



Growing Our Future Podcast – Episode 14

Lesson Plan

<p>Lesson Title: “A Journey to the Big Sky Country”</p>	
<p>TEKs: (c) Knowledge and skills.</p> <p>(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:</p> <p style="padding-left: 40px;">(A) identify career development, education, and entrepreneurship opportunities in the field of agriculture, food, and natural resources;</p> <p style="padding-left: 40px;">(B) apply competencies related to resources, information, interpersonal skills, problem solving, critical thinking, and systems of operation in agriculture, food, and natural resources;</p> <p style="padding-left: 40px;">(D) analyze employers' expectations such as appropriate work habits, ethical conduct, legal responsibilities, and good citizenship skills; and</p> <p style="padding-left: 40px;">(E) identify careers in agriculture, food, and natural resources with required aptitudes in science, technology, engineering, mathematics, language arts, and social studies.</p> <p>4) The student explains the historical, current, and future significance of the agriculture, food, and natural resources industry. The student is expected to:</p> <p style="padding-left: 40px;">(B) analyze the scope of agriculture, food, and natural resources and its effect upon society;</p> <p style="padding-left: 40px;">(C) evaluate significant historical and current agriculture, food, and natural resources developments;</p> <p style="padding-left: 40px;">(D) identify potential future scenarios for agriculture, food, and natural resources systems, including global impacts;</p> <p>(6) The student demonstrates appropriate personal and communication skills. The student is expected to:</p> <p style="padding-left: 40px;">(A) demonstrate written and oral communication skills appropriate for formal and informal situations such as prepared and extemporaneous presentations; and</p> <p style="padding-left: 40px;">(B) demonstrate effective listening skills appropriate for formal and informal situations.</p> <p><i>Note. TEKs taken from the Principles of Agriculture, Food, and Natural Resources Course. However, similar TEKs can be found within any of the AFNR courses.</i></p>	
<p>Terminal Performance Objective:</p> <p>Through class instruction and the evaluation of the Growing Our Future podcast episode students will explore the connection between geography, climate, and the type of agriculture in an area by reading background information and census data about the agricultural commodities.</p>	<p>Enabling Objectives:</p> <ol style="list-style-type: none"> 1. Define Agriculture Commodities 2. Discover the United States’ nine agricultural farm regions. 3. Research Commodity Products Grown with the US, Texas, and the nine agricultural farm regions. 4. Create a Commodities Ball. 5. Evaluate reasons for why specific commodities only grow in certain regions of the United States.
<p>Vocabulary:</p> <ul style="list-style-type: none"> • Bushel - a unit of measurement used in US agriculture that is equivalent to a volume of 64 	<p>Bell Work:</p> <p><i>Answer the following series of questions to the best of your ability:</i></p>

pints, but is generally standardized by weight for different products; a bushel of wheat weighs 60 lb, a bushel of corn weighs 56 lb

- **By-product** - A by-product is something that is produced as a result of making something else, or something unexpected that happens as a result of something. For example, buttermilk is a by-product of making butter or ice cream is the by-product from milk.
- **Census of Agriculture** - a complete accounting of US farms and ranches and the people who operate them; taken once every five years by US Department of Agriculture's (USDA) National Agricultural Statistics Service (NASS)
- **Commodity** - a raw material or primary agricultural product that is bought and sold on a large scale.
- **Commodity Broker** - works for investment companies where they buy and sell commodities in bulk quantities worldwide for set prices.
- **Commodity Chain** - the production, sale, and distribution points of a raw agricultural product (e.g. corn, wheat, cattle, coffee) that is used to make consumer products
- **Competitive Edge** - it is that special "something" .. the "it" ... that gives an advantage to a person or business over their peers. Many times, we don't know what "it" is, but we know they have it. Students involved in the agricultural education and FFA generally have a competitive edge over their peers who do not participate in the program. Their edge is evident in soft skills, work ethic, teamwork, problem solving, and communication.
- **Consumer** - a person who purchases goods, products, and services for personal use.
- **Data** - information in numerical form.
- **End-Product** - the final product after processing that is sold to the consumer.
- **Export** - Agriculture commodities that are sold from the US to other countries.
- **Farm Resource Region** - US regions map constructed by US Department of Agriculture's (USDA) Economic Research Service to portray geographic distribution of US farm production.
- **Hundredweight (cwt)** - a unit of weight equal to 100 pounds

1. What are your favorite foods?

Answers may vary.

2. What ingredients are used to make these foods?

(For example, if they list pizza as a favorite food, the ingredients would include flour, pizza sauce, cheese, pepperoni, etc.)

Answers may vary.

3. What plants/animals do these ingredients come from?

(For Example, wheat, tomatoes, dairy cattle, pigs)

Answers may vary.

4. Where are these items produced?

Answers will vary, but may include:

- In a factory.
- On Farms
- Ranches
- Fields
- Name of a state.

5. Are any of the items grown in our state?

Answers will vary depending on state.

After class discussion, explain, "The products or ingredients we use to make our favorite foods or recipes are called 'agricultural commodities'."

- **Imports** - the commodities that the US buys from other countries
- **Networking** - is a way to engage with other individuals in order to make connections that can be helpful for both you and the other person in the future. These connections can be used throughout life to help move forward in both business and personal interest. Making valuable connections can help you find your next job, hobby or friend!
- **Soft Skills** - Employers seek candidates with a strong set of "soft skills." Soft skills are known as personal skills, non-technical skills, and interpersonal skills.
- **Teamwork** - The process of working collaboratively with a group of people in order to achieve a goal. Teamwork is often a crucial part of a business, as it is often necessary for colleagues to work well together, trying their best in any circumstance.

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Preparation

Instructor Notes

Ask the class, "What exactly is a commodity though? Can it be anything? For example, would blue jeans be a commodity or would cotton that we use to make blue jeans be the commodity?"

After some discussion, show the "Trading Places" YouTube Video.

After watching the video, ask the class, "Now what do you think commodities are?"

Allow time for discussion, and explain,
"Commodities are the raw (foundational) agricultural products produced by farmers, ranchers, and people who work in the natural resource industries, such as the oil, fossil fuel, diamond industries, etc."

Ask the class, "What is a commodities broker?"

Answers will vary.

Explain to the class, *"A commodities broker works for an investment company where they buy and sell commodities in bulk quantities worldwide for set prices. The commodities they trade such as oil, gas,*

Activity Notes

Trading Placed YouTube Video Link:
<https://www.youtube.com/watch?v=ySxHud7abko>

metals, and food products are a part of the world stock exchange, which is responsible for the trade of goods and materials across the world. Agriculture commodities that are sold from the US to other countries are called exports, and the commodities that the US buys from other countries are called imports.

Agriculture commodities are grown all throughout the 50 states to not only supply food, fiber, and natural resources to people of North America, but to also feed individuals in countries all around the world. Today, we will be learning how geography and the production of agriculture products are related.”

Presentation

Instructor Notes

Tell the class, *“Agriculture expands across the United States, and is even found in the most extreme climates on earth.”*

Allow time for class discussion, and then explain, *“Today, we are going to hear from John Howley, Director of Communications for Montana State University Extension, who focuses on helping farmers and ranchers better their commodities for us as consumers.*

Ask the class, *“When I call us consumers, what do I mean? What does it mean to be a consumer?”*

After some discussion, explain, *“A consumer is a person who purchases goods and services for personal use.”*

Tell the class, *“Mr. Howley, was born and raised in Texas, and Howley's experience as a county Extension agent and a farm to school specialist in Utah, Indiana, and Montana gives him a unique perspective on agriculture and communication.”*

Explain to the class, *“As you listen to the podcast video, listen for key information to help you answer the questions on the worksheet. We will review the answers to the worksheet after everyone has had time to answers the questions.”*

Activity Notes

Have students watch the Episode 14 of the Growing Our Future Podcast.

- <https://youtu.be/EdBF6ru1oOA>

Pass out the “A Journey to the Big Sky Country” worksheet.

Give the student 10 minutes following the podcast video to research and answer the questions on the worksheet.

Application

Instructor Notes

Following the podcast video, tell the class, “Now that we understand a little more about agriculture and agricultural extension in different states, we are going to practice our teamwork skills by partnering up for the next activity.”

Read the worksheet introduction to the class, “The variety of climates and soils found across the United States makes different parts of our country better suited for raising different agricultural commodities. Many of the fresh fruits and vegetables that we eat are grown in temperate regions like California, Florida, and parts of Texas. These areas have longer growing seasons than other parts of the country. Wheat, barley, corn, and other grain crops grow well in our country’s midsection, which was once grassland. In some parts of the country, the land is not suitable for growing crops but provides good grazing for cattle and other livestock. Potatoes grow best in cooler climates, so they are a good crop for mountainous regions where it stays cool longer in the spring. Some crops require a great deal of rain, and some need plenty of sunshine. Because our country has so many different climates and soil types, we are able to produce many different kinds of agricultural products.

Agricultural products are often referred to as “**commodities**”. The word, commodity, typically refers to a raw product that is derived or grown from a resource.

From where do these products come? Why are commodities focused in specific regions? The United States Department of Agriculture (USDA) Census of Agriculture gathers **data** tracking agricultural production around the country. This information helps the government ensure a stable food supply and helps farmers assess supply and demand for the different crops they are able to grow given the constraints of climate, soil type, space, and equipment. When viewed as maps of production, **statistics** from the Census of Agriculture reflect what grows best in which part of the country.”

Activity Notes

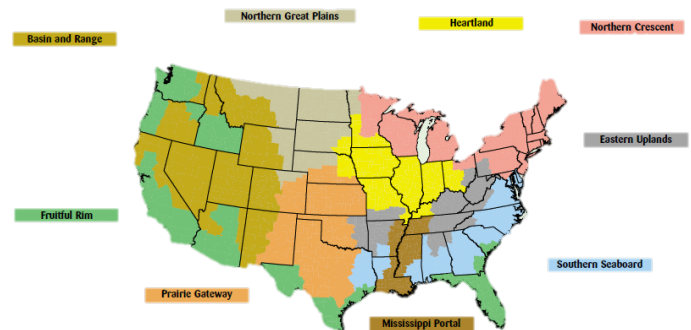
Break the class up into groups of two to three students. (Pairs work best for the next activity.)

Pass out the “Agricultural Commodities” worksheet to each student in the class. Even though they are working together to research the answers, they are to complete the worksheet independently. Read the introduction and instructions aloud to the class.

Write down one of each of the following Agricultural Farm Regions on a single post-it note. Place all post-it notes in a cup for student groups to draw from.

Agricultural Farm Regions:

- Basin and Range
- Northern Great Plains
- Heartland
- Northern Crescent
- Eastern Uplands
- Southern Seaboard
- Mississippi Portal
- Prairie Gateway
- Fruitful Rim



Allow time for class discussion, and then explain to the class, *“Each group will use the region they have been assigned to answer questions 1, 2, 3, & 4 of the Part One – Commodities Section of their worksheet.*

Tell the class, *“Once your group has completed questions 1 – 4, raise your hand for me to check your answers.*

Explain to the class, *“Now that you have completed questions 1 – 4, continue working through question #5 and fill out information needed in Tables 2, 3, & 4. Please don’t forget to read all the requirements listed under question #5.*

Once your group has completed all the tasks required of question #5, raise your hand for me to check your answers.

Print five copies of the AFB Food and Farm Facts book for students to reference during the activity.

Pass out the “Dodecahedron” foldable handout to every student. Every student will complete the foldable activity.

Read the instructions for the “Commodity Ball Activity” aloud to the class.

When the class is finishing decorating their foldable, ask them to stop what they are doing so they can watch you demonstrate how to put their foldable together.

Student Instructions:

Step 1 – Have each group of students draw one of the ‘Agricultural Farm Regions’ from a cup.

Step 2 - Students are to complete Table 1 of the worksheet by researching information of the following web links:

Ag in the Classroom - State Agricultural Fact Sheets -
<https://agclassroom.org/teacher/agfacts/>

USDA State Fact Sheets -
<https://www.ers.usda.gov/data-products/state-fact-sheets.aspx>

Step 3 – Students are to complete question #5 and fill in Tables 2, 3, & 4.

5. Use the AFB Food and Farm Facts book to answer the following questions.

- What are the top five commodities nationally?
- Draw a picture example of each commodity next to the chart below:
(Ex. Corn)
- What percentage of the following commodities does the United States produce of the world’s total production?
- What are the top five commodities in Texas?
- Draw a picture example of each commodity next to the chart below:
(Ex. Cotton)

Step 4 - Commodity Ball Activity

Using the template given to you by your teacher to create a Commodity Ball.

1. On five of the 10 sides of the Dodecahedron Ball, list one Texas Agriculture Commodity on each of the 5 sides.
2. On five of the 10 sides of the Dodecahedron Ball, list one National Agriculture Commodity on each of the 5 sides.
3. You can draw a picture of each commodity on each side, or you can paste a magazine picture cut out that represents each commodity on each side.



Then demonstrate how to put the foldable together using your own Commodity Ball as an example.

After the class finished their Commodity Ball activity, explain, “The next part of your worksheet will be assigned as homework and will count as a major grade. It will be due tomorrow at the beginning of class.”

Hand each student a copy of the following:

- Farm Resource Regions
- US_Farm_Region_Map_Blank

Explain to the class, “Using these two handouts and the instructions on your worksheet, you are going to create a commodity map that represents the entire United States. You may use any of the website links used today, along with the ‘Farm Resource Regions’ handout to complete this assignment.

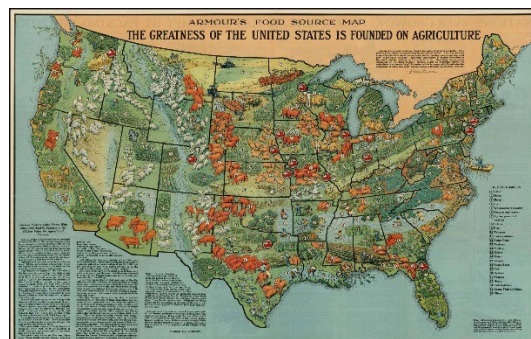
You are also responsible for answering your Summary Questions at the end of this worksheet as well.”

- Using the *AFB Farm Fact Book*, find one agriculture fact about each commodity, and write it under the associated commodity side.

Step 5 - Map it Out Homework Assignment (Major Grade)

Using the *US Farm Region Map* handout from your teacher, complete the following:

- Label each state with its correct state full name and state abbreviation.
- Draw symbol in each of the farm resource regions that depicts the top.
- Label the top animal commodity and top plant commodity for each state.
- Color each state according to the US Farm Region which it belongs. (Example. The Gray Region = The Northern Great Plains)
- Create a legend for your map that describes both the relationships of each states color and symbol. (See *US Farm Region Map Legend Example*.)
- See map below for activity example. (Do NOT copy the commodities used on this map for your *US Farm Region Map*, because this map was created in 1950, and the commodities for each state have changed since then).



Evaluation / Summary

Instructor Notes	Activity Notes
<p>Explain to the class, “Now that you have completed your worksheet, let’s hear from each group about what you learned about the Agricultural Farm Region you were assigned.”</p>	<p>Have each group of students come to the front of the class and briefly explain what they learned about the Agricultural Farm Region they were assigned.</p> <p>They will need to mention the following information:</p> <ul style="list-style-type: none">- Name of their assigned region.- Names of the states found within that region.- The top five commodities for each of the states you are assigned in the region. <p>Students should be given a participation grade for the presentation part of the assignment.</p>



**Growing Our Future Podcast – Episode 14
A Journey to the Big Sky Country**

1. In your own words, explain “Teamwork”. Do not use google or the dictionary to research the answer.

2. In your own words, explain “Networking”. Do not use google or the dictionary to

3. What do agriculture extension offices do?

4. What is the name agriculture extension agency for the state of Texas?

5. Why is the Texas agriculture extension office named after a university?

6. What is the name of the agriculture extensions service in Utah? Montana? Indiana?
 - Utah -

 - Montana -

 - Indiana –

7. What is 4-H?

8. What is FFA?

9. How is 4-H different from FFA?

10. How does the 4-H and FFA organizations teach teamwork?

11. How can you build professional networks through the FFA?



Growing Our Future Podcast – Episode 14 A Journey to the Big Sky Country KEY

1. In your own words, explain “Teamwork”. Do not use google or the dictionary to research the answer.

Answer will vary, the definition is as follows:

Teamwork is process of working collaboratively with a group of people in order to achieve a goal. Teamwork is often a crucial part of a business, as it is often necessary for colleagues to work well together, trying their best in any circumstance.

2. In your own words, explain “Networking”. Do not use google or the dictionary to research the answer.

Answer will vary, the definition is as follows:

Networking is a way to engage with other individuals in order to make connections that can be helpful for both you and the other person in the future. These connections can be used throughout life to help move forward in both business and personal interest. Making valuable connections can help you find your next job, hobby or friend!

