

Illinois
AGRICULTURE
in the ClassroomSM

Photos by Illinois Farm Bureau photographers • For more photos, go to ilfbphotos.org

Calendar
2017-2018



Back to School with Agriculture




Words and terms to learn:

- durability
- lanolin
- by-products
- essential

August 2017

Recommended Reading:

- How Did That Get in My Lunchbox?* by Chris Butterworth
Growing: Farm, School and Me! by Reiffon School Sixth Grade Students
Awesome Agriculture Beef Cattle in the story of agriculture
 by Susan Anderson and JoAnne Buggey
Awesome Agriculture Pigs an A-to-Z book
 by Susan Anderson and JoAnne Buggey

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--|--|--|---|---|--|---|
| 30 | 31 | 1 Spruce, fir, aspen and maple trees are typically harvested for use in facial tissues due to their thin wood fiber system that provides softness and durability. | 2 Beef by-products are found in glue, as well as in the erasers on pencils. | 3 Most pencils are made from California cedar trees due to the wood's non-warping features. | 4 Hair from cattle is often found in paintbrushes. | 5 |
| 6 | 7 One bale of cotton makes 1,217 t-shirts, 215 pairs of jeans and 4,321 socks! | 8 According to the U.S. Bureau of Engraving and Printing, a dollar bill is printed on 75% cotton and 25% linen fiber. | 9 The National School Lunch Program serves lunch to an average of 30.5 million students each day. | 10 The GoldRush apple is the state fruit of Illinois. Scientists named the apple based on its golden, bronze color and the "rush" of flavor you get from the first bite. | 11 Hard red winter wheat is grown in the Great Plains and is used to make bread flour. | 12  |
| 13 | 14 Hand lotion ingredients include lanolin from sheep. | 15 Soy ink is used in over 95% of America's daily newspapers. | 16 Corn starch is used in the formation of plastic items to help coat molds, which helps the efficiency of plastic production. | 17 One dairy cow produces enough milk each day to fill about 99 school milk cartons. | 18 Pigskin is used as a high-quality leather for shoes and sporting goods. | 19 |
| 20  | 21 Illinois wheat is used to make cookies, cakes, and cereal. It is called soft red winter wheat. | 22 A bushel of wheat weighs about 60 pounds and yields about 42 pounds of white flour, or 60 pounds of whole wheat flour. | 23 Pork by-products include fatty acids and glycerin and are used to make chalk and cellophane, as well as many other items. | 24 American pencils were first manufactured in 1812. After the War of 1812 ended, English imports and graphite mines were established in the U.S. | 25 One acre of soybeans can produce 82,368 crayons. | 26 |
| 27 | 28 Together, milk, cheese and yogurt provide nine essential nutrients which include calcium, potassium, protein, and Vitamins A, D & B12. | 29 A football is called a "pigskin" since it was originally made from a pig. However, footballs are now made of cowhide. | 30 Americans eat about 46 slices of pizza per year. Pepperoni is America's favorite topping. | 31 Popcorn is the official Illinois snack food. The most common types of corn grown are sweet corn, field corn and popcorn. | 1  | 2 |



Harvest




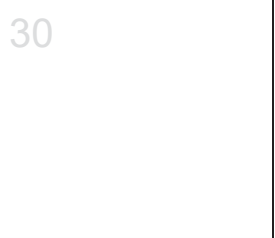
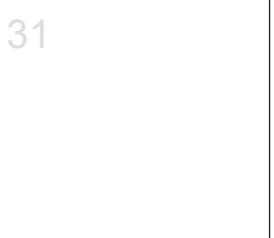

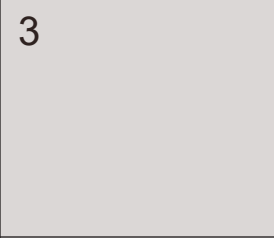

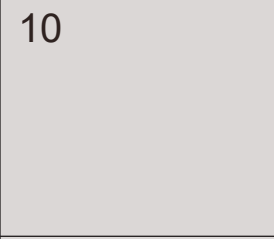

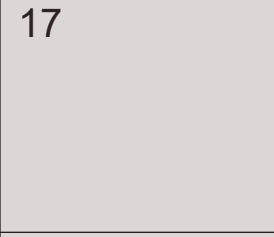

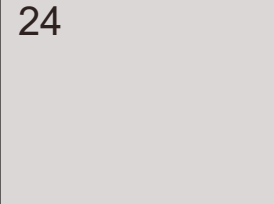

Words and terms to learn:

• harvest • produced • exported • nitrogen
• winnowing • reaping • threshing

September 2017

Recommended Reading:

Corn by Gail Gibbons
Fantastic Farm Machines by Cris Peterson
Awesome Agriculture Soybeans an A-to-Z book
by Susan Anderson & JoAnne Buggey

