

Preserving Minnesota's Wild Rice

THE IMPORTANCE OF INDIGENOUS KNOWLEDGE

Jessica Milgroom and Don Wedll

WILD RICE HARVESTING season comes with the warm days of late summer and the first chilly winds of autumn. If you have ever been out harvesting, you might remember the sound of the rice falling into the aluminum canoe like rain on a tin roof in gusts of wind. Or maybe you get a flash of the heron you saw swooping across the glassy water reflection of clouds and sky as you were chuckling over old harvesting stories with a friend or relative. If you have ever parched the rice in a large cast-iron kettle after picking it, the particular aroma that lies somewhere between roasted nuts and late-summer grass dried in the sun might swirl up your nostril memory (see “Gathering and Processing Wild Rice”). Or perhaps the mention of wild rice conjures up

nostalgia for the casserole your grandmother used to make, or the chicken wild rice soup you ate at a lakeside diner after a long day of fishing.

Wild rice is Minnesota's state grain. Currently, wild rice is found nowhere else in the world as abundantly as in Minnesota. Most Minnesotans have some association with wild rice, yet many imagine it to be the cultivated grain found packaged in the supermarket. Many are unaware that there is a world of difference between cultivated paddy rice and hand-harvested *wild* wild rice (see “Wild Wild Rice versus Paddy Rice,” see p. 80). *Wild* wild rice—sometimes called natural wild rice, true wild rice, or hand-harvested lake or river rice—grows wild in lakes and waterways and has provided for people and animals for thousands of years in a vast area covering central North America, from Minnesota stretching eastward.¹

Since European colonizers settled on the land, wild rice stands have diminished drastically. This change is the result of a number of interconnected factors. Native peoples were removed from their land, losing access to the waterways on which wild rice grew and preventing them from tending the rice beds—something they had been doing for centuries. Settlers significantly altered the landscape and waterscape by clearcutting forests for timber, draining lakes and marshes to gain farmland, and building dams to control water levels. These actions disrupted the balance of complex wild rice ecosystems and destroyed wild rice habitats. Invasive species and the use of waterways to transport logs further damaged existing beds by the early 1900s.²

When settlers began harvesting the grain for profit, they paid little heed to the plant's mechanism of



regeneration. The problem is that the grains that people and animals eat are also the seeds from which wild rice grows again the next year. If all the seeds are harvested or the plants are destroyed before enough seed has fallen into the water, the future of the rice is threatened. Careless practices were causing wild rice to disappear at a rapid rate.

During the Great Depression of the 1930s, a state of emergency was declared to protect wild rice. This was not because of state legislators' love of the plant, or even the food. It was because the cash-strapped State of Minnesota wanted to avoid having to spend more money to feed people on reservations and wild rice was a source of food for Native people. Lawmakers, recognizing that they didn't know how to regulate the wild rice harvest, relied on Native elders to help write and enforce the statutes to protect the rice. It is likely that Minnesota's lakes still have wild rice today because of the incorporation of Indigenous knowledge into state law.³

Manoomin as a Gift

Called *manoomin* in Ojibwe and *psin* in Dakota, wild rice has been harvested in a continuous and sustainable way for thousands of years by Native people. Archeological evidence indicates that Dakota people and their ancestors living in the Mille Lacs area consumed wild rice as far back as 2,000 years before contact with Europeans. Reports from before and around the turn of the twentieth century tell effusive tales of the landscape's beauty, the grain's abundance, and the harmony of harvesting and processing scenes along the edges of the lakes.⁴

FACING: Ricing on Big Sandy Lake, 2021.

GATHERING AND PROCESSING WILD RICE

Gathering the ripe grain, also called "ricing," was, and still is, a seasonal family affair. Two individuals go out in a canoe and gather the wild rice. One of them pushes the canoe through the stands of wild rice, and the other "knocks" or sweeps the ripe grain from the stalks into the canoe using two slender cedar sticks, carved smooth for the job, called "knocking sticks." Wild rice does not ripen all at once, so the practice of knocking only the ripe rice and leaving the rest of the stalk intact is important for gathering an abundant supply over time. The same wild rice beds are combed again and again over the ricing season to harvest the mature grains as they ripen little by little.

When the processing of the grain is done manually, the grain is then spread out to dry, and later it is "parched" (roasted or cured) in an iron kettle, or large flat metal pan, over an open fire, stirred with a canoe paddle so that the rice doesn't burn. When it is perfectly golden, it will be "jigged" (threshed) to remove the hull from the grain, traditionally by dancing or stepping on it. Finally, it is "winnowed" by tossing the grain and hull into the air: the wind blows away the lighter hull and the grain falls back into the basket. Although many people parch their own rice, today most of these practices, except for the harvesting, are mechanized in Minnesota. Rice processing plants are found across the state and minimize the labor of preparing the grain to be edible.

A. Gathering the rice. **B.** Parching rice in a long metal pan. One person stands on each side of a pan set over a fire and constantly moves the rice with wooden paddles to keep it from burning. The parching pan is an alternative to the cast iron kettle. **C.** "Jigging" or dancing on the parched rice to remove the hulls from the grain. **D.** While it is common for harvesters to parch their own rice, many people thresh their grain in a machine instead of manually "jigging" it. This homemade model is for small batches. **E.** After jigging the rice to separate the rice grain from the hulls, winnowing by hand entails tossing the mix into the air using a birch-bark basket. The hulls blow away and the grain falls back into the basket.



