this effort can establish internship or apprenticeship positions that receive long-term mentorship and job skills.

Objective 2.4: Develop a tool or process to help non-Indigenous communities select best stewardship practices aligning with their culture and priorities.

Objective 2.5: Facilitate discussions to determine approaches to remove non-local relatives that harm Manoomin beds in a good way, respecting Anishinaabe responsibility to new relatives.

> **Objective 2.5.a:** Investigate and approve new methods of reducing the overabundance and overspreading of competitive newcomers that are both effective and are permitted by Michigan's conservation agencies

Objective 2.6: Facilitate discussions to determine approaches in reducing potential damage that relatives, both animal and native plant species, with oversized populations can pose to Manoomin, including but not limited to exclosures, relocation and population reduction.

3. **Facilitate discussions among Tribal departments, traditional ricing communities, and local, state and federal agencies to clarify jurisdiction, responsibilities and expectations for Manoomin protection and restoration. These will likely vary within and across time and space, such as seasonally or regionally.**

Objective 3.1: Determine if and how the Public Trust Doctrine obligates the State to support Manoomin restoration.

Objective 3.2: Coordinate restoration resources across multiple partners, e.g., Tribes, state agencies, land conservancies, to ensure most effective use of funds.

Objective 3.3: Develop legal safeguards to protect Manoomin beds from various threats, ranging from individual disturbance to commercial exploitation or degradation. This can involve developing protection zones for both direct threats, such as mowing, and indirect threats, such as pesticide application and boat wakes.

Objective 3.4: Develop a non-binding map that identifies Tribal contacts for various regions of the state. This will help non-Indigenous partners connect with the right Tribal partner and help ensure that Tribe(s) are leading restoration projects within their areas of influence.

4. **Tribal departments of natural resources and culture, traditional ricing communities, and state management agencies develop a suite of best practices for Manoomin harvest. These would include, but not be limited to: a process for determining harvest season, allowable equipment.**

Objective 4.1: MWRI should facilitate the development of an initial suite of best practices for Manoomin harvest and ensure that these are regularly revisited. These best practices, along with lessons learned from Minnesota and Wisconsin, will provide the foundation for legally-enforceable harvesting practices when Michigan is ready to adopt a regime for licensing non-Tribal harvesters. [See **Policy and Protection, Goal 4**].

5. **Work with Tribal, state, federal and private partners to identify restoration goals for Manoomin and appropriate ways to track them.**

2.3: Policy & Protection

> *"I believe under treaty that they have an obligation, …They have an obligation to protect that resource, if we can establish that Tribes harvested wild rice here, there, everywhere regardless of what would be state land or tribal land today, regardless, they have an obligation, to re-establish that rice bed, they have an obligation to help protect that rice bed, just like the fishing rights"*
>
> -Tribal Elder

> *"…we were pretty aware of the fishing stuff, fishing rights struggles, the wild rice struggles like in the 70s, in the 80s, and the 90s, and they were fairly symbolic for us as well, so I think it also has that aspect to it. It's a symbol of political resistance and anti-colonial, anti-racist actions… Wild rice was almost always one of the topics associated with resistance against dams, to resistance against mines, the violation of treaty rights…"* –Tribal Member

> *"I want to see a stronger understanding in the public consciousness. We recently had Mnomen pass as the state grain. It's a cute, nice step, but it is only lip service until there is action that follows; until there are physical, tangible outcomes from that. I want to see that go further. I want Mnomen to continue to be acknowledged, continue to be part of the conversation, continue to be part of broader legislation, continue to be part of Michigan. Not just this instance"* –Tribal Youth

It is increasingly clear that supporting the wellbeing of Manoomin will also need legal reinforcement. Efforts must consider changes and additions to the existing policy and protection framework. In late 2023, the Michigan legislature adopted a resolution recognizing Manoomin as the state native grain of Michigan. This is a necessary and important first step toward appropriately recognizing and protecting them, and there will need to be additional efforts.

Goals and Objectives:

1. Ensure the recognition of the importance of Manoomin among non-Indigenous communities and institutions.

Objective 1.1: Work with Tribal leadership to seek protections for key Manoomin beds or their ambient ecosystems, as appropriate, at the local, state, federal and international levels.

Objective 1.2: Tribes in Michigan should take advantage of existing inter-tribal organizations or structures to ensure Tribal perspectives are advanced during negotiations, planning, and decision-making related to Manoomin at local, regional or state levels.

Objective 1.3: Tribal leadership should work to ensure the state legislature appropriately emphasizes Manoomin as a critical cultural resource for the Anishinaabe people. Recognition should include laws that restrict non-Indigenous harvest access until certain restoration conditions are met, while Tribal members retain access.

Objective 1.4: Work with state legislature, through local representatives and senators, to recognize Manoomin as beings with inherent rights and possessing legal protections equal to ones for humans; this should not be framed as giving them "personhood."

Objective 1.5: Work with the DNR to determine if it will be necessary to treat *Zizania palustris* as an endangered species on the basis that they will be very difficult to differentiate from *Z. aquatica* while enforcing the latter's protections under Michigan's Endangered Species Protection law.[11] Identify scenarios in which such a designation will have consequences for restoration and harvesting efforts.

2. Federal, State and local governments with relevant regulatory authority, e.g., for permitting activities with potential impacts to Manoomin, respect Treaty rights, recognize Tribal authorities, and collaborate with appropriate Tribal authorities when reviewing permits. These governments have the responsibility to respect Tribal input, the obligation to protect Tribal interests, and the authority to act on Tribal insights. They should uphold Tribal decisions and avoid any attempts to override them.

Objective 2.1: Use Memorandums of Understanding (MOUs) between Tribes and various local, state, and federal governments/agencies to clarify the regulatory roles and responsibilities of non-Indigenous and Tribal institutions related to Manoomin protection.

Objective 2.2: Use Memorandums of Understanding (MOUs) to respect the process for gathering as well as any shared data and knowledge.

Objective 2.3: Establish relationships and clear lines of communication with institutions that regulate water quality, such as those who oversee water flow, disturbance or pollution, to promote standards and regulations that will minimize damage to Manoomin beds, such as through managing boating speed regulations.

11 Michigan's **Endangered Species Protection Act** requires the DNR to assist the federal government in protecting federally endangered species. In addition, the act enables the DNR to establish a state list to highlight and protect species that are unable to sustain themselves successfully within the state's territory.

3. Maximize harvest access to Manoomin beds on public and private bottomlands.

Objective 3.1: Understand the rights that different types of riparian owners have to limit harvest access to Manoomin and restoration efforts as well as ways to address them in a good way.

Objective 3.2: Investigate management, regulatory, and legislative pathways to increase harvesting and monitoring access to Manoomin beds.

4. State employees who have policing authority, e.g., conservation officers, fully understand Treaty usufruct rights, are sensitive to the cultural importance of Manoomin, and are knowledgeable about appropriate harvesting practices.

Objective 4.1: Work with state regulators to determine appropriate penalties for violating Manoomin-related laws; they should form a framework that respects the integrity of Manoomin within a modern context.

Objective 4.2: Work with the state government and legislators to expand Tribal oversight and enforcement authority over Manoomin beds; explore whether something similar to Tribal oversight of fishery resources under the Inland and Great Lakes Consent Decrees is possible.

5. Tribal government and state agency personnel work together to develop an approach to Manoomin harvest on state and federal lands that include how and when rice beds will be declared open to harvest, how non-Tribal harvesters will be licensed, and specifications for harvest equipment.

Objective 5.1: Facilitate conversations among Tribal, state and local institutions, the rice-harvesting community and key organizational partners to determine the level of access and/or restrictions that should apply to the non-Indigenous community. This can include forming one or more intermediary stages between open and close, such as a Tribal- or permit-only stage. This process can determine the extent to which a specific bed must be rehabilitated before ricing is permitted, as well as which protections are kept, added or dropped as the bed recovers. If “eagle-feather” strictness is deemed ideal,[12] there would be no need for a license system for non-Tribal people.

Objective 5.2: If developing a license system for non-Tribal people is desired, consider how Minnesota and Wisconsin determine and declare rice beds open to harvest, license and police non-Tribal harvesters, and develop specifications for harvest equipment in order to identify initial parameters for a Michigan approach.[13]

> **Objective 5.2.a:** The MWRI should facilitate discussions about developing procedures to open and close Manoomin beds and determine who, such as rice chiefs, has the final say in the opening or closing of a bed.

12 As elaborated in **16 U.S.C. §668**, the Federal government bans taking, possessing, selling, purchasing, or transporting bald eagles, alive or dead, or any of their parts (e.g., feathers), nests, or eggs. Because bald eagles are a national symbol, the Federal government seriously enforces these protections. Yet, in accordance with **16 U.S.C. §668a**, federally recognized Tribes may use bald eagles or their products for religious purposes. In short, ‘eagle feather strictness’ reflects a standard which allows members of Federally-recognized Tribes access to an entity while heavily restricting non-affiliated individuals.

