

Minnesota's Powerhouse Crops

Take a ride in Minnesota farm country and you'll see an amazing variety of field crops. They thrive here thanks to our state's soil, climate and terrain. Most of our crops are used as food for people or for animals. Technology brings other uses for field crops, too. We have ink, candles and soy diesel from soybeans. We have cat litter and packing peanuts from wheat. We have skin care lotions from wild rice. We have ethanol from corn blended with gasoline. We even have warm blankets from a corn-based fabric called Ingeo. We have medicine, livestock feed and even shoe polish from sugarbeets. Read on for more about Minnesota crops!



Wild rice is a native crop. Minnesota's natural wild rice has provided food for people for over 500 years. To gather the hand-harvested rice—a special crop of northern Minnesota's shallow waters—the Ojibwe paddled canoes out to the rice. They bent the stalks of rice over the sides and gently tapped

the tops of the stalks to make the rice fall into the canoes. Some rice fell into the water as seed for the next year's crop. Indians still hand-harvest the natural stand. However, more of our wild rice today grows in special water-covered fields called paddies. The water is drained off before harvesting, which is done by machine. Most of the wild rice grown in the U.S. comes from just two states: California and Minnesota.

This Minnesota county's name is the Ojibwe word for "wild rice."

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Find the Ojibwe Secret Letters on page 8.

Soybeans

are **legumes**, members of the plant family that includes other beans, peas and lentils. The Chinese people have grown them for 5,000 years and called them "Yellow Jewel." Soybeans first came to the U.S. in 1804 as ballast for a ship. People thought they were useless and dumped them. Later we used them as a forage crop for animals. Then auto maker Henry Ford looked at soybeans as an industrial crop. A plastic steering wheel made by Ford was the first industrial use of soybeans. We learned that soybeans are not only powerhouses of protein for people and animals, but they have hundreds of uses. No wonder soybeans have been called "The Miracle Crop."



Sugarbeets

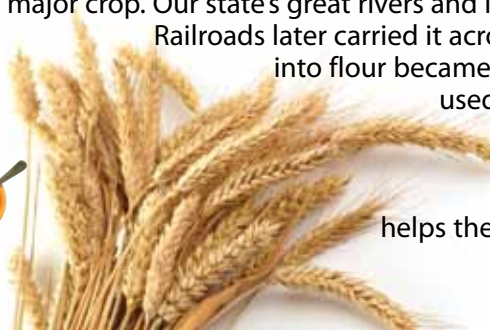
Western Minnesota and the Red River Valley are the nation's top spots for growing sugarbeets. The U.S. is third in the world, after Russia and France in sugarbeet production. Did you know the entire sugarbeet plant is put to use? At harvest time, one machine cuts off the tops of the plants and another lifts the beets out of the ground. The tops become animal feed. The beets are processed to extract the sugar and leftover beet pulp feeds livestock.

Corn

American Indians have grown corn (maize) for thousands of years. The first English colonists in America would have starved if the Indians had not shared corn with them, and shown them how to grow and use it. Sweet corn is what you eat canned, frozen or right off the cob, but you use products made from field corn every day. Components of field corn such as starch, syrup and oil are invisible ingredients in thousands of food products. Field corn is a major ingredient in livestock feed and industrial products, too. The U.S. is the world's largest field corn producer, consumer and exporter.

Wheat

covers more of the earth's cultivated land surface than any other crop. It was first grown in Minnesota in about 1820. By the time of the Civil War wheat was a major crop. Our state's great rivers and lakes were the first shipping routes for wheat. Railroads later carried it across the nation. Meanwhile, grinding wheat into flour became a big industry. Minneapolis companies used water power from the mighty Mississippi to grind wheat into flour. Through 1930, Minneapolis was the flour milling capital of the world! Today our state's wheat helps the U.S. be the world's largest exporter of wheat.



Did you know?

Almost all our breakfast cereals are made of grass. Oats, barley, corn and wheat are all grasses.