WILD WILD RICE VERSUS PADDY RICE

True wild rice grows naturally in waterways and lakes of the Great Lakes region in the United States and Canada. Botanically, wild rice (*Zizania palustris*) is not a rice at all. This name was given to it by colonists who recognized its resemblance to grains such as oats (called wild oats by the French) and called it rice because it grows in water. True wild rice has a nutty flavor, a nonuniform color, and variation in grain size because of its genetic variability and because it is harvested at different stages of ripeness. The paddy rice, or tame rice, that is farmed on plots is more uniform. Cultivated rice is also processed differently to achieve the characteristic black color, causing longer cooking times and a different texture, taste, and aroma. Like distant cousins, they merely resemble each other. How is this possible?

Although wild rice was traditionally traded by Native people or sold in trading posts, it wasn't until the 1920s that profits from harvesting and selling wild rice began to pique the attention of white settlers. As the market grew in the 1930s and 1940s, white settlers began to harvest the grain and experiment with harvesting and processing machines to mechanize the labor-intensive steps for commercialization. Farmers attempted to cultivate wild rice, but it was not economically viable to grow the rice and harvest with machines because of the way it matured little by little instead of all at once, a characteristic called "shattering." Early machines damaged the rice as they passed through stands when only the first grains were mature and managed to harvest only a small percentage of the grain.

By the 1950s, the market for wild rice and its profit potential had grown so much that the University of Minnesota began to support the search for a non-shattering variety that could be cultivated in paddies and harvested with machines. In 1963 seeds from a non-shattering variety were first identified and reproduced. In 1973 the University of Minnesota established a wild rice research program to support the growth of Minnesota's commercial wild rice industry. In the same decade, farmers in California began to grow wild rice, and today much of the wild rice sold in supermarkets, especially outside of Minnesota, is cultivated in California.

The lower production costs of paddy rice led to lower prices for consumers. Unfortunately, this shift in the market caused a crash for hand-harvested wild rice in the early 1970s. Today, however, this market is again gaining steam. Consumers recognize the difference, know that one is not a cheaper substitute for the other, and are willing to pay for the real stuff. Fortunately, because of a 1981 lawsuit, all wild rice sold in Minnesota must be properly labeled to distinguish between true wild rice and paddy rice. This is not the case in California, Wisconsin, or Canada.ⁱ

Another important difference lies in who benefits when consumers choose one package of rice or another. Profits gained from paddy rice go to large companies owned for the most part by white farmers, whereas you can buy hand-harvested rice directly from tribal governments and individuals, the original caretakers of this food. Furthermore, hand-harvested wild rice is always organic, whereas paddy rice is grown with chemical fertilizers, pesticides, and herbicides.



Hand-harvested, wild wild rice (A) comes in a wide variety of colors, shapes, and sizes, whereas paddy rice (B) is uniform and dark in color because of differences in the way it is harvested and processed.



Many generations ago, prophecies directed people of the Anishinaabe nation, living then on the eastern coast of North America, to migrate in search of a new home "where the food grows on water." They spent an estimated 500 years on their journey westward along the Great Lakes. When they found wild rice around Lake Superior, they split into what today are known as the Ojibwe, Odawa, and Potawatomi Nations, each to occupy a different region. The Ojibwe came to live in the area now known as Minnesota, ultimately pushing the Dakota people out. This story of migration and the search for the food that grows on water is one of the reasons wild rice is so important to Ojibwe people today; they regard wild rice as the "sacred gift of their chosen ground." An Ojibwe elder described this sentiment: "It's something that was given to us and we have to respect that sustenance



Wild rice on the plant at harvesting time.

was given to us. You know, it's a staple food and I really feel that it wouldn't have been given to us if we weren't meant to keep it in our heart as part of our culture."⁵

Wild rice used to be one of the main sources of food for the Ojibwe. But more than just a food, wild rice is central to Ojibwe life and culture. Wild rice is often the first meal and the last meal served to individuals in their lifetime; it is a central part of all ceremony and traditional gatherings. In the Ojibwe language, wild rice beds are also called *Manito Gitigaan*, or the Great Spirit's Garden.⁶

According to Ojibwe and many other Indigenous worldviews, plants, animals, and natural elements such as water and fire are considered relatives. Humans are not considered more important than other lifeforms. In fact, in Ojibwe cosmology humans were the last to arrive on this earth, after the rock, water, fire, wind, plants, and animals. Humans are most dependent on the rest for survival, and the least knowledgeable.⁷

Thus, in Ojibwe culture, wild rice is a relative, a spirit, and harvesting wild rice entails entering into a relationship—a relationship of reciprocity in which the rice provides sustenance for humans and in return humans take care of the plant so that it can thrive and grow abundantly. For the Ojibwe, going out ricing is a way to express gratitude for the gift of manoomin, and spiritual offerings such as tobacco and prayer are made to ensure an abundant harvest for years to come. This reverent relationship with nature stands in stark contrast to the culture of extraction brought by white settlers, in which wild rice is considered a resource to be used rather than a gift to be cherished and cared for. In Indigenous cosmologies, nature is stewarded, while settlers' common approach to nature is one of management.

Harvesting wild rice entails entering into a relationship . . . of reciprocity in which the rice provides sustenance for humans and in return humans take care of the plant so that it can thrive.