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--|---|---|---|--|--|---|
| 27  | 28  | 29  | 30  | 31  | 1 In agriculture, harvest is the process of gathering mature crops from the fields. The harvest marks the end of the growing season. | 2  |
| 3  | 4 "Harvest" came from the Old English word <i>haerfest</i> , meaning "autumn" and "harvest-time." | 5 A combine is a large, self-propelled machine used to harvest grain crops such as corn, wheat, soybeans, milo and rice. | 6 The name of the combine harvester comes from the combination of three separate operations into a single process: reaping, threshing, and winnowing. | 7 Thanksgiving Day is the most universally observed harvest ritual in the United States. It celebrates the first harvest of Dutch and English settlers who arrived in America aboard the <i>Mayflower</i> . | 8 The "Corn Belt" includes the states of Iowa, Illinois, Nebraska, Minnesota, Indiana, Ohio, Wisconsin, South Dakota, Michigan, Missouri, Kansas, and Kentucky. | 9  |
| 10  | 11 Grain elevators are buildings or groups of buildings used for the storage and shipment of harvested grain. They were invented in 1842 in Buffalo, New York. | 12 In 2015, the United States grew nearly 14.2 billion bushels (360 million metric tons) of corn. | 13 The combine harvester was invented in the U.S. by Hiram Moore in 1834. Teams of up to 20 horses, donkeys or mules pulled early versions. | 14 The best time of the day for harvesting sweet corn is during the early morning. This insures the sweetness of the corn will be at its highest level. | 15 In the fall, the soybean plant turns brown and the leaves drop off before the pods are harvested. | 16  |
| 17  | 18 Combines are equipped with removable, interchangeable "heads" designed for harvesting a specific type of crop. | 19 Iowa produced the most corn in 2015, followed by Illinois and Nebraska. Illinois produced over two billion bushels. | 20 The wheat grown in Illinois is called soft red winter wheat. Harvest begins in June in southern Illinois and ends in early July in northern Illinois. | 21 A 60-pound bushel of soybeans yields about 48 pounds of protein-rich meal and 11 pounds of oil. | 22 Grain elevator operators buy grain from farmers, either for cash or at a contracted price, and then sell these contracts for the same quantity of grain at a later date. | 23  |
| 24  | 25 U.S. farmers grow nearly 2.4 billion bushels of wheat on 63 million acres of land. | 26 Soybeans are good for crop rotation because they leave nitrogen in the soil for the next crop after they are harvested. | 27 Approximately 13% of the corn produced in the United States is exported to more than 100 countries. | 28 A bushel of wheat makes about forty-five 24-ounce boxes of wheat flake cereal. | 29 In 2015, the USDA reported the U.S. exported 59% of its whole soybean crop. China, Mexico, and Japan were the top buyers. | 30  |



WHEELING ILLINOIS STATE FAIR 1953



Agritourism




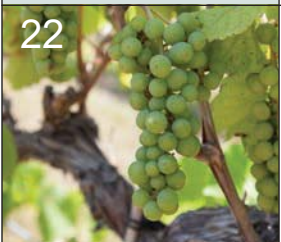

Words and terms to learn:

• exhibition • GPS • orchard
• producer • arboretum

Recommended Reading:

The Apple Orchard Riddle by Margaret McNamara
How Many Seeds in a Pumpkin by Margaret McNamara
Squashed by Joan Bauer

October 2017

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--|---|--|--|--|--|---|
| 1 | 2 Agritourism is any business activity that brings people to a farm or rural setting for enjoyment, education or involvement in related outdoor activities. | 3 Fairs, festivals, markets, orchards, pumpkin patches, and corn mazes are examples of agritourism. | 4 A fair is an exhibition of farm products or manufactured goods along with entertainment, food vendors and competitions for all ages. | 5 Each year, the Morton Pumpkin Festival is held throughout the town with over 30 special events and venues. Morton, Illinois, is considered the "Pumpkin Capital of the World." | 6 Each August, the Illinois Department of Agriculture hosts the Illinois State Fair. Visit their website at www.illinois.gov/statefair for dates and information. | 7 |
| 8 | 9 Many counties throughout Illinois host county fairs during the summer months. Projects and exhibits are judged, and a blue ribbon is awarded if the project meets or exceeds judging criteria. | 10 Since farmers make up only 1.5% of the population, agritourism helps farmers share their knowledge and experiences with the other 98.5% of the population. | 11 Near St. Louis, Eckert's Family Farm is a business that includes seasonal u-pick apple orchards and a year-round country store that sells their own farm-grown fruits and vegetables. | 12 In 1730, the first apple nursery was opened in Flushing, New York. <i>Illinois Great Apple Crunch Day</i> www.illinoisgreatapplecrunch.com | 13 There are over 2,200 apple orchards throughout the United States. Visit www.specialtygrowers.org/prairie-bounty for a complete listing of apple orchards in Illinois. | 14  |
| 15 | 16 Corn mazes are giant puzzles that you walk through. Farmers take cornfields and cut paths into them along with loops and dead ends to make it more challenging. | 17 The International Horseradish Festival is held the first weekend of June every year in Collinsville, Illinois. Collinsville is known as the "Horseradish Capital of the World." | 18 The Morton Arboretum, in Lisle, Illinois, was established in 1922 as an outdoor museum of trees and plants and is open year-round. There are 1,700 acres that house more than 222,000 live plants. | 19 Today, the use of GPS helps create extremely intricate and complex corn mazes compared to those of the past. | 20 Maple syrup festivals usually take place in late winter, when sugar maple tree sap is collected. | 21 |
| 22  | 23 Most apple orchards sell not only apples, but also apple cider and many other apple-based products. | 24 As of 2014, the Guinness World Record for the largest corn maze was 60 acres. | 25 Over hundreds of years, the tradition of collecting and making maple syrup has changed very little. Funks Grove Pure Maple "Sirup" Farm draws sap from 3,000 trees, and is the largest maple syrup producer in Illinois. | 26 It takes 40-50 gallons of maple sap to make one gallon of maple syrup. | 27 The word "maze" dates to the 13 th century and comes from the Middle English word meaning "delirium" or "delusion." | |
| 29 | 30 Apple festivals are found throughout the U.S. in the fall. It takes about 36 apples to create one gallon of apple cider. | 31 The word "patch" was used to describe a plot of land going back centuries. Today, a pumpkin patch describes a farm or rural area that grows and stocks a large amount of pumpkins. |  | | | |



