

Goals/Objectives/Student Outcomes:

Students will:

- Be able to trace the role of agriculture through history and today.
- Discuss past agricultural practices and relate them to modern agriculture.
- Identify by-products from selected commodities such as beet dairy, pork, corn, soybean, etc.
- Recognize the importance and diversity of locally produced plants and animals.

Materials:

1. Old magazines, scissors, glue
2. Reference materials, such as encyclopedias and/or informational materials from interest groups such as the Iowa Pork Producers Association (list follows "Resources")
3. Articles from The Goldfinch
4. Outline map of Iowa approximately bulletin-board sized

Background:

The loway Indians were among the first farmers in Iowa. The women actually did the field work. They were the first to discover that the rich Iowa soil was very suitable for corn, which was their most important crop. They roasted it or made it into corn meal for bread. It also was used in stews. In addition, the loway Indians raised beans and squash.

The prairies were at first considered unsuitable for farming by the early pioneers. They based this belief on the fact that there were few trees growing here. But in 1832 John Deere invented a plow that would break the sod and although plowing took time and sometimes required several yokes of oxen, the soil under the sod was found to be very rich. Pioneers raised mostly corn, but they also grew barley, oats, and hay for their livestock, and wheat for bread. The corn was picked by hand and most was fed to hogs that were then sold.

The new railroads opened up markets for livestock as well as grain. They also enabled people to begin farm-related industries, such as packing houses in Sioux City, Waterloo, Des Moines, and Ottumwa, and the Quaker Oats Company in Cedar Rapids.

At the turn of the century horses were the most important animals on the farm. They pulled implements and offered transportation for families. Farmers were diversified. They raised sheep and hogs, milked cows, had chickens, and raised corn, wheat, barley, and oats, as well as fruits and vegetables. They could provide almost all of the food they needed. But they had very little money to spend.

By the 1930s better roads, the coming of electricity, and the use of the tractor all made farming easier.

Farming is still the main occupation in Iowa although most people live in towns and cities. Since World War II fewer farmers work the land as small farms are combined to form larger units. Larger machinery is needed to do the work.

Iowa is the leading producer of both corn and soybeans. One fourth of the country's hogs are raised in Iowa. We are seventh in the total number of cattle and ninth in the number of sheep. There is a great amount of business generated by the use of the by-products of these industries. Iowa products are sold all over the world.

Procedure:

1. Prepare students for class discussions and activities by reading attached excerpts from The Goldfinch.
2. Discuss with students how agriculture started in Iowa and how it changed through the years.
3. List the main agricultural commodities in your area. Divide students into the same number of groups as the number of commodities that you choose to study. Assign each group a commodity. Have each group develop a list of by-products that are derived from their commodities. Have groups find pictures of these products and glue them to the outline map.

Assessment of Outcomes:

Have each group orally present its part of the collage to the rest of the class.

Teacher can lead a large group discussion on "How many occupations are dependent on your commodity?"

Extensions and Adaptations:

Have students bring in a product containing processed plant or animal ingredients.

Cook or bake using Iowa products, such as corn bread, butter, or pizza.

Write with soy ink (can be obtained from the Soybean Association).

Plan a field trip to a local agribusiness such as a locker, feed mill, dairy, or seed corn salesman.

Plan to visit varied farms in the area, including any that might have alternate crops or livestock such as sorghum or emus.

Plan an activity based on information from state producers' organizations. Many have developed excellent kits geared to elementary students. Many have presenters who will come into the classroom.

Create a landscape painting of a rural scene or locate good visual images of rural scenes in your area. It should include buildings found in rural America: barns, silos, fences, windmills. Talk to the students about the visuals and discuss the historic aspects of rural Iowa like wooden barns and buildings vs. the aluminum buildings of recent years. Discuss the National Trust's BARN AGAIN! program to preserve historic farm buildings. Discuss various farm buildings with regard to form and function: barns, chicken coops, long dairy barns, milk houses, farrowing houses, horse barns, silos, corn cribs, machine sheds, farm houses.

