

Minnesota's Ag Roots: Going Back in Time

First Farmers

Producers

Long before white settlers arrived and long before Minnesota became a state, the Ojibwe (also known as Anishinabe) and the Dakota Native Americans were farming in the area.

The Ojibwe lived in the central and eastern regions of what would later be Minnesota. They hunted and fished. They harvested wild berries, fruits and wild rice. They planted corn, pumpkins and squash, and tapped maple trees.

The Dakota lived in the southern and southwestern plains of what is now Minnesota. Dakota men hunted game for food. Dakota women were farmers. Working with simple hoes made of bone or wood, they raised corn, squash and beans.

By the early 1820s Fort Snelling had been built. The troops needed plenty of food, and 200 acres beside the Minnesota River were set aside to grow crops. Their harvests brought wheat, oats, corn, potatoes, carrots, turnips and cabbage.

From Wheat to Flour

Processing

By the 1830s hundreds of settlers had moved into the area. The settlers grew much of their own food and did most of their own processing—salting, pickling, preserving, grinding.

As more and more crops were grown in the area, some people started processing businesses. Wheat processing, or grinding wheat into flour, became a big business. It wasn't long before Minneapolis earned the nickname "Mill City."



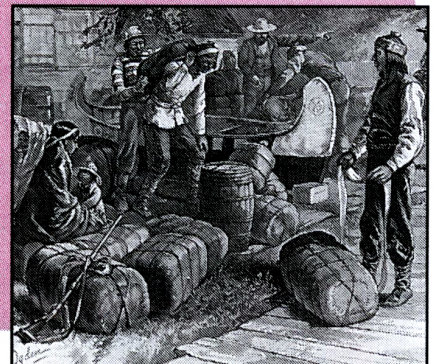
A mid-1800s flour mill packing room; workers packing flour into sacks and barrels.

Photo Courtesy Minnesota Historical Society

Getting What They Needed

Distribution

Early distribution was simple. Native Americans and farmers traded with each other and among themselves to get what they needed. They might trade chickens for venison, or eggs for deerskin. As time went on, settlers grew more food than they could use. They sold the extra for money, and used their money to buy other things they needed. Once people had money, trading posts, stores and shops sprang up as centers for buyers and sellers.



An early 1800s northern Minnesota or Canadian trading post.

Photo Courtesy Minnesota Historical Society

How's Your History?

1. How do you think American Indians helped settlers produce food? _____
2. What would have happened to Fort Snelling and other settlements if food crops had failed? _____
3. Why was Minneapolis such a good place to locate grinding mills? _____
4. How were early trading posts a way of distribution? _____

Seeds: *Miracle of Life Through all Ages*

Did you ever pick up a seed and think about the miracle you were holding in your hand? A tiny seed grows to be a flower, a tomato plant or a giant oak tree. That's a miracle, and here's an even bigger one: thanks to seeds, all human, plant and animal life on earth survives. Without seeds, we're all goners.

Early people lived off the land. They were hunters and gatherers, moving from place to place to find enough food. Their lives depended on seeds scattered by nature. In time, people began living together in larger groups.

Many wanted to build villages and stay in one place. There weren't enough wild sources of food nearby to feed everyone. They needed to grow their own food, and that meant planting seeds.

Native Americans knew seeds meant survival. They gathered corn, pumpkin, squash, sunflower and other seeds each fall and carefully stored them for the next growing season. Settlers coming to the United States brought seeds of other crops with them from "the Old World." They guarded and protected the seeds on

ocean journeys, wagon trains and travel on foot or horseback. Their seeds were treasures that could make the difference between life or starvation in the new land.

Today, most of the world's population depends for survival on seeds planted by humans.



Think about the foods you've eaten today. How did *each* of them depend on a seed?

Banking on Seeds

When you want to keep your money in a safe place you put it in a bank, right? Did you know our government does the same thing with seeds? Our National Seed Storage Laboratory (sometimes called "seed bank" for short) in Fort Collins, Colorado, holds more than 261,000 samples of seeds from around the world.

Why do we need a seed bank? If natural disasters or plant diseases destroy large numbers of our seeds, we can turn to the seed bank for more. The seed bank also keeps many varieties for each kind of plant. Take corn, for example. All corn seeds are

not alike. Farmers can choose from many different kinds of corn seeds to plant. They choose the kinds they think will produce the best on their farms. The seeds have different strengths and weaknesses. Some resist disease well. Others are able to grow in drier weather, etc. And all those seeds are storehouses of different genes from which new plants can be created. The seed bank stores all this **germplasm** to guarantee plants for our future.



A bank vault?

No...these are row after row of seed samples stored at the National Seed Storage Laboratory. There are 19 national germplasm storage locations in our country, but this is the largest.

*Photos Courtesy USDA
Agricultural Research Service*

Think about it: What happens if all corn farmers, or other crop farmers, plant the same kind of seed... and then a disaster such as insects, frost or drought strikes?

Times are changing:

From general store to supermarket

Except for some foods picked from the wild, everything we eat is connected to agriculture. For a quick view of some ways agriculture is changing, take a walk through a modern supermarket. You have your choice of at least 30,000 food products in a large supermarket, and they come from all over the globe. But in your great, great grandparents' time, a grocery store was much different.

Early stores were stocked based on needs of local families. One store might have everything from horse harnesses, shoes, fence wire, cloth and medicine to groceries. Because many people grew their own fruits and vegetables, the store carried few canned goods. They baked their own bread and cakes, so the store carried baking supplies but usually no finished bakery items. Families often raised their own animals for milk, butter, eggs and meat. Refrigeration was a problem, so most grocery stores did not stock these things. Even city people often had large

gardens and sometimes a few animals. When they needed milk, they got it fresh from a milk wagon or a creamery. Meat came from a special processing place called a meat market and eggs were bought from nearby farmers or poultry dealers.