Grain Delivery & Storage


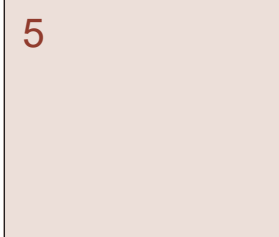


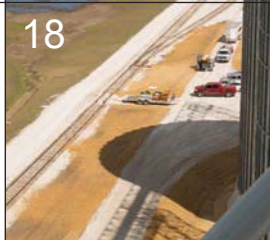


Words and terms to learn:

• grain elevator • barge • bin • silo • canal
• mills • cylinder • self-propelled • fodder

Recommended Reading:

Pod to Plate by Julie D. Blunier
Corn Belt Harvest by Raymond Bial

November 2017

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|---|---|--|--|---|
| 29 | 30 | 31 | 1 Once a farm's grain crop is harvested, semi-trucks or tractors with wagons take it to large grain bins that hold the crop. Bins are located on farms or at a grain elevator. | 2 Corn is transported by train from grain elevators to be processed in mills throughout the Midwest. | 3 Grain elevators are often located beside or near railroad tracks so that stored crops can be loaded onto trains for delivery to other locations. | 4  |
| 5  | 6 Because grain dust is so fine, it is highly flammable. Precautions must be taken at all grain elevators to avoid an explosion. | 7 When delivering crops to an elevator, each loaded vehicle is weighed at the scale before and after the load is emptied into a pit with a grate. | 8 A grain bin is a vented, silver, steel structure that stores dry corn, soybeans, wheat, oats and milo (sorghum). | 9 Grain elevators are groups of tall cylinders (bins) made of poured concrete. Farmers deliver their harvested crop to the elevator where the crops are stored in the bins. | 10 Silos function like a coffee thermos. They are tall, skinny, seal tight and hold moisture. Silos are used to store silage, which is grass or other harvested green fodder usually used to feed cattle. | 11  |
| 12  | 13 Trains, barges and ships carry corn, soybeans and wheat grown in the United States to countries all over the world. | 14 A barge is a flat-bottomed boat built mainly for river and canal transport of heavy goods. | 15 The first steam powered grain elevator was built in Buffalo, New York, in 1842 after the completion of the Erie Canal. | 16 While grain is stored at the elevator, moisture samples are taken frequently because the stored grain must stay dry or it will spoil. | 17 Since a barge is not self-propelled, it must be towed or pushed by a towboat down a river. | 18  |
| 19 | 20 Fans and dryers control moisture levels and keep grain stored in bins from spoiling. | 21 The DeBruce Elevator in Wichita, Kansas, holds the Guinness Book record as the largest elevator in the world. It holds more than 22.4 million bushels of grain. | 22 Corn and corn by-products are shipped by barge down the Mississippi River to New Orleans to be exported by ship around the world. | 23 Truck transportation is the most effective method of moving grain short distances or for moving perishable products that need refrigeration. | 24 The Mississippi Gulf Port of New Orleans typically handles 70% of the total U.S. corn exports. | 25  |
| 26 | 27 A barge holds 1,500 tons or approximately 52,000 bushels of grain. | 28 Commercial grain elevators usually include various numbers of 70-120 feet tall grain bins and include a work floor, dump scale, receiving pit and office. | 29 Where possible, up to 15 barges are tied together, 5 long by 3 wide, as they are towed or pushed down rivers. | 30 Rail transportation is fast and efficient for moving grain and is popular when shipping to/from the Western United States. | 1 | 2  |



Nursery & Greenhouse Crops






Words and terms to learn:

• horticulture • floriculture • ornamental
• cultivated • perennial • nursery • turf

Recommended Reading:

Up Down and Around by Katherine Ayers
My Garden by Kevin Henkes
Christmas Tree Farm by Ann Purmell