3. What do agriculture extension services do?

Answer: Agriculture extension services are research-based facilities unique to each state’s agricultural commodities. They provide research-based information and sustainable solutions created to improve the well-being of the land, people and animals across each state. They assist our agricultural producers by providing scientific advances in agricultural and life sciences to improve lands and businesses in meaningful and impactful ways.

4. What is the name agriculture extension agency for the state of Texas?

Answer: Texas A&M AgriLife Extension

5. Why is the Texas agriculture extension office named after a university?

Answer: The early history of Texas A&M AgriLife Extension Service is a blending of the history of the Cooperative extension service, Texas A&M University, and Prairie View A&M University.

The first step towards the creation of Cooperative Extension occurred in 1862 with the passing of the Morrill Land-Grant College Act. This law granted every state 30,000 acres of public land for each of its House and Senate members, with the land being used to endow land-grant colleges for the teaching of agriculture and other practical arts. This led to the Texas Legislature founding the Agricultural and Mechanical College of Texas

(referred to as Texas A.M.C.) in 1871, which was funded through the Morrill Act and was Texas' first public institution of higher education.

In compliance with the Morrill Act, in 1876 the Fifteenth Texas Legislature endowed the Agricultural and Mechanical College for the Benefit of Colored Youth (the future Prairie View A&M University) as part of Texas A.M.C. In 1890, an amendment to the Morrill Act was passed to deal with the issue of providing steady funding to the land-grant colleges and to prohibit racial discrimination at any of the funded colleges.

6. What is the name of the agriculture extensions service in Utah? Montana? Indiana?

Answer:

Utah – Utah State University Extension

Montana – Montana State University Extension

Indiana - Purdue Extension

7. What is 4-H?

Answer: 4-H is a U.S.-based network of youth organizations whose mission is "engaging youth to reach their fullest potential while advancing the field of youth development."

8. What is FFA?

Answer: The National FFA Organization is an American a career and technical student organization connected to middle and high school courses to promote and support agricultural education.

The FFA provides the next generation of leaders who will change the world. FFA makes a positive difference in the lives of students by developing their potential for premier leadership, personal growth and career success through agricultural education.

9. How is 4-H different from FFA?

Answer: The 4-H is part of the cooperative extension service and is coordinated by local extension agents through county government and by volunteers. 4-H is not limited to agriculture, but takes in things like family and consumer sciences and other areas as well.

The FFA is an integral part of the school's agricultural science program. Each local program is led by an agricultural science teacher who works for the school. FFA members apply what they learn in the classroom in FFA activities through school activities.

10. How does the 4-H and FFA organizations teach teamwork?

Answers will vary.

11. How can you build professional networks through the FFA?

Answers will vary. Answers may include:

Conventions, conferences, Leadership Development Event, Career Development Events, Chapter Outreach Events, Community Outreach Activities, Livestock Exhibits, Career Fairs, Leadership Development Opportunities, etc.



Growing Our Future Podcast – Episode 14 Agricultural Commodities

Introduction – The variety of climates and soils found across the United States makes different parts of our country better suited for raising different agricultural commodities. Many of the fresh fruits and vegetables that we eat are grown in temperate regions like California, Florida, and parts of Texas. These areas have longer growing seasons than other parts of the country. Wheat, barley, corn, and other grain crops grow well in our country’s midsection, which was once grassland. In some parts of the country, the land is not suitable for growing crops but provides good grazing for cattle and other livestock. Potatoes grow best in cooler climates, so they are a good crop for mountainous regions where it stays cool longer in the spring. Some crops require a great deal of rain, and some need plenty of sunshine. Because our country has so many different climates and soil types, we are able to produce many different kinds of agricultural products.

Agricultural products are often referred to as “commodities”. The word, commodity, typically refers to a raw product that is derived or grown from a resource.

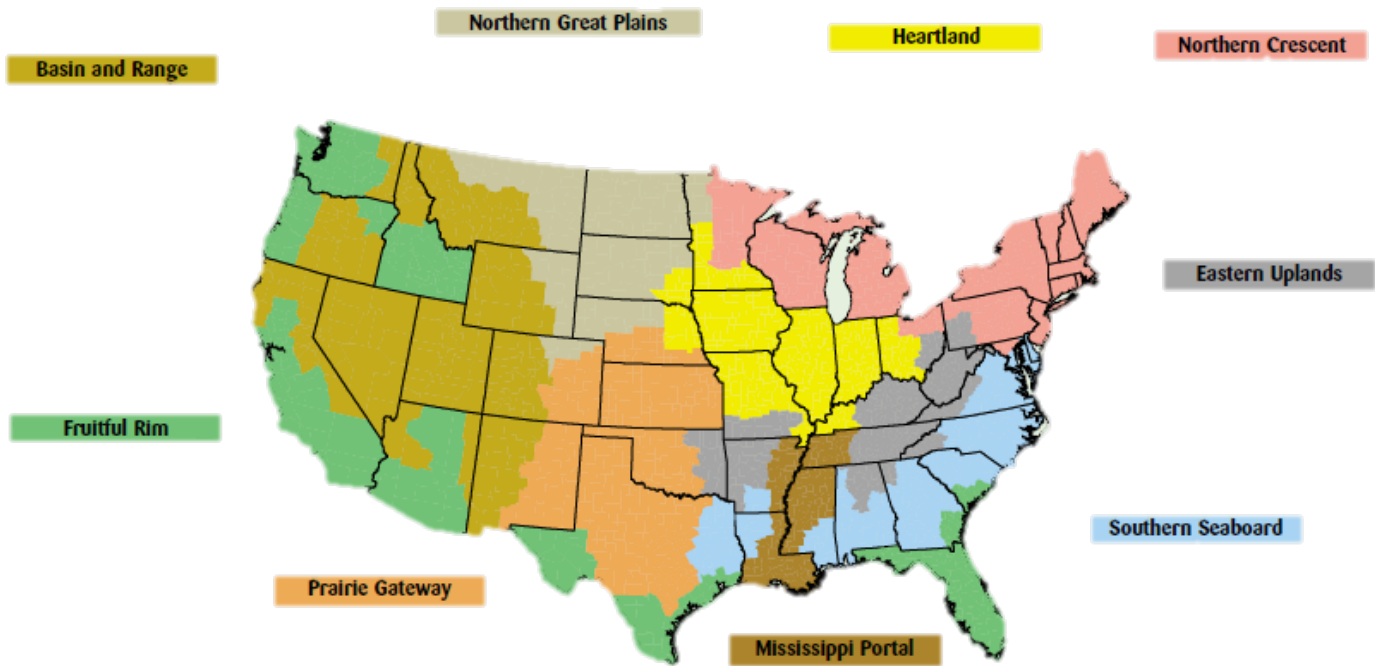
From where do these products come? Why are commodities focused in specific regions? The United States Department of Agriculture (USDA) Census of Agriculture gathers data tracking agricultural production around the country. This information helps the government ensure a stable food supply and helps farmers assess supply and demand for the different crops they are able to grow given the constraints of climate, soil type, space, and equipment. When viewed as maps of production, statistics from the Census of Agriculture reflect what grows best in which part of the country.

Procedure –

In this activity, you will work with a partner to research products grown in the United States of America. Even though you will be working together to research the information, you will each complete your own worksheet independently.

Part One – Commodities

1. Your teacher will assign you and your partner a region of the United States to research.



2. In the row labeled “State Name”, write in the state abbreviation for the states you were assigned.
3. Use the computer to access the following websites:
 - Ag in the Classroom - State Agricultural Fact Sheets found at: <https://agclassroom.org/teacher/agfacts/>
 - USDA State Fact Sheets at: <https://www.ers.usda.gov/data-products/state-fact-sheets.aspx>
4. Find and record in Table 1 the top five commodities for each of the states you are assigned.

Table 1. <i>Top Five Commodities by State</i>					
State Name	Top 5 Commodities per State				
1.					
2.					
3.					
4.					
5.					

5. Use the *AFB Food and Farm Facts* book to answer the following questions.


- What are the top five commodities nationally?
- Draw a picture example of each commodity next to the chart below: (Ex. Corn) 

Table 2. Top 5 National Commodities	
1.	
2.	
3.	
4.	
5.	

- What percentage of the following commodities does the United States produce of the world's total production?

Table 3. % of Commodities by US							
Beef	%	Milk	%	Cotton	%	Wheat	%
Corn	%	Soybeans	%	Eggs	%		


- What are the top five commodities in Texas?
- Draw a picture example of each commodity next to the chart below: (Ex. Cotton) 

Table 4. Top 5 Texas Commodities	
1.	
2.	
3.	
4.	
5.	

Part Three – Commodity Ball Activity

Using the template given to you by your teacher to create a Commodity Ball.

- On five of the 10 sides of the Dodecahedron Ball, list one Texas Agriculture Commodity on each of the 5 sides.
- On five of the 10 sides of the Dodecahedron Ball, list one National Agriculture Commodity on each of the 5 sides.
- Now, you can draw a picture of each commodity on each side, or you can paste a magazine picture cut out that represents each commodity on each side.

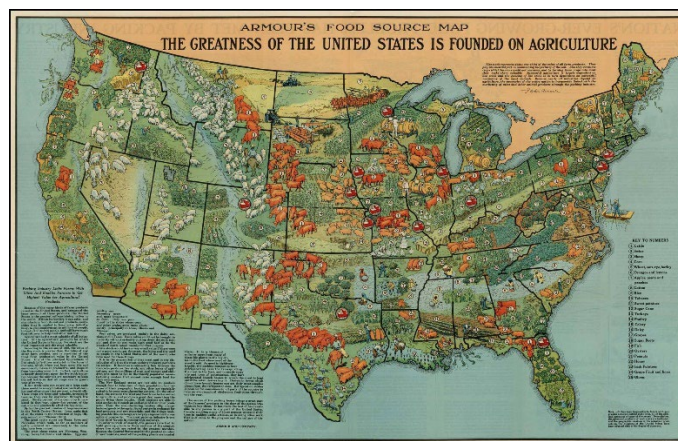
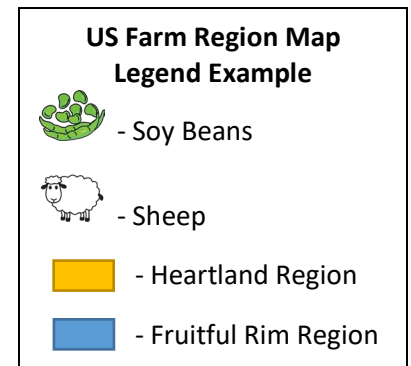


- Then, using the *AFB Farm Fact Book*, find one agriculture fact about each commodity, and write it under the associated commodity side.

Part Four – Map it Out Homework Assignment (Major Grade)

Using the *US Farm Region Map* handout from your teacher, complete the following:

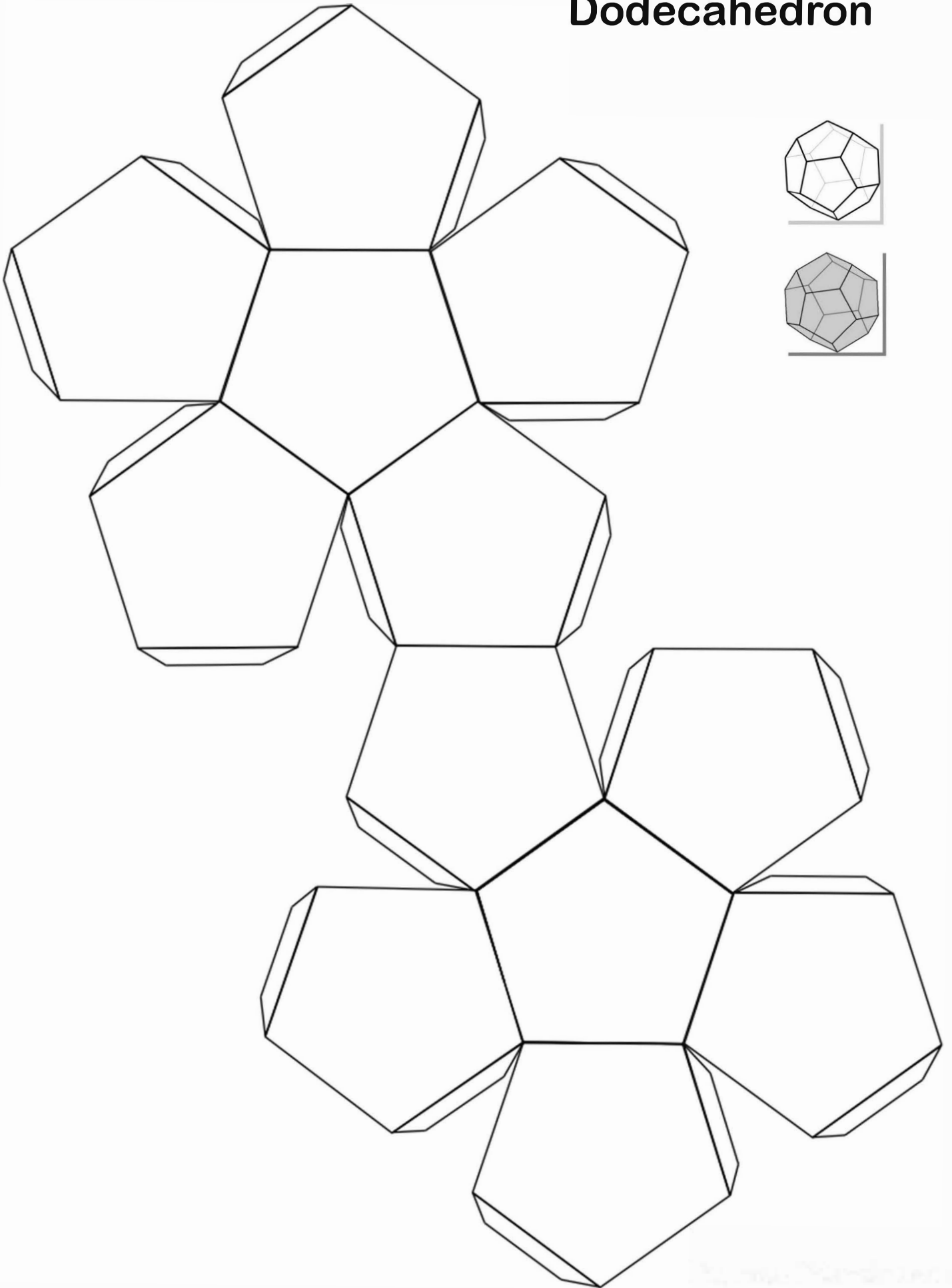
- Label each state with its correct state full name and state abbreviation.
- Draw symbol in each of the farm resource regions that depicts the top.
- Label the top animal commodity and top plant commodity for each state.
- Color each state according to the US Farm Region which it belongs. (*Example. The Red Region = The Northern Great Plains*)
- Create a legend for your map that describes both the relationships of each states color and symbol. (*See US Farm Region Map Legend Example.*)
 - See map below for activity example. (*Do NOT copy the commodities used on this map for your US Farm Region Map, because this map was created in 1950, and the commodities for each state have changed since then.*)



Summary – Use the USDA Farm Resource Regions link to answer the following questions: (https://www.ers.usda.gov/webdocs/publications/42298/32489_aib-760_002.pdf?v=42487)

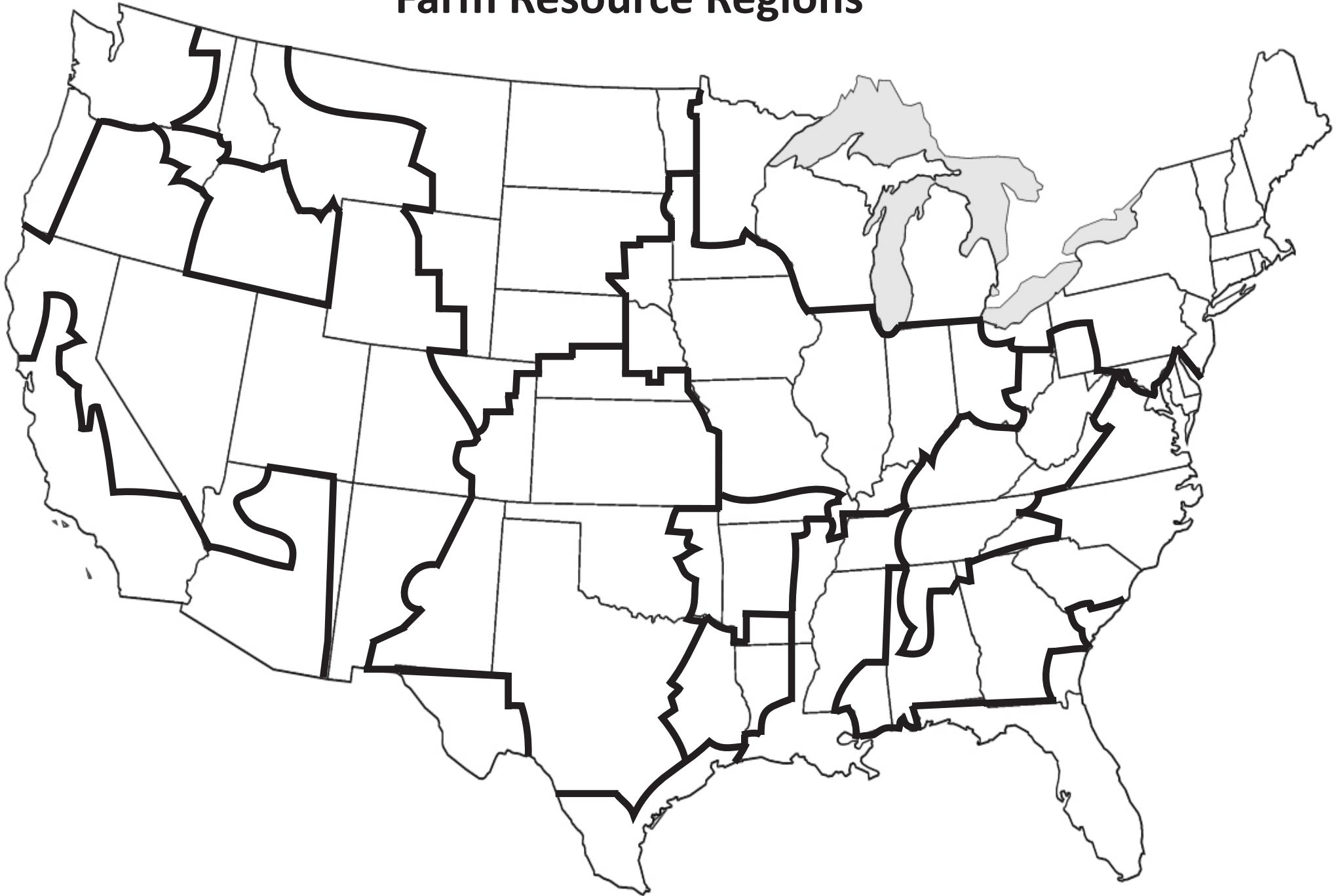
1. What region of the United States is corn production prevalent?
2. What region of the United States is beef and hog production prevalent?
3. Why do you suppose agricultural production occurs within regions?

