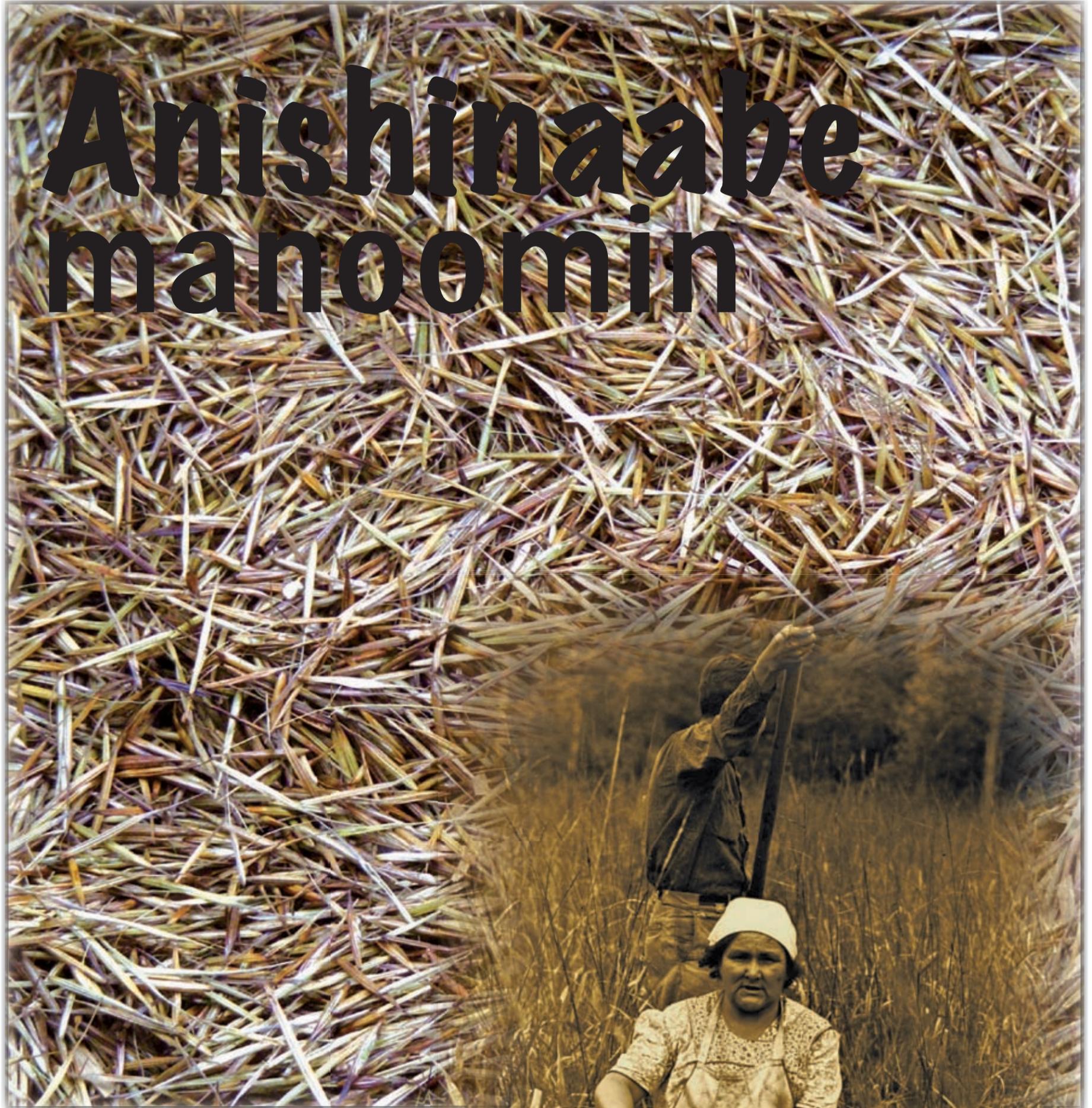


# Mazina'igan Supplement

Published by the Great Lakes Indian Fish & Wildlife Commission

Fall 2008



## Anishinaabe manoomin

### Welcome to “Manoomin— the Good Berry”

According to the teachings that elders give us, a long time ago when the Anishinaabe were living along the east coast, they were instructed to move to a land where “food grows on the water.” After many seasons of migration, they came to the northern Great Lakes area. Along the rivers and on the lakes in that area they found manoomin, the “food that grows on the water.”

Since that migration, manoomin has become a major staple for the Anishinaabe, is talked about in traditional and anecdotal stories and is a strong part of the Anishinaabe traditions and heritage. Manoomin translates to “good berry” or “good seed” and is known as wild rice in English. Once you hear the stories and taste manoomin, you can see why the Anishinaabe named it “the good berry” and continue to regard this giving plant with thanksgiving and respect.

This supplement, funded through a grant from the Administration for Native Americans, (ANA) ACF, U.S. Department of HHS, tells the many-faceted story of manoomin—it’s life-cycle, harvest, management, value, and cultural significance.



*Harvesting wild rice, Lake Number Four near Walker, Minnesota 1939. (Photo by Monroe P. Killy, Minnesota Historical Society. Loc# E97.32W p36 Neg# 21610.)*



# Wenabozhoo finds manoomin

Wenabozhoo is a hero featured in many Ojibwe stories. Sometimes he is also referred to as the “trickster” or “transformer.” The spelling of his name and pronunciation may often vary, i.e. Winaboozhoo, Waynaboozhoo, Wenibojo', Nanabozho, Nenabush, Manabush, but the reference is to the same character. Wenabozhoo lived in the forest with his grandmother, Nokomis, and participated in many adventures as he interacted with his environment.

## Wenabozhoo on a fasting journey

Wenabozhoo's discovery of wild rice is recounted in legends with wide circulation. Albert E. Jenks collected this version of the tale at Lac Courte Oreilles in 1899.

“The story begins when Wenabozhoo's grandmother tells him that to prove his manhood and become accustomed to hardships he should embark on a long journey without food.

*‘Many days he wandered, and finally came to a beautiful lake full of wild rice, the first ever seen. But he did not know that the grain was good to eat; he liked it for its beauty. He went into the forest and got the bark from a large pine tree. From this bark he made a canoe with which to gather the grain. After the canoe was made, he went to Noko'mis [grandmother] and they both came and gathered the rice, and sowed it in another lake.’*

“Wenabozhoo again departs on his fasting journey. He encounters some bushes that speak, telling him they were edible, whereupon he digs up their roots and eats them. This causes him to become so sick that he is forced to lie there three days. When he resumes his journey, other plants speak to him too, but he assiduously avoids them.

*‘At last he was passing along a river and saw little bunches of straw growing up in the water. They spoke to him and said, ‘Wenibojo', sometimes they eat us.’ So he picked some of it and ate it, and said: ‘Oh, but you are good! What do they call you?’ ‘They call us mano'min,’ the grass answered. Wenibojo' waded out into the water up to his breast and beat off the grain, and ate and ate, but this time he was not sick.’ Thus stated, he remembers having sown this very plant with his grandmother, so he returns home.’*

*(Reprinted from Wild Rice and the Ojibway People by Thomas Vennum.)*

## Winaboozhoo finds wild rice

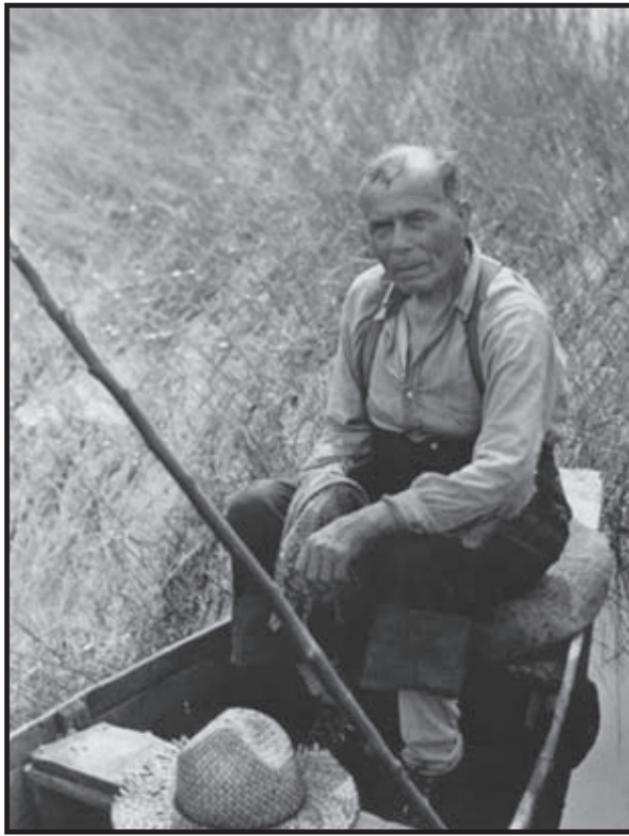
One evening Winaboozhoo returned from hunting, but he had no game. As he came toward his fire, he saw a duck sitting on the edge of his kettle of boiling water. After the duck flew away, Winaboozhoo looked into the kettle and found wild rice floating upon the water, but he did not know what it was. He ate his supper from the kettle, and it was the best soup he had ever tasted.