December 2017

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|--|--|---|---|---|---|
| 26 | 27 |  | 29 | 30 | 1 The Poinsettia, popular during the holiday season, is scientifically considered a small tree or shrub. | 2 |
| 3 | 4 Floriculture is a discipline of horticulture concerned with the cultivation of flowering and ornamental plants. | 5 It takes about seven years on average to grow a Christmas tree. | 6 Poinsettias received their name in the United States in honor of Joel Roberts Poinsett, who introduced the plant into the country in 1828 from Mexico, where he was the U.S. Ambassador. | 7 Approximately 2,000 Christmas trees are planted per acre. On average, 1,000-1,500 of these trees will survive. | 8 Chrysanthemum comes from the Greek words "chrysos" which means gold, and "Anthos" which means flower. | 9 |
|  | 11 In 2014, Illinois had over 220 farmers participating in floriculture, which ranks Illinois as one of the 15 major flower producing states. | 12 On average, one acre of Christmas trees provides the daily oxygen requirements of 18 people. | 13 Chrysanthemums, or mums, are one of the most popular and cultivated perennial flowers in the world. | 14 The showy, colored parts of Poinsettias are actually modified leaves called bracts. | 15 In agriculture, a nursery is a place, usually outside, where young plants and trees are grown for planting elsewhere. | 16 |
| 17 | 18 Like many decorative plants, Poinsettias are often cultivated in greenhouses during the winter time. | 19 Christmas tree farms grow many different varieties of firs, spruces and pines, which stay green year-round. These trees are called evergreens. | 20 Chrysanthemums were first cultivated in China as a flowering herb as far back as the 15 th century BC. | 21 Floriculture crops include bedding plants, houseplants, flowering garden plants, and cut greens and flowers. | 22 In Asia, chrysanthemum tea is a very popular drink due to its flavor and medicinal properties. |  |
| 24 31 | 25 Floriculture takes place in a variety of different settings, from open ground to fiberglass greenhouses. | 26 Turf is the layer of grasses and roots that covers parts of the earth. Different types of turf naturally grow in different areas. | 27 Approximately 66,000 Christmas trees are harvested in Illinois each year from over 270 farms. | 28 Nurseries provide the turf, shrubs, trees, and flowers people depend on for landscaping yards and parks. | 29 Although Poinsettias are native to the tropical climates of Central and South America, they are sturdy survivors and can live outdoors if they avoid frost. | 30 |



Animal Care and Fun Facts

Words and terms to learn:





• ruminating • sow • piglet • farrowing
• manure • acute • ruminant • grazing • cud

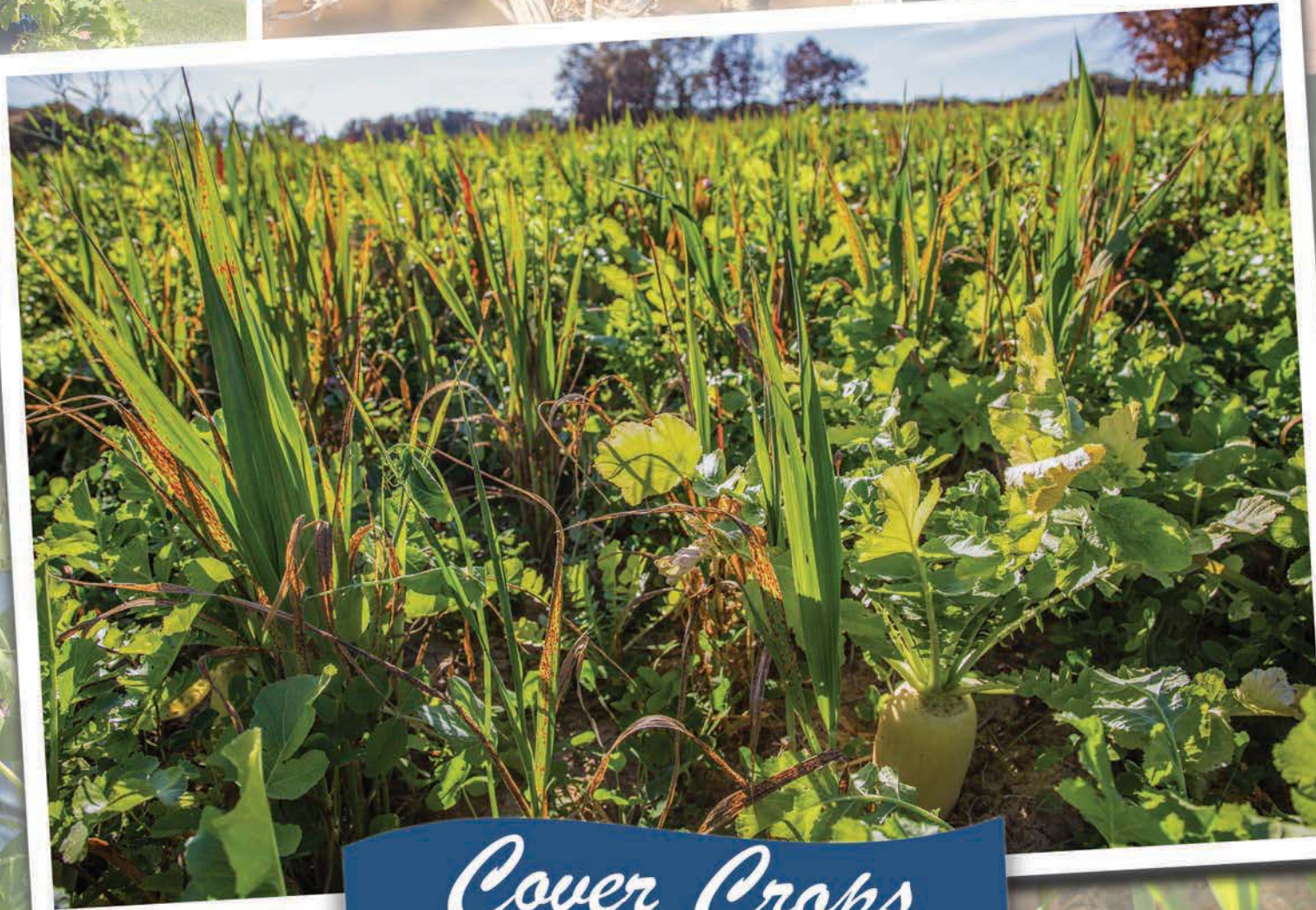
Recommended Reading:

