LLINOS AGRICULTURE



WHAT IS ILLINOIS AGRICULTURE?

Agriculture is defined as the cultivation of soil, production of crops, and raising of livestock for food, fiber, and fuel products. Every state and every country is involved in agriculture, and every person in the world depends on agriculture for survival! Due to our central location in the country and our rich, fertile soil, Illinois is a leading producer of agricultural products for the country and world. The agriculture industry in Illinois is a primary contributor to our state's economy, contributing \$51.1 billion in value-added. Seventy-six percent of Illinois land is farmland, and of those acres, 89% are used for cropland to grow valuable crops like corn and soybeans. Across Illinois you will find an estimated total of 72,600 farms, of which 97% are family-owned and operated. In addition to corn and soybeans, Illinois is also a top producer of hogs for pork products, cattle and calves for beef products, and is even the top-producing state of two unique specialty crops: Pumpkins and Horseradish! Because of the broad scope of agriculture in Illinois, we are also home to the headquarters of many top agricultural corporations such as John Deere (Moline, IL) and Caterpillar (Peoria, IL). Agriculture brings with it rich family traditions and history, and Illinois farmers are proud to carry out the legacy of a state with deep roots in this great industry.

ILLINOIS' RANK IN THE UNITED STATES



VOCABULARY

AGRICULTURE: The cultivation of soil, production of crops, and raising of livestock for food, fiber, and fuel products

AGRITOURISM: Any agriculturally based operation or activity that brings visitors to a farm or ranch

AGRONOMY: The science of soil management and crop production

BIOFUEL: Any fuel that is produced from recently living biomass, as opposed to fuels produced by slow geological processes such as fossil fuels.

BY-PRODUCT: A secondary product, unintended but inevitably produced in doing or producing something else

COMMODITY: A raw material or primary agricultural product that can be bought and sold, such as corn or pork

EROSION: The process by which soil is moved from one location to another by wind or water

LEGUME: A family of plants with the ability to fix nitrogen in the soil, thus reducing the amount of nitrogen fertilizer needed for a crop

LOAM: Rich soil consisting of approximately 25 percent clay, 50 percent silt and less than 50 percent sand; considered ideal soil for gardening and agriculture

SPECIALTY CROPS: Agricultural products grown on a smaller scale, i.e. - fruits and vegetables, tree nuts, dried fruits and horticulture and nursery crops, including floriculture

TILLAGE: The act of tilling the soil. Tillage includes turning with a plow, disking, harrowing, dragging, etc. Normally tillage involves significant disturbance of the soil

ILLINOIS AGRICULTURE BY THE NUMBERS

- \$51,100,000,000 total value of Illinois' agriculture industry
- 76% percent of Illinois land that is farmland
- 72,000 number of farms in Illinois
- 97% percent of Illinois farms that are family-owned
- 57 average age of a farmer in Illinois

AGRICULTURE'S TOP SIX COMMODITIES





CORN

\$7 billion in revenue annually Illinois produces 14% of total United States output

Corn production is a leading industry in Illinois agriculture, contributing \$7 billion annually to the economy and supplying about 14% of the country's total output of corn. There are many different types of corn grown in Illinois, including the sweet corn we enjoy in the summer months and the popcorn we snack on while we watch a movie. Most of the corn grown in Illinois, however, is what's known as field corn. Field corn is processed into products such as livestock and pet feed, cornstarch and corn flour, and corn syrup.



SOYBEANS

\$5.7 billion in revenue annually Illinois produces 14% of total United States output

In 2017, Illinois ranked first in the country for production of soybeans. Soybean production is a \$5.7 billion industry in Illinois, where we grow about 14% of the country's total soybean yield. Soybeans are often planted in a crop rotation with corn, which means farmers will alternate planting corn and soybeans in the same field every other year in order to preserve nutrients in the soil. Soybeans are especially efficient in doing this, because they are in a category of plants called legumes, which "fix" - or supply - nitrogen in the soil.



HOGS

\$1.3 billion in revenue annually Illinois produces 7% of total United States output

When Illinois farmers are not busy growing corn and soybeans, you might find them raising hogs! Illinois has been ranked fourth in the country for total production of pork, which is the meat that comes from hogs. Pork production is a \$1.3 billion industry in Illinois, and Illinois supplies 7% of all pork produced in the United States. Some common pork products you might be familiar with are ham, pork chops. bacon, tenderloin, and pork sausage. Hogs also provide over 500 different by-products such as glass, china, floor wax, chalk, and crayons.



CATTLE

\$650 million in revenue annually Illinois produces 1% of total United States output

Another significant livestock industry in Illinois is cattle and calves, which contributes \$650 million annually to the Illinois economy. In Illinois, we primarily raise our cattle for their meat, called beef. Beef is meat from full-grown cattle about 2 years old. A full-grown beef cow weighs over 1000 pounds and produces about 450 pounds of edible meat. This includes steaks, roasts, brisket, hamburger, and others. Cattle also give us lots of by-products such as candles, crayons, paint, and leather!



PUMPKINS

\$17 million in revenue annually Illinois produces 41% of total United States output

Did you know that Illinois produces more pumpkins than any other state in the country? It's true! This is because of a large Libby's canned pumpkin factory right here in Morton, Illinois, where over 85% of the world's canned pumpkin is processed at our Libby's factory. Pumpkins are grown primarily for processing, with a small percentage of all pumpkins being grown for ornamental (or decoration) sales through you-pick farms, farmers markets, and retail sales commonly in the fall months.