Threatened by Settler Notions of Extraction

In the 1920s, the alarm was sounded about the state of the wild rice beds. Duck hunters even began to replant wild rice to attract ducks back to regions where the rice (and ducks) had previously been abundant. Wild rice was being touted as a gourmet American grain, even being served in the White House. Demand for the delicacy was on the rise. International entrepreneurs took note and attempted to plant wild rice in places such as the United Kingdom. Settlers began to harvest the grain for profit without proper knowledge of its ecology. There is a large variability in the ripening times across

the landscape and between years; specific knowledge of the plant is necessary to identify when the rice is ripe in each location. Unskilled harvesters hit the plants too hard, harvested unripe rice too early in the season, and harmed the beds. Furthermore, they began looking for ways to harvest the grain more quickly and started inventing mechanical harvesters as early as 1919. The first harvesting machines tore up the plants at the roots, indiscriminately harvested ripe and green (unripe) rice alike, and broke the stems, all of which disrupted reseeding for the future. The devastation of a significant number of ricing beds increased pressure on the remaining stands of wild rice.⁸



A paddle wheel harvester that could pick a bag of wild rice per minute, circa 1930

A State of Emergency

The first mention of wild rice in Minnesota law is for the ducks. In 1927 it was deemed illegal to cut or destroy wild rice, the goal being to protect the waterfowl's natural habitat, including food and nesting grounds. When the number of non-Native harvesters began to increase, the urgent need for regulation became evident.⁹

A law was passed in 1931 that would definitively shape Minnesota's landscape. This law made it illegal to harvest wild rice with machinery or with any watercraft other than a skiff or a canoe propelled by hand. This landmark legislation came during a period of intensive industrialization. While the rest of the country was rapidly moving toward mechanized farming, processing, and large-scale distribution of food, Minnesota put a halt to the use of machines or even motor-powered boats for harvesting wild rice.¹⁰

A closer look at the situation puts this bold move into perspective.

State and federal regulators made serious attempts to protect wild rice because without healthy harvests the Ojibwe communities would become increasingly dependent on the government for food.

In 1939, a bill was passed that declared a state of emergency:

From time immemorial the wild rice crop of the waters of the State of Minnesota has been a vital factor to the sustenance and the continued existence of the Indian race in Minnesota. The great present market demand for this wild rice, the recent development of careless, wasteful, and despoiling methods of harvesting, together with water conditions of the past few years, have resulted in an emergency, requiring immediate stringent methods of control and regulation of the wild rice crop. The traditional methods of the Indian in such harvesting are not destructive. On the other hand,

the despoliation of the rice fields as now progressing, under commercial harvesting methods will result in imminent danger of starvation and misery to large bands of these Indians. They are in danger of becoming relief charges upon the state and the counties, many of which are overburdened with relief loads now.

This bill deemed the "wanton destruction" of the rice unlawful and violation of the rules a misdemeanor. It also recognized the exclusive right of tribal members to "harvest the wild rice crop upon all public waters within the original boundaries of the White Earth, Leech Lake, Nett Lake, Vermilion, Grand Portage, Fondulac [sic], and Mille Lacs Reservations." Most of the bill, however, outlined a series of rules and regulations that attempted to codify Indigenous knowledge and harvesting practices to protect the future of the wild rice beds, and to control the harvest of "green rice."¹¹



Wild Rice for Wild Ducks: Where and How to Grow It by George D. Hamilton (1922).

Green Rice

“Green rice” is a confusing term. It can mean both unripe rice and freshly picked wild rice. In this article, we use “green rice” to refer to unripe rice. Harvesting wild rice when it is green jeopardizes future generations of the plant. Wild rice naturally re-seeds itself by falling into the water when the grain—the seeds—are ripe. The wild rice kernel grows inside a waterproof hull with a beard (a pointy stalk). Until the seed matures fully, there is air in the hull along with the seed. This air causes an unripe seed, or an unpollinated, empty hull, to float rather than sink to the bottom. A fully ripened seed, however, sinks deep into the sediment and produces a strong plant upon germination the following spring. When people harvest green rice, the grain is knocked off too early and the possibility for re-seeding to ensure the following years’ wild rice is lost.¹²

The 1931 law outlawing mechanical harvesting represented a fundamental moment in the state’s history because harvesting machines indiscriminately collect all the wild rice they pass over, whether ripe or not, taking the green, immature rice and not allowing the mature grains to naturally reseed the lakes. In 1939, Minnesota lawmakers deemed it illegal to harvest immature rice; however, what is and is not ripe is hard to measure and to enforce (see “Identifying Green Wild Rice,” p. 86).¹³

Indigenous Knowledge and Practices that Sustain Abundant and Healthy Rice Beds

Traditional stewardship of wild rice is unique. It is more complex than approaches to some other wild sources of food because it lies at the



Freshly harvested wild rice.

crossroad between agriculture and gathering. For some wild plants, simply not overharvesting is sufficient to ensure the plant’s reproduction. In agriculture, when people plant food crops and eat the seed (or fruits with the seed inside) they save enough to plant the next year. In the case of wild rice, it is crucial to ensure that enough mature seed falls into the water for the next years, whether planting intentionally or indirectly reseeding. The tribal method of picking wild rice helps to plant future beds. As rickers knock the wild rice into the canoe with their knocking sticks, some seeds fall into the water to sink and grow a new plant in future years.¹⁴

Specific practices employed to protect wild rice are described here to demonstrate how they were codified into law. However, the practices alone, extracted from the context from which they emerged, lose their punch. Tribal governance is based on close-knit social networks. Indigenous knowledge is passed down from generation to generation, taught



Canoes full of rice in Nett Lake, 1968.