13 In Appendix 3, a table that displays the rules and regulations that Wisconsin and Minnesota currently have for non-Tribal harvesters. Anishinaabe Tribes have the authority to create and enforce permits and regulations for their Tribal members. The states respect Tribal permits and require harvesters not enrolled with a federally recognized Tribe in their state, both Indigenous and non-Indigenous, to acquire a state license and follow state rules. Appendix 3 also contains advice from WI and DNR staff for constructing regulations here in Michigan.

Objective 5.2.b: Develop required training materials and/or certification test(s) for licensees to ensure harvesters understand the basics of Manoomin harvesting, as well as their ecological and cultural importance. Messaging should elevate the plant's spiritual significance, emphasizing their role as a relative and the responsibility to respect their gift.

Objective 5.2.c: Define and detail what constitutes legally-enforceable harvesting practices for Michigan including tools and other relevant aspects in order to limit damage from improper or over harvesting. [See Stewardship Goal 4 for all harvest best practices]

Objective 5.2.d: Establish a representative advisory committee of Anishinaabe community elders, traditional ricers and stakeholders to oversee and demonstrate approval of harvest decisions made by the Tribes and the state, such as when a specific lake should open.

Objective 5.3: The MWRI should facilitate discussions about creating "safe spaces" for Indigenous peoples to rebuild their relationships with a specific Manoomin bed prior to being open to the public. This will involve designating specific lakes and rivers to restrict as well as roughly determining to what extent a Manoomin bed must be plentiful before public access.

6. Tribal governments work with local and regional management organizations, such as land and water conservancies, as well as state and local governments to influence land use management policy.

Objective 6.1: Promote the adoption of conservation and cultural preservation easements around Manoomin beds and key waterways to create and enhance buffers that either prevent new development or limit intensifying development.

Objective 6.2: Work with owners of public and private transportation infrastructure and other organizations to promote infrastructure that benefits Manoomin, such as restoring aging bridges and culverts as well as restoration requirements for new roads.

7. Tribal governments work with local, state and federal institutions to secure consistent funding for various Manoomin-related activities.

Objective 7.1: Tribes will work with the state government to establish processes for raising funds from Manoomin- related activities, such as licensing fees and sales taxes, to create a general funding pool for the mission.

8. Governance and collaboration dynamics across the landscape, potentially impacting Manoomin, are concretely illustrated/outlined to support stronger inter-Tribal and agency collaboration.

Objective 8.1: The MWRI should develop a diagram that demonstrates how established collaborations, among the Tribes and with the state and their associated authority, support Stewardship Plan goals and where there are gaps.

Objective 8.2: The MWRI should develop a diagram that documents state-wide or regional/local authorities impacting implementation of the Stewardship Plan.

Objective 8.3: Tribes in Michigan should work with experts in Tribal law to develop a map of how the various treaties across Michigan influence rights to Manoomin.

Guide 3: Working with Anishinaabe Nations in a Good Way

The Anishinabe way of mino-bimaadiziwin/ baamaadziwin/ mnobmadzëwen, the good life, invites people on a life-affirming path of healing. On this path, humans have an inherent place in this world. Life is not a competition. Rather, life is a vast web of intertwining reciprocity; gifts given, gifts taken, gifts exchanged. People must take life to live, but they can also create life for others. All relatives, human and non-human, are like colored glass beads. Together, they interconnect to form a spectacular, ever-changing tapestry. All people and communities belong. All people and communities matter.

Respecting an Alternative Way of Being

Many Anishinaabe community members have embraced living their life in overlapping worlds. They both practice their culture and participate in the dominant non-Indigenous culture. They have adopted and learned to use many materials and practices from other peoples to nurture Anishinaabe culture, such as with glass beading. Many Anishinaabe scholars attend Western universities and deeply understand Western ways of knowing. Many actively balance their studies with the knowledge of their culture and upbringing. Some have learned to intertwine them and use the best of the two ways of knowing. The Anishinaabe people continuously show it is possible for seemingly opposite, conflicting worlds to come together in a meaningful and good way. With an open heart, others can learn to do the same in their own way while working with Anishinaabe communities and knowledge holders.

All people can learn to live in a good way and teach life. It begins with proper guidance and an open heart. It also begins by understanding their own way of life and how they relate to others. After people accept others as they are, they can come together in good faith and form respectful relationships. People of various backgrounds can learn to embrace each other's gifts and support each other. Overtime, they nurture kinship. The following sections will provide specific advice for partners to kindle and nurture relationships with Anishinaabe nations and one another.

Canoeing by river Manoomin. (Credit: Barb Barton)

The following points provide some important etiquette to keep in mind. Please ask about specific appropriate language and perspectives among the individuals and communities with whom you are working. The specifics can change from nation to nation and community to community. These are only initial points to help guide your path.

Recognizing Relationship

- Review how you fit into the complex web of social, cultural, economic, ecological, and spiritual relationships. Consider how these different aspects of your identity intersect and influence one another. Highlight how they influence your relationship to your place.
- Reflect on how your relationships influence your values, knowledge, and priorities. Identify how you weigh various relationships and which you feel most accountable towards. Be transparent about these responsibilities to those working with you. Anishinaabe philosophy emphasizes that fostering numerous relationships with kin and nurturing the greater web of life is the basis for living a good life.
- Respect your own culture and connection to place. Understand the stories and lessons that shape your reality. Build empathy to respect the cultures of others. Exchange and celebrate one another's cultures to promote mutual admiration.

Building Relationship

- Accept that others' way of life is of equal standing to yours. There is no best way to live, nor can you rank cultures. Each way of life is simply a different way of relating to one's place and existence. Each culture and society has its own unique strengths and flaws. Avoid dismissing or invalidly criticizing others' culture.
- Acknowledge that neither an "objective" truth or hierarchy of truths exists. Individuals understand reality based on their own values and beliefs. The insights one learns from their local relationships are subjective. Avoid dismissing or invalidly criticizing others' knowledge based solely on differences of origin.
- Understand the foundational stories that ground and guide another community's way of living and knowing. Such stories often discuss underlying assumptions of reality and ethics that communities will expect others to know, acknowledge and respect.
- Accept that other communities will have a different understanding of history based on their distinct relations and interactions with governments and dominant communities. Engage in active and empathetic listening to better understand their sentiments, even if critical of your own, factual understanding or world view. Engage in respectful dialogue to see how to move together in a good way.
- Respect Indigenous partners' knowledge and data sovereignty. They will highlight what terminology and phrasing they wish to prioritize and identify what information they wish to convey. They will determine the requirements and responsibilities for individuals in order to receive Traditional Knowledge. The process of free, prior, informed consent (FPIC) is an essential component for learning and sharing insights in a good way.
- Avoid fetishizing and never appropriate Anishinaabe ways of life and knowing as one's own. Instead, learn from their practices to empower yourself to grow your own connections to this place. Engage with Manoomin under elder guidance to discover how Manoomin contribute to who you are. This will manifest differently based on your own background and identity, and how these intersect with Manoomin.
- Recognize there is much diversity amongst Anishinaabe people, and Indigenous peoples in general. Prepare to experience considerable cultural, social, and historical nuance between and within nations. They are not a monolith. Although you may see patterns, be specific about groups. Do not project insights from one nation onto other Indigenous peoples with whom you are not familiar.
- Research the specific community/ies you plan to work with prior to starting any work. Learn about their interior diversity to avoid overrepresenting a single group or perspective in discussions. Seek to understand the needs and responsibilities of the whole community as well as their strengths and capabilities to help.

Respecting Rights

- Acknowledge that the Anishinaabe nations have inherent rights to the lands, waters, and non-human relatives in this place. When signing Treaties, Anishinaabe nations asserted and retained their rights and responsibilities to their ancestral homelands. They remain accountable to the First Treaty with Gizhe-Manidoo, the Great Mystery, and their duty to care for the greater circle of life.
- Understand that the Anishinaabe nations did not agree to "cede" lands when signing the treaties. They welcomed Euro-Americans to live alongside them and share this place. They wanted both peoples to share their gifts and talents so both could flourish and together fulfill responsibilities to their relationships in this place.
- Support Anishinaabe efforts to protect and reinforce their fishing, hunting, and gathering rights and their access to lands, waters, and non-human relatives. Their ancestors smartly negotiated treaties to hold the federal government accountable to their own law. This empowered future generations to use the legal authority of the court system to uphold their retained rights and responsibilities.
- Promote the fact that the Anishinaabe Nations are rights-holders, not stakeholders. They are at equal footing with the federal government, not anyone else.