Visit a "Living History Farm"

Iowa Corn Promotion Board, 1200 35th Street #306, West Des Moines, IA 50266

Iowa Soybean Promotion Board, 1025 Ashworth Road, Suite 310, West Des Moines, IA 50265

Resources:

The Goldfinch 2 (February 1981).

The Goldfinch 14 (Spring 1993).

The Goldfinch 11 (February 1990).

William Bernard Graber. "A Farm Family Enters the Modern World." *The Palimpsest* 68 (Summer 1987).

Dorothy Schwieder, Thomas Morain, and Lynn Neilsen. *Iowa Past to Present*. Ames: Iowa State University Press, 1989.

"Agriculture In Iowa Resource Guide," Iowa State University, Iowa Department of Agriculture, and Agricultural Groups. (Reprinted in Section 5 of this binder.)

"Agricultural Awareness Activities: Curriculum Guide," Teacher's Academy on Agricultural Awareness, Iowa State University.

Related Interest Groups:

Iowa Beef Industry Council, 123 Airport Road, PO Box 451, Ames, IA 50010

Iowa Egg Council, 535 E. Lincoln Way, Ames, IA 50010

Iowa Sheep Industry Association, Gretta Irwin, 304 Greene Street, Boone, IA 50036

Iowa Turkey Federation, PO Box 825, Ames, IA 50010
Midland Dairy Association, 101 N.E. Trilein, Ankeny, IA 50021
Iowa Pork Producers, PO Box 71009, Clive, IA 50325-0009

Voices from the land

■ MANY PEOPLE HAVE WRITTEN about living on farms in Iowa. The pages that follow have sections of letters, diaries or magazine articles that tell about some of the different experiences of people who lived on Iowa's land.

You'll see in the oldest writings that people used spellings and words that we don't use today.

Catherine Wiggins Porter wrote in 1939 about her childhood. She was born in 1873 near Clarinda, so here she recalls her life when she was 10.

1883/1884

The house in which I was born was a story-and-a-half building, about 16 by 20 feet. . . . There was no plastering on the walls, only heavy building paper tacked to the studding. This one room **sufficed** [*was enough*] for all purposes for some four or five years, when a "**lean-to**" [*a simple room added to a house*] was built at the back and provided a kitchen and small pantry.

All laundry was done on the washboard. The tubs at our house were made from molasses or vinegar barrels sawed in two. They were heavy and unwieldy and without handles. Ironing was a hard, hot job. A cook stove was kept hot enough to make the irons sizzle. The irons were really iron throughout, handles and all. Thick pads had to be used to keep one's hands from being burned.

Then there were baking days, possibly twice a week, when Mother made about six loaves of bread and a pan of rolls. Mother made her own yeast.

Except for coffee, sugar, and salt, most of our food was raised on our own farm. Wheat, buckwheat, corn, and sugar cane were taken to the mill and converted into flour, meal, or **sorghum** [*a dark, sweet syrup*], on **shares** [*the miller was paid with some of the flour, meal, or sorghum*]. The hogs provided meat and lard, the chickens, eggs the cows, milk and butter. We raised our own potatoes, cabbages, and turnips, which were either put into the cellar or "holed in" in the ground. A pit would be dug to below the freezing point and lined with hay or straw. Boards were then laid across the top, and dirt heaped over and around it all.

Sarah Jane Kimball began to write letters when she was a child and kept a diary through her adult years. Most of the diary has been lost, but the following entries show some household activities when she was 43 and 47 years old.



Sept. 15, 1885

"Saturday lots of work to do for mother and I. We churned, made bread, dressed a chicken, made sweet pickles, made up a pail of apples into apple sauce, cleaned my bird cage, then the rooms, and did the work upstairs, and it was nearly milking time. Tired at night."

1881

"Mother is making soap this week and tonight has a barrel full." [The soap was thick, brown, and syrupy.]

The Kimball farm in 1899.





James Hearst
as a child.