Later, he followed in the direction the duck had taken, and came to a lake full of manoomin: wild rice. He saw all kinds of ducks, geese, mud hens, and all the other water birds eating the grain. After that, when Winaboozhoo did not kill a deer, he knew where to find food to eat.

*(This story is related by Lac du Flambeau artist biskakone (Greg Johnson) who has heard several versions of the story from Lac du Flambeau and other Ojibwe elders.)*



*Parching and sorting wild rice, White Earth Reservation. (Photo courtesy of the Minnesota Historical Society Loc# E97.32W p48 Neg# 10663.)*



*Joe Stoddard wild ricing on the Bad River Reservation, 1941. (Photo courtesy of the Bad River Casino.)*

## Elders share

The following are excerpts of thoughts and anecdotes shared by some elders during the listening sessions with them in 2000 & 2001.

### ~ Lac Vieux Desert ~

**Ruth Antone**—I remember one story when we were picking rice. I'm sitting in the boat. My husband was going to do the poling out on the lake. So he's got the push pole ready. He stuck it into the ground, you know, to push the boat out. I'm sitting at the end of the boat. He turns the boat around and is going to start to pole out onto the lake, and he fell in. He fell in! And all I could see was his legs up like this, and his feet and his shoes and his white socks, they weren't white anymore! They were all mud. Oh, he looked awful! And I was laughing, and he didn't like that, because I was laughing, you know. So we had to go back onto the shore and go back to where we were staying, so he could get changed. Back in those days you didn't have a lot of clothes.

**Ruth**—He was unsteady on his feet anyway and here he was standing in the lake—standing, and he was really unsteady. So everybody would say, “Hey Mike, look at all the ducks out there.” They just wanted him to fall in or something, cause then all of a sudden he would fall in. I don't know how many times that guy fell in the lake.

Sometimes your push pole would get stuck in that mud and you'd go to let your hands run up and down that pole and that would cause you to go over too. That's probably what happened to him.

### ~ Mole Lake ~

**Joyce Einertson**—I think that first year me and you went out—remember Ma and them? Chief took us out up there by Eagle's Nest someplace. And it was me and you that got in the boat; we never done it before, and she was my pusher. And she pushed too far down in there and ma, my ma and your ma, and all we could say was, “Where the hell did Ray go?” All you could see was his hat floating on the water. “He'll pop up, ma,” her ma says. “Where are you Ray?” “Pretty soon he popped up right in his hat. I'll never forget that.

**Joyce**—And another time I think Gramma, my grandma and Chief got (us to go ricing). That's when Jim and I first got married. He spoke Norwegian, so, we were going on Rice Lake back here. Jim says, “What do I do?” Gramma says, “You better give him that big pole,” my grandma says, “All you got to do is, while Joyce sits, you stand back here and pole.” And I said, “Remember Jim, don't push that pole all the way in. It'll get stuck.”

“Oh, I know what I'm doing,” he said. Ok. Well he got to put that pole in too far, and I was in the front of the boat. I heard a holler behind me. When I looked, the boat was up here, and Jim was still hanging onto the pole in the water.

### ~ Bad River ~

**Sylvia Cloud**—My mother was turtle clan, and she was always by the water, and she gave me some little frog pins. This was many years ago now, and she said always pray for the frogs because when they're gone and they're sick, we're in trouble, and that was about twenty years ago. I still have those frog pins yet and then I'm reading in the papers. You know, I'm doing environmental things, where the frogs are being found with five legs, and there are really a lot of deformities.

Right here on our reservation we were talking about the wild rice—you know, we as a people. This is our land; our ancestors fought and died so that we would be here, and there's a reason why all of us are in certain areas of this northern Wisconsin, Michigan, Minnesota. I never could understand why we do not have the right to control what happens on our land, on our own land.

Years ago, the wild rice was not a place to go boating, to take big boats and go all over. Our people didn't do that. It didn't have to be written down for us because we knew why—my uncles, my dad, all of them, they didn't go boating and racing around the sloughs and bringing big boats down there. There used to be a little clearing, enough for a boat or canoe to go down, and when they turned around, both ends of the boat touched where the rice was. Now you can put four boats sideways down there when you go down to the Kakagon. When you go down to Bear Trap, there was wild rice all along Bear Trap. I grew up right along Bear Trap. There was wild rice all along there. You go down any one of these, remember the rice was growing along the river, all along there. And some days they'd have the old timers go ricing there along Bear Trap and Kakagon. The old timers would go ricing there, and the rest of them would be towed down by boat, and some would canoe down there. Some of the people, the old timers, would canoe down there to go ricing. There were not these great big things, you know, that's stretched out. I noticed the difference when I went down there, and we were down there camped out—when was that—four, five years ago. We did special ceremonies to protect the Kakagon Sloughs.

**Joe Rose**—You know my cousin was making rice one time. A rice hull went in his ear. He was down there making rice with his Aunt Pattie. So they stopped making rice, and she took one of these little rice worms; she put that down in his ear like that and that worm grabbed that rice hull. He couldn't reach it, but that worm got it.



# Gathering manoomin

Twenty-first century manoomin harvesting is a lot like it was hundreds of years ago when Ojibwe, Menominee, Ottawa and Dakota people first vied for the wild rice marshes of the western Great Lakes region. With a canoe, a pair of ricing sticks and a push pole, gatherers are equipped for ricing.

On the surface, the process is uncomplicated. Typically two people 'rice' as a team. The "poler" slowly propels the canoe through the manoomin with a long push pole (about 18 feet, ending in a "V" or a "duckbill"), while the other person uses the ricing sticks to gather the grain.

Although this person is often referred to as the "knocker," a good picker knows that ricing is actually done with a gentle touch. One stick is used to bend the manoomin stalks over the side of the canoe, and the second to lightly stroke the seed heads, to release the ripe grains.

It's very important to knock lightly; manoomin ripens gradually, so the same bed can be harvested several times in a growing season if care is used. If appreciable force is required to separate the grain, the rice isn't sufficiently ripe. In this situation, it's best to give the rice a few more days to mature, or to look for a riper area to pick. Manoomin ripening can vary quite a bit from water to water, or even on different areas on the same water, but attempting to harvest too soon results in undue damage to rice plants and a poor harvest yield.