Collaboration Etiquette

- Prioritize a mentality of marathon over sprint. Prepare to move at a slow, intentional pace with a more flexible schedule. Slowing down and stepping back does not mean a community does not understand the urgency of an issue. Many communities have other pressing priorities, and they will spend time consulting and discussing among their people to come to the best solution available. Avoid imposing strict schedules or deadlines, as these can undermine meaningful relationships.
- Practice Anishinaabe customs when asking them to share knowledge. It is expected that one gives an offering of asemaa (tobacco) as a sign of respect and humility. Tobacco is used in prayer, and the offeror is asking for guidance. When a knowledge holder shares, they are not just giving information. They are sharing an emotional and spiritual gift because the knowledge holder spent considerable time, energy, and effort to learn and understand it themselves. Additionally, this offer of asemaa respects all the teachers, and human and non-human relatives who supported the knowledge holder on their own journey. To misuse, distort, or disrespect these teachings insults the knowledge holder and the entire web of relationships that produced the insights.
- Prepare to sit and listen to deeper lesson sharing. Indigenous knowledge holders will carefully take their time to consider how to articulate their next thoughts, and they will often give information via indirect or abstract narratives, such as cultural stories or artistic display, to convey lessons in a deeper, more critical fashion. Prepare to be comfortable with long pauses and listen without filling the silence or hurrying the speaker. They may also expect you to sit with a story rather than giving you direct information. Although there is no correct answer, you will only arrive at the same conclusion they did if you are ready to understand.
- Step back and observe those around you. Indigenous cultures have different rules for displaying proper manners related to things others consider common courtesy, such as keeping eye contact, initiating handshakes, and avoiding humor in formal conversation. Expectations will vary among Anishinaabe communities. It is best to observe how others communicate with one another to better understand local etiquette.
- Make some outreach buddies. Take your time to form bonds within the community, as community members will help you acclimate to social expectations. Seek to understand each other as individuals and appreciate each other's commitment. This helps ensure that the inevitable inter-personal gaffs and misunderstandings do not rupture the greater relationship. By understanding and correcting these missteps, one becomes better prepared to reach out to the broader community.

This whole process will take time and effort—begin early and be patient! Just as an infant gradually transitions to eating solid food, one must start small and build up to the larger meals of knowledge. Do not rush your learning, and take your time resolving inner disputes that arise. There are no shortcuts or substitutes; one cannot outsource these responsibilities. Allow yourself to grow.

Coming Together

Being Humble

You understand it is essential to come together—Anishinaabe and non-Indigenous community members—because individual and cultural insights, while valuable, are not enough on their own. Revitalizing the well being of Manoomin is a mission bigger than yourself and your close relationships. All must share their gifts and talents to heal Manoomin. Without acknowledging this, we cannot collaborate in a good way.

When two worlds come together, it is easy to get lost in the differences and be discouraged. It may seem too difficult to work together. But that's not the case! We highlight these important cultural and world view perspectives to ensure partnering groups are aware and better prepared to navigate conversations that might otherwise surprise them. With patience and good faith, both sides will be able to share views and values, and develop an inclusive, diverse, and accepting vision for the collaboration.

Getting Together

Building personal relationships sets the foundation for nurturing friendly institutional relations. Establishing transparency, honesty, and openness with one another, at both scales, is an essential step of bonding.

Open and consistent communication is paramount to any partnership. Organizations should set regular discussions to update one another on progress and challenges, and individuals should schedule frequent outings to exchange personal insights and values. Within regular conversations and in amicable surroundings, individuals can discuss more sincerely and productively, better preparing themselves for navigating difficult conversations. To prepare individuals for follow up conversations, share key information and regular updates through accessible forums, such as email or newsletters. Even with disagreement, these conversations build rapport that strengthen trust in the long run.

Over time, shared field days where individuals can work together to fulfill restoration tasks will be important. Jointly participating in field work — such as water monitoring, removing competitive newcomers, population control (e.g. geese, deer), or (re)seeding Manoomin beds — helps cement the shared responsibility of caring for this place. Additionally, the hands-on approach provides mutual learning through sharing techniques and protocols. Completing smaller, more immediate, tasks creates early successes that boost longer term momentum and morale. Otherwise, uncertainty about the other group can lead partners to become unsure of the collaboration's effectiveness. This can create a self-fulfilling prophecy of failure.

Sharing Power

To work as equals, partners must respect each other's established leadership, and both Anishinaabe and non-Indigenous personnel will share leadership responsibilities. One must also respect the other group's processes and criteria for selecting leadership, distributing power, and establishing requirements or setting boundaries. Western partners are encouraged to attend publicly open Anishinaabe events and workshops to understand commonly practiced protocols and norms. This enables you to experience the ways that events are introduced and concluded, the communication etiquette, the decision-making process, and other rules of engagement that are followed. Afterwards, one is better able to respect rites and other cultural expectations that will arise through collaboration, such as smudging or laying down asemaa before joint seeding efforts.

It is important to properly interact with Anishinaabe partners and follow their norms and customs. Proper engagement demonstrates that non-Indigenous partners respect Anishinaabe rights and demonstrate commitment to shared decision making. Accepting that engagement and discussion is necessary for even seemingly trivial matters, such as acquiring appropriate Manoomin seed, reinforces open communication and mutual respect. Appropriate engagement is more than just listening

to Anishinaabe opinions; it requires actively engaging with their expertise and perspectives. Additionally, acknowledging that Anishinaabe partners reserve their right to nullify or reshape restoration decisions on ceded lands is necessary to maintain a balanced partnership.

Walking Our Shared Road

Parallel, Independent Knowledge Systems

Both Western science and Anishinaabe paradigms observe and collect empirical information in order to understand ecosystems and life processes. Anishinaabe researchers, such as ricers and other knowledge keepers, closely interact with ecosystems and their observations can establish vital baselines for restoration efforts. Their evidence can also determine cultural and ecosystemic repercussions for different environmental inputs, including the ramifications of different restoration practices. Local, holistic insights enable Anishinaabe researchers to unearth intricate connections and impacts that outsiders may overlook. Anishinaabe knowledge overlaps with various Western scientific concepts, such as:

> *Population Dynamics, Resource Assessment, Sustainable Management, Community Ecology, Ethnotaxonomy, Climate Patterns, Disturbance Regimes, Phenology, Botany, Medicine, Horticulture, Astronomy, Seasonality, and Ecological Succession.*

When using multiple ways of knowing, it is important to recognize that the foundations of each knowledge system are credible and valuable. Both have their own methods that produce equally valid information about causal relationships, changes, and trends. And one should only critique a knowledge system within its own terms. While neither knowledge system should be considered an authenticator of the other, and neither system translates easily to the other, they can reinforce conclusions when they align. Where they conflict, different interpretations provide opportunities for greater investigation and can advance opportunities for knowledge co-production.

Metaphors for Collaboration

When respecting the individuality and autonomy of cultures and knowledge systems, we also recognize that neither is made to serve the other. To promote an effective and respectful collaboration, we do not ask the other to abandon their worldview; that will also mean a loss of identity. The following table provides useful metaphors to explain and expand on these points. To clarify, they do not originate from Anishinaabe thought. “Two Boats on a river” comes from the Haudenosaunee people, conventionally known as the “Iriquois.” “Coyote and Badger” comes from a contemporary interpretation of the lessons these non-human relatives share from their partnership.

TWO BOATS ON A RIVER	COYOTE AND BADGER
Traditional knowledge and Western science are separate vessels that float parallel to one another on the same river. Each respects the rules, conduct and traditions of the other and neither seeks to steer the other vessel. When common issues arise, the two boats coordinate to share their talents and insights for their mutual benefit. Once done, they return to their own business. Although they have different destinations for their respective journeys, they continue to travel together down the same river.	When Coyote and Badger are hunting ground squirrels, they are more successful when hunting together. Coyote will initiate the chase, running to catch Squirrel. Squirrel will retreat to a burrow, where Badger will begin digging to intercept Squirrel. Squirrel will then escape to the surface where Coyote will give chase once again. They do not share their catch, but both eat more when hunting together than when alone.

TWO BOATS ON A RIVER	COYOTE AND BADGER
Two Boats on a River is a long-standing Haudenoshaunee metaphor (circa 1613 with the Two Row Wampum) that recognizes that both knowledge systems are inherently different and cannot be made to fit into one another. Although they can create space between the two boats to fulfill a shared interest, such as setting out a large net, both remain independent during their interactions, being able to separate at any time. Additionally, both boats have foundationally different travel methods, i.e., paddles and sails, representing the different approaches and tools of each system. One cannot simply take the method of the other without changing the ship's foundational structure and retraining the crew. Instead, the two vessels learn to adapt their tools to remain in parallel with the other. This ensures neither is pulling ahead of the other and ensures the success of their shared net.	This relationship between predators, Coyote and Badger, challenges conventional understanding of predator competition. They cooperate without sacrificing individuality. Both possess their own specialized skill sets that are fundamentally different from one another. Both recognize that neither is superior. Both enter partnership of their own free will. Neither can extract the strengths of the other for their own. Neither attempts to dictate how the other should hunt. Neither interferes with the other's hunt. Coyote and Badger respect each other's right to a fair catch. The companionship will not always work, as Squirrel sometimes escapes. Yet, the pair do not antagonize one another. They trust both are better off in the long run. Neither retaliates if the other leaves, staying open to receiving the other's return.