Clarabelle by Cris Peterson
The Cow in Patrick O'Shanahan's Kitchen
by Diane Princhar

Awesome Agriculture Pigs in the story of agriculture
by Susan Anderson and JoAnne Buggey

January 2018

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|--|---|--|---|---|---|
| 31 | 1 Chickens see better than humans. They can distinguish violet and ultraviolet light, which is why roosters see the sunrise and crow about an hour before humans see the sunrise. | 2 Dairy farmers know that healthy, happy cows produce more high-quality milk so their animals' well-being is a farmer's top priority. | 3 Piglets are born in a farrowing barn where the mother pig, or sow, is put into a special stall that separates her from her piglets while she nurses them to prevent her from accidentally laying on them. | 4 The house or cage where a chicken lives is called a coop. | 5 Pigs do not have sweat glands and cannot sweat, so they can overheat easily. | 6 |
| 7 | 8 Cows have an good sense of smell and can smell something up to 6 miles away. | 9 Dairy cow barns help keep cows cool and comfortable by providing fans, and sprinkler or mister systems, while shading them from rain and the elements. | 10 Modern pig barns are kept at a constant comfortable temperature and humidity, which improves the health of the pigs. | 11 It takes 10 pounds of milk to make one pound of cheese. <i>National Milk Day!</i> | 12 Cattle graze on land that cannot be used to grow crops. Since cattle can digest the grass on this land, the available land area used to produce food more than doubles. | 13  |
| 14  | 15 Once chickens hatch, they are put in a room called a brooder. | 16 Adult cows are free to walk around dairy barns for exercise, get something to eat or drink, and then lie down in a bed whenever they want. | 17 Because cows spend 12 hours a day laying down, their bedding is straw, sand, wood shavings or other materials that help make them comfortable. | 18 Lighting, ventilation, food and water are all monitored automatically in most pig barns. | 19 An average litter includes 8 to 12 piglets. At birth, piglets weigh approximately 2 ½ pounds. | 20 |
| 21 | 22 Pigs are one of the few animals that will not overeat. | 23 Beside grazing, beef cattle eat a mixture of 75% corn and 25% soybean meal. | 24 Hens (adult female chickens) talk to their chicks while they are still in their eggs. As the chicks grow older and develop in the eggs, they begin to peep and squeak back. | 25 A dairy cow eats up to 100 pounds of food per day and drinks as much as 50 gallons of water each day. | 26 Hog manure is often spread on fields as fertilizer. | 27 |
| 28 | 29 When a horse is born, its legs are almost their full adult length. | 30 Cows spend an average of six hours each day eating and an additional eight hours ruminating, or chewing their cud. Most cows chew at least 50 times per minute. | 31 A cow is a ruminant, which means it has a stomach with four compartments. | 1  | 2  | 3 |



Cover Crops





Words and terms to learn:

- erosion • organic matter • evaporation • tillage
- microorganisms • pore • protozoa
- nematodes • aggregated • microbes

February 2018

Recommended Reading:

Explore Soil! by Kathleen M. Reilly
Investigate Rocks and Soil by Charlotte Guillain

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|--|--|---|---|----------|
| 28 | 29 | 30 | 31 | 1 Cover crops are plants that are seeded when a farmer's main crop has finished growing. | 2 For centuries, farmers have used cover crops to prevent soil erosion, improve nutrient cycling, and sustain their soils. | 3 |
| 4 | 5 The best choice of cover crop species will vary with climate, drainage, soil type and the crop produced. | 6 Healthy soil holds more water by binding it to organic matter, and loses less water to runoff and evaporation. | 7 One percent of organic matter in the top six inches of soil, holds approximately 20,000 gallons of water per acre. | 8 In 1932, Franklin Roosevelt said, "The nation that destroys its soil destroys itself." That is as true today as it was then! | 9 Organic matter in soil builds as tillage declines and plants and residue cover the soil. | 10 |
| 11  | 12 As world population and food production demands rise, keeping our soil healthy and productive is extremely important. | 13 Cover crops protect soil from wind and water erosion and keep good, productive soil in the field. | 14 The roots of cover crops, such as annual ryegrass, can grow several feet deep, which helps improve soil structure and increase organic matter. | 15 Growing cover crops helps the soil hold on to nutrients, such as nitrogen and phosphorus, that might otherwise be lost in water runoff. | 16 Keeping soils covered with growing plants builds healthy soil structure by feeding the microorganisms living in the soil. | 17 |
| 18 | 19 Soil structure is the arrangement of the solid parts of the soil and the pore spaces between them, which is critical to how the soil functions. | 20 When soils have large pore spaces between them, they are called "highly aggregated" soils and are considered to have good structure. | 21 A falling raindrop explodes as it hits bare soil and dislodges unprotected soil particles, which begins the process of soil erosion. | 22 Cover crops and residue allow water to better reach plant roots by protecting soil aggregates from being pounded by falling raindrops, which create soil erosion and soil crusting. | 23 Cover crops and no tillage farming practices help build the organic matter in soil which is the key to healthy soil. | 24 |
| 25 | 26 The carbon in organic matter is the main source of energy for soil microbes and is the key for making nutrients available to plants. | 27 Healthy soils are full of living organisms including bacteria, fungi, protozoa, mites, nematodes and earthworms. | 28 Some of the many different cover crop options include red clover, rye, oats, radish, alfalfa and wheat. |  | | |