A good day's harvest is never the product of hard knocking, but of scouting and experience. Many experienced ricers frequent a select few sites annually and monitor the progress of manoomin stands during

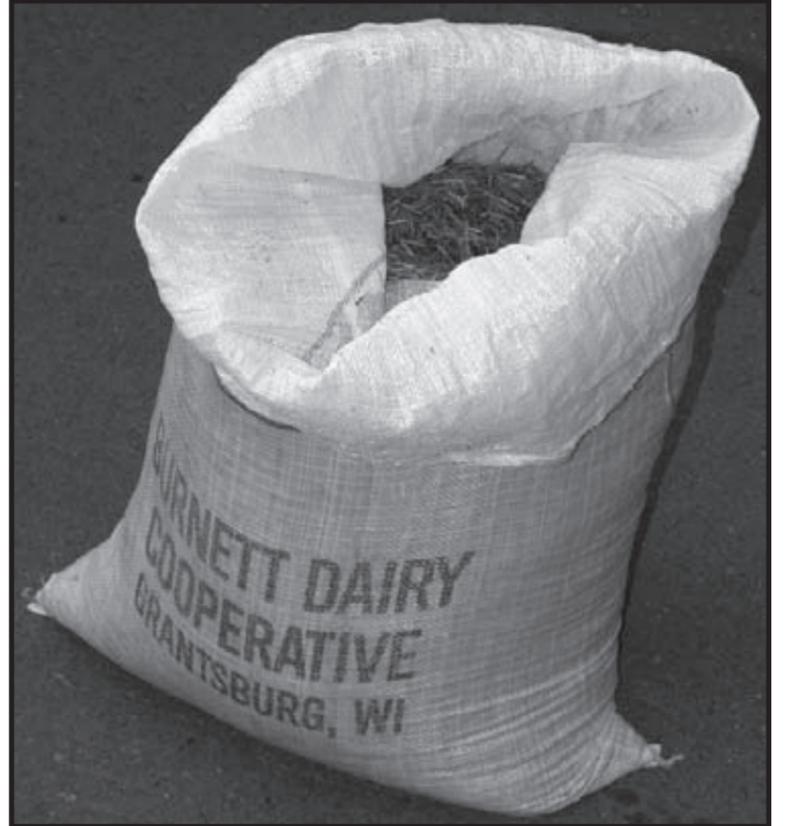
the summer. Tribal communities often rely on knowledgeable rice chiefs, who closely examine manoomin beds and officially open selected lakes and waterways only when the grain is ripe. Tribal and state biologists are another good source for locating productive rice beds and more importantly, to learn when rice on a particular site might be ready to be picked.

A good yield is also the product of experience and coordination. Good ricers place themselves on the right water at the right time of the season. And they develop a rhythm between the poler and the knocker, so that they move through the ripe beds with the tempo that is best for the density of the rice. Finally, they work good patches of rice methodically, making neat, parallel passes rather than random paths.

Upon returning to a boat launch with manoomin grain carpeting the canoe bottom, ricers often use grain sacks to temporarily store and transport their harvest. A ricing trip can yield anywhere from a few pounds of rice to more than 200. Yet even intensive hand harvesting removes only about 15% of the annual yield, leaving a vast quantity of seed for wildlife and natural reseeding.

Although freshly harvested "green" rice can be used for seeding projects, the rice has to be "finished" if it is to

be eaten. Some folks finish their rice themselves, or take it a professional finisher; see page four to learn how rice is finished.



Many ricers use grain sacks to transport their rice from the water to the processing site. (Photo By Charlie Otto Rasmussen.)



Rice gatherers generally work in pairs with one person propelling the boat through manoomin beds while another person "knocks" ripe grain from the end of the stalks, into the canoe. One stick is used to bend the manoomin stalks over the side of the canoe, and the second to lightly stroke the seed heads, to release the ripe grains. (Photo by Charlie Otto Rasmussen.)

## About those regulations....

As straight forward as the rice harvesting process is, in most areas there are some regulations that need to be followed. Although not complicated, these regulations vary a bit from state to state, and may vary depending upon whether a person is ricing under a state or tribal permit. It's important that ricers obtain any license or permit that is required and follow the laws associated with that license.

Regulations typically address things like boat length and width, ricing hours, and the length and composition of ricing sticks (or flails). It's also generally illegal to use any mechanical devices to harvest rice from natural stands. These regulations are generally intended to protect the manoomin, but there may be secondary considerations as well. For example, prohibiting ricing at night may protect plants, since stems are more likely to break if they are harvested while weighted with dew, but this regulation also provides time for waterfowl to feed in the rice undisturbed.

On some lakes, the date(s) the lake is opened for harvesting may also be regulated. This can help keep plants from being knocked before they are ready to harvest and can help ensure good picking by minimizing disturbance to the beds before they are ready to harvest.

While the state of Michigan does not regulate wild rice harvesting, people interested in ricing there are encouraged to voluntarily adopt regulations similar to those used in other areas. These regulations will help protect the small number of rice beds which still exist in that state.

And the next time you obtain a ricing license, you should remember that those licenses can have an important function in themselves: they help biologists monitor the number of ricers, and the pressure they may place on the resource. Changes in harvest levels over the years may reflect changes in harvesting patterns, or in the status of the resource. Harvest surveys can be a valuable tool to the biologists managing this resource; by answering them, you can give a little something back to this most giving plant.



Tribal natural resource officials and community rice chiefs closely monitor the development of manoomin stands and formally open sites to harvesters. (Photo by Charlie Otto Rasmussen.)



# Processing manoomin

The demanding and rewarding experience of harvesting manoomin only gets most rice pickers halfway to their ultimate goal: rice for the cooking kettle. “Green” or freshly harvested rice can be used to seed new beds, but it must be processed, or finished before its pantry-ready. Finishing steps—many of which are centuries old—include drying, parching, hulling and winnowing. These tasks may be consigned to commercial processors or completed by the ricers themselves.

## Drying

A key element in finishing green rice is reducing its moisture content to ensure the rice doesn't spoil in storage. The first step in this process involves spreading manoomin out on plastic tarps (or birch bark mats for the traditionalist) and allowing it to air dry in the sun.

Unwanted plant segments and insects are also removed during this step. Insect eating birds sometimes show up and help, especially if your green rice is “wormy.” Rice “worms” are actually the small white larvae of a particular type of moth. They are commonly found in rice, but vary greatly in abundance from site to site and year to year.

Occasionally turning the rice aids in the drying. Air-drying is always a good first step, even for harvesters that plan on taking their rice to a commercial finisher.



**Drying.** Air drying on a tarp—the first step to removing moisture from freshly harvest green rice. (Photo by Charlie Otto Rasmussen)



**Hulling.** Commonly known as dancing or jigging, hulling separates the sheath from the rice seed. (Photo by Marlie Allen, Lac du Flambeau.)

## Parching

Additional moisture is removed through the parching or roasting process. Parching is often accomplished by transferring manoomin from the drying tarp to a cast iron or similar kettle set into a small fire. Some finishers prefer to use birch wood for this step, while many commercial finishers use propane or natural gas to parch. The rice must be stirred continuously while over the fire to keep the grains from overheating and “popping.” A wooden paddle is ideal for the task; even canoe paddles are used.

Parching serves three primary functions: it destroys the germ so it cannot re-sprout; it dries and loosens the sheath which surrounds the grain, and it reduces the moisture content in the seed, allowing the manoomin to be preserved in an edible state for years when stored in a dry environment.

## Hulling

Commonly known as dancing or jigging, hulling separates the sheath from the rice seed. Traditionally, a shallow pit is dug and lined with wood, an animal hide, or a tarp. After the parched rice is placed in the pit, it is “danced on.”

Using special moccasins (high on the calf and unadorned), the huller treads the grain, rolling it against his or her feet. Usually wood-framed railings are built adjacent to the jigging pit to provide

leverage and support for the dancer, and reduce the weight on the rice.

Hulling is likely the first step in the finishing process to be mechanized by modern processors. Most of today's finishing is done mechanically, even by small-scale commercial finishers.

## Winnowing

At this point, all that remains in the process is to separate the grain from the chaff. Broad birch bark baskets remain the preferred winnowing instrument for the home finisher. Hulled rice is transferred to a basket held two-handed by a winnower. With a vertical snap of the wrist, light chaff is propelled away while the heavier manoomin kernels return to the basket. A light breeze is helpful but not required. The winnower repeats this exercise until all the chaff has been removed.

Other finishers opt to pour a small stream of hulled rice in front of a fan to remove the chaff. Either way, thorough finishers then hand pick through the rice to remove the hulls from any grains where they still remain.

The rice is now ready to be cooked or put into sealed containers and stored for the months ahead. A typical yield from fresh green rice to finished is

about 35-45%, so that 50-pound sack of manoomin you left the lake with might put about 20 pounds of finished rice on your pantry shelf.