"**Two Boats**" and "**Coyote and Badger**" provide key initial insight for ways in which Western science and Traditional Knowledge can authentically work together. As non-Indigenous stewards familiarize themselves with Anishinaabe insights and perspectives, both models serve as guides for respectful engagement. While both stories emphasize that knowledge systems and communities remain distinct, the stories present ways that different perspectives can deeply understand each other and work together for their common good.

In this current time and place, the world of the Anishinaabe people and that of the newcomers are irreversibly overlapped. It is important to remedy power imbalances in order to work in good faith. This requires non-Indigenous stewards learning how to see this shared place through an Anishinaabe lens. Many Anishinaabe scholars have already mastered Western science and understand how to intertwine it with their own insights. Non-Indigenous scholars can do the same for Traditional Knowledge.

Two-Eyed Seeing

The Two-Eyed Seeing (TES) approach argues that best caring for this shared place requires concurrently using the strengths of Western science and the strengths of Traditional Knowledge. With TES, scholars learn to use both ways of approaching reality and organizing their lived experiences.

With the eye of Western science, a scholar prioritizes rationality to determine a reality of causal rules. This eye applies step-by-step logic to break down complex existence into many smaller understandable strands. This eye emphasizes closely examining, in great detail, each strand and better understanding its influence on a series of cause-and-effect relationships. With the eye of Traditional Knowledge, a scholar prioritizes storytelling to construct a reality of purposeful relationships. This eye applies creative metaphor to intertwine seemingly separate strands into a shared living web. This eye emphasizes being mindful to not isolate each stand and better understanding its influence on the interconnected tapestry. When using both eyes, individuals and communities are able to balance concentrated, rigorous analysis with accountability to the greater web of relationships in the world. Using both eyes together, a person can see both how a place works and understand its purpose. This approach fosters a well-rounded, deeper understanding and appreciation of place.

TES enables someone to better understand emerging issues and construct resolutions that benefit both Indigenous and non-Indigenous community members. TES will strengthen our, as the Manoomin community, ability to work effectively across different scales. Western science can provide key insights and practices that will enable us to work together across larger areas. Traditional Knowledge can help ensure we appropriately apply the insights and practices in accordance to the wisdom of place. As TES is a relatively new concept, it is important to take time to learn to use these gifts in a good way. Continued discussion and shared experiences will provide greater insights, from both success and failures, for how to carry out and reinforce TES. Those here now have the responsibility to start intertwining these ways of knowing in order to better teach our youth.

Preparing for Tomorrow Together. Vincent Salgado (2024)

Manoomin restoration requires us to construct revitalization plans that are rooted in both ecology and culture. It is important to heal the land and people simultaneously. While using scientific methods to detect, monitor, and heal the challenges to the health of Manoomin, our work must also restore community spirit. This will help resolve the underlying causes of environmental degradation. Without Western science, Traditional Knowledge alone will not be able to adapt to the increasing complexity of environmental change and modern problems. Without Anishinaabe knowledge, Western science will be less able to inspire people to form reciprocal relationships with, and be accountable to, Manoomin and their greater web of relationship. Both Anishinaabe knowledge and Western science are needed to ensure communities in this shared place care for Manoomin for generations to come. We, the Manoomin community, invite you to join us at the rice camps so that, together, we can help Manoomin share abundance for all our communities.

To learn more about working with Anishinaabe nations in a good way, here are some resources, in no particular order, for further exploration.

- **The Mishomis Book: The Voice of the Ojibway**
- **Dibaginjigaadeg Anishinaabe Ezhitwaad: A Tribal Climate Adaptation Menu**
- **Seasons of Research with/by/as the Keweenaw Bay Indian Community**
- **Transforming Research and Relationship through Collaborative Tribal-University Partnerships on Manoomin (Wild Rice)**
- **Anishinaabe Values and Servant Leadership: A Two-Eyed Seeing Approach**
- **Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants**

Chi-Miigwech Acknowledgements

There are many people and beings to whom we wish to say a great big thank you, “Chi miigwech!” The process of developing We all live together in a good way with Manoomin has been a real journey for us—literally, figuratively, emotionally and culturally.

We are grateful for the early and ongoing guidance of the members of the Michigan Wild Rice Initiative (MWRI), who recognized the need for a focusing effort that can bring all who now know and love Manoomin together in Michigan to work for their well-being and to help teach others, Michiganders and beyond, about the great value of Manoomin in our lives. In particular, Dani Fegan (Sault Tribe) and then Frank Zomer (Bay Mills Indian Community), and Katie Lambeth (EGLE) as MWRI co-chairs have greatly supported and encouraged this work. The broader MWRI team read many iterations of this document, providing wise comments, connected us with additional resources, and met with us one-on-one or in small groups to help ensure we fully grasped the importance of our relatives’ gifts and responsibilities in our lives.

Many elders provided guidance along the way and we are grateful that they willingly shared wisdom with us: Kathleen Smith, Roger LaBine, Frank Ettawageshik, Frank Sprague, David Michener, Howard Kimewon. Other knowledge holders were equally generous, sharing what we were capable of hearing at the moment: Tera John, Kyle Whyte, Jerry Jondreau, and others who wished to remain unnamed.

We are grateful for those who shared their personal stories about their relationship with Manoomin. Miigwech for your honesty and courage. Thank you to Kathy Smith, Roger LaBine, Cassandra Reed-VanDam, Antonio Cosme, Jared Ten Brink, Frank Sprague, Annalee Bennett, Malcolm McDonald, and Ramsey Garza. We also thank all those we interviewed and permitted us to use their wise insights anonymously. Please see the list below.

We thank Barb Barton, Peter David, Edward Benton-Banai and his family, Kyle Whyte, Robin Kimmerer, and many other authors whose work set the path for us. We thank Spencer McCormack, and Jennifer Kanine and Kyle Malott for providing this document with several translations in Odawamowin and Bodwéwadmimwen, respectively.

We thank Anne Geiser from Minnesota DNR and Jason Fleener from Wisconsin DNR for sharing their experiences with Manoomin restoration and harvest management. We appreciate them offering advice and highlighting key steps to promote Manoomin restoration and harvest across the two peninsulas.

We are especially grateful to Kyle Whyte, Erin Johnston, Evelyn Ravindran, and Cassandra Reed-VanDam who helped us develop the final outline of this document, and to Kathy Smith and Roger LaBine who commented on the outline. They helped us see through all that we’d learned to find the pieces that need to be shared now and the pieces that can wait for later editions or in future personal or community conversations.

We are grateful to everyone who shared their creative talents to make this document the beautiful testament to Manoomin we hoped it would be. Thank you Todd Marsee (Michigan Sea Grant) and Antonio Cosme for your wonderful photos. Jamie John, Kitchi Wiikwedong Anishinaabe (Grand Traverse Bay Band of Ottawa and Chippewa Indians; see more of Jamie’s art at **https://patreon.com/jamiejohn**) and Shane Morseau, Nadwésipe Huron Bodéwadmi (Nottawaseppi Huron Band of the Potawatomi; see more of Shane’s art here: **@aabweds_oos**) provided beautiful prints and paintings.

We were also fortunate to be introduced to Manoomin through paddling and rice camps that deeply influenced how we expressed ideas in this document. Barb Barton and Steve Allen took Jen Read and Jared Ten Brink paddling among *Zizania Aquatica* in August 2022, after which John Rodwan introduced us to several members of the Nottawaseppi Huron Band of the Potawatomi—Robert Williams, Angela Chivas, and Douglas Taylor. In September that year we were able to attend a rice camp hosted by the Keweenaw Bay Indian Community—miigwech Erin Johnston and team!—and there we were able to spend time with Donald and Karlene Chosa, Roger LaBine, Kathleen Smith, Cortney Collia, and Angela Abraham. Vincent is grateful to Kelly Willis who, the following year, hosted a rice camp at the Saginaw Chippewa Indian Community. Here, Roger and Cortney guided Vincent and members of a local non-Indigenous food foraging group to make their tools and harvest Manoomin in a good way.