James Hearst was born in 1900. He was a farmer-poet who lived to be 82, and he later wrote about his Iowa childhood in the early 1900s.

1910-1915

The day finally came when the switch at the plant sent the **juice** [*electricity*] through the wires and the lights came on. Not even the telephone changed our way of living, thinking, and acting as

much as the coming of electricity. This break with the past seemed an entrance to the modern world. Later we learned of some of the risks involved in our loss of independence.

The neighborhood became a number of private homes and farm operations, the group feeling disappeared. . . And, the independence of the farm eroded. Now a single copper wire took the place of the woodpile and windmill. The farm no longer existed as a **self-sustaining** [*independent*] unit. We had learned to depend on electricity. The helplessness of a farm without electricity came home to me when the power failed after an ice storm, and the city fire trucks had to haul water out to the farms for the livestock until the lines could be repaired.



Joanne Meusburger wrote about growing up in Sac County. She and her older sister, Ruth, were good friends and constant playmates.

1935/1936

My Grandmother Wilson had a great repertoire of poetry. She was the grandmother who lived next door to us on the farm, and I can remember sitting spellbound while she recited "A Leak in the Dike" or "The Midnight Ride of Paul Revere." My father inherited this gift and entertained us on long trips by singing songs and recalling poems passed down

by memory. We begged to hear them again and again, so that in time we learned them ourselves.

Besides our real dolls, we had hundreds of the paper variety. Some came from regular paper doll books but others we cut from the comic section of the Sunday paper where they were printed every week. Since these had



Courtesy of Joanne Muesberger

Joanne and her sister, Ruth, with friends.

limited wardrobes, we spent hours designing clothes out of wallpaper samples. Each character was carefully stored between two pages of an old copy of *Good Housekeeping*.

We also had a scrapbook which we made into apartments for these dolls. A blank page was divided into two parts — an upstairs and a downstairs. Furnishings were cut from pages of the mail-order catalog and pasted into place. . . .

New Year's Eve was the one night of the year when we were allowed to stay up past midnight. Mother would pop corn, and we would sit around playing "Old Maid" and "Authors." About 10:00 p.m. Mother would serve ice cream, and we would turn on the radio to Times Square to listen to the celebration. By midnight the grape juice toast to the new year was almost **anticlimactic** [*disappointing*].

On Halloween night, each member of the family would choose a costume from

the dress-up box in the attic. (This included my grandparents and Helen and Wayne, of course. Helen and Wayne were our "hired man" and "hired girl." In storybook fashion, they fell in love, married, and stayed with us to later buy into a partnership and manage the farm after my grandfather died and my father went into the seed corn business full-time. Eventually they had a family of their own to also share in our holiday festivities.)

The costume box held a wonderful selection, accumulated from grade-school operettas, minstrel shows, and Christmas entertainments. There was also the costume and mask Daddy had worn as the girl singer in a mock wedding, the riding outfit Mother bought when she taught school in Idaho, the long, bustled dresses Grandma wore in the Gay Nineties, and the kimonos Aunt Ha Ha brought us from Chinatown. Each year when we opened the lid, the trunk seemed as magical and mysterious as a pirate's treasure chest.

When everyone was appropriately dressed, we had a style show, complete with **dramatizations** [*short plays*]. For example, Mother and Daddy might team up to act out **Maggie and Jiggs** [*comic strip characters*], complete with rolling pin. It was always so much fun that we would go back to the attic to reappear in three or four different costumes before we ran out of ideas. 



Alice was the best
corn husker in Linn Grove.
She wanted to enter
the county contest,
but there was one problem.
She was a girl.

The Cornhusking Caper

By Jen Guttenfelder

Look at all of this cool old stuff!" said Emily Warren as she and her brothers, and their cousin Abbie from Des Moines explored the old corn crib.

"It just looks like a bunch of rusty old junk to me," said Abbie.

"Ohhhh, what's this? It looks like something a gross creature would wear in a scary movie!" shrieked Abbie. She picked up a right-handed leather glove covered with little round metal pricks. Right in the middle of the palm was a large rusty sharp metal piece that looked like a two-pronged knife.