Dodecahedron

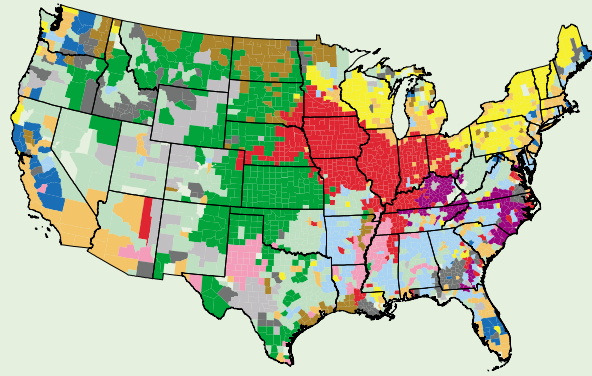


United States

Farm Resource Regions



County Clusters



J.E. Sommer and F.K. Hines. *Diversity in U.S. Agriculture: A New Delineation by Farming Characteristics*. AER-646, ERS, USDA, 1991.

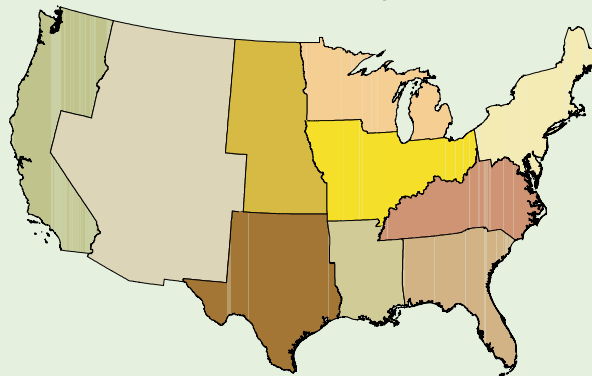
Since the early 1900's, USDA analysts have sought to identify patterns in U.S. farming that might further the understanding of differences in financial performance of farms and the economic well-being of farm households.

The Farm Resource Regions are derived from four sources: a cluster analysis of U.S. farm characteristics (Sommer and Hines), the old Farm Production Regions, USDA's Land Resource Regions, and NASS Crop Reporting Districts.

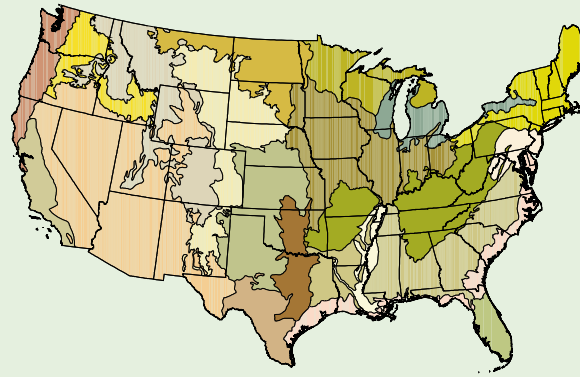
County clusters, based on commodities produced, have shown that a few commodities tend to dominate farm production in specific geographic areas that cut across State boundaries. The climate, soil, water, and topography in localized geographic areas tend to constrain the types of crops and livestock that will thrive there.

The old Farm Production Regions, in following State boundaries, necessarily group unlike areas together because a single State often encompasses different soils and topography.

USDA Farm Production Regions



USDA Land Resource Regions



USDA, SCS. *Land Resource Regions and Major Land Resource Areas of the United States*. AH-296, 1981.

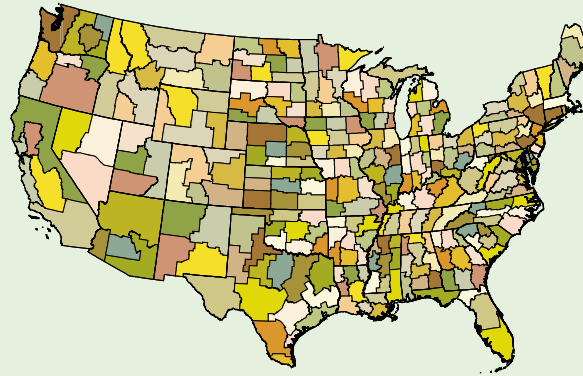
For example, the old Appalachian Region, comprising Tennessee, Kentucky, North Carolina, Virginia, and West Virginia, contains the Appalachian Mountains, Piedmont, and Coastal Plain areas, all of which have quite different agriculture.

With more and more data available at the county level, geographic representations need no longer be constrained to follow State boundaries. In constructing the new regions, we identified where areas with similar types of farms intersected with areas of similar physiographic, soil, and climatic traits, as reflected in USDA's Land Resource Regions. We then conformed these intersecting areas to follow the boundaries of NASS Crop Reporting Districts, which are aggregates of counties.

The Farm Resource Regions, by more accurately portraying the geographic distribution of U.S. farm production, will help analysts and policymakers better understand economic and resource issues affecting agriculture.

Electronic files linking counties to the Farm Resource Regions are online at the [ERS home page](#).

NASS Crop Reporting Districts



United States
Department of
Agriculture



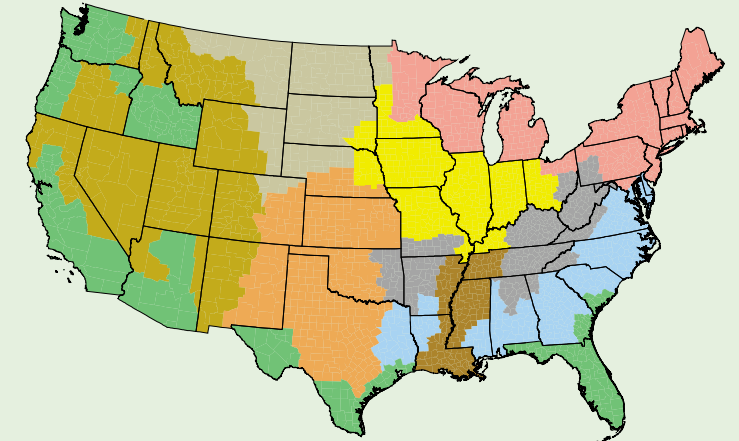
Economic
Research
Service

Agricultural
Information
Bulletin
Number 760

September 2000



Farm Resource Regions



USDA's Economic Research Service recently constructed a new set of regions depicting geographic specialization in production of U.S. farm commodities. With more and more data available at the county level, geographic representations need no longer be constrained to follow State boundaries. ERS will use the new regions to display results of its analyses in a broad array of venues—from briefings to publications, our Web site, and journal articles. The new regions take advantage of both new capabilities and standards in the resolution of the data we work with and overcome some longstanding problems with the old USDA Farm Production Regions. This pamphlet introduces the Farm Resource Regions, explains their origin and rationale, and serves as a reference for our clients.

Farm Resource Regions

Basin and Range

- Largest share of nonfamily farms, smallest share of U.S. cropland.
- 4% of farms, 4% of value of production, 4% of cropland.
- Cattle, wheat, and sorghum farms.

Fruitful Rim

- Largest share of large and very large family farms and nonfamily farms.
- 10% of farms, 22% of production value, 8% of cropland.
- Fruit, vegetable, nursery, and cotton farms.

Northern Great Plains

- Largest farms and smallest population.
- 5% of farms, 6% of production value, 17% of cropland.
- Wheat, cattle, sheep farms.

Heartland

- Most farms (22%), highest value of production (23%), and most cropland (27%).
- Cash grain and cattle farms.

Northern Crescent

- Most populous region.
- 15% of farms, 15% of value of production, 9% of cropland.
- Dairy, general crop, and cash grain farms.

Eastern Uplands

- Most small farms of any region.
- 15% of farms, 5% of production value, and 6% of cropland.
- Part-time cattle, tobacco, and poultry farms.

Southern Seaboard

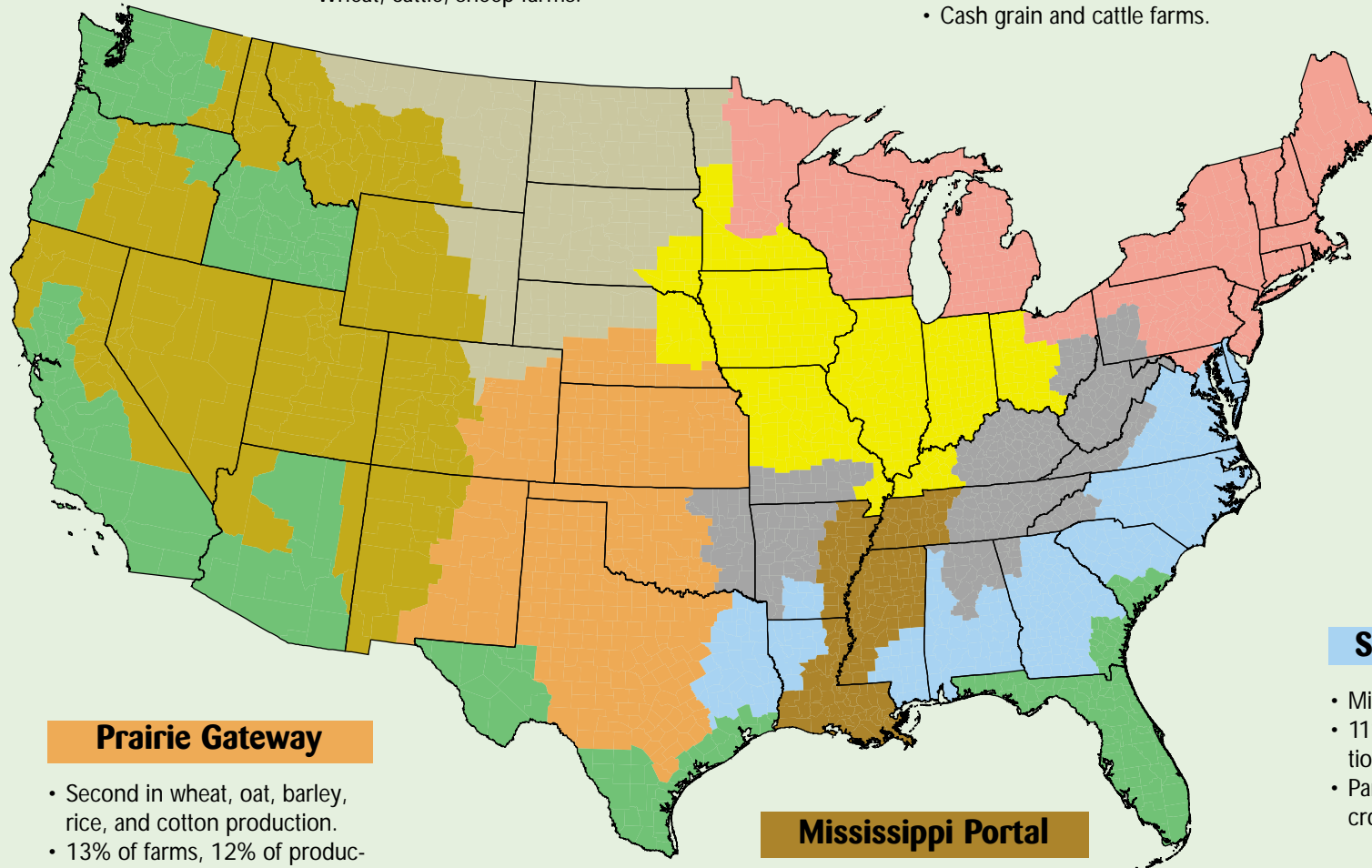
- Mix of small and larger farms.
- 11% of farms, 9% of production value, 6% of cropland.
- Part-time cattle, general field crop, and poultry farms.

Prairie Gateway

- Second in wheat, oat, barley, rice, and cotton production.
- 13% of farms, 12% of production value, 17% of cropland.
- Cattle, wheat, sorghum, cotton, and rice farms.

Mississippi Portal

- Higher proportions of both small and larger farms than elsewhere.
- 5% of farms, 4% of value, 5% of cropland.
- Cotton, rice, poultry, and hog farms.





FOOD *and* FARM

Facts



Welcome Readers!

Where does our food come from and who grows it? Food and Farm Facts helps to answer these questions as it explores topics about agriculture in the U.S.

Food and Farm Facts can be used in a variety of ways to help increase agricultural literacy. Several suggested uses include: in a classroom, at fairs and events, and with student leadership organizations. Explore specific suggestions online at agfoundation.org.



AMERICAN FARM BUREAU
FOUNDATION FOR AGRICULTURE

FOOD AND FARM FACTS is produced by the
American Farm Bureau Foundation for Agriculture®

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Farming & Ranching is **MUCH MORE** than a Job



The achievements of modern farmers and ranchers are worthy of tribute, but most of us aren't very good about blowing our own horns. We quietly go about our work. Agriculture is a vast undertaking, from producing a bounty of food for consumers, to growing the wood that frames our homes, the fiber in our clothes and even the renewable fuel in our cars.

We are dedicated to an important mission—feeding Americans so we don't have to depend on other nations for our most basic need. We enjoy working to be more productive and sustainable. We love the land. We love helping our rural communities stay economically vibrant. We love carrying on our farms and traditions whether we started them or they've been in our family for tens or hundreds of years. We work to make sure that when it is our turn to pass along the legacy, our farms and ranches are in better shape than when we started. All of those things make farming and ranching so much more than "a job."

Farmers and ranchers are focused on continuous improvement, growing more food using fewer resources, while agriculture's environmental footprint is shrinking, as quantified and reported by both independent and government research.

The best way to learn about how farmers and ranchers grow, process and bring food to market is to ask one in person. Not yet acquainted with a farmer or rancher but have questions about food production? A number of options are open to you.

CONNECT on Social Media

Facebook posts from the farm, tweets from the tractor seat and blogs from the "back 40" make it easier than ever to connect to farmers and ranchers.

CHECK IN with Farm Bureau

All state Farm Bureau affiliates maintain websites with useful information on such things as farm tours and what foods are in season. Learn more at fb.org/about/join.

WATCH a SMART Farm Video

Farm tour videos created by the U.S. Farmers & Ranchers Alliance show how all types of farms and ranches use technology to be more sustainable and productive. Watch at fooddialogues.com/smartfarm.

Food and Farm Facts provides you with the opportunity to learn more about the many ways modern farmers produce food to meet the needs of today's consumers. It is my hope that it also puts into perspective how blessed we are to be Americans.