We are grateful to Dan Hinmon (Little Traverse Bay Band of Odawa Indians), who set up our meeting with Kimbery Keshick and Nathan Wright. Also to Dani Fegan (Sault Ste Marie Tribe of Chippewa Indians) who arranged for us to connect with Lori Gambardella, Charlee Brissette Niimiida Migizii Kwe, Mikinaakikwe Jennifer Dale-Burton, Michael Castaga, and Amy Miskwaanakwadookwe McCoy at the Sault Tribe Cultural Center.

Our thanks again to Frank Zomer who arranged a meeting at Bay Mills Indian Community with Bucko Teeple, Kayla Perron, Paula Carrick, Justin Carrick and Chelsey Moon.

We are grateful to everyone who participated in a workshop in August 2023 at the R.A.M. Center in Roscommon. It was a wonderful gathering of those who love Manoomin who were able to attend and make new friendships, renew and strengthen existing ones and to think deeply about the shared future we seek with Manoomin. We did not ask you if we can share your names, so we are not doing so at this time. Special thanks to the planning team; Frank Zomer, Katie Lambeth, John Rodwan, Erin Johnston and Alexis DeGabrielle, in particular, who helped us find an amazing Manidoon Gitigan, spirit garden, where we sang to Manoomin and paddled among them. To Jim Mikaolaizik and Michael Surprenant of the Houghton Lake Improvement Board and Jennifer Jermalowicz-Jones of Restorative Lake Sciences who helped plan and provide boat support to ensure Elders and those who did not want to canoe were able to visit Manoomin during the workshop. We so appreciate the staff at the RAM Center who welcomed us with cheer and flexibility and prepared a special meal of Manoomin, bison, squash and other local foods. Our colleagues at the University of Michigan Water Center—Sarah Miller and Sarah Le—helped keep everything running smoothly.

We thank Dawn Browning who, in June 2024, welcomed us, the Elders, and other guests to the Ojibwe Community Library in Baraga, Michigan. Here, we had a two-day writing session as we wrapped up this edition of We live together in a good way with Manoomin.

All of this work was supported by grants from the Michigan Office of the Great Lakes, Michigan Department of Environment, Great Lakes and Energy (thank you Emily Finnell and Simon Beslisle); the Michigan Health Endowment Fund (thank you Jan Delatorre); and the Bureau of Indian Affairs, via the Nottawaseppi Huron Band of the Potawatomi (thank you John Rodwan, Angela Chavis and Lynn Tenbrink).

Individual Interviewees: Wayne Anderson, Jennifer Bailey, Barb Barton, Amanda Bosak, Clay Buchannan, Rich Corner, Peter David, Brad Deacon, Alexis DeGabrielle, Danielle Fegan, Paul Hausler, Stephanie Hoyle, Nicole Hunt, Erin Johnston, Jennifer Kanine, Keith Kintigh, Roger LaBine, Katie Lambeth, Sean Leask, Garrett McClain, Emily Martin, Jon Mauchmar, Rita Mills, Pam Nankervis, Elan Pochedley, Matt Preisser, Sigrid Resh, John Rodwan, Kali Rush, Allison Smart, Alex Weiten, Kyle Whyte, Frank Zomer.

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Vincent is a researcher at the Water Center, part of University of Michigan's Graham Sustainability Institute. He attended the UofM's School for Environment and Sustainability with a focus in Ecosystem Science & Stewardship and Environmental Justice. He is proud of his Mexican heritage and the revolutionary spirit of his ancestors. He aims to energize people to reconnect to the lands, waters, and non-human relatives around them to promote community sovereignty and autonomy. He seeks to help build home and belonging for his people and other migrant communities residing here at the heart of Turtle Island. Vincent hopes to do this with the guidance of Anishinaabe relatives to respect their rights and relationships to these lands and waters as well as share gifts and foster kinship for generations to come.

Jennifer Read

Jen directs the University of Michigan Water Center where, over time, she has come to deeply value work that centers those most affected by it. Jen grew up and was educated in the ancestral lands of the Michi Saagig Anishinaabe (north of Lake Ontario) in a traditional, western mode that shaped her outlook until realizing that a commitment to sustainability is a commitment to place and to relationship with the people of that place. She is grateful for the patience, wisdom and knowledge that people of various places have shared with her, to help her understand how her gifts can be best used to support them in their place.

Jared Ten Brink

Jared is a father, partner, friend, doctoral candidate at the University of Michigan, and enrolled member of the Nottawaseppi Huron Band of Potawatomi. His research explores centering Indigenous people and perspectives for formal and informal science learning, the usage of extended reality in education, and the development of science identities for Indigenous youth. He is active in his tribe's governmental sovereignty, gathering and traditional food pathways, and learning his culture through remembering. In his local community, he is an advocate for Indigenous social justice and vocal advocate for appropriate and authentic representations of Indigenous peoples, appearing in national podcasts and local news. Currently he is finishing his dissertation on the impact of virtual reality to support youth learning Anishinaabe culture and ways of knowing through distance learning. An outdoor enthusiast, Jared enjoys backpacking, sailing, cooking with traditional foods, and SCUBA diving with his family.

About the University of Michigan Water Center

We contribute to restoring, enhancing, and sustaining water and water-dependent resources through policy and management-relevant processes that engage and benefit diverse stakeholders and rightsholders, particularly historically underrepresented and overlooked communities. **Read more about us here**.

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Appendix 1: Best Stewardship Practices

The following insights are not meant to be fixed, prescriptive steps that are universally applicable. Stewards are encouraged to understand them as general guidelines or directions, to test them out, and to share about their effectiveness. It is expected that stewards may need to adjust specific tips to better accommodate their local contexts because of varying regional and local factors, such as soil composition, geology, water levels and flows, and precipitation patterns. As the collaborative efforts continue, the initiative will have a better understanding of which tips are more universally applicable and which are more site or region specific.

Seed sourcing

- Need to develop a Michigan "pipeline" or seed bank
- Recommendation or goal: that a Michigan seed bank, or banks, be developed to ensure sustainable harvest from source beds while providing a source of seed for other restoration/enhancement projects

Navigation in Manoomin-hosting waterways

- Anne Garwood suggested that EGLE has some ideas about dredging / nav channel maintenance that could be developed into BSP

Best Stewardship Practices Table

BSP Title	Description	Relevant links
Seeding Rates for Restoration	Standard is 50-100 lbs per acre. Seeding for new/rehab/ restored sites should occur for 3-5 consecutive years. Seed your project area for at least three years or until you reach 100-150 stems in a half-meter quadrant. At that point, you can begin seeding along the edges to help the bed expand.	**GLIFWC, *Manoomin*, "Seeding Guidelines"** (pp 69-72)
Seed location parameters/ recommendations	Water level, turbidity, general water quality, other vegetation present, flow, pH, substrate composition (%organic, etc.). Difference between *Z. aquatica* and *Z. palustris* Timing: fall	**USACE Manoomin Literature Review** **GLIFWC Seeding Guidelines** (above)
Seed Sourcing	Try to get as much info on your seed source as possible. Collect from local seed sources if available. Know the difference between *Z.palustris/Z.aquatica*. Evaluate whether seed source and planting location are compatible. Don't buy GMO seed. Consult with Tribes in the area (or Ceded Territory) prior to initiating projects. Listen to Tribe's policies on seed source (may only want seed sourced from specific location) and be willing to postpone project until that source can be secured. Many Michigan water bodies have been planted with seed from WI/MN/Canada. Genetic studies (referenced paper) suggest that few stands of authentic Michigan genetics remain. **These original (unplanted) MI stands could be prioritized as seed sources for restoration plantings.**	**Diller, McNaught et. al., "Genetic Structure and Morphometric Variation among Fragmented Michigan Wild Rice Populations."**