"Wow!" said Edward, as he grabbed the leather glove from Abbie. "I wonder what this was used for?"

"Something awful I bet," said Emily.

"Yeah," said Zack. "I'll bet it was used to kill something . . . or someone!" He dangled the glove.

Abbie gulped and her eyes widened.

"Killers who hide out in corn cribs!" whispered Zack.

Abbie screamed and ran outside. Emily, Zack, and Edward giggled.

"Wait up, Abbie," said Zack. The Warren kids followed their cousin out of the corn crib and headed for the house. The old corn crib looked like an old red barn, but it was used as a big storage bin. It was one of their favorite places to hang out.

"Let's go ask Grandpa what it is," said Emily.

The Warrens lived on an 80-acre farm near Linn Grove, Iowa. The farm had been in their family for almost 100 years. Their dad, Ben, used all modern equipment now, but many old farming tools and machines reminded Grandpa of when he was a kid living on the farm.

The grown-ups sat in the family room talking farm business. The children took off their coats and followed Edward quietly into the room. Edward took the glove from Zack and held it up.

"Grandpa, what's this?" he asked.

"Did they use it for murder?" asked Zack before Grandpa could answer. Grandpa and the adults laughed.

Art by Mary Moye-Rowley



"That's a cornhusking mitt," answered Grandpa. "We used that to husk corn."

"You mean it's not a weapon to protect you from wild animals?" asked Abbie.

Grandpa shook his head. "We didn't have combines when I was a kid, so we had to pick and husk the corn by hand. Some people were so good at it, they entered cornhusking contests. People came from miles around to watch or be in the contests. It was a real big sport, back when I was a kid," said Grandpa.

"Were you ever in a cornhusking contest, Grandpa?" asked Emily.

"No, I had very weak wrists. But I know someone who was!" He winked at Grandma.

"Arthur!" cried Grandma. "You promised you wouldn't!"

"Oh, Alice. Go ahead and tell them!"

"Tell us!"

"C'mon, Grandma!"

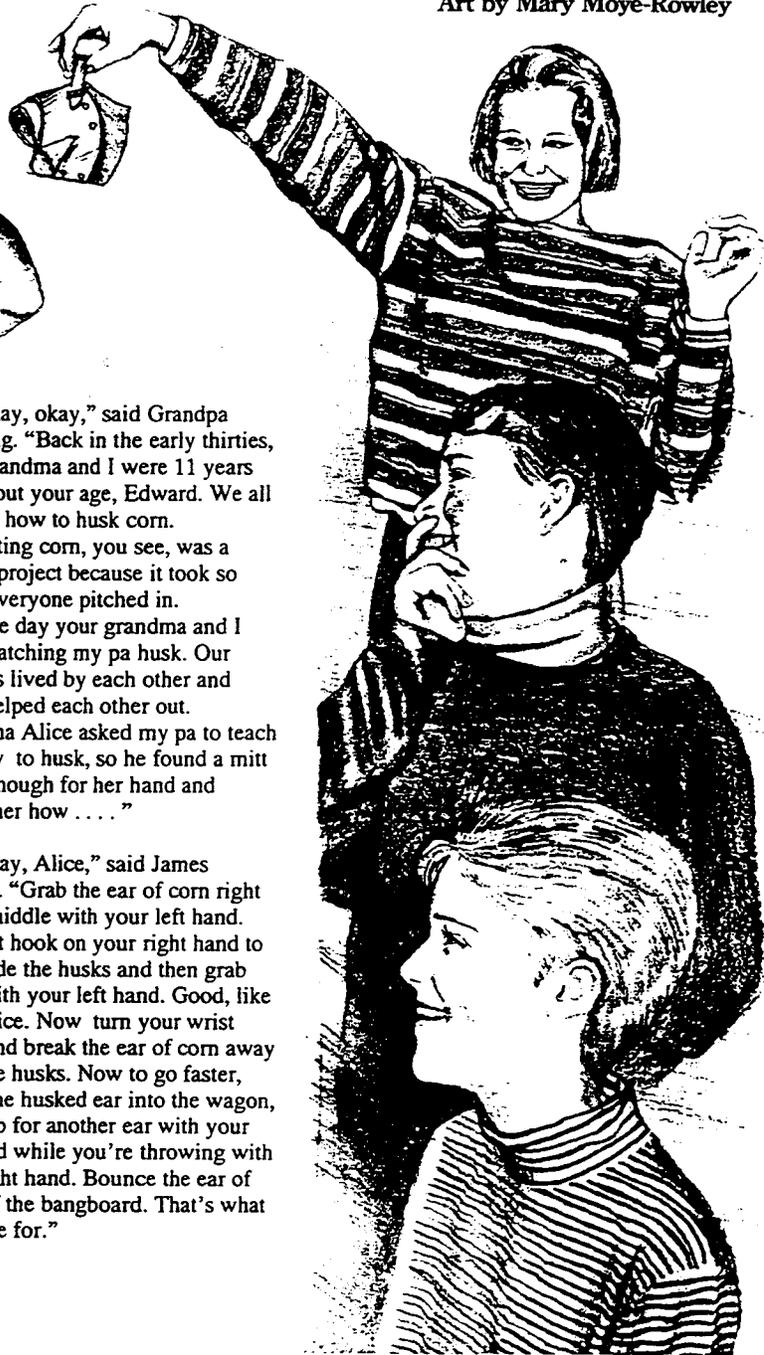
"It's supposed to be a secret," said Grandma. She looked at Grandpa with a consenting smile and nod.