It's worth noting that rice finished at home or by small batch finishers tends to look very different than the cultivated wild rice often seen in the supermarket. The color is lighter—even greenish—and more variable than the uniform black associated with paddy-grown wild rice. This is no cause for concern; many people find they prefer the flavor of wild-grown, hand-harvested wild rice, and it has a shorter cooking time as well.

## Commercial finishers

While some ricers enjoy the entire process of harvesting and finishing manoomin, many others opt to have their rice finished commercially. Commercial operations may be fairly large, or small “Mom and Pop” finishers with hand-built finishing machines.

Commercial finishers may charge by the pound, or they may keep a percentage (often 20%) of the finished rice as their payment. Each finisher does the process a little differently. Ask around to find one that is suitable to your needs.



**Parching.** Following air drying, manoomin is ready to be parched. Many home and small-scale processors use cast iron kettles to make the rice chaff dry and brittle, a technique used since western Great Lakes Indians began acquiring the large vessels from European traders. (Photo by Charlie Otto Rasmussen.)



**Winnowing.** Birch bark baskets remain the preferred winnowing instrument for the home finisher. With a vertical snap of the wrist, light chaff is propelled away while the heavier rice kernels return to the basket. (Photo by Jeff Peters.)



# Ecology & management

Wherever it occurs in relative abundance, wild rice tends to have unusually significant impacts on the ecological community. Although its nutritious seeds have long been recognized as a valuable waterfowl food, the other ecological contributions of rice are often less appreciated.

From the muskrat that feeds on a tender spring shoot, to the invertebrate that recycles the nutrients in the winter's dead straw, wild rice benefits a wide range of species because of the food, cover, or physical structure it adds to the environment. The habitat it provides to species ranging from moths to moose and snails to rails adds greatly to the biological diversity of wetlands.

The rich biological communities that manoomin supports make them wonderful places for the outdoor enthusiast. Bird watchers find not just a wide range of ducks and geese, but may also come across eagles, herons, loons, trumpeter swans, black terns, sora and Virginia rails, and other uncommon species.

Fishermen know to work the edges of rice beds both for panfish and the larger predatory fish. Duck hunters and trappers have long appreciated the abundance associated with rice. Clearly, manoomin is not simply a plant, but a community.

Wild rice can also help maintain water quality by binding soils, tying-up nutrients and slowing winds across shallow wetlands. These factors can help preserve water clarity and reduce algae blooms. Wild rice is an ecological treasure.

## Habitat requirements

### Water depth

Water level is perhaps the most critical element affecting rice. Rice grows in about 0.5-3 feet of water, with about 1-2 feet being optimal. While rice sometimes attempts growing in greater depths, these plants often lag in their development and may not produce seeds. Rice also rarely maintains itself where the entire bed is on the deep end of the growing range, but beds on shallower areas will grow out to these general depths.

### Water flow

Rice requires slowly flowing water, with rivers bends and flowages being optimal habitat areas. Rice also can do well in lakes that have one or more inlets and an outlet. While fast flows are not tolerated, it seems that very low flows tend to make rice abundance more variable from year to year. Thus, riverine sites tend to have more consistent stands than large lakes that have relatively small inlets and outlets.

### Water fluctuations

The influence that water level fluctuations have on manoomin can be a bit confusing, because what is beneficial in the short run may be detrimental in the long run.

Water levels during a single growing season should be stable or gradually receding. However, too much stability in water levels over many years may be detrimental. Rice is an annual, and as such, it benefits from the natural variability in water levels that occurs over time. The loss of year-to-year fluctuations, as may occur where water levels are artificially controlled, may lead to perennial plants out-competing rice. Some natural fluctuations should be maintained, even if it means an occasional poor year for rice.



*Natural resource agencies annually distribute manoomin seed in lakes and reservoirs across the ceded territory each fall. Seeding green rice helps support manoomin waters in down-cycles and is key to reestablishing wild rice in its historic range. Above, an 1854 Treaty Authority biologist broadcasts green manoomin into northeast Minnesota's Pat Zakovec Flowage. (1854 Treaty Authority photo.)*

### Water clarity/color

Relatively clear water is preferred, as very dark or turbid water limits sunlight penetration and may hinder early plant development. However, rice beds can be supported on moderately colored waters, particularly where water depths are limited to about two feet or less.

### Sediment type

Several inches of soft organic muck is considered optimal. However, rice is fairly tolerant and beds exist on a wide variety of bottom types including sand and gravel. Extremely soft bottoms may be unsuitable, but moderately soft sites appear to be a preferred habitat niche.

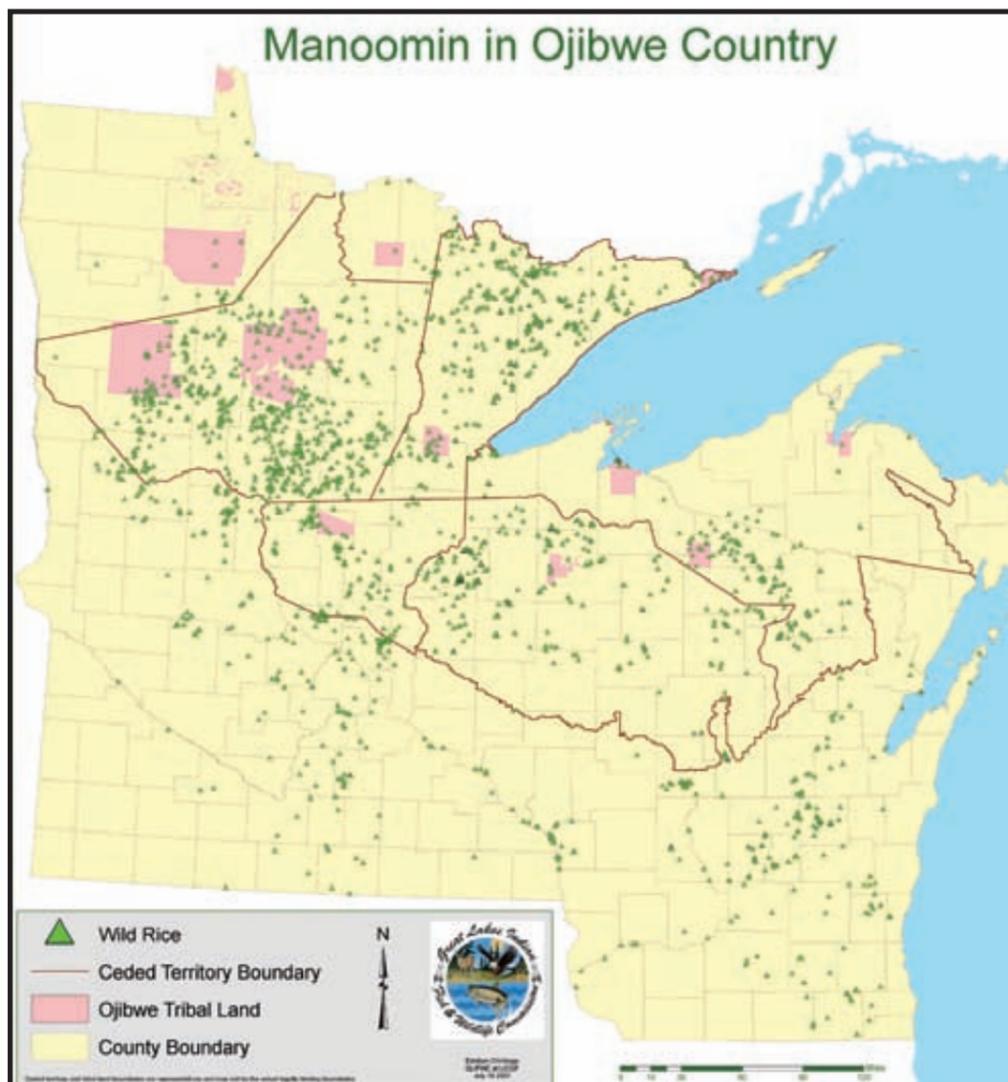
## Management

Despite the great value of wild rice, many historic beds have been lost, especially as a result of artificial water level manipulation. Applying the Ojibwe perspective of acting today with consideration of the seventh generation yet to come, the tribes have developed active cooperative efforts with many partners to restore, protect and manage manoomin for the future. Today tribal, state, federal, and private natural resource organizations—and even interested individuals—are working on behalf of this special resource. Public support is essential for these efforts to succeed. With your help, we can try to ensure that manoomin remains a viable part of our wetland ecosystems.