BSP Title	Description	Relevant links
Restoration methods	How to harvest/store seed for restoration, transplanting, whether or not a State T&E permit is required, emphasis on site selection & the fact that it can be a long process, etc. Seed in spring and fall. For spring, submerge seed in a lake or stream until ice out. Seed ASAP in Spring. Mudball methods Consider ceremony, cultural revitalization in partnership with tribes	C. Reed-VanDam Restoration is Repairing Relationships: Bridging Indigenous and Western Science to Assess the Socio-ecological Restoration of Wild Rice (Zizania Palustris) on Keweenaw Bay Indian Community Homelands (2024)(**https://digitalcommons.mtu.edu/etdr/1720/**) KBIC Manoomin Restoration Guidance Document (in progress, 2024)
Communication with Tribes	Landowners wanting to establish Manoomin on their property should reach out to local tribal communities. MWRI, local DNR biologists, conservation districts, etc could be good contacts to make these connections. Tribal community workshops would be a good way of introducing non-indigenous landowners and others to Manoomin, the importance of Manoomin, and best ways of caring for Manoomin	**Tribal Climate Adaptation Menu** "Guiding Principles for Interacting with Tribes" **Map of Michigan Tribes** **MSU Reciprocal Research Guidebook** **Seasons of Research with/by/as KBIC Paper**
Treatment of competitive newcomers	Submerged and floating leaf stages are the most susceptible to negative impacts of herbicide treatments. Best practice is to wait until fully emerged before treating invasives in areas of wild rice. However, most invasive managers want to treat early in the season for many species (ex. curly-leaf pondweed treatments are done in June). Some ANC permits include special conditions for protecting wild rice (ex. Houghton Lake tiered system), but these are not standard, don't take timing into account, and are difficult to get added into permits. Avoid using copper-containing herbicides (usually algicides) in wild rice waters. Copper accumulation in lake sediment can impact wild rice stands for decades. Manual/mechanical removal is preferred over herbicides.	**Sensitivity of Wild Rice (Z. palustris L.) to the Aquatic Herbicide Triclopyr** **Chemical Control of Giant Burreed (Sparganium eurycarpum) in Wild Rice (Z. palustris)** **USACE, "Response of Wild Rice to Selected Aquatic Herbicides."**
Permitting considerations	Consider manoomin	
Monitoring standards	Kijerland? Remote sensing/drones. Genetics	**Wild Rice Monitoring Handbook & Field Guide** **O'Shea et al "Improved Remote Sensing Methods to Detect Northern Wild Rice (Zizania palustris L.)"**
Wildlife exclosure/ deterrent use	1 ½" deer fencing; 5x5 meter plot.	**Herbivory by Resident Geese: The Loss and Recovery of Wild Rice Along the Tidal Patuxent River**

BSP Title	Description	Relevant links
Timing/ logistics	When to monitor: post flowering When to seed: after senescence (usually October) or in Spring, store seed at the bottom of a lake or river. Don't take motorboats into Manoomin beds at any time of year. Even avoid canoe/kayaking in beds while Manoomin are in floating leaf stage (to avoid uprooting plants) and flowering (to avoid knocking off flowers and inhibiting pollination). For outside groups unfamiliar with wild rice, a safe general rule could be to wait until September.	
Navigation/ recreation	If you have to take motor boats through wild rice: take the same path each time. Unvegetated "channels" are created by early season boat traffic and remain unvegetated later in the year. Sticking to these same channels each time keeps impacts to a smaller area. Don't use wake boats on wild rice lakes. Signage at boat launches sharing information about wild rice. Implement no-wake zones, especially during floating leaf stage	
Water Control Structures	Don't raise water levels after wild rice germinates. Be aware of if wild rice is/isn't present above and below the dam and understand how the dam is impacting wild rice. Long-term stable water levels result in cattail/phragmites encroachment into wild rice stands, so fluctuation benefits wild rice. Dams can also raise water levels too deep for wild rice to grow or thrive. While wild rice can grow in water deeper than 1m, these depths may be associated with lower density, higher rates of disease, and lower seed viability. Dams can be used to manipulate water levels in favor of manoomin, drawing down water levels over winter. Establish a water level management plan that supports wild rice.	**GLIFWC, Manoomin**, "Water Level Management" and "Dams" (pp 72-73)
Natural Shorelines	Natural shorelines are beneficial for wild rice. Land use - negative impacts from agriculture and conifer forestry practices can be mediated through natural shorelines.	**Michigan Natural Shoreline Partnership** **GANAWENINDIWAG: Working with plant relatives to heal and protect Gichigami shorelines** M. Nyblade, University of Minnesota (in progress) **University of Minnesota Wild Rice Roundtable Discussion papers** *(google folder)*
Insights on best practices will be added, changed, or removed as we learn more from ongoing restoration efforts.		

Appendix 2: Table of Anishinaabemowin Names for Common Animal Relatives

Each non-human relative understands their own name in their way of communicating. One can never know the self-proclaimed names of non-human relatives. But, the specific words of a culture or people help them highlight how they distinguish and value a specific relative.

English Name	Ojibwe Name	Odawa Name	Bodéwadmi Name	Latin name
Bird	Bineshiinh (bih-neh-sheen)	Bineshi (bih-neh-shih)	Bnéshi (Bneh-shee)	*Aves*
Duck	Zhiishiib (zhee-sheeb)	-	Zhishib (zhee-sheeb)	*Anas. spp.*
Mallard	Ininishib (ih-nih-nih-shihb)	Shiishiibenh (shee-shee-behn)	Zhegáde (zhih-gah-deh)	*Anas platyrhynchos*
Goose	Nika (nih-kuh)	Pishkise (pish-kih-seh)	Këgo (kuh-goh)	*Branta Canadensis*
Trumpeter Swan	Waabizii (Wah-bih-zee)	Waabizii (wah-bih-zee)	Wabzhi (wahb-zhee)	*Cygnus buccinator*
Red-Winged Blackbird	Asiginaak (uh-sih-gih-nahk)	Assiganak (uh-sih-gah-nahk)	Mskwangé (mskwahn-geh)	*Agelaius phoenicieus*
Wren	Anaamisagadoweshiinh (uh-nah-mih-suh-guh-doh-way-sheen)	-	Wawyémdëmozé (wah-wyeh-mduh-moh-zeh)	*Troglodytidae. spp.*
Raptor	Binesi (bih-nay-sih)	-	-	
Red-tail Hawk	Meskwananiisi (meh-skwuh-nuh-nee-sih)	Kekek (keh-kehk)	Meshtenyé (Mih-shtih-nyeh)	*Buteo jamaicensis*
Bald Eagle	Migizi (mig-gih-zih)	Migizi (mig-gih-zih)	Mgezhwash (mgi-zhwahsh)	*Haliaeetus leucocephalus*
Osprey	Biijigiwane (bee-jih-gig-wah-neh)	-	Mshizibwan (mshee-zee-bwahn)	*Pandion haliaetus*
Blue Heron	Zhashagi (zhuh-shuh-gih)	-	Zëgo (zuh-goh)	*Ardea herodias*
Common Loon	Maang (mahng)	Maang (mahng)	Mang (mahng)	*Gavia immer*
Grebe	Zhingibis (zheen-gih-bihs)	-	Zhingëbish (zhee-nguh-beesh)	*Podiceps spp.*
Insect	Manidoons (muh-nih-doons)	Manidoshenhs (mah-nih-doh-shens)	Mnedoshé (mnih-doh-sheh)	
Worm	Moose (Moo-say)	-	-	
Spider	Asabikeshiinh (uh-suh-bih-kay-sheen)	Esbikenh (ehz-bih-kehn)	Éspiké (eh-spee-keh)	
Bee	Aamoo (ah-moo)	Amoo (ah-moh)	Amo (ah-moh)	
Beetle	-	-	Mnedoshé (mneh-doh-shih)	
Moth	-	-	Thigwéwdêkmé (jee-gweh-wdoo-kmeh)	
Fish	Giigoonh (gee-goon)	Giigoonh (gee-gohn)	Gigo (gee-go)	
Walleye	Ogaa (oh-gah)	Ogaa (oh-gaa)	Oga (oh-gah)	
Northern Pike	Giinoozhe (gee-noo-zhay)	Gnoozhe (gih-noh-zh)	Gnozhé (gnoh-zheh)	
Bass	Ashigan (uh-shih-guhn)	Shigan (zhih-guhn)	Shëgën (shuh-guhn)	
Amphibian	-	-	-	
Turtle	Mikinaak (mih-kih-nahk)	Mishiikenh (mih-shee-kehn)	Mshiké (mshee-keh)	

English Name	Ojibwe Name	Odawa Name	Bodéwadmi Name	Latin name
Mammal	-	-	-	
Muskrat	Wazhashk (wah-zhushk)	Zhaashkonh (zhahsh-kohn)	Zheshko (zhih-shkoh)	
White-tailed deer	Waawaashkeshi (wah-wahsh-kay-shih)	waawaashkeshii (wah-wahsh-keh-shee)	Wawashkéshi (wah-wah-shkeh-shee)	
Moose	Mooz (mooz)	Mooz (mooz)	Moz (mohz)	
Beaver	Amik (uh-mihk)	Amik (uh-mihk)	Mëk (muhk)	
Mink	Zhaangweshi (Zhahng-way-shee)	Zhaangwesh (zhahng-waysh)	Zhangéshi (zhah-ngeh-shee)	
Wolf				

Appendix 3: Table of Laws and Regulations from WI & MN, DNR Insights, and Tribal Codes

This appendix aims to inform the formulation of laws and regulations relating to the harvest of Manoomin. Wisconsin and Minnesota have considerable experience overseeing non-Tribal access to Manoomin beds, and the following table summarizes each state's legislation. Additionally, this appendix provides overall lessons that DNR staff have shared from their experience to keep in mind when forming regulations in Michigan. This appendix also provides Tribal codes to further inform the legislation process.