Zippy Duvall

President, American Farm Bureau Federation®
Chairman, American Farm Bureau Foundation for Agriculture®
Beef Cattle and Poultry Farmer from Georgia



what's

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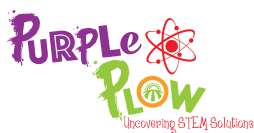
About the **FOUNDATION**

Building awareness, understanding and a positive public perception of agriculture through education



AMERICAN FARM BUREAU
FOUNDATION FOR AGRICULTURE

We believe everyone should have an understanding of where their food comes from. To reach that goal, we offer a variety of standards-based programs and activities at all grade levels for educators, volunteers and families. In addition to Food and Farm Facts, our premier resources and programs include:



Using science, technology, engineering and math resources, the **Purple Plow Maker Space Challenge** encourages students to research scenarios related to food, hunger and sustainability and build their own prototypes to solve the defined problem. purpleplowchallenge.org



My American Farm educates about agriculture in a fun way through 24 interactive computer games, e-comics, videos, free lesson plans and activities. myamericanfarm.org

Accurate Ag Resources is a curated list of publications, Foundation lesson plans and Ag Mags searchable by reading level, topic and type.

My American Farm and The Purple Plow Challenge are made possible through the generous support of title sponsor, DuPont Pioneer. Learn more at agfoundation.org.

OTHER GREAT RESOURCES

AGRICULTURE IN THE CLASSROOM, agclassroom.org

Classroom resources and historical information (Growing a Nation, The Story of American Agriculture, etc.)

GMO ANSWERS, gmoanswers.com

GMO Answers is dedicated to creating an open dialogue on the topics of biotechnology and GMOs in food and modern agriculture.

FARMLAND DOCUMENTARY, farmlandfilm.com

A firsthand glimpse inside the lives of six young farmers and ranchers – streaming on Netflix and available at Walmart retail locations or on walmart.com.

USDA

Visit ARS (ars.usda.gov) to learn how scientists are working to find solutions to agricultural problems that affect Americans every day; ERS (ers.usda.gov) for info on food expenditures in the U.S. and other countries, the food dollar series, farm production expenses, etc.; the National Agricultural Library (nal.usda.gov), one of the world's largest agricultural information collections; and NASS (nass.usda.gov) for the U.S. Census of Agriculture (conducted every five years) and other statistics.

NATIONAL 4-H COUNCIL, 4-h.org

4-H is delivered by Cooperative Extension, a community of more than 100 public universities across the nation. Kids complete hands-on projects in areas like health, science, agriculture and citizenship, in a positive environment where they receive guidance from adult mentors and are encouraged to take on proactive leadership roles.

NATIONAL FFA, ffa.org

FFA is an intracurricular student organization for those interested in agriculture and leadership. It is one of the three components of agricultural education.

SELECTED ACRONYMS USED IN THIS BOOK

American Farm Bureau Federation (AFBF); Agricultural Research Service (ARS); Economic Research Service (ERS); Food and Agriculture Organization (FAO); Foreign Agricultural Service (FAS); Foreign Agricultural Trade of the United States (FATUS); National Agricultural Statistics Service (NASS); Natural Resources Conservation Service (NRCS); and U.S. Department of Agriculture (USDA).



America's Farmers & Ranchers are **DIVERSE**

Farm and ranch families make up less than **2 PERCENT** of the U.S. population. They are diverse, growing conventional, biotech and organic crops. They also raise traditional and specialized livestock for meat, milk and eggs. Whether their businesses are big or small, today's farmers strive for continuous improvement in food production.

Over time, the tools and methods of farming have changed. So too has consumer interest in food and transparency about how it is produced. The intersection of these two trends is what drives much of the interaction that takes place today between farmers and consumers.

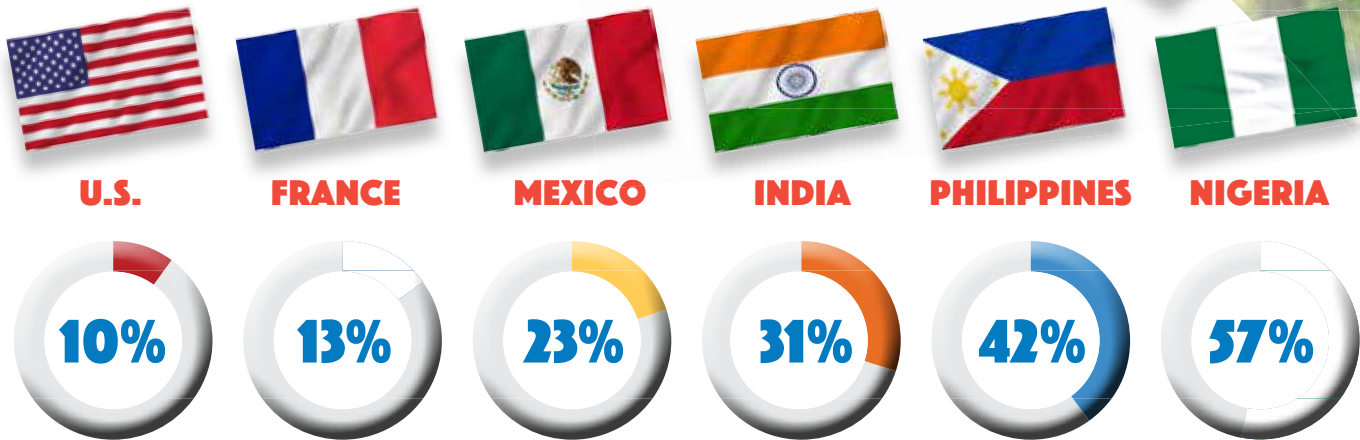
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Sources: AFBF; National Institute of Food and Agriculture



Americans Pay the **LEAST** for Food

U.S. consumers spend just **10 PERCENT** of their disposable income on food each year, while those in other countries spend much more.¹

CONSUMERS



Average per capita annual food expenditures equal \$4,576 in the U.S. Of the 10 percent of disposable income Americans spend on food each year, 50 percent is for food eaten at home and 50 percent is for food eaten away from home.

USDA tracks how much of different types of food we eat on average annually (annual per capita consumption).

MOST POPULAR FOODS

Flour (White & Whole Wheat)	94.8 lbs
Chicken	87.7 lbs
Beef	51.5 lbs
Potatoes	46.7 lbs
Tomatoes	31.4 lbs
Cheese	21.9 lbs
Apples	11.6 lbs
Bananas	11.3 lbs

¹ U.S. figure is for food consumed at home and away from home. Figures for all other countries are for food consumed at home. As food consumed at home is less expensive, the gap between these countries and the U.S. would be even greater if food consumed away from home was not included in the total.

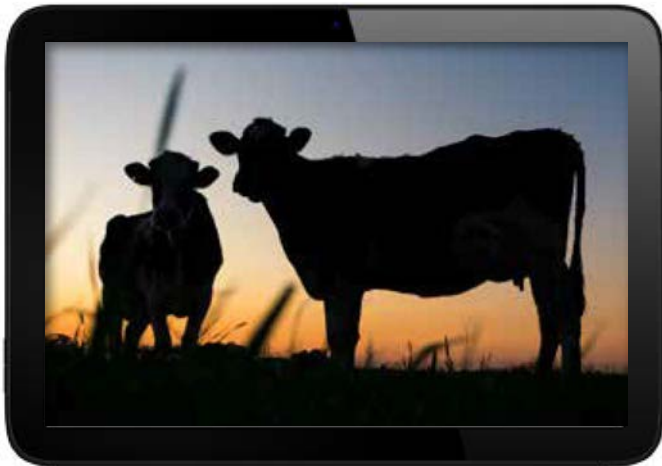


How do Farmers & Ranchers **CARE** for Farm Animals?

Through social media, America's farmers and ranchers explain why they do certain things when raising animals for food.

OUR ANIMALS DEPEND ON US

"Our animals depend on us to keep them safe and healthy. This is particularly critical in extreme winter conditions, when we take special action to ensure cows stay safe and healthy. We give the cattle a larger portion of feed so they have plenty to eat in case we're unable to get to them right away for the next feeding. We also make sure the electric water heaters are running so they always have access to water.



Also, before a blizzard starts, we bring the cows that are close to giving birth into the barn. It's crucial that we keep the new calves warm so they stay healthy.

We put out extra straw for bedding so the cows have an insulated bed and can lie down and stay warm and comfortable. We also set up wagons to create temporary windbreaks. The little ones get under the wagon beds for shelter, and the rest of the herd will surround one side to prevent the wind from getting through. Our animals' health and safety is our top priority. Even though it can be challenging in the winter, we always want to do what's right for the animals."

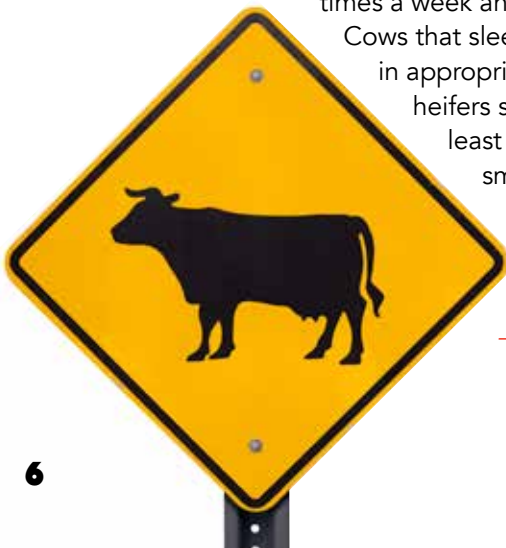
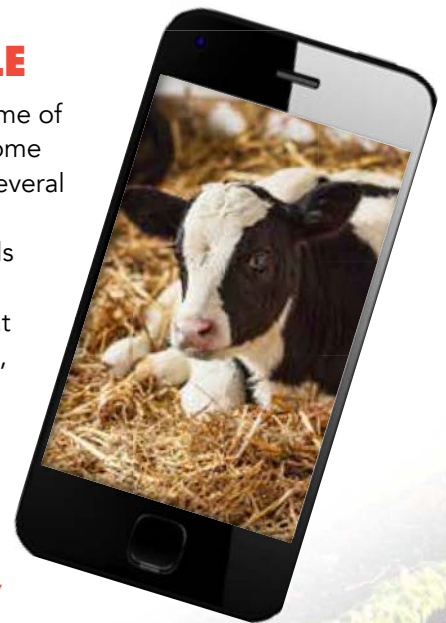
—Excerpted from a CommonGround blog post by **Hilary Maricle**, a family farmer and Farm Bureau member from Nebraska, commongroundnebraska.com/author/hilary-maricle/

WE KEEP OUR COWS COMFORTABLE

"On our modern dairy farm cows sleep in various places. Some of our cows sleep in individual stalls in a barn and are free to come and go as they please. The stalls are cleaned daily, leveled several times a week and new bedding is added every two weeks.

Cows that sleep in barns also have access to outside corrals in appropriate weather. Some of our cows and younger heifers sleep outside in corrals, which are groomed at least three times weekly to keep the bedding soft, smooth and dry. Our pregnant cows rest on a clean, bedded pack filled with almond shells. We also have some cows that sleep in a pasture."

—Excerpted from a blog post by **Ray Prock**, a family farmer and Farm Bureau member in California, [facebook.com/raylindairy/](https://www.facebook.com/raylindairy/)





MY HOGS ARE ON A HEALTHCARE PLAN

"On our farm, it's normal for us to have entire groups of pigs that have never had any antibiotics when they go to market. I like to explain our antibiotic use like this: Our hogs do not carry health insurance, and all medications are expensive. We cannot afford to use antibiotics unless absolutely necessary to improve the quality of health for our animals. And we always use antibiotics under the guidance of our veterinarian. He decides what medication will be used when necessary and what dose will be used.

We have a healthcare plan for our hogs that is designed by our veterinarian. This means when we detect a hog might be sick or a hog isn't behaving normally, we follow our vet's advice on how to protect that animal and keep it healthy. As a mom, this is one of the most important jobs I will ever have and I take that responsibility very seriously."

—Excerpted from a blog post by **Chris Chinn**, a family farmer and Farm Bureau member who serves as director of the Missouri Department of Agriculture; the full post appeared on CNN's Eatocracy Blog, bit.ly/ChrisChinnEatocracy

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Source: AFBF



Social Media **CONNECTS** Farmers & Consumers

Finding common ground between farm families and consumers is easier than ever thanks to social media.



FOOD AND AGRICULTURE BLOGS TO FOLLOW



Best Food Facts

bestfoodfacts.org

Fill Your Plate Blog

filyourplate.org/blog

Food Dialogues Blog

fooddialogues.com/blog

Food Insight

foodinsight.org/blogs

Food Integrity Blog

foodintegrity.org/news-blog/cfi-blog

GMA Blog

gmaonline.org/blog

©2017 American Farm Bureau Foundation for Agriculture®
Sources: AFBF; USDA-ERS

DID YOU KNOW?

About 8 percent of U.S. farms market foods locally, through direct-to-consumer or intermediated sales (farmers' markets, farm stands, Community Supported Agriculture, food hubs, etc.). Buying local provides the opportunity to talk to those who grow or produce fresh fruits and veggies, flowers, meats, cheeses, baked goods and other value-added foods. Learn more at www.ams.usda.gov/services/local-regional/food-directories.



FOOD SAFETY

at Home & School

Farmers and ranchers take seriously their obligation to grow safe, wholesome food. Thanks to strict government monitoring, the incidence of foodborne illness has dropped dramatically in the past 100 years. But we all still need to do our part to prevent foodborne illness at home and school!

- ✓ Cook foods to proper temperatures.
- ✓ Use separate cutting boards for uncooked meat and ready-to-eat foods.
- ✓ Store leftover food in shallow containers and refrigerate within two hours.
- ✓ Wash hands often in hot, soapy water.

©2017 American Farm Bureau Foundation for Agriculture®
Source: Partnership for Food Safety Education

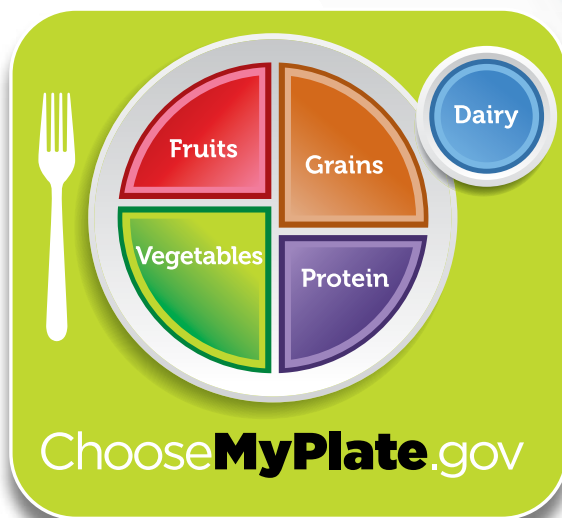
Choose MYPLATE

MyPlate illustrates the five food groups that are the building blocks for a healthy diet using a familiar image—a place setting for a meal. Before you eat, think about what goes on your plate or in your cup or bowl.

Strive for a healthy eating pattern that includes nutrient-dense foods and beverages — vegetables, fruits, whole grains, fat-free or low-fat milk and dairy products, seafood, lean meats and poultry, eggs, beans and peas, soy products and nuts and seeds.

What foods, flavors and recipes is your state known for, and how do they fit into a healthy eating style? Visit [choosemyplate.gov/myplate-mystate](https://www.choosemyplate.gov/myplate-mystate) to find out.

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Source: Dietary Guidelines for Americans, 2015-2020

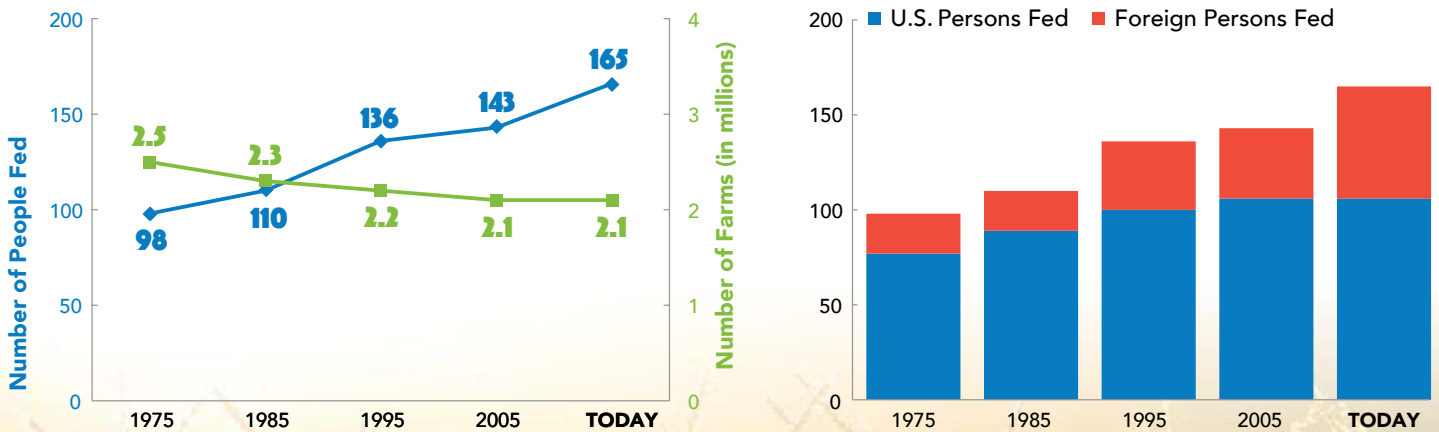


One U.S. FARM Feeds 165 PEOPLE

America's farms and farmers are the world's most productive. Today, each farm produces food and fiber for 165 people annually in the United States and abroad. Of those 165 people, 106 are in the U.S. and 59 are outside the U.S. The global population is expected to increase by 2.3 billion by 2050, which means the world's farmers will have to grow about **70 PERCENT** more food than what is now produced.