### Wild rice management can take several forms

Restoration and enhancement includes seeding rice at historic sites and introducing rice to sites with suitable habitat, such as artificial impoundments, for the benefit of wildlife and humans. It can also involve attempting to restore historical habitat conditions, or attempting to protect rice beds from negative environmental impacts. Many opportunities for restoration and enhancement exist. Please contact The Great Lakes Indian Fish & Wildlife Commission (GLIFWC) if you have a site that you think may be suitable; we would be happy to discuss it with you.

(See **Harvest & abundance monitoring**, page 11)



Map by Esteban Chiriboga, GLIFWC GIS specialist.



*Some shorebirds like rails feed on ripe wild rice.*

imaakooomiiin

wilay

hicoo



Design by Biskakone  
Wild rice growth illustration by UW-Extension  
Words from a well-known Ojibwe wild rice story appear as  
a background on this poster. The story is related by  
Lao du Flambeau artist Biskakone Johnson



# OOOO! Manoomin! Wild Rice—its nice!

By Sue Erickson, Staff Writer

Boozhoo (Hello!)

Manoomin (ma-new-men) is the Ojibwe word for wild rice. It means the “good berry.” That is a good name for this food because it is good for you and tastes good too.

For hundreds of years manoomin has been a very important food for the Ojibwe people. They gathered it from rice fields, called rice beds, along the shores of northern lakes and rivers in the early fall.

Then the Ojibwe prepared it so it could be stored for use over the long winter when food became hard to find. Think about what it would be like to find enough food to feed a family in the middle of winter. Remember that this was long before grocery stores were around.

That is why foods that could be dried and stored, like manoomin, were so important to the Ojibwe people long ago. It was also important because of its nutrition—that means it has a lot of vitamins, protein and minerals and is low in fat. So wild rice could not only be stored easily, but it was also important to a healthy diet.

Today, manoomin is still important to the Ojibwe and to other people as well. It is served during special feasts and holiday meals. Because it is so good for you and good tasting, it is enjoyed by many people. Real wild rice that comes off our lakes and rivers is a little hard to buy because it is a wild food, and there is only a limited amount to harvest each year. Actually, it is not a rice at all, but rather a grain, like wheat, but it grows in water like rice.

## Gathering rice

People gather wild rice using a canoe, which is poled through the rice field while another person knocks the rice from the stalks into the bottom of a canoe. People use special ricing sticks that are very light to knock the rice. The ricing sticks are usually made of cedar, which is a very lightweight wood. They pole the canoe through the rice beds because motors damage the rice and so do paddles. Why do you think paddles and motors would hurt the wild rice?

## Finishing rice

Finished rice is wild rice that is ready to be cooked and eaten. But there is a lot of work to do from the time wild rice is knocked off its stalk in the rice bed to the time when it can be stored.

After it is taken to shore, the rice is spread out to dry. Next it is heated carefully in a large kettle over a fire. Someone has to stir and watch the rice constantly so it doesn't burn. This makes the outside husks even drier and brittle.

Next the dry husks are removed by “dancing” the rice. That means it is put in a large pot in the ground, and someone with clean moccasins gently dances on the rice, making the dry husks crack and break. The rice kernels will then be free of the husks. Lastly, the rice is winnowed in a large, flat birch bark basket.

It is gently tossed into the air from the basket, so the wind will take the light, dry husks and blow them away. This leaves just the rice kernels—the part that will be cooked and eaten. Today, some people have machines that help with some of this work.

Manoomin is not only an important food for people, but also for many ducks, birds and fish that live in the wetland habitat where wild rice grows. So it is good to protect wild rice beds for the good of people and the wildlife that depend on it too.

## Ojibwe words

- Duck ~ **zhiishiib**
- Bird ~ **bineshiinh**
- Fish ~ **giigoonh**
- Canoe ~ **jiimaan**
- Gathering wild rice ~ **manoominike**
- Birch bark ~ **wiigwaas**
- Wind ~ **noodin**
- Basket ~ **makak**
- Water ~ **nibi**

## Vocabulary words

- Habitat** ~ the natural environment of a plant or animal
- Stalk** ~ the main stem of a plant
- Husk** ~ the outer covering of certain seeds or fruits
- Kernel** ~ the soft, usually go to eat, part inside a nut, fruit or grain
- Nutrition** ~ nourishing, or that which keeps the body healthy and well
- Winnow** ~ to use air to loosen the dry, outer part of a grain by tossing it up and letting the wind or airflow catch it.

## Can you find the items hidden in the manoomin?



Answer is on page 10.

# A source of natural nutrition

Wild rice, or manoomin, is actually not a rice, but rather an aquatic grain or cereal which is low in fat, gluten free but high in nutrition. Uncooked manoomin is higher in protein than most other grains and white rice. Manoomin is an excellent source of minerals like iron, potassium and phosphorus and also vitamins such as thiamine, riboflavin and niacin. Wild rice contains even more niacin, also known as vitamin B, than brown rice. With its nutritional value, along with the ability to preserve it, it is no wonder that manoomin became an important dietary staple for the Ojibwe people.

In the case of manoomin, high nutritional value is in combination with a delicious, nutty and unique taste when cooked and eaten alone or in combination with other foods and spices. Manoomin adds texture, fragrance and flavor to casseroles, soups, salads, or even dressings for fish and fowl.

A little manoomin also goes a long way. Cooked wild rice usually quadruples in bulk, so a little makes a lot. Harvested naturally from lakes and rivers, manoomin comes to the table as a special gift from nature, free of artificial flavors, colors or preservatives. It's the "good berry," a food for families.

Nutrition Facts	
Serving Size 1 cup 164g (164 g)	
Amount Per Serving	
<b>Calories</b> 166	<b>Calories from Fat</b> 5
% Daily Value*	
<b>Total Fat</b> 1g	1%
Saturated Fat 0g	0%
Trans Fat	
<b>Cholesterol</b> 0mg	0%
<b>Sodium</b> 5mg	0%
<b>Total Carbohydrate</b> 35g	12%
Dietary Fiber 3g	12%
Sugars 1g	
<b>Protein</b> 7g	
<b>Vitamin A</b> 0%	<b>Vitamin C</b> 0%
<b>Calcium</b> 0%	<b>Iron</b> 5%

\*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

©www.NutritionData.com

## Manoomin Recipes

### Basic stovetop instructions

(1 cup of dry rice yields approximately 3-4 cups cooked rice)

3 cups water or broth  
1 cup wild rice  
½ tsp. salt per cup of rice (omit if using salted broth)

Rinse the rice. Bring water, rice and salt to a boil. Reduce heat, cover & simmer until rice is tender but yet still a bit chewy. Rice will cook in 30-40 minutes.

### Warm and Nutty Wild Rice Salad

1 ½ cups cooked wild rice  
1 cup peas, frozen, uncooked  
4 green onions, sliced  
¼ cup slivered almonds, toasted  
2 stalks celery, thinly sliced

#### Dressing

2 tbsp. wine vinegar  
1 tbsp. soy sauce  
1 tsp. sugar  
¼ cup oil  
2 tsp. sesame oil (optional)

Warm the wild rice. Toss all ingredients together; toss in dressing. Best if served warm. Serves 4.

### Wild Rice Salad with Herbs

2/3 cup uncooked wild rice  
1/3 cup fresh lemon juice  
1/8 tsp. freshly-ground pepper  
2/3 cup olive oil  
½ c. thin sliced green onion  
½ cup chopped parsley  
1/3 cup chopped fresh mint  
Crisp romaine leaves  
1 medium tomato, seeded & chopped  
Alfalfa sprouts

Cook wild rice. Mix cooked rice with the lemon juice, pepper, olive oil, green onion, parsley and mint leaves. Cover and refrigerate at least 2 hours for flavors to blend. Serve over a bed of romaine; garnish with chopped tomato and alfalfa sprouts. Serves 6.