"Okay, okay," said Grandpa laughing. "Back in the early thirties, your grandma and I were 11 years old, about your age, Edward. We all learned how to husk corn.

Harvesting corn, you see, was a family project because it took so long. Everyone pitched in.

"One day your grandma and I were watching my pa husk. Our families lived by each other and often helped each other out. Grandma Alice asked my pa to teach her how to husk, so he found a mitt small enough for her hand and taught her how"

"Okay, Alice," said James Warren. "Grab the ear of corn right in the middle with your left hand. Use that hook on your right hand to pull aside the husks and then grab them with your left hand. Good, like that, Alice. Now turn your wrist quick and break the ear of corn away from the husks. Now to go faster, throw the husked ear into the wagon, and grab for another ear with your left hand while you're throwing with your right hand. Bounce the ear of corn off the bangboard. That's what it's there for."



"I can do this!" thought Alice. At first, Alice was a little slow and awkward. She wasn't used to having a hook attached to her right hand. The dry corn leaves scratched her face. The early morning cold made her nose run and her fingers dry and crack. But Alice was determined. She didn't give up.

One day Alice came home with a bleeding scratch on her face and sore hands.

"Alice, have you been fighting with the boys?"

"Oh, no, Father. I've been working right alongside them at the Warren's. I'm husking corn. Mr. Warren says I'm getting pretty good at it."

"Husking corn with the boys and men?" asked Father.

"I'm not sure that's such a good idea," said Mother.

"Please, don't make me stop," begged Alice. "I'm just getting good at it."

"I could use some help in my field," said Father.

"Can I help Father with husking? Please?" cried Alice.

Mother sighed. Even though she disapproved, she knew how stubborn Alice could be. "Okay," she consented.

Father and Alice laughed. Deep down Father was proud that his girl was a hard worker who could keep up with the men. He couldn't wait to brag about her to his friends.

The rest of the harvesting season, Alice husked corn with her father. She got to be very good. One day



Mary Moyer-Rowley

she even husked more corn than one of the hired men.

"Giminy!" cried Amos, the hired man. "Alice has husked more corn than me today!"

"Good job, sweet pea," said Father.

"You should enter the county cornhusking contest," said Amos. "There's a Junior Division."

"Can I, Father?" asked Alice with wide eyes. "Please!"