through doing and the development of implicit knowledge. The relationships of people with the wild rice and with each other—values of reciprocity—are at the center of sustainable wild rice stewardship.¹⁵

Opening and closing of lakes:
Regulating the opening and closing of lakes during the harvest season is one important way to protect the rice. Traditional rice chiefs, chosen from among experienced elders for their fair personality and sharp eye, decide when the wild rice on particular lakes and waterways is ripe and ready to pick, when it needs to rest a

day or two to let the rice ripen more, or when the lake must be closed for the rest of the season due to damage caused by a storm. Today most bands have a committee that controls all the ricing waterways pertaining to the reservation.¹⁶

Harvesting “in a good way”: Crucial to protecting the rice is transmitting knowledge from one generation to the next and respecting the importance of the relationship between humans and wild rice as a relative. Experienced ricers know how to identify areas where the wild rice is ripe, how to harvest so that the immature rice is not dislodged and the heads don’t break off, and how to move the canoe through the rice without damaging the plants. They often have deep knowledge of specific lakes. Relationship with place, careful observation from year to year, and a philosophy of honoring the rice as a teacher leads to a certain way of picking rice that can only be learned through experience and through intergenerational knowledge transmission.

Regulation of harvesting practices: Regulation of harvesting practices is done either through social control or by tribal elders enforcing traditional law. Knowing the importance of caring for the wild rice beds, pickers watch each other. If ricers break stalks or go into an area with green rice, observers may shame them, or tribal elders may order them off the lake. No one would help if they did not listen to the person who controlled the picking of wild rice on that rice bed. For larger infractions, in the past elders were known to sink or break canoes or to banish disrespectful individuals from the wild rice harvest for the remainder of the year.¹⁷

Tribal beliefs hold that individual behaviors that disrespect or disregard traditional teachings can put the rice harvest at risk, for example, by

Relationship with place, careful observation from year to year, and a philosophy of honoring the rice as a teacher leads to a certain way of picking rice that can only be learned through experience and through intergenerational knowledge transmission.

causing storms with wind, hard rain, and hail. Ricing rules ensure that harvesting practices remain respectful. For the benefit of everyone, those who went out on the lake too early, who were not respectful of the lake, or who made too much noise on the lake were not allowed access to wild rice beds.

The Minnesota Government’s Attempt to Adopt Traditional Practices

The 1939 statutes regulating the wild rice harvest were the product of a joint effort by Minnesota representative Joseph Prifrel and William “Chief” Madison, a member of the White Earth Reservation. According to Prifrel, Madison approached him to request help in preserving wild rice. Together they drafted the bills, and Madison “made out all the requirements he thought should go into the bill.” The proposed regulations were met with considerable resistance. Commercial buyers did not care if the wild rice beds were destroyed and argued for modernizing and mechanizing the rice business in the name of profit and progress. Surprisingly, however, testimonies from university researchers provided the turning point for the case. They stated that for wild rice to reproduce, it must be harvested in a certain manner, encouraging the courts to rule in favor of the bill.¹⁸

The challenge was how to translate traditional practices into workable law. Since the initial law in 1939, legislators changed details based on experiments. However, the market for wild rice and the total amount of green rice harvested in the state increased steadily from the 1940s until the 1960s and became a very lucrative activity. Economic interests complicated matters of regulation considerably as individuals and commercial buyers alike attempted to maximize profits. Until the market crashed in the early 1970s, many people depended on the wild rice harvest as an important portion of their yearly income concentrated in a short season. Stories about using the harvest money to buy cars, appliances, or school clothes for the whole family are commonplace.¹⁹

Opening and closing of lakes: Replicating the traditional role of the rice chief responsible for opening and closing each lake, the 1939 law created the figure of “director of the wild rice harvest.” This director would be “a man of proven experience in the actual harvesting of wild rice for a period that is not less than 20 years.” The state commissioner of conservation appointed this person who had the responsibility to inform the commissioner about the state of the wild rice; the commissioner would then open or close waterways to harvesting as necessary. Because the director had to cover the whole state, he could appoint paid assistants as well as unpaid



In bumper years, harvesters could pick as much as 500 pounds of wild rice in a day, but 100 to 200 pounds is a more common daily harvest.

deputies to help him with his job. The commissioner of conservation reserved the right to restrict or prohibit the harvesting of wild rice to protect against “undue depletion of the crop”;

additional wording expanded the rule: “or so as to endanger its effective use as a natural food for waterfowl.” This latter clause remains in the Minnesota statutes today.²⁰



Harvesters waiting in line to sell their freshly picked rice at East Lake, 1959.

Regulating the days of the week and the hours during which wild rice could be harvested was another attempt at state management. The idea was that if people harvested rice for fewer hours each day, the rice beds were less likely to be over-harvested because harvesters would not spend their time in the green rice. In 1939, lakes were open from 8 a.m. to 6 p.m.; in 1959, from 9 a.m. to 3 p.m. The harvest coordinators on some lakes limited the hours even further, especially in the early part of the season. To avoid an onslaught of eager harvesters on opening day, harvesting in some cases was permitted for only one hour.²¹

Between 1939 and 1996, there were continuous changes in how the director of the wild rice harvest worked, the relationship between the commissioner and the director, the role of paid and unpaid advisors, and the means of communication with the rice harvesters. The fact that the director had to have 20 years of

experience implied that he was most likely of Ojibwe origin, as were most of the assistants, and race-based conflicts undermined the efficacy of the director's work. The laws also were largely unsuccessful in protecting the wild rice because the knowledge-intensive and value-based nature of "harvesting in a good way" came into conflict with settlers' notions of extraction for profit.