State Codes

Type of Law	Wisconsin	Minnesota
Ownership[14]	• The State of Wisconsin, through legislation, explicitly owns the legal title to all Manoomin beds in all lakes throughout the state. • Manoomin is not recognized as the state grain.	• The State of Minnesota owns all aquatic vegetation that grows in public waters, indirectly owning legal title to all Manoomin beds throughout public waters. • Manoomin is the state grain. There is no distinction of 'native.'
Timing	• Daily hours: All permitted beds in the state open at 10 AM and close at sunset. • Date-regulated sites: These specific sites are specifically listed into state law for more direct oversight. Each year, the respective Tribal ricing authority will determine specific dates when the bed will open and close. Harvesting before or after is illegal. ○ The DNR is required to post a notice on the shores and public entrances of a lake or stream at least 24 hours in advance of the opening date. • Non-date regulated sites: There is no official opening or closing date. Ricing can commence once the rice in the bed is ripe (not green).	• Daily hours: All beds open at 9 AM and close at 3 PM. • Statewide season in which all beds open on August 15 and close on September 30. • The DNR commissioner may restrict or prohibit, or advise such action, harvesting within a specific bed if it will threaten reseeding or food for waterfowl.

14 Michigan has designated Manoomin as the native state grain. The State of Michigan holds title to bottom lands or beds of the Great Lakes in public trust. Thus, all Manoomin beds growing in the Great Lakes belong to the public through the Public Trust Doctrine. For inland lakes, the title of bottom lands is distributed among the riparian owners, with each having ownership of their 'slice' of the lake bed, therefore ownership of Manoomin beds is similarly distributed among the adjacent riparian owners. For more info, visit Michigan State University's Public Rights on Michigan Waters.

Type of Law	Wisconsin	Minnesota

Harvest Permits	• Individuals between 16 and 65 years old require a harvest license.
	  ○ Immediate family members of a license holder are not required to obtain a harvest license. They must obtain a DNR Wild Rice Identification card from the DNR.
	  ○ *Immediate family* includes a legal spouse or minor children who share the same abode and domicile as the harvest license holder.
	• A state license is necessary and must be on one's person when ricing.
	• Tribal members qualify for a free license from their respective tribal conservation department. They must also carry the license when ricing off-reservation.
	• Licenses are only available for residents of Wisconsin.
	• Assistants who only help on-shore do <u>not</u> require any form of documentation.
		• All individuals over 18 years old must acquire a license. Both season-long license and 1-day licenses are available. Only 1-day is available for out-of-state residents.
		• In-state residents under 18 may harvest without a license if they accompany an individual who has a license. This does not apply to out-of-state residents.
		• A state license is necessary and must be on one's person when ricing.
		• Tribal members qualify for a free license from their respective tribal conservation department. They must also carry the license when ricing off-reservation.
		• Assistants who only help on-shore must still acquire a license. This also applies to anyone transporting the rice.

Harvest Restrictions	• No mention of binding stalks. • There is no law about harvesting unripe ("green") rice. • No one may remove Manoomin by hand, mechanical or chemical means in public lakes unless approved by the department of natural resources.	• No mention of binding stalks. • It is illegal to harvest unripe ("green") rice. • No one may cut, pull, or remove Manoomin unless done above the water line and use them for either shooting or observation blinds.
Legal Enforcement	• Ricing without a license is punishable by a fine not exceeding $1000. • Violating harvest rules (e.g. tool requirements) is punishable by revoking a harvest license for up to 3 years. • There are no listed punishments for illegally removing Manoomin.	• Violating Manoomin-related laws is punishable by up to $1000 fine and/or 90 days in jail. • 2 violations within a 3 year period nullifies an individual's license for a year.

Advice from WI/MN DNR staff

The DNR staff of Wisconsin and Minnesota have generously offered further guidance for establishing rules and regulations. They based their insights on both their personal experiences and what they would like to see done differently within their respective states. By taking this advice, restoration efforts in Michigan will be better prepared to avoid repeating similar mistakes or learning the hard way on their own, which saves resources and allows for more time and personnel to focus on other matters.

Wisconsin

1. Michigan should establish a training system that one must take to acquire a harvesting license. The system can be based on online modules and videos.
    a. Although possible, there is caution towards using in-person/on-site camps or courses, especially if multi-day.
2. If Michigan decides to disclose the sites of beds, Michigan should only generally reveal which lakes have beds.
    a. This requires the public to put in some effort to find the exact location of a bed, which helps filter potential harvesters
    b. The posting of date-regulated sites will also draw in more harvesters because this takes less effort on their part. This helps concentrate newer harvesters for better oversight, and there is greater reassurance that mainly experienced harvesters are visiting more hidden beds.
3. Because ricing with knockers is purposefully inefficient, there is not much need for harvest/bagging quotas. This will only make things more difficult for conservation officers. If harvest limitations are desired, it will be easier to restrict access from specific lakes or streams until the Manoomin bed is ready to sustain harvest.

Minnesota

1. Michigan should construct a training module for conservation officers to learn about Manoomin, especially in regards to ripeness.
2. Michigan should have a higher threshold for the width of canoes than MN (36”). Currently, the narrow canoes are much more expensive than wider (38”) ones, which can be a strong barrier to entry for lower-income communities.
    a. Narrower boats do not appear to be much more practical benefit for the rice beds than the slightly wider ones.
3. Michigan should establish strict punishments for violating laws related to Manoomin so law enforcement has jurisdiction to “throw the book” at more extreme cases.
    a. Language should emphasize officer discretion to allow a lesser penalty for less severe incidences based on context.
    b. Work with law enforcement to write regulations so they are clear and direct enough to easily enforce on the ground. When applicable, it is best to establish fixed thresholds that do not require judgment calls.
4. Michigan should not establish a state-wide season system. If desired, Michigan should only have a closing date, as opening dates do not reflect when Manoomin is ready across sites.
    a. An opening date can also severely confuse inexperienced harvesters, unintentionally promoting inappropriate harvesting of unripe rice.
5. Michigan should open beds at 10 AM to allow the beds more time to dry. They should remain open till sunset, or at least 5 PM, to ensure youth have time to harvest after school.

Tribal Codes

The following Tribal codes are from four of the Federally-recognized Tribes here in Michigan, although they only apply to and are enforced upon Tribal harvesters. Their additional guidance will help ensure Michigan legislation develops adequate standards that respects both human kinship with Manoomin and their importance as a sacred relative.

Timing

Bay Mills Indian Community

- Daily hours: All beds open at 9 AM and close at sunset.
- There is no closed season. A specific bed may close for the season.

Lac Vieux Desert

- Daily hours: Applicable beds open at 9 AM and close at sunset.
- Date-regulated sites only; one cannot harvest at a site unless opened first.

Keweenaw Bay Indian Community

- Daily hours: (not mentioned)
- Date-regulated sites only; one cannot harvest at a site unless opened first.

Saginaw Chippewa

- Daily Hours: There are no set hours. They may vary per season with 24 hour notice of the opening of a specific season.
- Season: There are no set season dates. They may vary per season with 24 hour notice of the opening of a specific season.
- Lake assignments may be required for harvesters, and, if so, they are non-transferable. If done, at least one original recipient must be present when ricing on the water.

Harvest Permits

Bay Mills Indian Community

- All Tribal members must acquire a permit from the BMIC's conservation department.
  - The spouse, parent, grandparent, child, grandchild, or sibling of a license holder who does not have a license may assist said license holder with harvest-related activities. Legal language suggests they must have their own license to harvest.
- Tribal code also applies to Tribal members harvesting on ceded lands.
- Assistants who only help on-shore do not require any form of documentation.

Lac Vieux Desert

- All Tribal members must acquire a permit from LVD's conservation department.
  - Among members of signatory Tribes, only the spouse, parent, grandparent, child, grandchild, or sibling (at least one parent in common) of a license holder may assist said license holder in harvest-related activities without a license. They must acquire their own license if they wish to harvest.
  - Individuals who are not enrolled with any Tribe may assist a licensed member in harvesting and harvest-related activities as allowed by Michigan state law.
- Assistants who only help on-shore do not require any form of documentation.

Saginaw Chippewa

- All Tribal members must acquire and be in possession of a permit.
  - Youth less than 16 years old are not exempt, and they must be in the immediate vicinity of a parent, guardian, or Tribal member with ricing experience.

Tools

Bay Mills Indian Community

- Ricing sticks must be (a) smooth, (b) rounded, (c) cedar, (d) length less than or equal to 38 inches, (e) hand held or hand operated, (f) no weight requirement.
- Boats must be (a) length less than or equal to 17 feet, (b) width less than or equal to 38 inches, (c) no modifications to catch rice outside of the boat, (d) only have muscle power with push poles or paddles.
    - There are no requirements for push polls or paddles.