"I wish you could, Alice," said Father. "You'd give the boys your age a real run for their money. But girls don't usually participate in the husking contests. Besides, I'm sure your mother would never let you."

Alice was so disappointed that her cornhusking slowed down to a crawl. At the end of the day, Alice went over to Arthur's. Maybe he could cheer her up.

"Arthur, do you think it would

shock everybody if I was in the county cornhusking contest?" asked Alice, as they sat on the porch swing. "Everybody already knows how fast I am because Amos and Father tell everyone. Why can't I compete with the boys? I work with them."

"I don't know, Alice," said Arthur. "There are just some things that girls aren't supposed to do in public. This is one of them. . . ."

"But what if I'm invisible?" she asked with a mischievous smile

"Are you thinking what I'm thinking?"

Alice and Arthur talked about making Alice invisible all the way home.

On the morning of the cornhusking contest, Alice met Arthur behind the outhouses. He gave her a bundle wrapped in brown paper and tied with a string. She took it, smiled, and then darted into an outhouse. When she came out, her dress and hair ribbons were gone. She wore a pair of too-big denim overalls. One of Arthur's caps held her hair tucked underneath it. From that moment on, she was "Alan."

Alan wandered through the crowd of people. She was a little afraid that someone would recognize her, so she walked with her eyes down. She knew her disguise worked when she bumped into Amos.

"Hey, kid! Watch where you're going!" he cried.

Alan couldn't believe how many

people came to the county Battle of the Bangboards. Wagons and buggies lined up in dozens of rows. Food booths sold hot dogs, pies, cakes, and souvenirs. Displays showed new farm equipment and hybrids of seed corn. Newspaper reporters, photographers, and radio broadcasters scuttled about interviewing people and taking notes.

Alan was nervous when her name was called for the Juniors Division. People were surprised to see a stranger competing for Linn Grove in the contest. Alan remembered all of the advice Father and Mr. Warren gave her and quickly found her rhythm. Bang! bang! bang! The corn flew against the bangboard like bullets.

"Where's Alice?" said her father as Alan husked.

"I can't believe she's missing this," said her mother.

"Yeah, Alan!" cheered Arthur.

Some people in the crowd gasped when the stranger named "Alan" won. After the trophies were awarded, everyone wanted to congratulate the new champion, but Alan had disappeared.

A little while later, Alice caught up with her parents and Arthur. Her hands and face were just as clean as they had been that morning when she left the house and her dress and hair ribbons were in place.

"Alice, where have you been?" asked Mother. "You missed the Juniors competition. . . ."

"There was this lickety-split boy who won," interrupted Arthur.

"Oh, I'm sorry I missed it. I was at the church booth getting a slice of pie," said Alice with a special smile for Arthur. Father, who was still suspicious about her absence, caught Alice's smile. Suddenly he opened his mouth, as if to say something. All at once he understood. He looked at Alice, who smiled back. She knew he had figured out who Alan was.

"Did he say anything?" asked Abbie.

"No," said Grandpa. "And neither did I, until today. Everyone talked about the mystery cornhusking champion for quite awhile. They never saw him again and they never knew who he was."

"Did you keep the trophy, Grandma?" asked Zack.

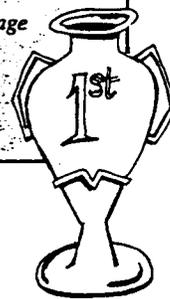
"Yes, I did," replied Grandma. "It's hidden in the attic."

"Let's get it out!" said Emily.

Ask Yourself

1. Why do you think girls didn't enter corn husking contests?
2. How was cornhusking a sport?
3. Are there any competitions today that boys or girls are not allowed to enter? If so, why?

—With Shelby Myers-Verhage



Corn News

bushels: a unit of volume for measuring grain, fruit and vegetables. It equals 32 quarts.