In 1967, an article titled "Harvest is Cutthroat: Wild Rice Beds Take Beating" in the *Minneapolis Tribune* described some of these complications:

For a time, committees were set up to determine when each major rice bed should be opened. But the rice, growing like gold over

the water, was just too valuable for this to work. Soon many of the rice committees were accused of favoring some buyer or some harvesters. So, while it is generally agreed that the Conservation Department is doing it all wrong, no one seems to have a better suggestion.²²

Due to continuous criticism from commercial buyers and the complicated nature of opening each lake individually based on the rice's maturity, the Minnesota Department of Natural Resources (DNR; until 1971, the Conservation Department) did not want to continue regulating wild rice lakes on an individual basis. Pressure was mounting to deregulate on one hand, while others insisted that

more regulation be put into place. An experiment with deregulating the harvest in 1977 and 1978 was a disaster: for two consecutive years the wild rice beds were damaged by people harvesting unripe rice and the overall harvest was the lowest in many years. In 1979 Ron Libertus from the Leech Lake Reservation expressed his concern about the situation and was appointed as wild rice director. He innovated with a system that combined a date regulation of the whole state (August 27) while reserving the right to keep certain waterways and lakes closed until a later date if the rice was not yet ripe on the season's opening day. He established a wild rice advisory committee made up of people knowledgeable about wild rice around the state to support the

IDENTIFYING GREEN WILD RICE

People who harvest wild rice year after year know how to identify unripe, green rice. But if you don't have this experience, how can you tell when the rice is still green? Although a number of signals indicate maturity, it is difficult to translate this specific knowledge into law and even more difficult to enforce. Here are some examples of ways to quantify the measurement of ripe rice.

ON THE LAKE:

1. More than 15 percent of the wild rice is still in the milk phase (when broken the grain exudes white liquid).
2. More than 15 percent of grains adhere to the stalk of the wild rice plant.ⁱⁱ
3. Wild rice plants are still in the flowering stage.

AFTER HARVEST:

1. More than 40 rice heads (the top of the rice plant) are found in 10 pounds of harvested wild rice. A head broken off the wild rice plant reflects inappropriate harvesting practice.ⁱⁱⁱ
2. In a pound of rice placed in water, 30 percent or more floats.^{iv}
3. Once parched, ripe wild rice will weigh about 50 percent of its wet weight. If the parched rice weighs closer to 30 percent of its wet weight, then it was too green when picked.
4. The estimated number of kernels necessary to make one pound of finished rice differs significantly when the rice is green (64,000) versus when the rice is mature (12,000).^v

Because regulations lack the nuances that come with translating knowledge based on experience, first-time harvesters should go with a veteran ricer. Indigenous practices are based on deep knowledge of the ecosystem and the biology of the natural world. Take time before, during, and after harvest to observe, listen, and learn from experienced ricers and from the plants themselves.



Wild rice plant in flower. If any plants are in flower on a lake, the lake should not be open for harvest.

An experiment with deregulating the harvest in 1977 and 1978 was a disaster: for two consecutive years the wild rice beds were damaged by people harvesting unripe rice and the overall harvest was the lowest in many years.

initiative. This system proved to be relatively successful in protecting the wild rice beds.²³

In 1996, the DNR removed the position of wild rice director and replaced this function with a set date for the opening of all lakes: July 15. The hope, as in the disastrous 1977 experiment, was that individuals would not pick green rice, in the same way that people would not pick unripe blueberries, and that a fixed opening date well before the beginning of the season would avoid the opening-day frenzy. Given the wide variability in when wild rice ripens from one waterway to another, a statewide opening day for rice season still requires considerable knowledge on the part of the harvester to be able to distinguish between green and ripe rice.²⁴

The detrimental effects of this decision on the health of the wild rice beds became clear, and in 2009 the law was again amended to open all lakes on August 15, a measure meant to preserve the rice while it was still flowering and one that remains in effect today, offering questionable protection of the wild rice.

Harvesting “in a good way”: Given the challenges of transmitting knowledge about harvesting practices and the lack of cultural relationships with the plant among non-Native harvesters, in 1939 a number of regulations were set to attempt to protect the rice. Boat size was limited to avoid flattening the plants as the boat traversed the lake. Initially, the maximum size

was 30 inches by 16 feet; later the dimensions increased to 36 inches by 18 feet to accommodate aluminum canoes. To avoid damaging the plants, the flails, or knocking sticks, used to knock the rice into the boat needed to be handheld and hand-operated, no longer than 30 inches, and weighing no more than one pound. This rule was introduced because some harvesters bound their knocking sticks with metal to knock more rice off the plant, increasing the chance that green rice would also be harvested and the plant would be damaged. The pole used for propelling the boat had to end in a fork no longer than 12 inches to avoid damaging the roots of the rice stalk. These regulations are still in place today. Limiting the size and weight of the tools used for ricing is a poor substitute for “harvesting in a good way.”