In 1935, the number of farms in the United States peaked at 6.8 million. By 1975, there were 2.5 million U.S. farms. Today, there are 2.1 million farms dotting America's rural landscape.

HOW MANY PEOPLE DOES ONE U.S. FARM FEED ANNUALLY?



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Sources: AFBF; Census of Agriculture (2012); FAO; USDA-NASS

DID YOU KNOW?

Total U.S. corn yield (tons per acre) has increased more than 360 percent since 1950.

See what FARMERS & RANCHERS GROW

Farming accounts for about **1 PERCENT** of the U.S. gross domestic product, but has economic significance beyond the farm gate. The manufacturing of farm machinery and fertilizer is mostly done in metro counties, while farm services and food processing are disproportionately located in non-metro counties. Even in many counties that are dependent on manufacturing or services, farming can be an important component of local communities.

MODERN FARMERS

TOTAL ANNUAL PRODUCTION: 2.5 TRILLION POUNDS

CROPS = 87% LIVESTOCK = 13%

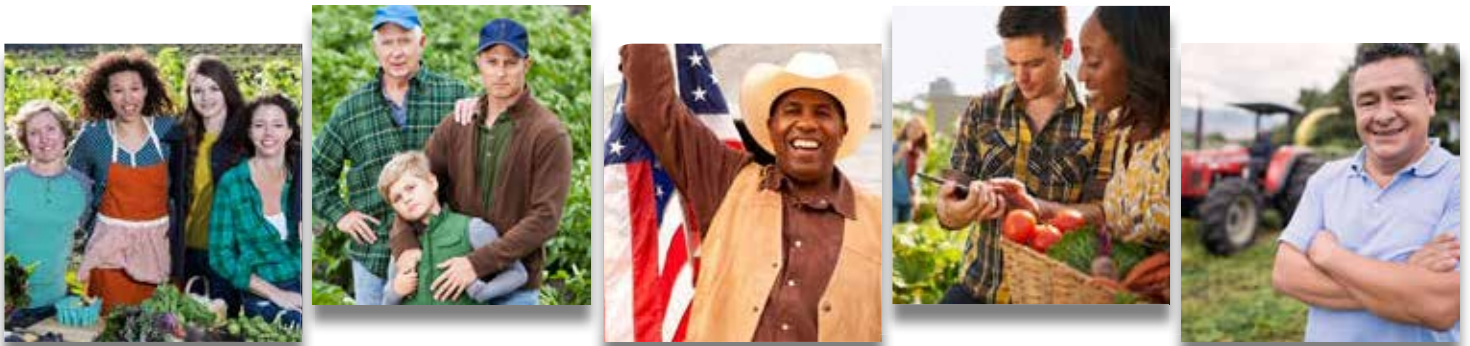
BILLION	COMMODITY
1,049.2 lbs	Grains (Corn, Wheat, Oats, Rice, Barley, Rye, Sorghum & Millet)
529.2 lbs	Hay & Silage
281.5 lbs	Oilseeds (Soybeans, Sunflowers, Peanuts, Canola, Cottonseed, Mustard Seed, Flaxseed, Rapeseed & Safflower)
208.6 lbs	Dairy Products
148.5 lbs	Cotton, Tobacco, Sugarbeets & Sugarcane
139.7 lbs	Horticulture (Vegetables, Citrus, Non-citrus Fruits & Nuts)
48.3 lbs	Potatoes, Sweet Potatoes, Mushrooms, Hops, Peppermint Oil, Spearmint Oil & Maple Syrup
47.4 lbs	Poultry (Turkeys & Broilers)
24.5 lbs	Pork
23.8 lbs	Beef & Veal
12.7 lbs	Eggs
7.0 lbs	Dry Beans, Peas & Lentils



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Sources: USDA-ERS; USDA-NASS; WAOB

Exploring Farm DEMOGRAPHICS

There are **3.2 MILLION** U.S. farm operators who work on **2.1 MILLION** farms. They run the farm, making decisions about planning, harvesting, feeding, marketing and so on. Operators may be owners, members of the owner's household, a hired manager, a tenant, a renter or a sharecropper. The average age of principal farm operators has been steadily increasing over the past three decades and is now 58.



The number of farm operators of **SPANISH, HISPANIC** or **LATINO** origin is **HIGHER** than ever, **UP 21 PERCENT** to 99,734. There also are **MORE AFRICAN AMERICAN** (44,629, up 12 percent) and **AMERICAN INDIAN** (58,475, up 5 percent) farm operators.

WOMEN make up 30 percent (969,672) of the total number of farm operators.

The **MILLENNIAL GENERATION** (people age 34 and under) includes 257,454 farmers.

More than 20 percent of all farmers are **BEGINNING FARMERS** (in business less than 10 years).

TEXAS has the **MOST FARMS** (248,809), followed by Missouri (99,171), Iowa (88,637), Oklahoma (80,245) and California (77,857).

Total land in farms was estimated at 915 million acres in 2012, a decrease of 1 million acres since 2007.

Farms are getting **BIGGER**. The average farm size was 434 acres in 2012, compared to 418 acres in 2007.

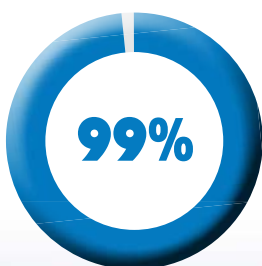
©2017 American Farm Bureau Foundation for Agriculture®
Sources: Census of Agriculture (2012); USDA-ERS

Family Farmers & Ranchers FEED AMERICA

Today, **99 PERCENT** of all U.S. farms are owned by individuals, family partnerships or family corporations. Just **1 PERCENT** of America's farms and ranches are owned by non-family corporations.

In addition, **89 PERCENT** of U.S. ag products sold are produced on family farms or ranches. Non-family corporations account for only **11 PERCENT** of U.S. ag product sales.

FARM OWNERSHIP

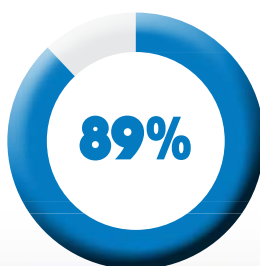


Family



Non-Family
Corporations

FARM PRODUCTION



Family



Non-Family
Corporations

©2017 American Farm Bureau Foundation for Agriculture®
Source: USDA-ERS – America's Diverse Family Farms, 2016 Edition
Photo Credit: PastureBird LLC



FARM EXPORTS HELP *the Economy*



In 2016, **\$135.5 BILLION** worth of American agricultural products were exported around the globe. The top five customers (in red) accounted for **61 PERCENT** of all exports.

China and Canada are the United States' largest trading partners. Together, they account for 31 percent of all U.S. agricultural exports.

IMPORT MARKET	BILLION
CHINA	\$21.4
CANADA	\$20.5
MEXICO	\$17.9
JAPAN	\$11.1
EU-28	\$11.6
SOUTH KOREA	\$6.2
HONG KONG	\$3.8
TAIWAN	\$3.2
INDONESIA	\$2.7
VIETNAM	\$2.7

U.S. SHARE OF WORLD PRODUCTION

Corn	36%
Soybeans	34%
Beef & Veal	18%
Milk	16%
Cotton	13%
Wheat	8%
Apples	6%

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Source: USDA, FAS Online, 2017

Agriculture has a **POSITIVE** Trade Balance

U.S. AG EXPORTS EQUAL \$135.5 BILLION

BILLION	TOP EXPORTS
\$22.9	Soybeans
\$16.2	Beef, Veal, Pork & Poultry
\$13.4	Fresh & Processed Fruits & Vegetables
\$9.9	Corn
\$7.9	Tree Nuts
\$7.5	Feeds & Fodder
\$5.3	Wheat
\$4.7	Dairy Products
\$4.0	Cotton
\$1.9	Rice

U.S. AG IMPORTS EQUAL \$115.0 BILLION

BILLION	TOP IMPORTS
\$15.3	Fresh & Processed Fruits
\$13.3	Fresh & Processed Vegetables
\$11.1	Coffee & Cocoa
\$11.1	Grains & Feeds
\$10.6	Wine & Malt Beverages
\$7.7	Beef, Veal & Pork

About **25 PERCENT** of all U.S. agricultural products by value are exported yearly, including:

- 148.5 million tons of corn, coarse grains, distillers grains, soybeans, soybean meal and feed & fodder
- 3.6 million tons of poultry meats
- 3.0 million tons of fresh fruit



Ag Programs **EQUAL 16%** of the **USDA BUDGET**



TOTAL USDA BUDGET IN 2017

Food Assistance & Nutrition Programs	71%
Ag Programs	16%
Conservation & Forestry	7%
Other ¹	6%



DID YOU KNOW?

President Abraham Lincoln established the USDA in 1862.

USDA's budget focuses on creating jobs and building a foundation for future economic growth, particularly in rural America. It also provides stability for farmers and ranchers, in addition to making targeted investments in bio-based product manufacturing, local and regional food systems, and specialty crops and organic production. Food Assistance and Nutrition Programs — including the Supplemental Nutrition Assistance Program or SNAP (formerly known as Food Stamps); Women, Infants and Children or WIC; and school lunch/breakfast programs — account for nearly three-quarters of the Agriculture Department's 2017 budget. In contrast, ag programs equal just **16 PERCENT.**

¹ Includes Food Safety, Rural Development, Research and Marketing/Regulatory programs.

What does **10-YEAR FEDERAL SPENDING** look like?

(2017-2027 • BIG BUDGET ITEMS)

TOTAL FEDERAL SPENDING

\$42.5 Trillion → **100%**

Healthcare, Social Security,
Net Interest on Public Debt
\$34.9 Trillion → **66%**

National Defense
\$6.7 Trillion → **13%**

Agriculture Baseline
INCLUDING
Food Assistance &
Nutrition Programs
\$1.1 Trillion → **2%**

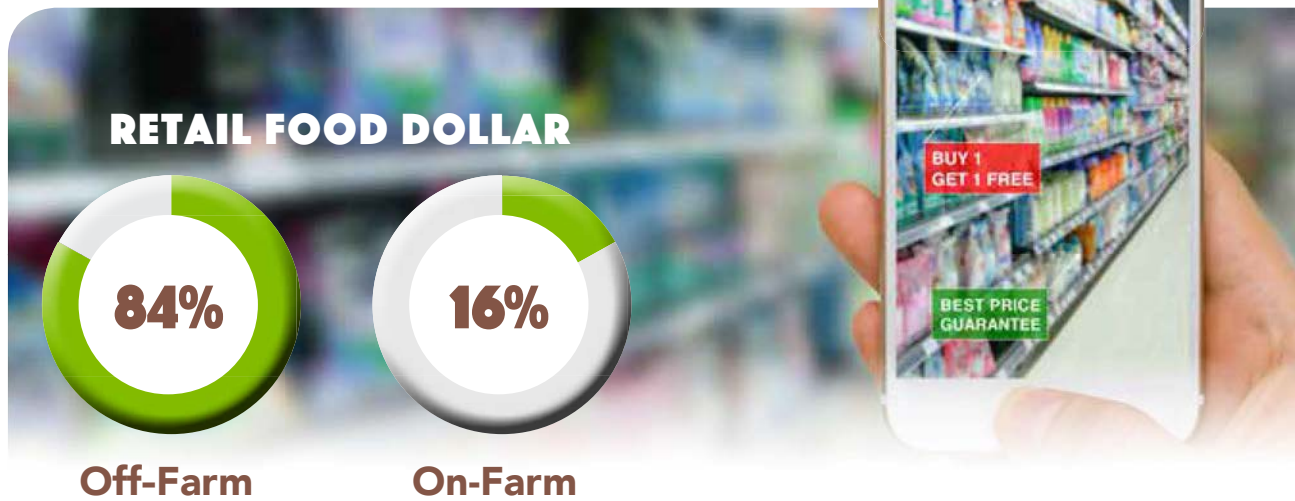
Agriculture Baseline
MINUS Food Assistance
& Nutrition Programs
\$147 Billion → **0.3%**

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Sources: AFBF; Congressional Budget Office January 2017 Baseline



Where does Your **FOOD DOLLAR** Go?

Transporting, processing and packaging farm-grown foods so they're ready to be enjoyed on our tables costs significantly more today compared with the recent past. The farmer's share of the retail food dollar is as low as **2 PERCENT** to **4 PERCENT** for bread and cereal, and as much as **35 PERCENT** for some fresh market products.



FARMERS AND RANCHERS receive only 16 cents (on average) out of every retail dollar spent on food that is eaten at home and away from home. In 1980, farmers received 31 cents out of every retail dollar spent on food in the United States. The farm share in a dollar food purchase is higher for food consumed at home, compared to food consumed away from home — 24 cents vs. only 5 cents.

OFF-FARM COSTS — marketing expenses associated with processing, wholesaling, distributing and retailing of food products — account for 84 cents of every retail dollar spent on food.



©2017 American Farm Bureau Foundation for Agriculture®
Sources: AFBF; USDA-ERS (Food Dollar Series)

FARMERS' EXPENSES

Continue to Rise

For 2016, farm-level production expenses were down slightly from the record-high level of 2014, but were still **50 PERCENT** higher than expenses in 2006. This is how those expenses break down:

- 16.5%** Purchased Feed
- 16.0%** Capital Upkeep and Replacement
- 15.4%** Fertilizer, Seed, Crop-Protecting Chemicals
- 11.7%** Farm Labor and Custom Hire
- 9.8%** Interest, Property Taxes, Other Taxes/Fees
- 6.4%** Purchased Livestock
- 5.8%** Net Rental Payments
- 5.4%** Fuel, Electricity
- 2.5%** Marketing, Storage, Transportation
- 10.5%** Miscellaneous

FARM PRODUCTION EXPENSES

YEAR BILLION

1996 \$176.9

2001 \$195.0

2006 \$232.7

2011 \$306.9

2016 \$349.9

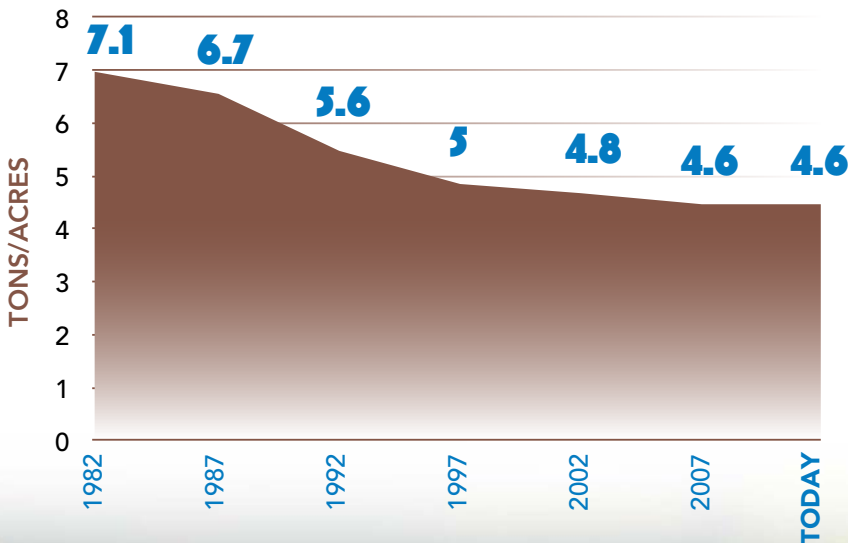
©2017 American Farm Bureau Foundation for Agriculture®
Sources: ERS, Farm Production Expenses and Food Dollar Series

Farmers Take **CONSERVATION** **SERIOUSLY**



Careful stewardship by America's food producers has spurred a **44 PERCENT** decline in erosion of cropland by wind and water since 1982.

SOIL EROSION BY WIND & WATER



Through the farm bill, funding is provided to farmers and ranchers for conservation programs that prevent soil erosion, preserve and restore wetlands, clean the air and water, and enhance wildlife.

Crop rotation, the practice of growing different crops in succession on the same land, is another way farmers take care of the land.

For contour farming, farmers plant crops across the slope of the land to conserve water and protect soil.

DID YOU KNOW?

Sand, silt and clay are basic mineral particles that make up soil, which also contains organic matter, water, microorganisms and (sometimes) worms. Farmers often test soil before planting to determine composition, pH and balance of nutrients such as nitrogen, phosphorus and potassium. Results are used to determine the proper type and amount of fertilizer to apply.