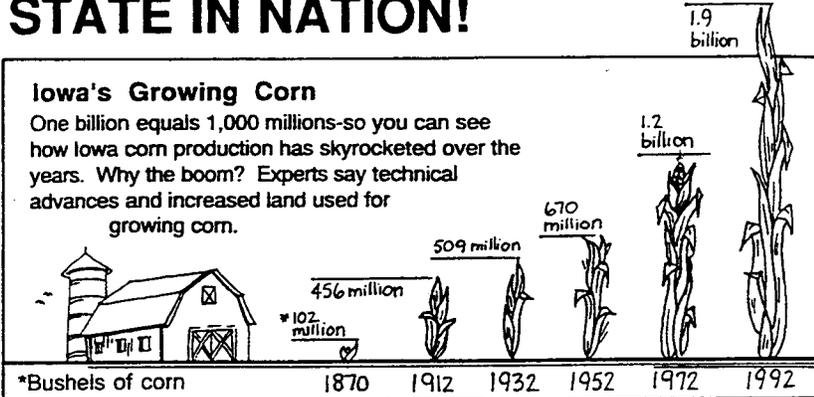
IOWA #1 CORN PRODUCING STATE IN NATION!

Corn is big business in Iowa. Corn production in Iowa has quadrupled since 1929, from 400 million bushels to approximately 1.7 billion bushels annually. Look out the car window when you're out and about in the state and you're sure to see corn fields. More than one-third of the total land area of Iowa is used to produce corn. You may not see flocks of farmers, but eight out of ten jobs in Iowa are directly or indirectly related to agriculture.

Today there are more than 360 different uses for corn products. You can find corn products in stuff

Iowa's Growing Corn

One billion equals 1,000 millions-so you can see how Iowa corn production has skyrocketed over the years. Why the boom? Experts say technical advances and increased land used for growing corn.

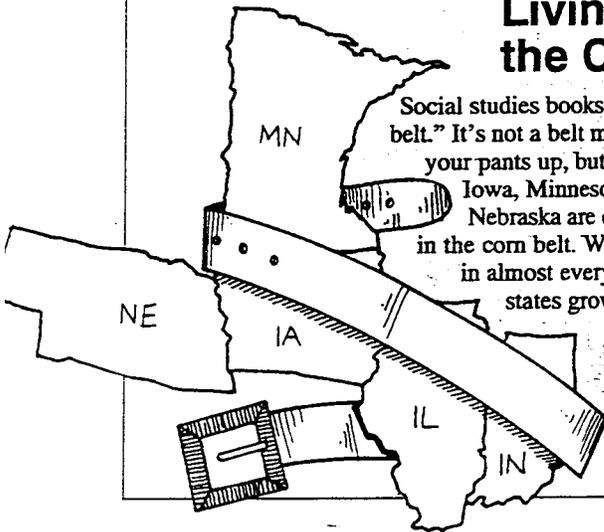


like paint, paper products, batteries, clothing, mouthwash, and shampoo! More than 1,200 different food items in U.S. supermarkets

products are made from corn. Now you know why people sing, "Ioway, Ioway, that's where the tall corn grows!"

Living in the Corn Belt

Social studies books often mention the "corn belt." It's not a belt made out of seeds to keep your pants up, but an area of the Midwest. Iowa, Minnesota, Illinois, Indiana, and Nebraska are often mentioned as states in the corn belt. While some corn is grown in almost every state in America, these states grow huge amounts of corn.



Fueling the Nation

Part of Iowa's corn goes into gasoline! This product is called ethanol (eth-AH-nol) and it's a fuel that's made up of 90 percent gasoline and 10 percent ethanol. Iowa produces about one fourth of the nation's ethanol. Ethanol may help lower carbon monoxide emissions (a kind of air pollution) by more than 25 percent.