Regulation of harvesting practices: In lieu of tribal elders and social control, a system of licenses was introduced to attempt to manage who was ricing (as well as to create revenue for the DNR) and fines were levied to enforce the regulations. In 1939, a license for an individual to harvest rice cost \$0.50. This fee steadily increased over the years. Licenses for buyers and sellers of wild rice each had their own set of stipulations that became increasingly complex as the market grew in size and value. As a short-lived experiment in 1969, some licenses permitted harvesting exclusively in certain regions of the state

to relieve pressure on other areas, but this practice was not adopted statewide, despite its apparent potential for protecting the rice. Nonresidents of Minnesota were not eligible for licenses until 2004, when it became possible for them to purchase a one-day license only. As of 2016, band members who possess a valid tribal identification card from a federally recognized tribe located in Minnesota are deemed to have a license to harvest wild rice and do not need the additional state wild rice harvesting license.²⁵

In 1939 it became a misdemeanor to violate any of the wild rice laws. Offenders were not eligible for a new license until a year after the violation, similar to the tribal measure of a year-long banishment from the harvest. However, the problem of enforcing what and how people harvested remained. As in traditional tribal management of the rice, some individuals or committees responsible for each lake tried to observe the ricing practices in their domain. They asked harvesters to refrain from ricing in areas where the rice was green or to stop ricing on a certain lake. But unlike in traditional systems in which shared cultural values and social relationships strengthened this kind of enforcement, requests were not often met with acquiescence unless DNR staff was present to enforce the law.

Ricing Today

Had it not been for Chief William Madison and his scripting of the 1939 regulations incorporating Indigenous knowledge and practices into formal law, the story of wild rice in Minnesota may have been very different. Imagine what Minnesota's lakes would look like at the end of summer and early in fall if mechanical harvesting of wild rice were permitted.

The White Earth Band of Ojibwe adopted the rights of manoomin, or wild rice law, which states that wild rice “possesses inherent rights to exist, flourish, regenerate, and evolve, as well as inherent rights to restoration, recovery, and preservation.”

Besides the entourage of boats and airplanes and machines competing for strips of each year’s stands of rice, buzzing and blurring the aural and visual landscape of northern Minnesota, it is possible that the lakes would have little wild rice left to harvest.²⁶

Treaties signed between the US government and the Ojibwe tribes in 1837 and 1854 made specific mention of Native people’s rights to gather wild rice on all ceded territories; however, these rights were often not upheld. While protecting wild rice and the treaty agreements should have been reason enough to inspire regulatory action, measures were undertaken to satisfy duck hunters and when the state’s economic and political interests were threatened by looming welfare costs. Even as the original laws attempted to mimic traditional practices, in the absence of tribal structures of governance and Indigenous relational worldview, it has proved very difficult to successfully regulate wild rice harvests when profits are at stake.²⁷

Today, wild rice is also threatened by water levels, mines, water contamination, climate change, and invasive species. The harvest is governed by a complex mix of tribal, federal, state, and local laws and regulations. On reservations and in the 1854 treaty area, rice committees still open lakes for harvest individually based on the maturity of the rice, but state lakes are open to harvesting on a set date

regardless of the conditions of the rice. Advocators for wild rice have pressured the state to reestablish a wild rice committee in Minnesota, but these efforts have not yet come to fruition. Funding for wild rice research is disproportionately allocated to further development of paddy rice for industry. This funding includes genetic research that potentially could put wild rice varieties in danger, rather than supporting a deeper understanding of the ecology of wild rice and integration of Indigenous knowledge.²⁸

Nevertheless, there are some bright spots on the horizon. In December 2018, in an attempt to codify Indigenous knowledge into law to protect wild rice, the White Earth Band of Ojibwe adopted the rights of manoomin, or wild rice law, which states that wild rice “possesses inherent rights to exist, flourish, regenerate, and evolve, as well as inherent rights to restoration, recovery, and preservation.” While the legal approach of assigning nature its own rights is used commonly in other parts of the world, it is not yet well accepted in the US legal context. Still, the effort is a groundbreaking step toward recognizing Indigenous worldviews as valuable in tackling complex ecological and social problems.²⁹

What is clear is that the State of Minnesota took important legal measures in the first half of the twentieth century to protect wild rice on state lakes from total destruction by

incorporating Indigenous knowledge into law and by adopting a tribal management system. The climatic and economic uncertainty we face today calls for reflection on this past regulatory effort. Around the world, Indigenous knowledge is being called upon to help develop climate change adaptation plans, to rehabilitate the environment, to produce food sustainably, to develop medicines, and more. Here in Minnesota, it is time to review the current threats to wild rice and once again incorporate invaluable traditional knowledge into state law to provide the protection the wild rice ecosystem deserves. ▣

Notes

1. Ervin A. Oelke, et al., “Wild Rice Production in Minnesota,” Extension Bulletin 464, University of Minnesota, 1982.

2. David Hansen, “Natural Wild Rice in Minnesota,” study document submitted to the Minnesota Legislature by the Minnesota Department of Natural Resources, 2008; Jane Lamm Carroll, “Dams and Damages: The Ojibway, the United States and the Mississippi Headwaters Reservoirs,” *Minnesota History* 52, no. 1 (1990): 2–15; “Carp Ousting Wild Duck,” *Cook County Herald*, Apr. 18, 1903; “To Tempt Aquatic Fowl,” *Minneapolis Journal*, Mar. 4, 1906; “Looking for Trouble,” *Tomahawk*, Apr. 16, 1903.

3. Charlene L. Smith and Howard J. Vogel, “The Wild Rice Mystique: Resource Management and American Indians’ Rights as a Problem of Law and Culture,” *William Mitchell Law Review* 10, no. 4 (1984): 743–96.