### Wild Rice with Blueberries & Nuts

2 cups rice washed in cold water  
5 cups water  
2 wild onions—diced  
1 cup nuts (hazelnuts, walnuts pecans, or whatever nuts you have on hand)  
1 cup dried blueberries

Combine rice, water and onion in a large kettle. Bring to a boil, cover and simmer for about 40 minutes. Add nuts and blueberries and mix together and cover and steam for about 20 minutes. Serves about 12.

Submitted by Christine Carlson, Nickerson, MN

### Chippewa Wild Rice Bread

1 cup ground wild rice  
1 cup wheat flour  
½ tsp. soda,  
1 tsp. cream of tartar  
½ tsp. salt  
1 tbsp. sugar or maple syrup  
2 tbsp. melted butter  
1 egg  
1 ¼ cups of milk

Mix all the dry ingredients and rub them through a sieve.

Beat the eggs until light and add milk to it. Pour this mixture upon the first one and after adding the melted butter, pour the batter into a buttered shallow pan and bake for 25-30 minutes in a hot oven. Serve hot.

Submitted by Fred Whitedeer Gabourie, (Sr.), Whorley, ID

### Venison & Wild Rice Stew

3½ pounds shoulder of venison  
cut into 2" cubes  
2 tsp. salt  
pepper to taste  
2 quarts water  
2 large onions, peeled & quartered  
1 ½ cup wild rice,  
(washed in cold water)

Put venison, water and onions in a large pot, simmer uncovered for 3 hours. Add salt, pepper, wild rice. Cover and simmer for 20 minutes

Stir well and uncover for another 20 minutes or until rice is tender and most of the liquid is absorbed.

Submitted by Fred Whitedeer Gabourie, (Sr.), Whorley, ID

### Quick Wild Rice and Potato Soup

1 tbsp. chopped onion  
1 cup water  
1 can cream of potato soup  
1 cup milk or half & half or cream  
1 cup grated cheddar or Swiss cheese  
1 cup cooked wild rice

**Optional:** add leftover chicken, turkey, ham, fried bacon or mushrooms

Bring water and onion to a boil in a medium pot. Add milk, soup, and stir with a whisk. Add cheese and wild rice. Serve when cheese melts. Serves 4.

Submitted by Christine Carlson, Nickerson, MN

### Wild Rice Breakfast Bake

3 cups cooked wild rice  
2 cups cooked ham, cubed  
2 tbsp. butter  
1 dozen eggs, lightly beaten  
1/3 cup milk  
3 tbsp. butter  
1 ½ lbs broccoli, cooked 'til tender  
Cheese sauce (see below)

Put rice in greased 9 x 13-inch baking dish. Sauté ham in butter. Place ham and pan juices on top of wild rice. Combine eggs with milk. Melt 3 tablespoons butter in skillet and scramble eggs just until soft. Spoon eggs onto ham in baking dish. Place broccoli down center of baking dish. Spoon cheese sauce over all. Bake covered at 325°F for 25 minutes; uncover and bake another 10 to 15 minutes. Serves 8-10.

#### Cheese sauce

2 tbsp. oil  
3 tbsp. flour  
1 cup milk  
2 cups grated cheese  
½ tsp. pepper  
salt to taste

Heat oil in skillet and stir in flour. Add milk. Cook and stir until sauce thickens slightly. Stir in cheese; add pepper and salt.

### Sausage and Wild Rice Casserole

1 cup uncooked wild rice  
3 cups water  
1 pound well seasoned bulk sausage  
8 ounces fresh mushrooms  
1 can cream of mushroom soup  
1 medium onion, sliced thin

Cook wild rice 35 to 40 minutes (do not let it get mushy). In a frying pan, cook sausage until crumbly. Pour off fat. Add mushrooms and lightly sauté. Stir in soup and cooked wild rice. Spread one-half the mixture in a 1½ or 2 quart buttered casserole dish. Layer with onion. Spread remaining onion over mixture. Bake in covered casserole at 350°F for 60 minutes. Serves 4 to 6.

### Cashew and Wild Rice Patties

1 cup cooked wild rice  
¼ cup chopped cashews  
2 tbsp. flour  
1 egg or 2 egg whites  
Salt and pepper to taste  
(omit salt if nuts are salted)

Mix ingredients together. Lightly grease a frying pan and heat to medium high. With a spoon, place the mixture in the pan in 3 or 4 dollops and shape into patties. The mixture will be loose at first, but will firm up with cooking. Cook about 3 minutes on each side. Serve as an entree or side dish. To serve as an appetizer, make the patties smaller. (Makes 3 entrees or a dozen appetizer patties.)

### Raisin Wild Rice Pudding

3 tbsp. uncooked wild rice  
½ cup raisins  
1 qt. milk  
1 ½ tbsp. sugar or maple syrup  
2 eggs  
½ tsp. salt  
¾ tsp. cinnamon

Rinse rice well. Add all ingredients except eggs. Separate eggs, beat whites until stiff. Beat egg yolks and fold into rice mixture, then fold egg whites. Spoon gently into a casserole dish. Bake at 300°F for about 2 hours or until done; be sure to stir several times. It is best served warm.

Submitted by Fred Whitedeer Gabourie, (Sr.), Whorley, ID

### Wild Rice Dessert Topping

1 cup cooked wild rice  
1/3 cup brown sugar  
1/2 cup golden or dark raisins  
1/2 cup chopped pecans

Combine all ingredients. Cover and refrigerate. Spoon mixture over vanilla ice cream, pudding or custard. Serves 4.

**(Editor's note:** Recipes not attributed are reprinted from **Wild Rice Cooking, History, Natural History, Harvesting, and Lore** by Susan Carol Hauser and **The Best of Wild Rice Recipes** by Beatrice Ojakangas.)



# Ojibwe manoomin harvesters & processors

## Wisconsin

**Bear Clan Wild Rice  
"Manoomin"**  
*100% natural wild rice  
hand harvested*  
Brian Wiggins, Bad River  
Lisa Ash, Lac Courte Oreilles  
W7491 Bramer Road  
Trego, WI 54888  
715-466-5368

Charles W. Ackley, Mole Lake  
3037 State Highway 55  
Crandon, WI 54520  
715-478-5449

Fred Ackley Jr., Mole Lake  
3181 B. Indian Settlement Road  
Crandon, WI 54520  
715-478-1155

Pete McGeshick Sr., Mole Lake  
3173 Indian Settlement Road  
Crandon, WI 54520  
715-478-5647  
715-902-0322 cell

Roger McGeshick Sr., Mole Lake  
3187 Indian Settlement Road  
Crandon, WI 54520  
715-478-0580

Charles E. Polar, Mole Lake  
P.O. Box 123  
Crandon, WI 54520  
715-478-2083

## Michigan

Louis McGeshick, Lac Vieux  
Desert  
Hand Parched  
P.O. Box 371  
Watersmeet, MI 49969  
906-366-0092



## Minnesota

**Spirit Lake Native Products**  
Bruce & Tahee Savage,  
Fond du Lac  
P.O. Box 93  
1032 Spirit Lake Road  
Sawyer, MN 55780  
218-644-0912

David Danielson, Fond du Lac  
*Hand Parched*  
490 Brookston Road  
Cloquet, MN 55720  
218-390-3097

Jeff Savage, Fond du Lac  
1780 Blue Spruce Drive  
Cloquet, MN 55720  
218-879-0157

## Manoomin Resources

### GLIFWC publications

Wild Rice: Ecology, Harvest & Management (brochure)  
Manoomin Wild Rice: The Good Berry (poster & brochure)  
Ricing with Tommy Sky: A Sequel to Growing Up Ojibwe  
(*Mazinai'gan* supplement published for elementary age kids)  
Manoominike (poster)  
Proceedings of the Wild Rice Research & Management Conference  
Carlton, Minnesota (1999)