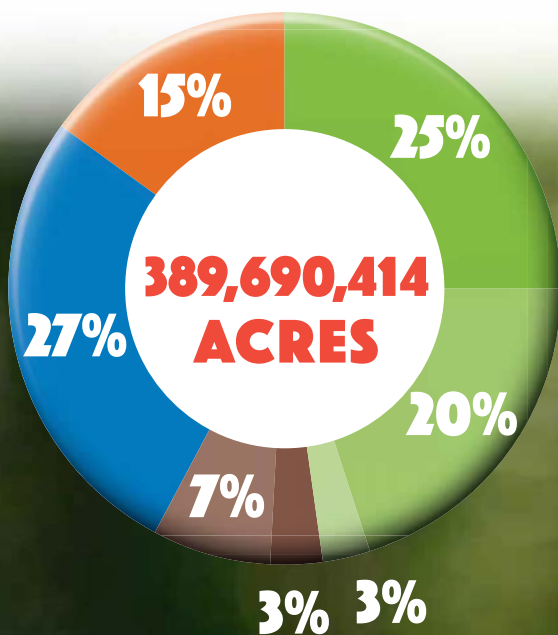
©2017 American Farm Bureau Foundation for Agriculture®
Sources: AFBF; USDA National Resources Inventory (2012)

Farmers **PROTECT** NATURAL RESOURCES

No-till or conservation tillage—a way of farming that reduces erosion (soil loss) while using less energy—is used on more than twice as many cropland acres compared to conventional tillage. Advanced conservation practices are used on more than **50 PERCENT** of cropland acres.

Farmers, ranchers and other landowners have enrolled a total of 24 million acres in the Conservation Reserve Program to protect the environment and provide habitat for wildlife. Since its inception in 1986, the program has reduced soil erosion by 8 billion tons, annually cut sediment leaving fields by more than 300 million tons and has restored more than 2 million acres of wetlands.

Two important CRP initiatives included in the farm bill are introduction of native grasses and installation of conservation buffers. Buffers improve soil, air and water quality, enhance wildlife habitat, and create scenic landscapes.

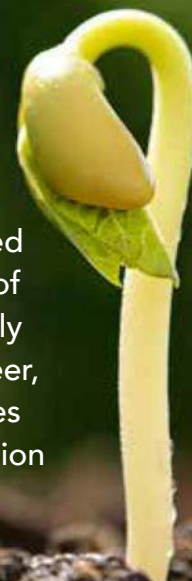


CROPLAND USE PRACTICES

CROPLAND USE PRACTICES	ACRES
No-till	96,476,496
Conservation Tillage	76,639,804
Conservation Easement	13,186,093
Planted to a Cover Crop	10,280,793
USDA Conservation Programs	27,485,000
Conventional Tillage	105,707,971
Other	59,914,257
TOTAL CROPLAND	389,690,414

DID YOU KNOW?

Each year, hundreds of thousands of trees are planted on farmland. More than half of America's farmers intentionally provide habitat for wildlife. Deer, moose, fowl and other species have shown significant population increases for decades.



©2017 American Farm Bureau Foundation for Agriculture®
Sources: Census of Agriculture (2012); USDA-NRCS

BIOTECHNOLOGY

Benefits Consumers

Biotechnology applied to medicine, agriculture and environmental management solves problems or enhances products through cellular and molecular processes.

Improved crop disease protection through biotechnology provides a more reliable harvest. This means food is consistently available and more affordable.

Oils from some biotech crops contain fewer saturated fats and trans fats after processing; others are higher in Omega-3 fatty acids, which are associated with improved heart health. Lower-fat beef and pigs with a higher meat-to-fat ratio also are possible thanks to biotechnology.

Non-bruising and non-browning apples and potatoes reduce food waste.

Biotech salmon contribute to more sustainable aquaculture systems by rapidly reaching market weight while consuming **25 PERCENT** less food compared to conventionally raised salmon.

Biotechnology saved the Hawaiian papaya industry after the papaya ringspot virus nearly wiped the crop out.

Scientists are exploring how biotechnology may someday expand choices for people with common food-related allergies, improve the flavor of food and enhance freshness.

BIOTECH CROPS GLOBALLY

- **TOP FIVE** countries in terms of acreage —
United States, Brazil, Argentina, Canada and India
- Grown by 18 million farmers, **90 PERCENT** of whom live in developing countries
- Reduced herbicide and insecticide use by **19 PERCENT**

DID YOU KNOW?

U.S. farmers grew biotech varieties of corn, cotton, soybeans, sugarbeets, papaya, alfalfa, canola, squash and potatoes on 180 million acres in 2016.

Help students understand biotechnology!
Download Bringing Biotechnology to Life Lesson Plans available at
agfoundation.org/bringing-biotech-to-life.

AQUACULTURE & SILVICULTURE are Important



PRODUCTION

AQUACULTURE is the production of aquatic animals and plants under controlled conditions for all or part of their life cycle. Louisiana has the most aquaculture farms (500) followed by Florida (393), Mississippi (244), Alabama (156) and North Carolina (146). The U.S. total is 3,093.

The **TOP FIVE** states for aquaculture sales by dollar value are:
Washington, Mississippi, Alabama, Louisiana and California.

COMPARING TYPES OF AQUACULTURE FARMS

(Individual categories do not equal U.S. total, as some farmers raise multiple types of fish.)

Food Fish	Mollusks	Crustaceans	Ornamental Fish	Sport Fish	Bait Fish	Misc. Fish
1,296	756	566	285	282	166	235

Food fish = Catfish, Salmon, Trout, Tilapia, etc.

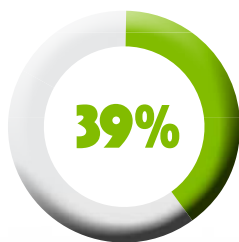
SILVICULTURE is a branch of forestry dealing with the management and cultivation of forest trees. About one-third of the U.S. (766 million acres) is covered with trees.

The U.S. Forest Service manages 193 million acres of forestland and grasslands which includes non-wildlife habitat and recreation areas as well as hydroelectric power plants and energy pipelines. The boundary lines of this natural resource total 276,100 miles, which equates to 11 trips around the Earth at the equator.

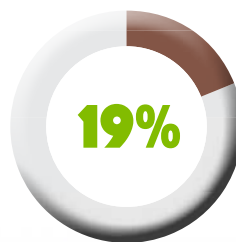
Careful forest management allows regular harvesting of timber without harming air and water quality and wildlife habitats. Replanting trees promptly after harvest ensures that new forests are in place to prevent soil erosion and protect water quality. U.S. forest plantings average about 2.1 million acres per year.

The **TOP FIVE** states for silviculture sales by dollar value are:
Georgia, Alabama, Mississippi, South Carolina and North Carolina.

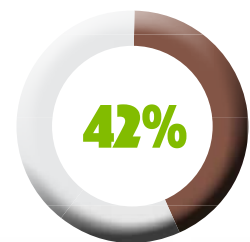
WHO OWNS AMERICA'S FORESTS?



Private Non-Corporate
(includes citizens)



Private Corporate
(includes forest products industry)



Federal, State & Local Governments

BEAUTIFUL AGRICULTURE

Nursery & Greenhouse Production



The nursery and greenhouse industry is made up of thousands of small family businesses that grow, retail, install and care for plants and landscapes. Grower cash receipts from nursery and greenhouse sales to retail and distribution businesses totaled **\$13.8 BILLION** in 2014.

There are 23,221 nursery and greenhouse operations in the U.S. The **TOP-PRODUCING STATES** by value are: **California, Florida, Oregon, Michigan** and **Texas**.

TYPICAL NURSERY CROPS

- Cut and live Christmas trees
- Fruit and nut plants for outdoor/landscape use
- Ornamental plants and trees with woody stems
- Ornamental vines
- Turfgrass sod and other ground covers

TYPICAL GREENHOUSE CROPS

- Aquatic plants
- Floral, foliage and vegetable plants including tomatoes
- Mushrooms, herbs and seeds
- Transplant seedlings and bulbs

©2017 American Farm Bureau Foundation for Agriculture®
Source: 2014 Census of Horticulture



Producing **MORE MILK** with **LESS FEED**



PRODUCTION

A typical Holstein dairy cow weighs 1,800 pounds and produces more than **60,000 POUNDS** of milk during her lifetime. A cow converts roughage and grains not consumed by people into high-energy foods.

ONE DAY'S PRODUCTION for a high-producing cow is **105 POUNDS** of milk that is **3.5 PERCENT FAT**. This yields:

4.8 POUNDS of butter or
8.7 GALLONS of ice cream or
10.5 POUNDS of cheese

FARM VALUE of 100 pounds of milk (about 12 gallons)¹ = **\$18.90**

FARMERS' COST:

Feed = \$ 6.62
Buildings/overhead = \$ 2.89
Labor = \$ 2.51
Supplies = \$ 1.81
TOTAL = \$13.83

FARMERS' RETURN = \$5.07

ONE DAY'S CONSUMPTION for a high-producing cow:

60 POUNDS of hay or silage
10-20 POUNDS of grain and concentrated feed
6-12 POUNDS of supplements (protein, fat, vitamins and minerals)
25-50 GALLONS of water

¹ Based on 2016 costs and prices

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Sources: USDA-ERS; America's Dairyland; University of Illinois



DID YOU KNOW?
The pounds of feed (grain, forage, etc.) a cow needs to eat to produce 100 pounds of milk has decreased by more than 40 percent on average in the last 30 years.



Agriculture is **MORE** than **FOOD**

Many products we use in our everyday lives are plant and animal byproducts of foods produced by America's farmers and ranchers.

MANUFACTURING

Adhesives, lubricants, solvents, detergents, polymers

CONSTRUCTION

Lumber, paints, brushes, tar paper, drywall, tool handles, particleboard

HEALTHCARE

Pharmaceuticals, surgical sutures, ointments, latex gloves, X-ray film

PERSONAL CARE PRODUCTS

Shampoo, soap, cosmetics, lotions, fingernail polish, toothpaste

TRANSPORTATION

Biofuels including ethanol and biodiesel, lubricants, antifreeze, tires, upholstery, packing materials

SPORTS

Uniforms, baseball bats, leather equipment and balls, shoes

PRINTING

Paper, ink

EDUCATION

Crayons, textbooks, chalk, desks, pencils, paper

ENTERTAINMENT

Strings for musical instruments

©2017 American Farm Bureau Foundation for Agriculture®
Source: USDA's Amber Waves Magazine





PIZZA comes from America's **FARMS & RANCHES**



TOP-PRODUCING STATES FOR PIZZA INGREDIENTS

ONIONS	California, Colorado, Georgia
TOMATO SAUCE (Fresh Tomatoes)	Florida, California
MUSHROOMS	Pennsylvania, California
PIZZA DOUGH (Winter Wheat)	Kansas, Oklahoma, Washington
CHICKEN	Georgia, North Carolina, Alabama
SAUSAGE (Hogs)	Iowa, Minnesota, North Carolina
PINEAPPLE	Hawaii
SPINACH	California, Arizona
GREEN PEPPERS	California, Florida
MOZZARELLA CHEESE (Dairy Products)	California, Wisconsin, New York

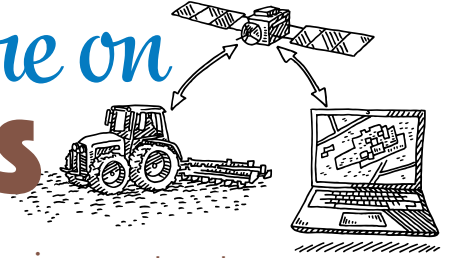


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Sources: USDA—NASS; American Pizza Community

DID YOU KNOW?

Americans consume more than **3 BILLION** pizzas annually; the average family eats pizza at home 30 times each year.

Precision Agriculture on MODERN FARMS



GPS-based mapping, auto-steer guidance systems and variable-rate technology for applying crop inputs such as pesticides and fertilizer are used by farmers to increase yields, lower costs and reduce chemical use, which benefits the environment. Technology also helps farmers identify precisely where (and how many) seeds to plant.

GPS technology used by farmers is more precise than what's used by most consumers; accuracy within a few inches or less is typical. Several GPS-based technology systems serve farm and ranch customers.

Auto-steer on tractors is hands-free and allows farmers to drive in straight lines with less effort, thereby reducing fatigue. It also ensures consistency when different people take a turn in the driver's seat.

The United Nations estimates the world population will grow to 9.7 billion people by 2050. Precision agriculture will play a role in helping farmers increase productivity to meet the growing demand for food.

PRECISION AG ADOPTION RATES

(U.S. corn and soybean acres)

- 50%** Auto-steer
- 40%** GPS-based yield mapping
- 30%** GPS soil maps
- 28%–34%** Variable-rate input technology

©2017 American Farm Bureau Foundation for Agriculture®
Source: USDA-ERS

ALTERNATIVE ENERGY

helps Fuel America



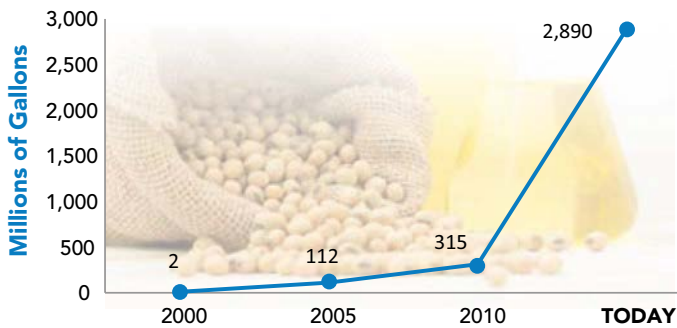
PRODUCTION

Renewable fuels, also known as biofuels, include ethanol (from corn) and biodiesel (from soybeans) and contribute to a cleaner environment while reducing pollution and reliance on foreign oil. They also contribute to the stability of the rural farm economy by creating a commercial market for crops.

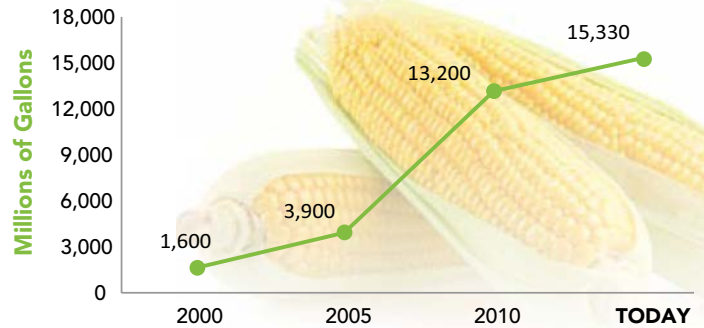
The use of ethanol in gasoline in 2016 reduced GHG emissions by 45.5 million metric tons — equivalent to removing nearly 9.3 million cars from the road for an entire year.

Cellulosic ethanol derived from grasses and agricultural waste, rather than corn, also offers great potential as a renewable energy source.

HISTORIC U.S. BIODIESEL PRODUCTION



HISTORIC U.S. FUEL ETHANOL PRODUCTION



©2017 American Farm Bureau Foundation for Agriculture®
Sources: Renewable Fuels Association; National Biodiesel Board; Census of Agriculture (2012)



DID YOU KNOW?

36,331 U.S. farms use solar panels to generate electricity. States with the most on-farm solar energy systems are California, 15 percent; Texas, 10 percent; and Colorado, 5 percent.

An **ACRE** of Land

An acre is about the size of a football field.

One acre of land can produce many different types of crops, depending on the fertility and type of soil, how much rain falls and how much the sun shines.

LOOK AT HOW MUCH CAN GROW ON ONE ACRE

Cotton | **821 lbs**

A bale of cotton weighs about 480 pounds.

One bale can be used to make 215 pairs of jeans or 313,600 \$100 bills.

Wheat | **2,784 lbs** (46.4 bushels)

One bushel of wheat produces about 42 pounds of flour, which can be used to make 42 loaves of bread or 42 pounds of traditional pasta. One bushel of whole wheat yields even more: 64 pounds of flour to make 64 loaves of bread or 64 pounds of pasta.

Strawberries | **50,000 lbs**

One serving of strawberries offers 160% of your daily vitamin C.