4. David Mather and Robert G. Thompson, “Archeological Perspectives on Wild Rice,” 15–27, and Seppo H. Valppu, “Paleoethnobotanical Investigations at the Big Rice Site: Laurel Culture Use of Wild Rice (*Zizania aquatica* L.) and Associated Radiocarbon Dates,” 27–40—both in *Proceedings of the Wild Rice Research and Management Conference, Carlton, Minnesota, July 7–8, 1999*, ed. Lisa S. Williamson, Lisa A. Dlutkowski, and Ann P. McCammon Soltis (Odanah, WI: Great Lakes Indian Fish and Wildlife Commission, 2000); “Descriptive Extracts from the Frontier,” *Minnesota Weekly Times*, Apr. 17, 1851; “A Wooded Prairie,” *Minneapolis Journal*, Nov. 26, 1903.

5. Edward Benton-Banai, *The Mishomis Book: The Voice of the Ojibway* (St. Paul, MN: Indian Country Press, 1979); Rachel McNeil and Charley Langowski, *Lake Superior Ojibwe Guide* (Duluth, MN: St. Louis County Historical Society, n.d.);

anonymous elder from Nett Lake, interview by Annette Drewes, Apr. 1, 2006; see also Annette L. Drewes, "Sustaining a Ricing Culture: An Integrated Landscape Approach to Understanding Harvest, Distribution and Management of Wild Rice (*Zizania palustris*) across the Upper Great Lakes Region" (PhD diss., University of Wisconsin–Madison, 2008); Great Lakes Culture and Language, "Manoomin," *The Ways*, PBS Wisconsin Education, <https://theways.org/story/manoomin>.

6. Brenda J. Child, *My Grandfather's Knocking Sticks: Ojibwe Family Life and Labor on the Reservation* (St. Paul: Minnesota Historical Society Press, 2014).

7. Rachel McNeil and Charley Langowski, *Lake Superior Ojibwe Guide*; elder from Fond du Lac, Duluth, MN, May 2022; Charlie Otto Rasmussen, "Multinational Alliance Keeps Gichigami Fishery Afloat," *Mazina'igan: A Chronicle of the Lake Superior Ojibwe* (Fall 2022): 1, 6.

8. "Real Sportsman's View of Minnesota's Wild Life," *Windom Reporter*, Feb. 22, 1924; "Wild Rice," *Minneapolis Tribune*, Sept. 13, 1903; "Coolidge Sent Wild Rice from Bemidji," *Tomahawk*, Dec. 25, 1924; "Sees Wild Rice as Coming Food Crop in America," *National Advocate*, Mar. 27, 1920; Anya Zilberstein, "Inured to Empire: Wild Rice and Climate Change," *William and Mary Quarterly* 72, no. 1 (Jan. 2015): 127–58; "Wild Rice King Prepares for Harvesting," *Daily People's Press*, Sept. 17, 1924; "Bemidji Concern to Market Wild Rice," *International Falls Press*, Apr. 8, 1920; "Rice Harvesting Machine Reported Operating at Wild Rice Lake," *Tomahawk*, Sept. 18, 1924; Smith and Vogel, "The Wild Rice Mystique."

9. "Preservation of Game and Fish," *Mason's Minnesota Statutes*, 1927 (St. Paul, MN: Citer-Digest Co., 1927), 1158; Geo. D. Hamilton, *Wild Rice for Wild Ducks: Where and How to Grow It* (Detroit, MN: the author, 1922); Minnesota Wild Rice Co., *Wild Rice and Natural Duck Food Plants: Which Will Provide Feeding Grounds for Wild Ducks* (Laporte, MN: the company, 192[?]); *Wild Rice: Where Wild Rice Grows Ducks Will Come* (Minneapolis, MN: Northrup, King and Co., 1908); Agriculture and Rural Credits Act, Mar. 30, 1929, c. 120, §1; Smith and Vogel, "The Wild Rice Mystique."

10. Preservation of Game and Fish Act, Apr. 25, 1931, c. 373, §1.

11. Minnesota Statutes 6131-4, c. t Apr. 13, 1939, c. 231. This law was only repealed in 1996. Ch. 231—H. F. No. 1100, Sec 1, 1939.

12. Thomas Vennum Jr., *Wild Rice and the Ojibway People* (St. Paul: MNHS Press, 1988).

13. This was amended in 1980 to allow mechanical harvesting on lakes surrounded by property belonging to one individual: Ch. 543—S. F. No. 818, 1982.

14. Another reason it is important to reseed each year is that under average conditions wild rice seed has a variable germination period of between one and seven years, but seeds have been observed to wait at the bottom of a waterway for up to thirty years until conditions are advantageous for germination. Therefore, the

seed a picker knocks into the water one year contributes to the genetic variation of the seeds waiting to germinate and may come up many years later depending on the water and weather conditions.

15. Practices vary from one location to the next; this is not meant to be an exhaustive list. Winona LaDuke, "Traditional Ecological Knowledge and Environmental Futures," *Colorado Journal of International Environmental Law and Policy* 5, no. 1 (1994): 127–48.

16. While focus is often placed on the harvest, stewarding the rice goes beyond the harvest season. Stewarding wild rice requires not just an awareness of the annual process of re-seeding but also an understanding of the whole system, such as the speed of the flow of water, approximate water levels of between one and three feet deep, and a well-balanced ecosystem, including its symbiotic interactions with other plants, insects, animals, birds, and fish. Rice chiefs lowered water levels by removing beaver dams if the water was too high. Knowledge about levels, other water conditions, and ecosystem relations influencing the rice abundance was not codified into state law. Western science today still does not understand the complexities of the wild rice ecosystem and all the interdependencies involved.