### Books

**Wild Rice and the Ojibwa People** by Thomas Vennum Jr.,  
Minnesota Historical Society Press  
**Wild Rice in Canada** by S.G. Aiken et al., NC Press Limited,  
Toronto, 1988  
**The Sacred Harvest: Ojibway Wild Rice Gathering**  
by Gordon Regguinti, Leech Lake Band Ojibway, with  
photographs by Dale Kakkak, Menominee, Lerner Publications Co.,  
**Real Wild Rice**, by David Martinson  
Published by School District 709, Duluth, MN

### Videos

Manoomin (Wild Rice): Ojibwe Spirit Food by Michael M. Loukinen  
[www.upnorthfilms.org](http://www.upnorthfilms.org)  
Mahnomin Wild Rice, Native American Educational Series  
[www.glitc.org](http://www.glitc.org)

### Websites

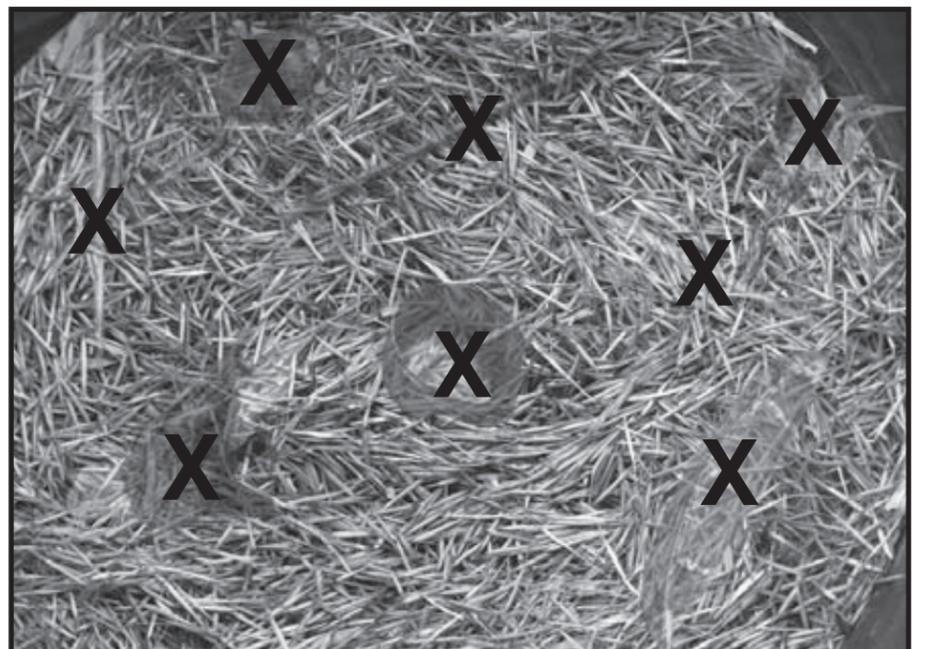
[www.glifwc.org](http://www.glifwc.org)  
[www.manoomin.com](http://www.manoomin.com)  
[www.savewildrice.org](http://www.savewildrice.org)  
[www.1854treatyauthority.org](http://www.1854treatyauthority.org)

### Regulations

Great Lakes Indian Fish & Wildlife Commission [www.glifwc.org](http://www.glifwc.org)  
Wisconsin Department of Natural Resources [www.dnr.wi.gov](http://www.dnr.wi.gov)  
Minnesota Department of Natural Resources [www.dnr.state.mn.us](http://www.dnr.state.mn.us)



Heads of ripened wild rice. (Photo by Charlie Otto Rasmussen.)



Answers to look and find, page 8.



# Harvest & abundance monitoring

(Continued from page 5)

Abundance monitoring is important to determine whether or not rice is continuing to decline in abundance. Because of the high variability in abundance from year-to-year, only long term data bases will answer this question. Abundance monitoring can also be used to direct harvesters to the most productive stands and



Air and ground surveys of wild rice waters are used to monitor abundance, evaluate restoration efforts, and direct harvesters to abundant stands. The above aerial photo was taken at Scott Lake, Forest County, Wisconsin in 2007. (Photo by Peter David.)

save unnecessary trips to waters with poor stands. Each year GLIFWC surveys many rice waters from the ground or the air to monitor rice abundance.

Harvest monitoring helps biologists determine if wild rice abundance is adequate to meet the human demand for this resource. Harvest monitoring can also help biologists monitor the effectiveness of restoration efforts. In Wisconsin, a sample of state and tribal harvesters is surveyed each year to estimate harvest. Contemporary annual harvest estimates from off-reservation waters within the state have varied from 34,000 to over 110,000 pounds of green (unfinished) rice.

Research can increase our understanding and appreciation of this unique plant. It may also improve our ability to restore lost beds, or increase the likelihood of success when introducing rice at new sites.

Legal protection is provided to manoomin because of its great value and limited abundance. Contact you local state or tribal natural resources agency for more information.

Public Information is critical for the long-term protection of our wild rice resource. Manoomin's future may well hinge on public appreciation of the values of this very giving plant.

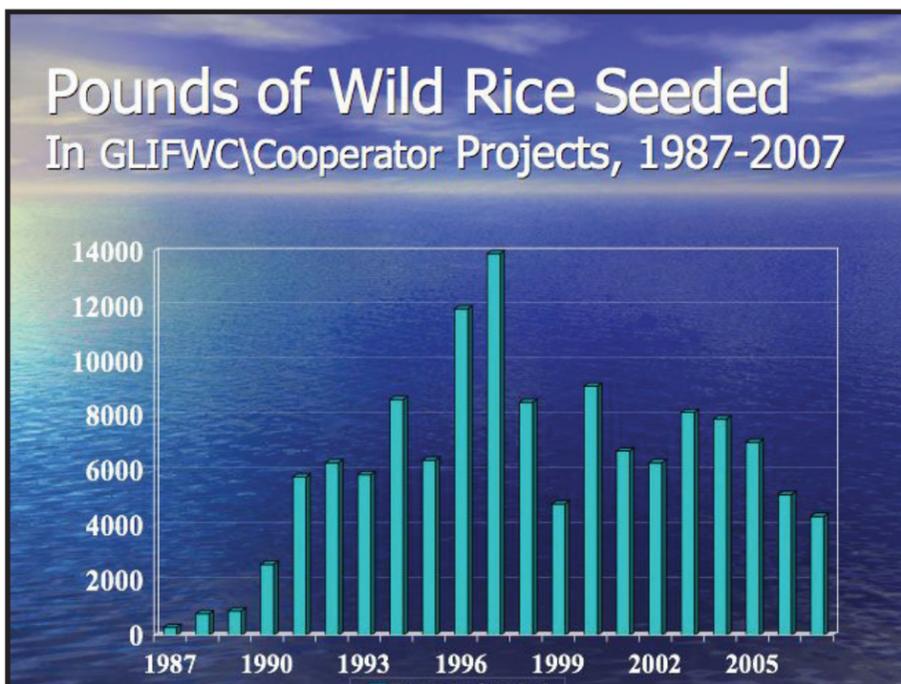


Joe Graveen, GLIFWC wild rice intern, takes stem density measurements on Alice Lake, Oneida County, Wisconsin. Stem density measurements are taken annually on select waters as part of an effort to determine long-term trends in manoomin abundance. (Photo by Katie Lancaster.)

## Did you know...



Many consumers confuse paddy-grown wild rice with the true wild rice, hand-harvested from northern lakes and rivers. Frequently, the wild rice offered for sale in local grocery stores or at roadside markets is paddy-grown rice—a different product than the true wild rice taken from naturally growing stands of manoomin. Paddy grown rice has larger, darker (almost black) kernels, takes longer to cook and lacks the distinguishing nutty flavor and fragrance found in native wild rice. Paddy rice is farmed in large rice paddies and mechanically harvested. Commercially grown, paddy wild rice comes mostly from large paddy fields in Minnesota and California. (Photo by Charlie Otto Rasmussen.)



Graph by Peter David, GLIFWC wildlife biologist.



GLIFWC is a leader in purchasing green manoomin from gatherers and reseedling the rice grain back into ceded territory lakes. Over 4,000 pounds of rice was seeded in 2007. (Photo by COR.)