©2017 American Farm Bureau Foundation for Agriculture®
Sources: California Strawberry Commission; National Cotton Council of America;
North Dakota Wheat Commission

TOP STATES *for* PRODUCTION of Farm Products

U.S. FARM PRODUCTS

U.S. FARM PRODUCTS	MILLION	TOP 3 STATES BY VALUE OF CASH RECEIPTS (MILLION \$)		
1 CATTLE & CALVES	\$78,229	Nebraska \$12,552	Texas \$11,364	Kansas \$8,839
2 CORN	\$47,204	Iowa \$8,085	Illinois \$7,610	Nebraska \$5,763
3 DAIRY PRODUCTS	\$35,739	California \$6,293	Wisconsin \$5,121	New York \$2,558
4 SOYBEANS	\$33,184	Illinois \$4,761	Iowa \$4,334	Minnesota \$2,767
5 CHICKENS (Broilers)	\$28,710	Georgia \$4,252	North Carolina \$3,452	Alabama \$3,321
6 HOGS	\$21,032	Iowa \$7,512	Minnesota \$2,528	North Carolina \$2,284
7 CHICKEN EGGS	\$13,500	Iowa \$1,534	Ohio \$1,212	Indiana \$1,066
8 WHEAT	\$9,473	North Dakota \$1,655	Kansas \$1,416	Montana \$919
9 HAY	\$6,955	California \$958	Idaho \$440	Washington \$410
10 TURKEYS	\$5,708	North Carolina \$885	Minnesota \$801	Indiana \$610

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Source: USDA-ERS

AGRICULTURAL History



- 8000 B.C.** Animals and grain domesticated in the Middle East—the **birth of agriculture**.
- 1493** **Christopher Columbus** brought calves, goats, sheep, pigs, hens, citrus, melons and many kinds of vegetables to America.
- 1585** The **potato was introduced in Spain** from South America.
- 1607** English colonists in Jamestown, Virginia, planted grain, potatoes, pumpkins, melons, cotton, oranges and pineapples.
- 1609** **Native Americans taught the Jamestown settlers how to grow corn.**
- 1731** **Jethro Tull** introduced the **horse-drawn cultivator and seed drill** to English farming.
- 1783** Improved cattle, probably Shorthorns, were introduced to the U.S. from England.
- 1784** **James Small** invented the **iron plow** in England.
- 1793** **Eli Whitney** invented the **cotton gin**.
- 1798** John (**Johnny Applesseed**) Chapman planted some of his first apple trees in western Pennsylvania.
- 1834** **Cyrus McCormick** patented the **grain reaper**.
- 1837** **John Deere** began manufacturing **steel plows**.
- 1843** Sir John Lawes founded the **commercial fertilizer industry** by developing a process for making superphosphate.
- 1850** About 75–90 hours of labor required to produce 100 bushels of corn with walking plow, harrow and hand planting. Yields were about 40 bushels per acre.
- 1854** Self-governing **windmill** perfected.
- 1855** Michigan and Pennsylvania established the **first state agricultural colleges**.
- 1856** A **patent for condensing milk** was issued to Gail Borden.
- 1858** **Mason jars**, used for home canning, were invented.
- 1862** President Abraham Lincoln signed legislation creating the **first Department of Agriculture**. Lincoln also signed the **Morrill Land Grant College Act**.
- 1867** **Barbed wire** for livestock fencing invented.
- 1869** **Transcontinental railroad** completed.
- 1870** **Silos** came into use.
- 1874** Georgia established the **first state Department of Agriculture**.
- 1879** The grain combine was patented.
- 1881** **Hybridized corn** was produced.
- 1887** The **Hatch Experiment Station Act** was passed, providing federal grants to states for agricultural experimentation.
- 1888** The **first long-haul shipment of a refrigerated freight car** was made from California to New York.
- 1892** The **first gasoline tractor** was built by John Froelich.
- 1900** Special work projects for farm youth were organized in Illinois; the name **"4-H" was adopted in 1913**.
- 1900** The amount of labor needed to produce 100 bushels of corn is down to 35–40 hours using a 2-bottom gang plow, disk and peg-tooth harrow and 2-row planter. Yields remain about the same as in 1850.
- 1902** **Reclamation Act** passed, leading to water projects for irrigation.
- 1906** The **first rural electric line** was constructed at Hood River, Oregon. The Pure Food and Drug Law was enacted.
- 1911** The **first county Farm Bureau** was formed in Broome County, New York.
- 1914** Establishment of the **federal-state Extension Service** was a major step in direct education for farmers.
- 1919** **American Farm Bureau Federation** formally organized in Chicago, Illinois.
- 1921** The first farm market news radio report was broadcast over KDKA, Pittsburgh. The **Packers and Stockyards Act** was enacted.
- 1922** **Capper-Volstead Act** exempts farm cooperatives from federal antitrust statutes. The Grain Futures Trading Act was enacted.
- 1928** **Otto Rohwedder** introduced his **bread-slicing machine**.
- 1928** **Future Farmers of America** established in Kansas City, Missouri.



- 1933** The **Farm Credit Administration** was established, creating specialized credit for agriculture.
- 1938** The **Agricultural Adjustment Act** was enacted, authorizing farm price supports and adjustment programs.
- 1945** **Commercial fertilizer** use helps increase yields. Corn yields now 50 bushels per acre. One farmer works 10–14 hours to produce 100 bushels of corn with a tractor, 3-bottom plow, disk, harrow, 4-row planter and 2-row picker. About 16 percent of the U.S. population is involved in production agriculture.
- 1946** The first **National School Lunch Act** enacted.
- 1947** Federal **Insecticide, Fungicide and Rodenticide Act** passed.
- 1948** The **General Agreement on Tariffs and Trade** was put in place. It provided the rules for much of world trade for the next 47 years.
- 1949** **Agricultural Act of 1949 passed**, incorporating the principle of flexible price supports and giving surplus food to the needy.
- 1954** **Food for Peace Program** enacted.
- 1959** **Mechanical tomato harvester** developed.
- 1964** **National Food Stamp Act** passed.
- 1967** The **American Farm Bureau Foundation for Agriculture** is founded.
- 1970** **Plant Variety Protection Act** passed.
- 1979** **Grain embargo** imposed against the Soviet Union following its invasion of Afghanistan.
- 1981** **Soviet grain embargo** lifted.
- 1987** Less than three hours of labor and about one acre of land are required to produce 100 bushels of corn, with one farmer using a tractor, 5-bottom plow, 20-foot tandem disk, planter, 20-foot herbicide applicator, 12-foot self-propelled combine and trucks.
- 1988** **U.S.–Canada free trade accord** ratified.
- 1988** **Future Farmers of America** changed its name to the **National FFA Organization** to reflect the growing diversity of agriculture.
- 1990** Yeast for baking bread, introduced in Great Britain, is the **first biotech product available worldwide**.
- 1992** **Food and Drug Administration declares biotech foods** are “not inherently dangerous” and determines no special regulation is required.
- 1993** The **North American Free Trade Agreement** signed into law.
- 1994** **Farmers begin using satellite technology** to track and plan farming practices. USDA approves rBST to improve milk production in dairy cattle.
- 1996** **World Trade Organization**, the principal international forum governing world trade, is created. Food Quality Protection Act enacted.
- 1997** The first weed- and insect-resistant biotech crops—soybeans and cotton—are available commercially. **A sheep named “Dolly” is the first mammal cloned**.
- 2000** USDA unveils organic standards for foods and the official organic seal.
- 2001** **China admitted into the WTO**.
- 2008** **Food, Conservation and Energy Act** enacted.
- 2009** American Farm Bureau Federation celebrates 90th anniversary and begins using social media.
- 2010** AgChat Foundation launched to empower farmers and ranchers to connect communities through social media platforms.
- 2010** The **U.S. Farmers & Ranchers Alliance is formed** to increase consumer trust in farmers and today’s modern food system.
- 2012** Labor Department withdraws proposed labor rule that would have unnecessarily restricted youth from working in agriculture and on family farms.
- 2012** **USDA celebrates 150th anniversary**.
- 2014** Food and Agriculture Organization of the UN declares **2014 the International Year of Family Farms**.
- 2014** **2014 farm bill enacted**. Less than 2 percent of the U.S. population is involved in production agriculture.
- 2015** **FDA approves some genetically modified potatoes and apples**.
- 2016** Globally, 18 million farmers grow biotech crops; 90 percent of them on small, resource-poor farms in developing countries.
- 2017** **Agriculture Secretary Sonny Perdue**, a farmer and veterinarian, takes the reins at USDA.

FOOD *and* FARM Facts

Books, lesson plans, pocket guides and more online at:
dmsfulfillment.com/FarmBureau

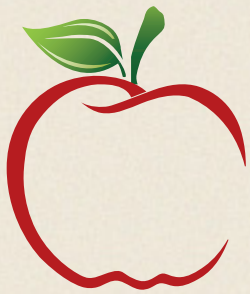
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A Look at *Alabama* Agriculture

Capital: Montgomery

Population: 4,871,547

Founded: December 14, 1819 (22nd)

State Bird: Yellowhammer

State Tree: Southern Pine

State Flower: Camellia

Number of Counties: 67

Largest City: Birmingham - 212,237

Number of Farms: 43,000

Average Farm Size: 206 acres

Total Farmland: 9 million acres



www.agclassroom.org/al

Climate & Soil

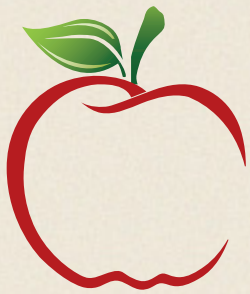
- Alabama has a mild climate.
- January temperatures average about 51° F in the southern part of the state, and about 46° F in the north.
- July temperatures average about 80° F throughout the whole state.
- The central and western counties in Alabama are known as the “Black Belt” because of the dark surface colors of many of the soils. Most of the soils of the Black Belt region of the state are used for timber production and pasture.
- Soil is one of Alabama’s most important natural resources. It is vital to agriculture and forestry as well as to urban development, water quality and wildlife habitat.

Crops & Livestock

- Cotton is the State’s largest row crop and is grown in 59 of Alabama’s 67 counties.
- Alabama’s green industry contributes \$2.9 billion annually to the state’s economy and employs 43,000 Alabamians.
- Peaches are the state’s leading commercial fruit.
- Half of the peanuts produced in the U.S. are grown within a 100 mile radius of Dothan, AL.
- Alabama farmers primarily raise catfish but also farm tilapia, shrimp and crawfish. Alabama’s catfish industry’s annual economic impact is \$158.4 million.
- Alabama is home to 1.2 million head of cattle and this is a \$2.5 billion industry.
- Broiler production is Alabama’s top agricultural commodity generating more than \$15 billion annually. Poultry production and processing employs close to 90,000 people.

General

- Farmland covers about 25% of the state.
- Two-thirds of Alabama, or 23 million acres is covered in forestland.
- The queen honeybee is the official state agricultural insect.
- Alabama’s top 5 commodities are: Poultry, Cattle and Calves, Greenhouse, Nursery and Sod, Cotton and Soybeans.



A Look at *Alaska* Agriculture

Capital: Juneau

Population: 731,007

Founded: January 3, 1959 (49th)

State Bird: Willow ptarmigan

State Tree: Sitka spruce

State Flower: Forget-me-not

Counties: 16 Boroughs and

11 Geographical Census Areas

Largest City: Anchorage - 396,150

Nickname: The Last Frontier

Number of Farms: 990

Average Farm Size: 858 acres

Total Farmland: 849,753 acres



www.agclassroom.org/ak

Climate & Soil

- Alaska's temperatures vary widely.
- The coastal areas range in temperature from 60.6°F to 28.9°F, while the inland areas average is more extreme from 72°F to -1.5°F. Average January temperatures range from -8°F in Barrow to 37°F in Valdez; average July temperatures range from 44°F in Barrow to 72°F in Fairbanks.
- Alaska has 318 different soil types.
- Permafrost is more than 2,000 feet deep on Alaska's North Slope.
- The state soil is Tanana, found in the Fairbanks area.
- An estimated 15 million acres of soil in Alaska is suitable for farming.

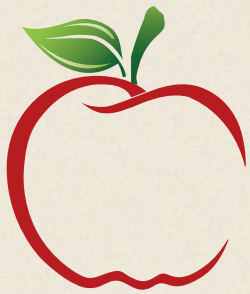
Crops & Livestock

- Summer days of nearly constant daylight allow some crops to be nurtured to enormous size.
- Jumbo crops include a world-record 19lb carrot, a 83lb rutabaga, and a 138lb cabbage!
- Barley was planted on 4,847 acres in 2017, with production for grain at about 225,217 bushels.
- Hay is planted on the most Alaska acreage: 24,238 acres.
- Greenhouse and nursery crops are the fastest-growing segment of Alaska's agricultural industry.
- Alaska exports more than one million metric tons of seafood each year, bringing over \$3 billion of new money into the U.S. economy.
- Alaskans rely on the sale of cattle, pigs, sheep, reindeer, milk, wool, antlers and velvet, bison, yak and elk.
- Alaska is the largest state (365 million acres), but fewer than 1 million acres are farmed.

General

- Alaska's oil production is 14% of the total U.S. production.
- Alaska is one-fifth the size of the contiguous U.S.; 488 times larger than the state of Rhode Island.
- 61% of Alaska is owned by the U.S. Government.
- The Tongass National Forest, at 16.9 million acres, is the largest national forest.
- The state fish of Alaska is the King Salmon. The state animal of Alaska is the moose.
- Alaska is divided into boroughs, instead of counties or parishes. There are 16 organized boroughs and 246 recognized tribal governments.
- Total cash receipts from farm marketing in 2017: nearly \$70.5 million.
- Other world record vegetables:

39 pound turnip	97 pound kohlrabi
106 pound kale	63 pound celery
65 pound cantaloupe	
- Alaska boasts the northernmost (Point Barrow), the easternmost (Pochnoi Point on Semisopchnoi Island in the Aleutians), and the westernmost (Amatignak Island in the Aleutians) points in the United States.
- Alaska has an estimated 100,000 glaciers.
- Of the 20 highest peaks in the United States, 17 are in Alaska. Denali, the highest peak in North America, is 20,310 ft. above sea level. The peak's name was officially changed in 2015 from the former Mount McKinley.



A Look at *Arizona* Agriculture

Capital: Phoenix

Population: 6,595,778

Founded: February 14, 1912 (48th)

State Bird: Cactus Wren

State Tree: Palo Verde

State Flower: Saguaro Cactus Bloom

Number of Counties: 15

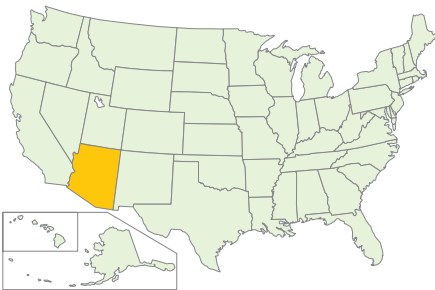
Largest City: Phoenix - 1.5 million

Nickname: Grand Canyon State

Number of Farms: 15,600

Average Farm Size: 1,670 acres

Total Farmland: 26.1 million acres



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Climate & Soil

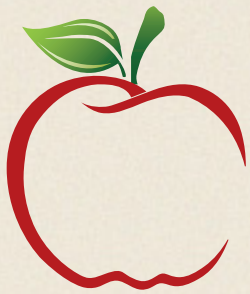
- The southern half of the state is mainly desert and is good for year round crop growth in irrigated areas. Arizona is on the western end of the Rocky Mountain chain and the northern half of the state is very mountainous. Cattle and sheep are the main agricultural commodities in this region. State elevation ranges from 70 ft. to 12,633 ft.
- With Arizona's diverse topography, the temperature average for southern Arizona, including the Phoenix metropolitan area, is lows of 30°F in the winter to over 100°F in the summer. In the northern portion of the state, the temperature fluctuates from 20°F to 95°F. The highest temperature recorded was 127°F. The lowest temperature recorded was -40°F.
- A major climate feature of the Southwest is the North American monsoon (a distinct seasonal change in wind direction of at least 120°). Arizona receives a majority of its rainfall during this late summer period. On average, there are 197 clear, sunny days with an average rainfall of 13.6" a year giving Arizona a very low humidity.
- Most Arizona soils have very low levels of organic matter, usually less than 1% by weight.
- Our top soils around the state average only about one-half inch.
- Most of the state's farming occurs in the alluvial basins of the Colorado, Salt, Verde and Agua Fria rivers. Massive irrigation projects with dams for water storage in lakes and reservoirs provide a large portion of the water for farming. Arizona has one of the most efficient irrigation networks in the world.

Crops & Livestock

- The top agricultural crop commodities in Arizona are lettuce, cotton and hay. Lettuce production represents 14% of the state's total farm receipts. Yuma, Arizona is the winter lettuce capitol of the world. Cotton produced 553,950 bales representing 6% of total farm receipts for the state. Hay was 5% of farm receipts.
- Arizona grows enough cotton each year to make more than one pair of jeans for every person in the United States.
- The top agricultural crop exports are vegetables, hay, cotton, and cottonseed.
- Arizona ranks 2nd nationally in its production of cantaloupe & honeydew melons, head & leaf lettuce, spinach, broccoli, cauliflower and lemons.
- Arizona alfalfa yield led the nation at 8.3 tons per acre, compared to 3.4 tons nationally.
- Cattle & calves and dairy goods are Arizona's most valuable farm products, with cattle & calves representing 18% of total farm receipts and dairy products 20%.
- There are approximately 1 million head of cattle & calves producing 386 million pounds of beef annually.
- There are 186,000 milk cows in the state with a yearly milk production of 23,382 pounds per cow.
- Arizona has over 165,000 hogs, and 150,000 head of sheep and lambs.
- The state has, on average, 1,600,000 laying hens which produce over 5.8 billion eggs a year.