Lac Vieux Desert

- Ricing sticks must be (a) smooth, (b) rounded, (c) cedar, (d) length less than or equal to 38 inches, (e) hand held and hand operated, (f) no weight requirement.
- Boats must be (a) lengths less than or equal to 17 feet, (b) width less than or equal to 38 inches, (c) no modifications to catch rice outside of the boat, (d) only have muscle power with push poles or paddles.
    - There are no requirements for push polls or paddles.

Saginaw Chippewa

- Knockers are not mentioned.
- Boats must be (a) no length limit unless specifically posted at site seven days in advance, (b) no width limit unless specifically posted at site seven days in advance, (c) there is no mention of modifications, (d) only have muscle power.
    - There is no specific tool or method for pushing the boat; one cannot just use mechanical means to propel the boat.
    - Mechanical 'duck bills' are banned during pre-harvest and harvest seasons.
    - All individuals must wear a personal safety device (life jacket).
    - The number of persons on watercraft may not exceed said watercraft's intended maximum capacity.

Harvest Restrictions

Bay Mills Indian Community

- Binding stalks is not permitted. One may not rice stalks that have been bundled. There are no exceptions to this.
- There is no law about harvesting green rice.

Lac Vieux Desert

- Binding stalks is not permitted. One may not rice stalks that have been bundled. One may acquire a special permit from the LVD conservation department to do so.
- There is no law about harvesting green rice.

Saginaw Chippewa

- Hunting waterfowl in a rice bed during the posted harvest hours is prohibited.
- One may not allow another to use their permit. One may not harvest with or assist another individual who does not have a proper license.
- Gathering wild rice or operating watercraft while under the influence is prohibited.

Legal Enforcement

[Tribal legal consequences are not included because they do not have legal jurisdiction over individuals who are not enrolled in their respective Tribe].

Appendix 4: Rights of Manoomin - White Earth Band

In 2018, the White Earth Band of Chippewa Indians passed a resolution to protect Manoomin and their greater habitat from degradation. By protecting Manoomin, the White Earth Band asserts it also protects the health, welfare, and economic security of their people. It highlights elevated respect for Manoomin as a sacred relative. This resolution highlights their position on the minimum rights that others, including governments, businesses, and non-Anishinaabe communities, must respect to honor the relationship between the Anishinaabe people and Manoomin and the integrity of Manoomin. The core of the document is as follows:

Section 1. Statements of Law -Rights

a) **Rights of Manoomin.** Manoomin, or wild rice, within the White Earth Reservation possesses inherent rights to exist, flourish, regenerate, and evolve, as well as inherent rights to restoration, recovery, and preservation. These rights include, but are not limited to, the right to pure water and freshwater habitat; the right to a healthy climate system and a natural environment free from human-caused global warming impacts and emissions; the right to be free from patenting; as well as rights to be free from infection, infestation, or drift by any means from genetically engineered organisms, trans-genetic risk seed, or other seeds that have been developed using methods other than traditional plant breeding.

b) **Rights of Tribal Members.** Tribal members of White Earth Band possess the right to harvest manoomin, and protect and save manoomin seeds, within the White Earth Reservation. This right shall include, but is not limited to, the right to manoomin that is free from patenting, as well as free from infection, infestation, or drift by any means from genetically engineered organisms, trans-genetic risk seed, or other seeds that have been developed using methods other than traditional plant breeding.

c) **Right of Sovereignty.** The White Earth Band and its members possess both a collective and individual right of sovereignty, self-determination, and self-government, which shall not be infringed by other governments or business entities claiming the right to override that right. This shall include the right to enforce this law free of interference from corporations, other business entities, governments, or other public or private entities. That right shall include the right of tribal members to be free from ceiling preemption, because this law expands rights-protections for people and manoomin above those provided by less-protective state, federal, or international law.

d) **Rights as Self-Executing.** All rights secured by this law are inherent, fundamental, and unalienable, and shall be enforceable against both private and public actors without further implementing legislation.

Section 2. Statement of Law - Prohibitions Necessary to Secure Rights

a) It shall be unlawful for any business entity or government, or any other public or private entity, to engage in activities which violate, or which are likely to violate, the rights or prohibitions of this law, regardless of whether those activities occur within, or outside of, the White Earth Reservation.

b) No government shall recognize as valid any permit, license, privilege, charter, or other authorization issued to any business entity or government, or any other public or private entity, that would enable that entity to violate the rights or prohibitions of this law, regardless of whether the authorized activities occur within, or outside of, the White Earth Reservation.

Section 3: Enforcement

a) The Tribal Government shall take all necessary actions to protect, implement, defend, and enforce the rights and prohibitions of this law.

b) Any business entity or government, or any other public or private entity, that violates any provision of this law shall be guilty of an offense and, upon conviction thereof, shall be sentenced to pay the maximum fine allowable under tribal law. Each day or portion thereof, and each violation of each section of this law, shall count as a separate violation.

c) Any business entity or government, or any other public or private entity, that violates any provision of this law shall also be liable for any damages to the manoomin and its habitat caused by the violation. Damages shall be measured by the cost of restoring the manoomin and its habitat to their state before the violation, and shall be paid to the White Earth Reservation Business Committee to be used exclusively for the full and complete restoration, recovery, and protection of the manoomin and its habitat.

d) The White Earth Reservation Business Committee may enforce all of the provisions of this law through an action brought in any appropriate court. In such an action, the White Earth Reservation Business Committee shall be entitled to recover all costs of litigation, including, without limitation, expert and attorney's fees.

e) Manoomin within the White Earth Reservation may enforce its rights and the prohibitions of this law through an action brought by the White Earth Reservation Business Committee in any appropriate court, in the name of manoomin as the real party in interest.

f) Law enforcement personnel shall be prohibited from arresting or detaining persons directly enforcing these rights; and, enforcement shall be consistent with Article 13 (Rights of Members) under the Revised Constitution and Bylaws of the Minnesota Chippewa Tribe.

g) The White Earth Reservation Business Committee and manoomin shall have the right to intervene in any action concerning this law in order to enforce or defend it, and in such an action, other parties to that action shall not be deemed to adequately represent their particularized interests.

Section 4. Effective Date and Existing Permit Holders

This law shall be effective immediately on the date of its enactment, at which point the law shall apply to any and all actions that would violate this law regardless of the date of any applicable local, state, or federal permit.

White Earth Reservation Business Committee. (2018). Rights of Manoomin: Resolution No. 001-19-009. White Earth Band of Chippewa Indians. https://static1.squarespace.com/static/5e3f36df772e5208fa96513c/t/61b0fbde0f3dc509e54c6aca/16389887

Appendix 5: Research Agenda

A common research agenda will help partners work together to fill gaps in our knowledge for working with Manoomin to support their well-being. Like the stewardship plan, the Research Agenda is meant to be revisited periodically and updated as the initiative learns more about ways partners can steward Manoomin well-being. The following document lists categories of gaps with some specific questions related to the gaps.

Understanding Boom/Bust Cycles

- Disease and Plant Vigor
- Microbial Community Interactions and/or Effects Related to Disease and Plant Vigor
  - Manoomin-microbe interaction, especially inside plant tissue and disease suppression, and role in brown spot infestation/breakout.
  - Other relatives/species microbial communities that may be impacting Manoomin.
- Rice worm infestations - understand why populations boom/bust and impact on stands.
- Diseases such as Brown Spot, ergot
- Relationship between brown spot and rice worm

Causes of ghost rice

Climate Change/ Extreme Weather Effects

Role of water quality

- PFAS, boat fuel, septic and agricultural fertilizer run-off
- Sediment and pore water
- Heavy metal uptake into seeds
- Herbicide impacts

Role of Hydrology

- Hydrologic manipulation and management of competitive newcomers, timing to ensure Manoomin are not endangered

Environmental Monitoring

- Benefits and costs of long-term environmental monitoring for Manoomin well-being and spatial distribution
  - Environmental variables required for long-term monitoring
  - Minimum standards needed for comparable data across the landscape
- Opportunities to collect comparable monitoring data across Michigan

Seed Sourcing

- Importance of genetics when sourcing seed
- Best practices for seeding, eg timing, over-wintering in water
- Number of regional seed banks

Genetics

- Maintaining genetic diversity and unique MI genetics
- Role of genetics in local adaptation and bed success
- Potential threats of genetic mixing of Manoomin with paddy rice
  - Susceptibility of hybridization with paddy rice
  - Impact of hybridization on disease resistance capacity

Community Relations

- Role in providing fish habitat
- Muskrat's role in facilitating Manoomin well-being
- Natures of various community interactions, e.g., with other plant relatives, fishes, amphibians, invertebrates, birds and/or mammals
- Interaction of Manoomin with competitive newcomers

Until next time...

Credit: Antonio Cosme