Minnesota's Powerhouse Livestock

Animals are a huge part of Minnesota's agriculture landscape. Our livestock thrives because our state is the perfect place to grow the food they need. Some of them graze on grass in the summer and dried grass or corn (hay or silage) in the winter. All are fed carefully balanced mixed rations with everything they need for a healthy diet. Each animal's ration differs. Vitamins, minerals and grains such as ground corn, oats, sorghum, soybean meal and sugarbeet pulp are often in the mix. Meet four of Minnesota's powerhouse livestock animals.

How is each important to our state—and to your life?





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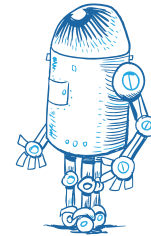


Cattle were likely domesticated in Europe and Asia way back in the Stone Age. Christopher Columbus introduced cattle to the western world on his second voyage in 1493. The first cattle in Minnesota were for feeding soldiers at Fort Snelling, established in 1820.

Minnesota has two types of cattle: **beef** and **dairy**.

 **Beef cattle** are raised for meat and have more muscular bodies. They efficiently turn the food they eat into meat we call beef.

 **Dairy cattle** are efficient in turning the energy from their food into milk. Milk from dairy cattle is made into dozens of products, including cheese, yogurt, ice cream, butter, sour cream, cottage cheese and kefir. While dairy animals are used for beef, too, milk is their main purpose.



Minnesota currently has about 50 farms using robotic milking machines in one of agriculture's newest technologies!

Cattle can graze on grass and other plants inedible to humans and turn them into meat, milk and more. Cattle by-products improve our lives, too. Soap, shampoo, medicine, leather and sports equipment (footballs, baseball gloves, etc.) are just a few items we use daily.



2

Hogs (also called pigs) are native to Eurasian and African continents. Columbus took eight hogs on his voyage to Cuba in 1493, but "the Father of the American Hog Industry" is Hernando de Soto. This Spanish explorer landed with 13 hogs at Tampa Bay, Florida in 1539. Later, pioneers moving west took their indispensable hogs with them. Baby pigs in wooden crates hung from the axels of prairie schooners. After the Civil War, the pork industry moved to the upper Midwest, where huge fields of feed grains grew. The "corn belt" also became the "hog belt."

China is the world's number one producer and consumer of fresh pork. Minnesota ranked 3rd in U.S. hog production in 2012.



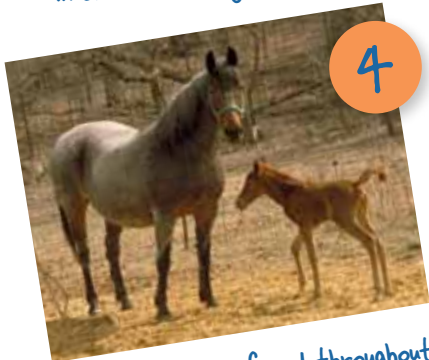
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Turkeys are the only major meat animals native to North America. Turkey consumption has more than doubled over the past 25 years. Every year more turkeys are produced in Minnesota than anywhere else in the nation. The gobble that shows up on Thanksgiving tables is a descendant of the wild turkey native to our forests. We enjoy turkey year-round as tenderloins, ground turkey, breakfast sausage, deli meat and more.

Compared to a turkey of the 1930s, each turkey today produces twice as much meat with half as much feed. Why? New technologies in animal breeding and feeding make the difference.



Benjamin Franklin wanted the turkey as our nation's official bird! It's a true American original!



4

Horses in prehistoric forms roamed North America, but they died out long before humans came. Later, Spanish explorers brought horses to the New World. Those first horses were domesticated, but some escaped or were turned out into the wild. Indians captured wild horses and began using them for hunting, traveling and bartering. Settlers and ranchers used horses for helping with farm work, pulling machinery, working cattle, logging and transportation. Minnesota is still home to thousands of horses. Most are used for pleasure riding, horse show competitions, and sports events such as rodeos and horse races. Horses are on some police forces, too, serving as partners with mounted patrols.

Horses are found throughout Minnesota. The largest concentration is in the Twin Cities Metro area. What might explain this?

Llamas, alpacas, sheep, goats, ducks, chickens, red deer, emus, fish and bison are just a few other animals raised on Minnesota farms. Why do you think farmers are interested in raising these animals?



Bison is one of the fastest growing markets for meat today.