So what would you find at the grocery store? Not nearly so many choices. Nothing in fancy, colorful packages. Many things were in "bulk" amounts like you might find today in co-ops or in special sections of large supermarkets: big barrels of sugar and 50 or 100 lb. sacks of flour. Sacks, tins and barrels of coffee. Cans of baking powder and salt. Canisters and jars of spices, candy, peanuts, teas, mustard. The bulk containers often had measuring scoops inside. Customers could buy as much or as little as they wanted. Imagine that you wanted, for example, \$1.00 worth of coffee. The grocer would measure out that amount of coffee, wrap it in brown wrapping paper and tie it with string for you.



Meighen Store Front



Photos Courtesy Minnesota Ag in the Classroom

The prices in early Minnesota stores were a lot different than they are today. How much? Estimate first, then check it out! Ask a parent or check a store for the actual prices.

| | Then (1871) | Today (My Guess) | (Actual) | % Increase |
|------------|----------------|---------------------|----------|------------|
| Cheese | 24¢ lb. | | | |
| Coffee | 33¢ lb. | | | |
| Butter | 27¢ lb. | | | |
| Eggs | 21¢ dozen | | | |
| Milk | 6¢ quart | | | |
| Beef Roast | 12¢ lb. | | | |

Why do groceries cost more today than they did in 1871? _____

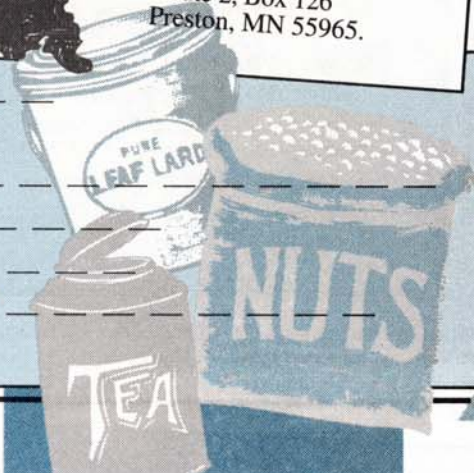
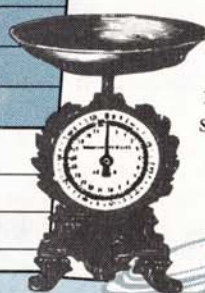
Unscramble the letters and discover things that make possible thousands of choices at the grocery store that people years ago didn't have. The first letter is given.

tionfrirarege R _____
 stropim I _____
 dogo rantsatporiont G _____ T _____
 dogo gnicpakag G _____ P _____
 antpl redbeing P _____ B _____
 rultlcua tseidvriy C _____ D _____
 ssepccorign P _____

See it like it was!

Would you like to step back in time and visit a store from the late 1800s? The historic Meighen General Store at Forestville near Preston, MN (southeast of Rochester in Forestville State Park) is the place to go! Original products sold during that time period are still on the shelves today. As part of a special summer program you can chat with store clerks, business leaders and farmers, all dressed in the styles of their time.

For more information write:
 Historic Forestville,
 Route 2, Box 126
 Preston, MN 55965.



Science + Technology = New Earth-Friendly Agriculture!

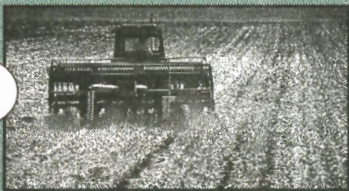
These are just a few of the many ways agriculture and science are teaming up to protect the planet. Read each article. Then write a headline that tells the main idea. (The last one is done for you!)

My headline

To protect the soil, many farmers have changed the way they farm. They plant rows of trees (**windbreaks**) to keep wind from blowing away the soil. They leave plant parts like stems on fields after harvesting instead of plowing them under at the end of the growing season (**conservation tillage**). The plant parts hold soil from being blown or washed away. To slow water runoff, farmers plant **row crops** (like corn) *around* hillsides instead of up and down (**contour planting**). Some plant row crops in narrow strips with sod types of crops between them (**strip cropping**). Conservation tillage, contour planting and strip cropping have cut soil erosion by 25 percent over the past ten years! Match each photo with its soil-saving idea above!

Photos Courtesy Minnesota Extension Service and Board of Water and Soil Resources

1.



2.



3.



My headline

Today's farmers are carefully trained to handle and use **crop protection chemicals** safely and wisely. They use fewer and safer chemicals to kill insects and weeds. Many use organic or natural fertilizers. "Good bugs" are being used instead of chemicals to get rid of unwanted insects. Some farmers attract birds and bats to their farms to eat harmful insects.



Using chemicals safely
Photo Courtesy Minnesota Extension Service

My headline

Every year, plant scientists discover new ways to grow plants that are easier on the environment. Here's one example: A new family of plant genes could soon replace many of the chemicals now used by growers to protect crops against pests. Some new plants may fight off insects all by themselves!

New research with plants

Photo Courtesy Minnesota Extension Service



Earth Care, Animal Care

Making sure farm animals get the food, water, space and shelter they need while protecting the environment is every **livestock** farmer's challenge. How's this for a brainy idea?

What would you name this invention?

NEW

"Sipper" Saves Soil

Cows and river banks are a muddy combination. When cows tramp down to the water for a drink, their hooves tear up the banks. Soil and animal waste wash into the water.

Now there's a new way to help protect our river banks and give thirsty cows a drink at the same time—a special cow fountain! It pumps water away from the river or stream to a bucket-sized trough. A cow can press a lever with its nose and make the water flow. Presto! The cow gets a fresh drink without a long walk, and the river bank gets a break, too. When the fountain was built at a test farm, cows lined up like kids to take a drink!