HORSERADISH

\$10 million in revenue annually Illinois produces 60% of total United States output

Illinois is home to the vast majority of another unique specialty crop, too... horseradish! Horseradish is a perennial root vegetable commonly harvested for its distinctive, pungent flavor and used as a spice or a condiment. Love it or hate it, Illinois farmers produce an estimated 60% of the world's supply of horseradish! Illinois' horseradish farms are located very specifically in southern Illinois, near Collinsville bordering the city of St. Louis.



ILLINOIS AGRICULTURE

Biofuel, Ethanol, Biodiesel, Agritourism, Renewable Farmers Market, Consumer, Farmer, Marketing, Geneticist, Production, Specialty Crops, Sustainable

AGRITOURISM AND FARMERS MARKETS

Illinois is also a key player in the nation's agritourism and farmers market industries! People are increasingly more interested in learning about where their food comes from, so our farmers are making efforts to swing open their barn doors for consumers to visit and learn about how food is grown, as well as spending their summer weekends setting up stands at local farmers markets to interact face-to-face with the people who eat what they have grown! Illinois ranks third in the nation for the number of farmers markets. Illinois specialty crop growers produce a wide variety of crops to sell directly to consumers, including crops like lettuce, tomatoes, cucumbers, herbs, cut flowers, and so much more. Visit www.il.foodmarketmaker.com to find a farmers' market or an agritourism location near you!



BIOFUELS

Due to Illinois' vast production of corn and soybeans, we are a primary contributor of the raw goods needed to make Biofuels. Biofuels are renewable fuels for our vehicles and machi nery that act as an alternative to the petroleum fuel (gasoline) we are so accustomed to using. Petroleum is a non-renewable resource, meaning it will eventually run out if we use too much of it. Non-renewable resources, like biofuels, are much more sustainable for the environment because they come from sources we can continue to replant and grow over and over again!

Corn can be used to make a biofuel called Ethanol, which is becoming more widely available at gas stations across the country. Most gas stations sell gasoline that is mixed 10% with ethanol. Car manufacturers are also making cars which can run on fuels mixed up to 85% with this great renewable fuel source. Soybeans can be used to make another type of biofuel called Biodiesel, which is the fastest growing alternative diesel fuel in the United States. Biodiesel can be used to operate diesel-powered cars and heavy machinery used for agricultural production and reduces exhaust leaks compared to petroleum-based diesel fuel. Both types of biofuels are better for the environment than petroleum fuel and allow us to use less and less of the world's supply of non-renewable resources!

TOP 5 COUNTIES FOR AGRICULTURAL PRODUCTION IN ILLINOIS

- 1. McLean
- 2. Iroquois
- 3. Livingston
- 4. DeKalb
- 5. Champaign



SPOTLIGHT ON CAREERS:



GRAIN MARKETING SPECIALIST — A **Grain Marketing Specialist** is responsible for managing inventory of grain products like corn and soybeans, and selling the inventory to local, national, and international buyers. Grain Marketing Specialists buy grain in and around their designated trade area, conduct calls to current and potential producers to ensure they understand the programs and services offered by the company, and maintain existing grain customers and acquire new ones. They are essentially the bridge between farmers and processors (or food or fuel). Grain Marketing Specialists are constantly aware of current market trends and spend a great deal of time collaborating with other grain merchandising staff to create and maintain strong sales plans.

ANIMAL GENETICISTS — Animal Geneticists study the genetic makeup of animals and their behavior and performance. They may also study animal health to determine what might cause animals to be immune to certain diseases or fail to thrive in certain environments. In agriculture, animal geneticists study breed-specific characteristics to determine which breeds perform best for agricultural purposes and determine how producers can better manage their herds. Animal Geneticists study and summarize genetic trends, analyze animal breeding practices, and find ways to improve selection decisions to improve genetic differentiation between breeds.

FUN FACTS

Much of our country's (and world's) most beloved agricultural companies and products were founded right here in Illinois! See below for some examples.

1831 Wheat Reapers:

Do you like bread? We do too! The first wheat harvesting tool, called a wheat reaper, was invented right here in Chicago, Illinois, by Cyrus McCormick

1837 Plow:

John Deere invents the first self-scouring plow in Grand Detour, Illinois



JOHN DEERE

1917 Soybean Processing:

A.E. Staley opens the first commercial soybean-processing plant in Decatur, Illinois

1923 DeKalb Seed:

Tom Roberts began his work with hybrid corn which became DeKalb Seed in DeKalb, Illinois



1940 Dairy Queen:

Blizzard, please! Sherb Noble opens the very first Dairy Queen in Joliet, Illinois



1943 Penicillin:

Dr. Andrew Moyer begins researching increased yield of penicillin in Peoria at the USDA Ag Research Center

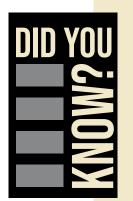
1955 McDonalds:



Roy Kroc opens first ever McDonalds in Des Plains, Illinois

1988 Dippin' Dots:

This "Ice Cream of the Future" was founded in New Grand Chain, IL



The average size of a farm in Illinois is 358 acres.

44% of grain produced in Illinois is exported out of the state or country.

The ice cream sundae originated in Evanston, IL.

Nearly 1 million people are employed in the food and fiber industry in Illinois, with about 75,000 being farm operators.

Illinois produces enough corn each year to fill a train of box cars stretching more than 7,600 miles, or from here to Hong Kong.

Each Illinois farmer produces enough food to feed 156 people.





www.ers.usda.gov www.il.foodmarketmaker.com www.il.stateaghistory.org www.ilfb.org





www.agintheclassroom.org / www.iaafoundation.org