



### **Top 10 Minnesota Counties Producing Culivated Wild Rice in 2012:**

1. Crow Wing 2. Clearwater 3. Carlton 4. Polk 5. Cass 6. Hubbard 7. Itasca 8. Koochiching 9. St. Louis 10. Beltrami

### On The Front

### A. Wild Rice Plant

The American wild rice plant is a type of aquatic grass. The stem is composed of hollow, waterproof compartments which give the plant the ability to stand upright in water. The height of a wild rice plant can vary greatly depending on the depth of the water in which it grows. Wild rice usually grows best in depths of 6 inches to 2 feet of water, although they are able to thrive in depths of up to 4 feet. The plant typically extends 1 to 2 feet above the surface of the water in lakes but 5 to 6 feet in commercial fields.

#### B. Panicle

The panicle or "head" of the wild rice plant is made up of the female flowers (which eventually form the grain), with the male flowers just below them on the stem. The male flowers contain the pollen to fertilize the female flowers. The female flowers emerge from the shoot first, so plants must depend on the earlier maturing plants around them for pollination. Thus, it is a cross-pollinating plant.

### C. Seed

The mature seed is about 5/8 of an inch long, but some can be almost an inch in length. Wild rice seeds are dark in color and tapered at both ends. Seeds are covered by a hard and waxy layer called the pericarp, which must be weakened by moist conditions and seed typically requires about three months of low temperature exposure before germinating.

## Wild Rice (Minnesota's Official State Grain)

Wild rice is the only cereal grain native to North America. Its emergence as a commercial crop is fairly new, but has been met with great success. Wild rice, or "Manoomin," was first gathered by Native Americans. This traditional harvest is still carried out in some areas. However, most wild rice is now cultivated and harvested with combines. In 2012, Minnesota led the nation in the production of cultivated wild rice with 9.2 million finished pounds.

Wild rice is an aquatic plant. Commercial large-scale production requires the flooding of "rice paddies" and various pieces of specialized equipment. Due to the need for water over a long period of time during the growing season, the wild rice crop serves as a very important habitat for numerous species of waterfowl.

# Planting

In nature, when the wild rice plant matures in the early fall, the seeds fall into the muddy bottoms of shallow lakes and streams. Here they remain throughout the winter season in frigid temperatures. The following spring thaw weakens the pericarp enough to allow seed germination. This occurs when the temperature reaches about 40°F. When wild rice is planted commercially, fields are planted in the fall but not flooded until spring. Some fields reseed from the previous wild rice crop.

### Harvest

The traditional hand harvesting process requires two individuals. One crouches in the bow of the canoe, or any other narrow boat, and gently taps ripe kernels into the canoe with knocking sticks called "bawa'iganaakoon" (bah wah eegah NAH koon) which are made of lightweight cedar. The other stands in the stern and propels the canoe using a long pole. The kernels that fall outside the canoe seed the area for future harvest. Harvesting in this manner is labor intensive, but is still a tradition in many Indian families.

In commercial paddies, the water is released in the late summer season and the fields are allowed to partially dry. The grain is then harvested with large modified combines.

## **Processing**

Wild rice grown commercially in Minnesota is processed using the "parching" method. It involves six steps:

- Curing \_\_\_\_\_ Continued ripening or darkening of kernels.
- Roasting \_\_\_\_\_ A drying and flavoring process.
- Hulling\_\_\_\_\_ The removal of the outer portion of the hull.
- Scarification \_\_\_\_ The removal of a portion of the bran layer or pericarp (optional).
- Cleaning \_\_\_\_\_ The removal of all foreign debris from the grain.
- Grading Separating the grain by size.

## Wild Rice and the Native Americans

"Manoominikewin" is an Oiibwe word that means "making rice." Making wild rice has been a part of Ojibwe life for thousands of years in the land we know today as Minnesota.

After the wild rice is gathered, the basic processing steps of wild rice are the same as they have been for a thousand years, essentially unchanged from the traditional Indian method of parching, thrashing and winnowing. Parching was traditionally done over open fires, thrashing was done by "jigging" or dancing on the wild rice to remove the hulls, and winnowing was accomplished by tossing the wild rice into the air from a birch tray, allowing the wind to clean the debris from the wild rice. Today mechanization has taken over and finishing plants do the processing of the majority of hand harvested wild rice. The wild rice crop was an important food staple and served as the main vegetative food source in an area where agriculture was difficult.