Planting Crops





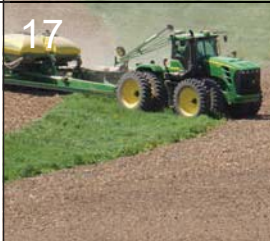

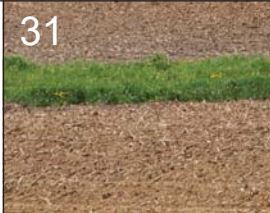
Words and terms to learn:

- implement • germinate • tillage • fertilizer
- crop rotation • nitrogen • depletion
- furrow • compaction

Recommended Reading:

All Around the Farm by Heather Alexander
Oh Say Can You Seed? by Bonnie Worth

March 2018

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|---|--|---|--|---|
| 25 | 26 | 27 | 28 | 1 Farmers use tractors and planters to plant soybean, corn or wheat seeds. | 2 Crop rotation is the practice of planting and growing a series of different types of crops in the same area each season. | 3  |
| 4 | 5 A planter is a farm implement, towed behind a tractor, that distributes seeds in a precise manner through devices called row units. | 6 Seeds need to be planted at the right depth and spacing. Farmers use settings on the planter and computers in the tractor to help plant correctly. | 7 Planters vary in size from one row to 48 rows. The most common spacing between rows in the U.S. today is 30 inches. | 8 Global Positioning Systems (GPS) help farmers determine their exact location in the field when planting. | 9 Corn seeds are called kernels. Planters drop the kernels in the ground one by one in the spring when the soil is warm enough to germinate the seeds, but not so early that frost can damage the young plants. | 10  Southern ILLINOIS READS Book Festival DuQuoin High School www.illinoisreads.org |
| 11  | 12 No-till farming is a way of planting crops without disturbing the soil through tillage, thus reducing soil erosion and preserving soil nutrients. | 13 Grain drills are a type of planter that places seeds into the soil in narrow rows. They are most commonly used for seeding pastures and planting cereal grain crops such as wheat, oats, and rye. | 14 Soybeans are good for crop rotation because they leave nitrogen in the soil for the next crop. | 15 When a seed is planted, the row unit or grain drill digs a tiny furrow, drops the seed into the furrow at a predetermined depth, and covers it with soil. | 16 Many farmers use a planter attachment that allows them to apply liquid fertilizer directly into the root zone at planting time. This process allows the plant to quickly access the nutrients with much less runoff. | 17  |
| 18 | 19 Applying fertilizer at planting saves the farmer time and fuel by eliminating a second trip over the field, which also helps to keep the soil healthy with less compaction. | 20 Conservation tillage (no-till and strip-till) involves leaving the previous year's crop residue, such as corn stalks or bean stubble, on fields before and after planting the next crop to avoid soil erosion and runoff. | 21 Soybeans grow in pods, like peas. Each soybean plant grows 60-80 pods, and each pod has 2-4 beans inside. | 22 After being planted, seeds need the correct soil moisture and temperature levels to germinate, as well as oxygen. | 23 The first successful, mass produced row crop tractor, the Farmall Regular, was built in 1923. Its success began the elimination of using horses to plant crops. | 24  |
| 25 | 26 Soybeans grow on bushy plants that are three to five feet tall. | 27 In 1869, J.I. Case and Company produced the first steam engine tractor. | 28 Over 12,000,000 acres of field corn are planted each year in Illinois. | 29 Each corn plant produces one or two ears of corn. One ear of corn averages 800 kernels in 16 rows. | 30 Wheat was first planted in the United States in 1777 as a hobby crop. In 2016, about 44 million acres of wheat were planted. | 31  |



Pollinators



Words and terms to learn:

- fertilization • apiary • indicator species
- environment • foraging • anther
- stigma • stamen • entomologist

Recommended Reading:

Monarch Butterfly by Gail Gibbons
The Honey Makers by Gail Gibbons
When the Bees Fly Home by Andrea Cheng
The Secret Life of Bees by Sue Monk Kidd