17. Maude Kegg, *Portage Lake: Memories of an Ojibwe Childhood* (Minneapolis: University of Minnesota Press, 1993), 127; Peter David, et al., "Manoomin," 1.0 (Odanah, WI: Great Lakes Indian Fish and Wildlife Commission, 2019).

18. Smith and Vogel, "The Wild Rice Mystique."

19. In 1945 the statutes were passed from Chapter 32 (Preservation of Fish and Game) to Chapter 84 (Department of Conservation). From then on, most of the statutes regarding harvesting of wild rice are found in Chapter 84. Raw wild rice, pounds produced per year; graph by Sherman Holbert, in Sherman Holbert and Family papers, 1888–2005, MNHS.

20. The first mention of a commissioner's intervention to determine the end of rice season was in 1929 to compromise between the duck hunters and the wild ricers. 11939 c. 231 s. 11; 1941 c. 217 s. 8 (6131-14); Act A pr.13, 1939, c. 231, §1; Minnesota Statutes 84.15, subdivision 1.

21. "Natural Wild Rice Important," (Aitkin, MN) *Independent Age*, Dec. 16, 1970; *Mille Lacs Messenger*, Jan. 28, 1971; "Wild Ricing Hours and Regulations Set," *Crosby-Ironton Courier*, July 30, 1969.

22. "Harvest is Cutthroat: Wild Rice Beds Take Beating," *Minneapolis Tribune*, Sept. 17, 1967.

23. "State Murdering Wild Rice," *Minneapolis Star*, Nov. 25 1967; "Wild Ricing Hours and Regulations Set"; Smith and Vogel, "The Wild Rice Mystique."

24. Hansen, "Natural Wild Rice in Minnesota."

25. "Rice-Harvest Law Needs Longer Trial," *Minneapolis Tribune*, Oct. 12, 1969; "Wild Ricing Hours and Regulations Set"; Sec. 14, Minnesota Statutes 2002, section 84.085; see especially

1959 for the advent of new regulations; Minnesota Statutes 2002, section 84.091.

26. Even under heavy harvesting pressure, this method removes only 10–14 percent of the available seed: G. T. Fannucchi, et al., "Wild Rice in Wisconsin: Its Ecology and Cultivation," University of Wisconsin–Extension, 1986, as cited in David, et al., "Manoomin."

27. Amanda Raster and Christina Gish Hill, "The Dispute over Wild Rice: An Investigation of Treaty Agreements and Ojibwe Food Sovereignty," *Agriculture and Human Values* 34, no. 2 (2017): 267–81; Robert Jarvenpa, "Political Entrenchment in an Ojibwa Wild Rice Economy," *Journal of the Minnesota Academy of Science* 37, no. 2 (1971).

28. David, et al., "Manoomin"; Hansen, "Natural Wild Rice in Minnesota"; Rachel Durkee Walker and Jill Doerfler, "Wild Rice: The Minnesota Legislature, a Distinctive Crop, GMOs, and Ojibwe Perspectives," *Hamline Law Review* 32 (2009): 499.

29. See also the Tribal Climate Adaptation Menu, a tool that offers a series of climate adaptation actions from an Indigenous perspective: Tribal Adaptation Menu Team, "Dibaginijigaadeg Anishinaabe Ezhitwaad: A Tribal Climate Adaptation Menu" (Odanah, WI: Great Lakes Indian Fish and Wildlife Commission, 2019).

Notes to Sidebars

- i. Winona LaDuke, "Ricekeepers," *Orion Magazine* (2007).
- ii. Minnesota Statutes ch. 231—H. F. No. 1100 Section 9.
- iii. Developed by Don Wedll.
- iv. Developed by Don Wedll.
- v. "Natural Wild Rice Important."

Images on p. 78 and 79 (C) by Lorie Shaull, licensed under Creative Commons; p. 79 (A) and 80 (A) courtesy Tashia Hart; p. 81 courtesy Williams family; p. 82 MNHS collections; p. 83 (bottom) and 85 (both) Sherman Holbert and Family Papers, MNHS collections; p. 86 courtesy Annette Drewes. All others courtesy the author.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 844637.



Copyright of **Minnesota History** is the property of the Minnesota Historical Society, and its content may not be copied or emailed to multiple sites or users or posted to a listserv without the copyright holder's express written permission: [contact us](#).

Individuals may print or download articles for personal use.

To request permission for educational or commercial use, [contact us](#). Include the author's name and article title in the body of your message. But first--

If you think you may need permission, here are some guidelines:

Students and researchers

- You **do not** need permission to quote or paraphrase portions of an article, as long as your work falls within the fair use provision of copyright law. Using information from an article to develop an argument is fair use. Quoting brief pieces of text in an unpublished paper or thesis is fair use. Even quoting in a work to be published can be fair use, depending on the amount quoted. Read about fair use here: <http://www.copyright.gov/fls/fl102.html>
- You **should**, however, always credit the article as a source for your work.

Teachers

- You **do not** need permission to incorporate parts of an article into a lesson.
- You **do** need permission to assign an article, either by downloading multiple copies or by sending students to the online pdf. There is a small per-copy use fee for assigned reading. [Contact us](#) for more information.

About Illustrations

- **Minnesota History** credits the sources for illustrations at the end of each article. **Minnesota History** itself does not hold copyright on images and therefore cannot grant permission to reproduce them.
- For information on using illustrations owned by the Minnesota Historical Society, see [MHS Library FAQ](#).