# A life cycle story

It's an early spring day in northern Wisconsin. The ice has not long left the surface of the small, shallow lake in Burnett County, but the force of life that the season unleashes is already gaining strength. The stream that feeds and empties this lake is flowing with runoff from yesterday's rain—the first of the year. Coupled with the energy of the morning sun, the dark muck on the lake bottom begins to warm. An inch and a half below the muck's surface, a manoomin (wild rice) seed is beginning to sprout.

This individual seed is part of a large community of rice seeds, spread over a dozen or so acres, located where the right mix of water depth, flow and sediment meet to provide manoomin's habitat needs. Like a number of its neighbors, this seed joined the seed bank community last fall when a canoe with two wild rice harvesters passed through the bed. Fully ripe, it fell into the lake the moment the cedar ricing sticks contacted its stalk, even before that stalk could be leaned over the side of the canoe.

Some of the others in the seed community have spent years in the muck. Many will germinate this spring, but others will wait for a future spring to break from their dormancy. This variability in germination helps insure that the rice bed will survive years with poor production.

Weeks pass; early June has arrived and great changes have taken place. The northward migration of waterfowl ended about a month ago. Many ducks fed and rested on our lake during the migration, and although most have moved on, several mallards and wood duck pairs remained nearby to nest, as have a pair of Canada geese, who's eggs are already beginning to hatch.

The rice community is now a small sea of plants, with their long, ribbon-like leaves floating on the lake surface. The competition for space, light and nutrients has been fierce, and many young plants have already withered away. Others have been consumed by the nesting geese and the deer that wade up to their bellies to enjoy the succulent green growth.

One evening a wind storm swept the lake, and a large number of plants on the deeper fringe of the bed were uprooted by the swelling waves. Fortunately, those plants also absorbed some of the force of the waves, protecting the better-rooted plants in the shallows behind them—and the young perch which sought food and protection among their roots.

By mid-July the rice community has tapped the energy of the summer sun to send up its aerial shoots. Pale, spongy support roots—different from those used to gather nutrients—reach out at the sediment surface to keep the plant upright in the soft muck. Tiny white female flowers open near the top of the stem, followed a few days later by the more noticeable yellow male flowers.

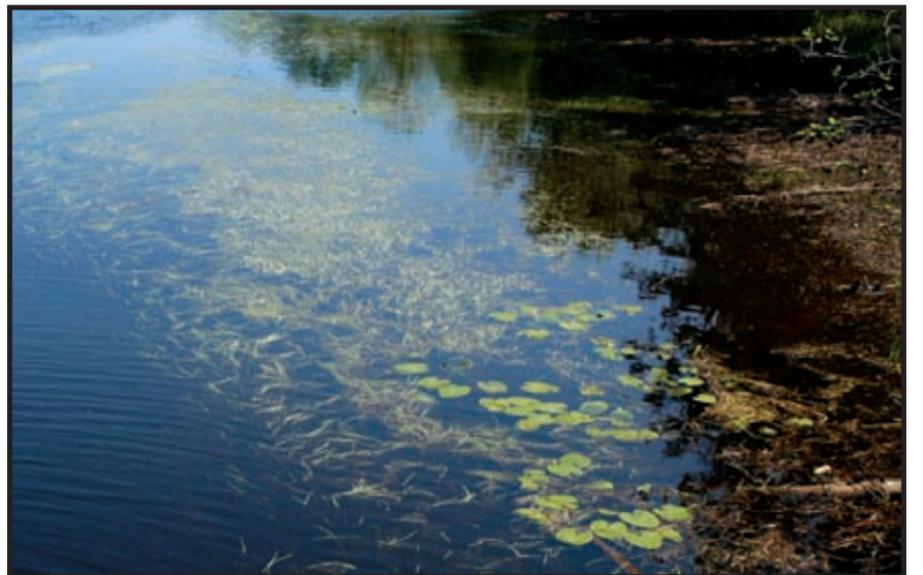
The bed buzzes with bees seeking pollen, but with no interest in the female flowers, the bees do not act as pollinators. Fortunately, all that is required for that is a gentle breeze. A puff blows out of the west, gently carrying a pollen grain to a female flower on a nearby plant, and within hours the initial steps in the creation of a new seed is underway. Meanwhile, a small circle in the dense rice bed grows as stalk after stalk falls with the neat nip of a muskrat's incisors. In the center of the opening, a mound forms as the rat builds its house. This loss of rice benefits more than the rat; this fall the opening will give ducks a place to land in the dense rice, and next year it will serve as the base for a trumpeter swan nest.

Although the manoomin community has been supporting other species all summer long, it has been saving its greatest gift until the moon turns to September. It is at this time that the great bounty of the annual seed production is shared with the greater biological community.

As the seed matures, birds begin filling the bed—a menagerie of ducks, rails, coots, red-winged black birds and more. A family enjoying the Labor Day weekend arrives at the boat landing with two canoes to partake of the bounty as well. Father and daughter, and mother and son, pair up and push-pole into the beds. Out on the lake they meet old friends, knowing they would be there. All pick in concert, moving their canoes in parallel paths, and all pick gently, knowing that it is still early in the season for the gradually-ripening manoomin. With careful picking and good weather, they can return to this bed in a few days to enjoy harvesting it again.

As sunset approaches, the ricers head back to the landing and bag up their rice. It has been a good day—nearly 50 pounds of rice in one canoe, over 60 in the other. The rice has been generous to the human community again, providing not only great nutrition, but the opportunity to enjoy a day outdoors where the air, water, plant and animal worlds meet.

The sky is turning red and the rice bed gold in the low evening sun. A sweeping flock of perhaps 200 blackbirds banks several times in unison then settles into the rice. One seed, a bit riper than the others, falls when a bird alights along the stem. The seed hits the water like a drop of rain, and sinks rapidly to the bottom. There, tiny hairs along the awn that encloses the seed help it settle into the sediment until its at a good depth for germination in a following spring. Two weeks later, the seed is nearly lost to the probing bill of a ring-necked duck, but an adjacent seed is found instead, and the duck moves on. Within a couple more weeks, skim ice begins to lace the lake and the last of the ducks are bound for the Gulf of Mexico, but this seed still rests securely imbedded in the muck. It has months to pass before a warm spring rain will trigger it to start another cycle of life.



*This photo taken in late May shows the manoomin plant in the floating leaf state, when ribbon-like leaves lay flat on the water's surface. This is often considered a critical stage; the plant is buoyant and high winds or a rapid increase in water levels can uproot or drown entire beds. (Photo by COR.)*



*At the same location aerial shoots have begun to develop by the end of June. These shoots will continue to grow into August, reaching a height of 2-8 feet above the water. Multiple shoots, up to 10 or more, are most common where the water is shallow and the plant density is low. (Photo by COR.)*



*As they reach maturity in later August, manoomin seeds become fully developed. Grain generally ripens gradually over a 10-14 day period. (GLIFWC photo.)*

## Supplement Credits

### Editors:

Jim St. Arnold, ANA Director  
Sue Erickson, *Mazina'igan* Staff Writer

### Text:

Peter David, GLIFWC Wildlife Biologist  
Charlie Otto Rasmussen, *Mazina'igan* Staff Writer  
Sue Erickson, *Mazina'igan* Staff Writer

### Photography:

Charlie Otto Rasmussen, *Mazina'igan* Staff Writer

### Graphics:

Biskakone Johnson, Lac du Flambeau

### Layout:

Lynn Plucinski, *Mazina'igan* Staff

*Mazina'igan* (Talking Paper) is a quarterly publication of the Great Lakes Indian Fish & Wildlife Commission (GLIFWC), which represents eleven Ojibwe tribes in Michigan, Minnesota and Wisconsin.

Additional copies of this supplement can be ordered at no cost from GLIFWC, P.O. Box 9, Odanah, WI 54861 or e-mail [pjo@glifwc.org](mailto:pjo@glifwc.org). For more information visit [www.manoomin.com](http://www.manoomin.com).

*This supplement was funded under a grant from the Administration for Native Americans, ACF, U.S. Department of Health & Human Services.*