April 2018

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--|--|---|---|---|----------|
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 1 | 2 A pollinator moves pollen from the male anthers of a flower to the female stigma of a flower, resulting in fertilization. | 3 Pollen is a fine powdery substance, often yellow, produced by the anthers and collected by pollinators. | 4 Three-fourths of the world's flowering plants and about 35% of the world's food crops depend on pollinators to reproduce. | 5 There are many important pollinating insects including bees, wasps, ants, butterflies, moths, flies and beetles. | 6 A hive of bees must fly almost 55,000 miles to make one pound of honey. | 7 |
| 8 | 9 Bees communicate by dancing. | 10 The Dooryard Violet is the Illinois state flower. It needs full sun to partial shade and is visited by butterflies and bees. | 11 An apiarist is a beekeeper and is responsible for ensuring the efficient production of honey by managing colonies of honey bees located with an apiary. | 12 Pollinators visit flowers in their search for food (pollen and nectar). | 13 The average honey bee lives about one month. | 14 |
| 15 | 16 Scientists estimate that one out of every three bites of food we eat exists because of pollinators. | 17 Nectar is a sweet liquid secreted by flowers of various plants. | 18 Butterflies are an indicator species that tell us about the health of our environment. They are sensitive to climate changes, harmful chemicals, and pollution. | 19 Different pollinators are attracted to different colors and different flower structures, so a variety of flowers is important when planting a garden. | 20 The Monarch Butterfly is the Illinois state insect. The adult feeds on flower nectar. The larva eats milkweed plants. | 21 |
| 22 | 23 More than 3,500 species of native bees help increase crop yields. | 24 Entomologists are trained and educated professionals who study insects. | 25 Of the 100 crop species providing 90% of the world's food, over 70 are pollinated by bees. | 26 Many plants cannot reproduce without pollen carried to them by foraging pollinators. | 27 The stamen is the male part of a flower which produces pollen. | 28 |
| 29 | 30 Honey bees have four wings that stroke 12,000 times per minute. | | | | | |



Post Planting



Words and terms to learn:



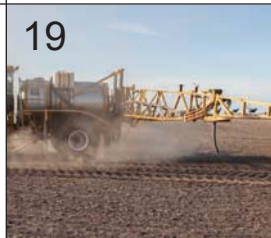


• pests • herbicide • insecticide • fungicide
• noxious • emerge • trifoliate



May 2018

Recommended Reading:

The Thing About Luck by Cynthia Kadohata
Bread Comes to Life by George Levenson

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--|---|---|---|--|--|--|
| 29 | 30 | 1 After planting is completed, farmers clean, maintain, repair and store their planters so they are ready for next season. | 2 Farmers "scout" their fields many times throughout the growing season checking for plant health, disease, pests and weeds. | 3 To avoid waste and excess runoff, many farmers apply Nitrogen after their corn crop emerges. This is called "sidedressing." | 4 Soybeans are part of a family of bushy green plants called legumes. | 5 |
| 6  | 7 To keep plants healthy, farmers can use insecticides, herbicides or fungicides to control the insects, weeds or diseases. | 8 After emerging, the soybean grows a little tail-like root called a radical. This becomes the plant's main root, called a taproot. | 9 A pest is an insect that is dangerous to crops. Insects can eat the leaves, stems and roots. If farmers see that insects are damaging their crops, they will spray insecticides. | 10 Sprayers are used to apply insecticides or herbicides to a farmer's field. | 11 A healthy corn plant's root system reaches 6.5 feet into the ground. | 12 |
| 13  | 14 While crops continue to grow through the summer, farmers spend time keeping the edges of their farm fields and roadside areas mowed. Mowing keeps weeds from spreading. | 15 Small purple or white flowers appear on the soybean plant. Many of these flowers grow into small pods of soybeans. | 16 Most sprayers are self-propelled machines with wide "booms" and nozzles that drop or spray the solution as the sprayer rides between the rows of crops without damaging the plants. | 17 A noxious weed is a weed that has been determined to be harmful to agricultural crops. When farmers find noxious weeds in their crops, they will apply herbicides to kill those weeds. | 18 Once a corn plant tassels, pollen from the tassel lands on the silk on the ear of corn and travels down to make one kernel of corn. | 19  |
| 20  | 21 One ear of corn averages 800 kernels in 16 rows. | 22 In Illinois, wheat is harvested in early summer. Many farmers then "double-crop" their fields, planting soybeans immediately after the wheat harvest. | 23 The leaves of soybeans grow in groups of three. They are called trifoliates. | 24 An acre of corn gives off 4,000 gallons of water per day in evaporation. | 25 When crops become too tall for a sprayer, insecticides, herbicides and fungicides are applied with a special airplane, referred to as a "crop duster." | 26 |
| 27  | 28 Field corn grows 8-12 feet tall, depending on the growing conditions. | 29 Wheat is planted after fall harvest is complete in Illinois. It then lies dormant through the winter and begins to grow again in the spring. | 30 Each corn plant produces just one or two ears of corn. | 31 The head of the wheat plant contains the kernels. The beard on a wheat plant is the bristle-like part that covers and protects the kernels. | 1 | 2 |



Farmers' Markets

Words and terms to learn:

• assembly • consumer • middlemen
• distinguishable • protein • economy

Recommended Reading:

Farmer Will Allen and the Growing Table
by Jacqueline Briggs Martin
The Fruits We Eat by Gail Gibbons
The Vegetables We Eat by Gail Gibbons

June 2018

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

27

28

29

30

31

1

A farmers' market is a public and recurring assembly of farmers selling the food they produced directly to consumers.