Hidden Objects Game

This is an illustration of a 19th-century family working on a farm. Find the hidden objects

leather purse

heeled shoe

compact disc (CD)

modern silo

airplane

remote phone

soda pop can

light pole

car

television

(items from today) that do not belong in the picture. (Solution on page 31.)

television antenna

fan

washing machine

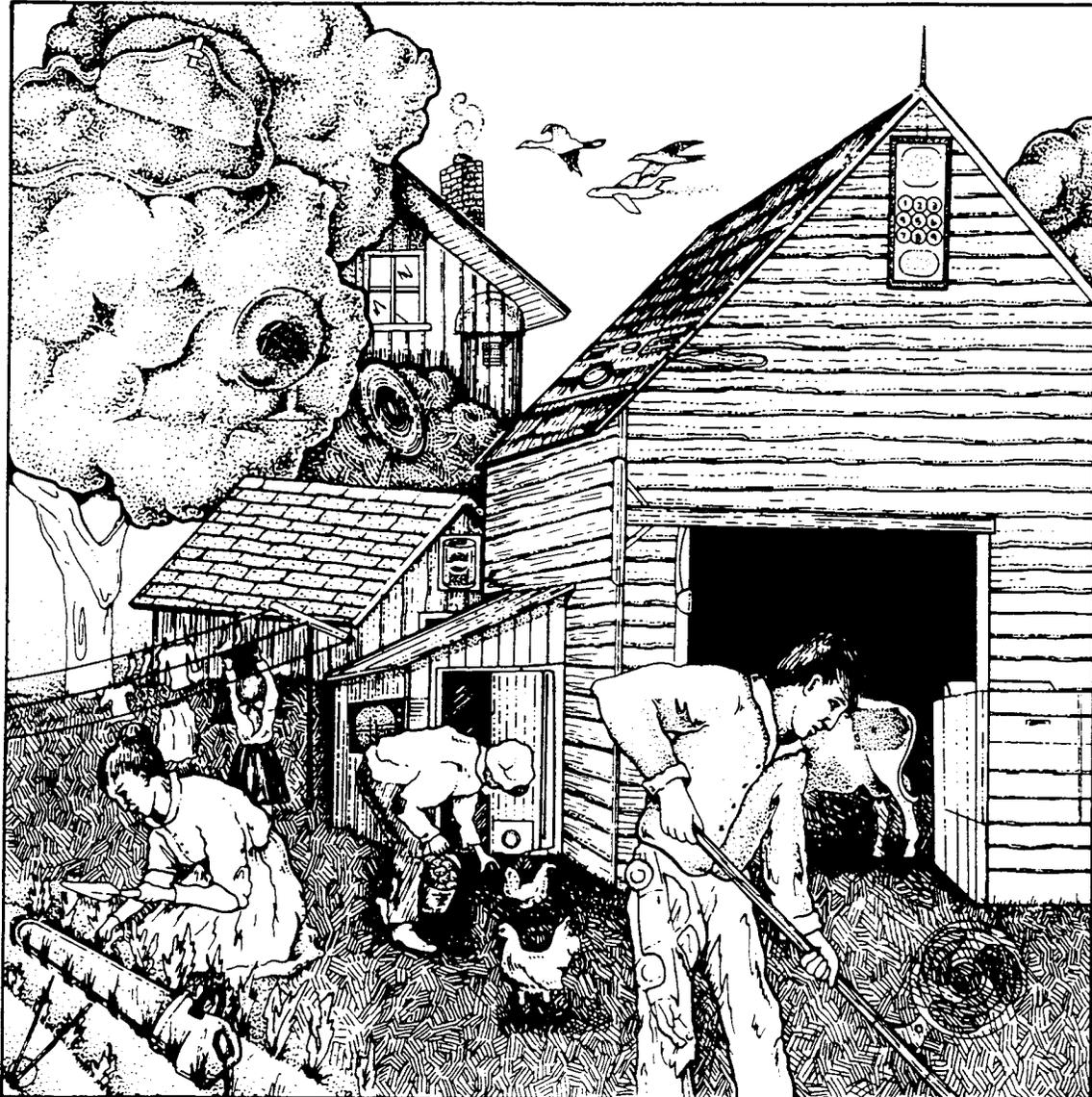
chain saw

35mm camera

floppy disk

satellite dish

map of Iowa



Art by Brenda Robinson