2

3

4

5

Farmers' markets vary in size and always reflect a region's agriculture and seasons.

6

7

There are 324 farmers' markets registered in Illinois.

8

9

10

11

Currently, American farmers receive only 17.4 cents of every dollar Americans spend on food.

12

13

By cutting out middlemen at a farmers' market, farmers receive more of the food dollars spent, and shoppers receive the freshest and most flavorful food in their area.

14

15

If \$100 is spent at a farmers' market, \$62 goes into the local economy. At a grocery store, only \$25 out of \$100 remains with the local economy.

16

17

18

19

Popcorn is the official Illinois snack food.

20

21

Most farmers' markets sell only locally grown and locally made foods that are in season.

22

23

24

25

There are currently over 8,600 farmers' markets registered throughout the United States.

26

27

Calhoun County, Illinois, is known for its delicious peaches.

28

29

Not only are bees an important pollinator for our crops and flowers, but they also make delicious honey.

30

July 2018

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

1

2

In Illinois, more than 64 vegetables and 15 fruit and nut crops are grown commercially on more than 100,000 acres.

3

4

According to the University of Illinois Extension, the tomato is the most popular vegetable in America.

5

6

There are many pick-your-own orchards throughout the United States.

7

8

9

10

Illinois produces 2/3 of the U.S. horseradish supply, resulting in 10 million dollars in annual income.

11

12

Sweet corn is a favorite warm season vegetable crop. During peak season, many roadside stands are found since its quality is highest shortly after picking.

13

14

15

16

A large peach has fewer than 70 calories and contains three grams of fiber. It's also a good source of vitamins A and C.

17

18

Horseradish is a root that is harvested in the spring and fall. Its flavor is very distinguishable and a favorite to many.

19

20

There are more than 500 pumpkin patches in Illinois. Illinois is the top producer of pumpkins in the United States.

21

22

23

24

The term herb comes from the Latin, "herba," meaning green crops. The most popular herbs grown in Illinois include basil, chives, dill, mint, oregano, parsley, rosemary, sage and thyme.

25

26

During the months of mid-September through October, many apple orchards allow visitors to pick their own apples from the apple trees.

27

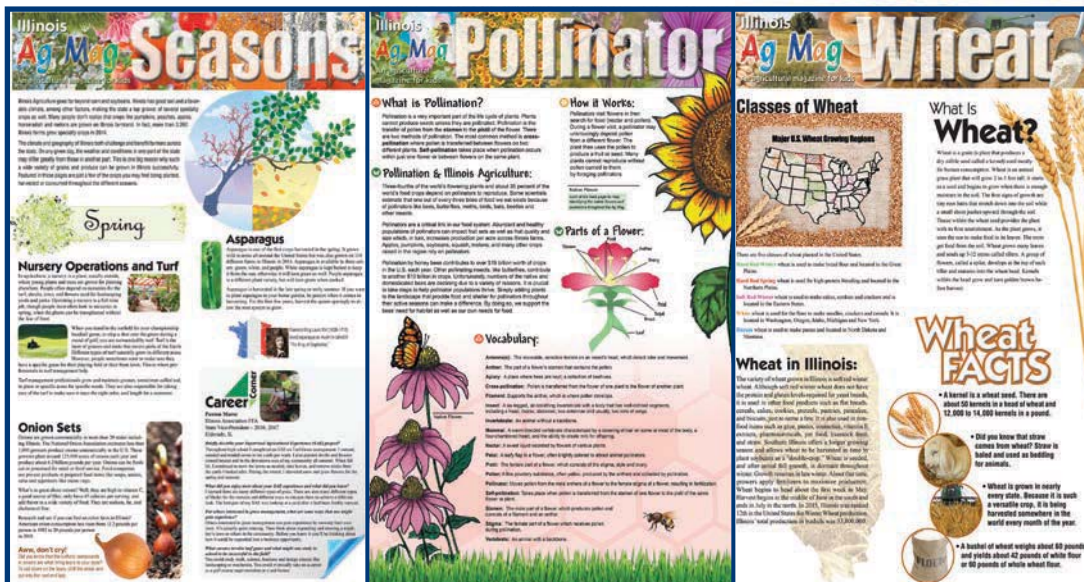
28

30

Popcorn contains more protein than any other cereal grain and contains more iron than eggs.

30

AG MAGS ARE AVAILABLE ONLINE AND IN CLASSROOM SETS OF 30.



www.iaafoundation.org

IAITC is supported through contributors to the IAA Foundation.

AG MAGS

The Illinois Agriculture in the Classroom Ag Mags are four-page, colorful agricultural magazines for kids. They contain information about agriculture, classroom activities, agricultural career interviews and bright pictures.

Ag Mags are available online and in classroom sets of 30. Contact your local County Farm Bureau to order some today!

Apple
Beef
Careers
Corn
Dairy
Livestock

Nutrition
Pollinator
Pork
Pumpkin
Seasons

Soil
Soybean
Urban
Water
Wheat



1701 Towanda Avenue • Bloomington, IL 61701 • 309-557-3334 • aitc@ilfb.org

Visit us on our website at www.agintheclassroom.org