General

- Agriculture is a \$9.2 billion industry for the state of Arizona.
- Arizona's land ownership is 48% federal and state, 28% Native American, and 24% private.
- The state has the largest contiguous stand of Ponderosa pine forest in the world.
- The state's land grant university is the University of Arizona in Tucson. <http://cals.arizona.edu>



A Look at *Arkansas* Agriculture

Capital: Little Rock

Population: 2,889,450

Founded: June 15, 1836 (27th)

State Bird: Mockingbird

State Tree: Pine Tree

State Flower: Apple blossom

Number of Counties: 75

Largest City: Little Rock - 191,930

Nickname: The Natural State

Number of Farms: 49,300

Average Farm Size: 281 acres

Total Farmland: 13.8 million acres



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Climate & Soil

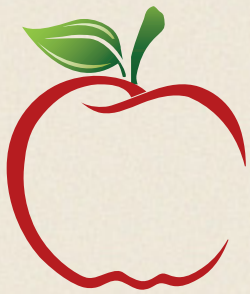
- Average monthly temperatures range from a high of 93° to a low of 26°.
- Average rainfall is between 44 and 54 inches annually.
- Arkansas has six regional land types: Ozark Mountains, Arkansas River Valley, Ouachita Mountains, West Gulf Coastal Plain, Mississippi Alluvial Plain and Crowley's Ridge.
- Stuttgart Soil is the state soil of Arkansas.
- Arkansas' growing season ranges from 180 days in the northwest to 240 days in the southeast.

Crops & Livestock

- Agriculture is Arkansas' largest industry, accounting for nearly \$16 Billion of Arkansas' economy.
- The poultry industry accounts for just over 35% of the total value of Arkansas agriculture.
- Arkansas is the largest producer of rice in the U.S.
- Soybeans account for 25% of the total value of Arkansas crops.
- Two-thirds of the corn grown in Arkansas is fed to the poultry industry.
- There are 1.9 million head of beef cattle in Arkansas.
- Arkansas farmers produce around 1.2 billion broiler chickens annually.
- Arkansas has 10 commodities that rank in the top 10 nationally:
 - #1 in Rice
 - #2 in Broilers
 - #3 in Cotton
 - #3 in Cottonseed
 - #3 in Catfish
 - #4 in Turkeys
 - #8 in Grain Sorghum
 - #8 in Eggs
 - #10 in Soybeans
 - #10 in Pecans

General

- Arkansas has 52,075 square miles of land, or 33.3 million acres.
- Forests cover more than 56% of Arkansas' landscape.
- Arkansas is home to the world's only diamond producing site open to the public.
- Arkansas is also home to:
 - Wal-Mart, the largest food retailer in the world
 - Tyson Foods, one of the largest poultry producers in the U.S.
 - Riceland Foods, the largest rice miller and marketer in the world
 - Anderson Fish Farms, the largest producer of baitfish in the world



A Look at *California* Agriculture

Capital: Sacramento

Population: 39,937,489

Founded: September 9, 1850 (31st)

State Bird: California quail

State Tree: Redwood

State Flower: Poppy

Number of Counties: 58

Largest City: Los Angeles - 4,015,936

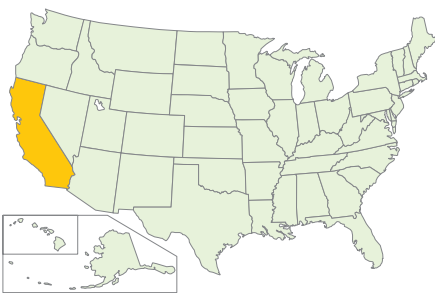
Nickname: The Golden State

Number of Farms: 69,400

Average Farm Size: 350 acres

Total Farmland: 24.3 million acres

Area: 163,696 square miles



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Climate & Soil

- California's moderate, Mediterranean climate, coupled with the state's fertile soil and diverse land resources, allows year-round production of many commodities. Some of those with year-round crop seasons include lemons, artichokes, avocados, broccoli, cabbage, carrots, cauliflower, celery, lettuce, mushrooms, potatoes, spinach and squash.
- The San Joaquin series is the state soil.
- California is home to more than 2,000 soils, located in the state's unique blend of valleys, foothills, mountains, coastal areas and deserts.

Crops & Livestock

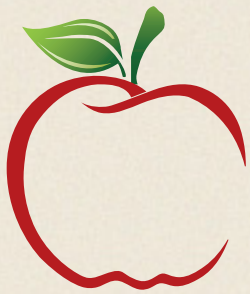
- California produces more than 400 crops. Of those, the following are commercially produced only in California: almonds, artichokes, dates, figs, kiwifruit, olives, persimmons, pistachios, pomegranates, prunes, raisins and walnuts.
- California grows more than half of the nation's fruits, vegetables and nuts from just three percent of the nation's farmland.
- California leads the nation in milk production with more than 1,781,000 dairy cows.
- Primary livestock production includes: cattle and calves, beef cow operations, dairy cows, hens and pullets, broilers, turkeys, hogs and pigs, sheep, lambs and goats (dairy, meat and milk).
- Over 4,000 million eggs are produced each year by 14.5 million hens and pullets of laying age.
- Bee colonies, of which there are over 740,000 in the state, are included in the category of livestock. They are used for pollination of at least 90 different crops, valued at \$11.7 billion.

General

- California is the nation's top agricultural state, and has been for more than 50 years
- There are 69,400 farms and ranches in California.
- The state's average farm size is 350 acres.
- More than 95 percent of California farms are family farms or partnerships.
- The state's two leading commodities in cash receipts are milk (\$6.37 billion) and grapes (\$6.25 billion).
- The top 10 commodities include: milk and cream, all grapes, almonds, cattle and calves, pistachios, strawberries, lettuce, floriculture, all tomatoes, and oranges.
- California's Secretary of Agriculture is Karen Ross.

Economy

- California exports approximately 25% of its agricultural production by volume, accounting for over \$21.02 billion in value.
- California is the largest food and agricultural economy in the nation.
- California's farms and ranches received approximately \$49.9 billion for their output in 2018.



A Look at *Colorado* Agriculture

Capital: Denver

Population: 5,607,154

Founded: August 1, 1876 (38th)

State Bird: Lark bunting

State Tree: Blue Spruce

State Flower: Rocky Mountain

Columbine

Number of Counties: 64

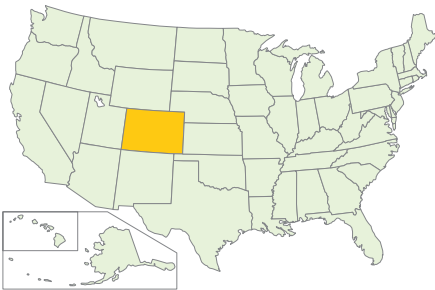
Largest City: Denver - 693,060

Nickname: The Centennial State

Number of Farms: 33,800

Average Farm Size: 938 acres

Total Farmland: 31.7 million acres



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Climate & Soil

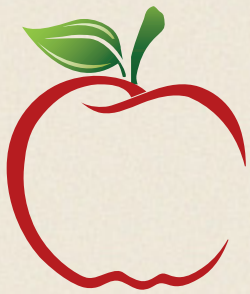
- Colorado's climate is generally dry and sunny. It is a semi-arid state averaging 15" of precipitation.
- Colorado has dry winters, wetter springs and summer, highly changeable weather, often windy and the occasional monstrous thunderstorms with damaging hail.
- Because of the difference in altitude found in the state there is a large range of temperatures.
- The soils in the eastern plains regions and the valley of the western mountains are the most fertile in the nation.
- Colorado's State soil is "Seitz soil" that consists of very deep, well drained, slowly permeable soils that were formed from igneous, sedimentary and volcanic rocks. Seitz soils are found on mountains, mainly in southwestern and central Colorado.
- Colorado's warm days and cool nights help lock in sweetness in fruits such as peaches and melons.

Crops & Livestock

- Colorado ranks first nationally in production of proso millet. This annual grass is grown as a grain crop and is used for bird and livestock feed.
- Colorado's production of sunflowers ranks fourth in the nation.
- The San Luis Valley is the largest and highest alpine valley in the world capable of producing crops. Elevation in the valley ranges from 7,400 to 8,000 feet.
- Colorado produces more than 100 million pounds of pinto bean each year, ranking ninth nationally in dry bean production.
- Colorado's leading vegetable crops are potatoes, cabbage, and onions.
- Colorado's leading fruit crops are peaches and apples.
- Cattle and Calves is Colorado's number one agricultural commodity with 2.8 million head of cattle in the state.
- Colorado's sheep and lamb totals rank third in the nation and Colorado wool production ranks fourth.
- In 2016, Colorado's 155,000 milk cows produced more than 456 million gallons of milk.
- There are 4.6 million layers in Colorado producing more than 1.3 billion eggs each year.
- There are over 40 aquaculture producers (or fish farmers) in this state.
- There are 32,000 bee colonies in Colorado producing nearly 1.5 million pounds of honey every year.
- Sugarbeet production in Colorado totaled 927,000 tons in 2016, ranking Colorado ninth nationally.
- Colorado's grape growing regions range in elevation from 4,000 to 7,000 feet and are among the highest vineyards in the world.

General

- Nearly half of the state's total land area is used for production agriculture.
- There are more than 170,000 jobs in Colorado related to agribusiness, contributing more than \$40 billion annually to Colorado's economy.
- Colorado exports nearly \$2 billion in products. Canada, Mexico, Japan, Korea, and China receive the largest share of Colorado food products.



A Look at *Connecticut* Agriculture

Capital: Hartford

Population: 3,590,000

Founded: January 9, 1788 (5th)

State Bird: Robin

State Tree: White Oak

State Flower: Mountain Laurel

Number of Counties: 8

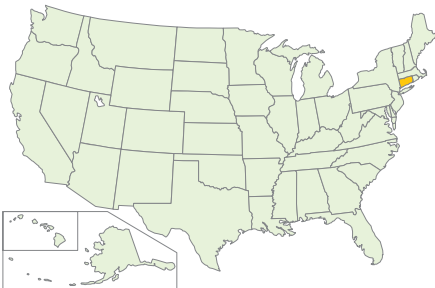
Largest City: Bridgeport - 136,405

Nickname: The Constitution State

Number of Farms: 5,977

Average Farm Size: 73 acres

Total Farmland: 436, 406 acres



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Climate & Soil

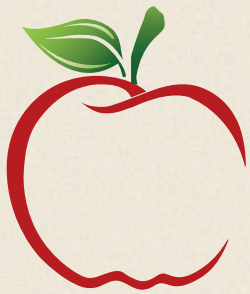
- Connecticut's weather is relatively mild
- Year round average temperature range is from 17° F to 85° F.
- The relatively mild climate allows for a long growing season with the first killing frost generally in mid-October and the last in mid-April.
- The growing season is fairly long, with the first killing frost generally in mid-October and the last in mid-April.
- Despite Connecticut's small size, there is some variety in climate, with temperatures in the northern hills as much as 10° lower than those in the central valley year-round.
- The state has moderate rainfall, with an equal distribution of precipitation among the four seasons.
- Connecticut soils are glaciated, formed by glacial processes.
- The state soil is Windsor, soils consisting of very deep, excessively drained, rapidly permeable solids formed in glacial meltwater sediments. These soils are important for the production of fruit and vegetable crops, silage corn and ornamental shrubs and trees.
- The richest soils in Connecticut are along the Connecticut River in the Connecticut River valley.

Crops & Livestock

- Nursery and Greenhouse products are the top crops in Connecticut accounting for 45% of farm receipts. Greenhouse and nursery products include ornamental shrubs, flowers, bedding plants, hanging plants, young plants, Christmas trees, sod and greenhouse vegetables.
- Top crop items include: Fruit crops (primarily apples and peaches), vegetables, tobacco, forage: hay, haylage, grass silage and green crop; and corn for silage.
- A listing of farm-raised livestock in the order of importance to the Connecticut economy is dairy cows, chickens, horses, beef, sheep, dairy and meat goats, as well as hogs.
- More than 70,000 acres of shellfish farms are now under cultivation in Connecticut's coastal waters accounting for \$30 million plus in farm-gate sales annually. These shellfish farms harvest 450,000 bushels of hard clams and 200,000 bushels of oysters annually.
- Connecticut's most valuable livestock products are dairy products (milk), cheese, chicken eggs and aquaculture products.
- Connecticut has 750 beekeepers reporting 6000 bee colonies. These bee colonies enhance the pollination of Connecticut's specialty crops. In addition, Connecticut has 9 semi-commercial beekeepers providing colonies to the orchards in the state. In 2013 orchard producers had to rely on out of state beekeepers to provide colonies for pollination.
- Niche markets exist for camelids: alpacas and llamas, broilers, buffalo (bison), turkeys and farm produced pheasants.
- Niche markets also exist for specialty crops, organic vegetables, pick your own (vegetables and fruits), goat milk, raw milk, maple syrup, tag and cut your own Christmas trees, and value added products such as jams, jellies, pickles and sauces.

General

- Connecticut's top agricultural commodities in 2012 were: greenhouse – nursery, dairy products, aquaculture, chicken eggs, fruits, vegetables, tobacco and cattle and calves.
- Connecticut agriculture adds 4.6 billion dollars to the state economy annually.
- 60% of the land area in Connecticut is in farmland, open space and forest: an important natural resource base and enhancement to the environment.



A Look at *Delaware* Agriculture

Capital: Dover

Population: 885,122

Founded: December 7, 1787 (1st)

State Bird: Blue Hen Chicken

State Tree: American Holly

State Flower: Peach Blossom

Number of Counties: 3

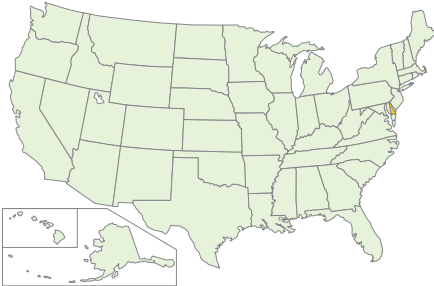
Largest City: Wilmington - 72,826

Nickname: The First State

Number of Farms: 2,500

Average Farm Size: 200 acres

Total Farmland: 510,253 acres



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Climate & Soil

- Delaware has a humid climate with hot summers and mild winters.
- State average temp in the summer is 76°F, and in the winter 35°F.
- The average of amount precipitation is 45 inches (including rain, melted snow and other forms of moisture).
- Delaware is protected from the cold winds of winter due to the mountains in Pennsylvania.
- The state soil is called Greenwich.
- The Greenwich series consists of very deep, well drained soils, high in silt. Greenwich is categorized as a Prime Farmland Soil, which means it is one of the most productive soils in the state in agriculture and forestry, in addition to being one of the best suited soils to construction. The soil profile is a brown loam topsoil, 10 inches thick (plow layer); a yellowish brown and strong brown loam subsoil.
- Patches of gravel and coarse red sand and silt cover some of the rocky Piedmont of Northern Delaware.
- A region just south of the Piedmont is made up of a mixture of clay and loam soils.

Crops & Livestock

- Corn is Delaware's number one crop, it is grown on 2/5 of the cultivated land; soybeans are second.
- Apples are Delaware's leading fruit crop.
- Broilers are Delaware's most valuable farm product.
- Livestock and related products account for 70% of Delaware's farm income.
- Southwestern Delaware raises the most pigs.

General

- The top 5 agricultural commodities in 2008 were: broiler/meat chickens, corn, soybeans, wheat, and dairy products.
- The value of farm sales topped \$1 billion dollars in 2008.



A Look at *District of Columbia* Agriculture

Capital: United States of America Capital

Population: 720,687

Founded: July 1790

State Bird: Wood Thrush

State Flower: American Beauty Rose

State Tree: Scarlet Oak

Number of Counties: 4 Quadrants

Largest City: Itself - 68.3 square miles

Largest County: Northwest Quadrant

Nickname: The District or WDC

Number of Farms: 14 farm markets

Total Farmland: 11.5 Million acres

School Gardens: 154

Total Farmland: 11.5 million acres



www.agclassroom.org/dc

Climate & Soil

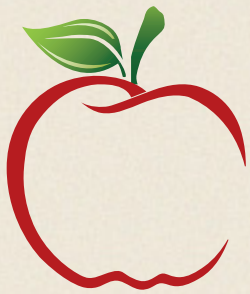
- The average high temperature in WDC is 74.1°F, while the average low is 48°F and the annual average rainfall is 39.7 inches.
- DC is surrounded by the Potomac River on the south and west, Anacostia River on the east.
- DC is bordered by Maryland on the north and east and Virginia on the west and south.
- Most of the soils in the District of Columbia have been altered by urbanization and other activities of man. 81% of the area has been disturbed during urbanization and about 14% of its soil is made from various kinds of fill materials.
- Approximately 19% of the area is relatively undisturbed.
- Much of "The Mall" (from Capital Building to Lincoln Memorial, including the Smithsonian Buildings area, White House and the Jefferson Memorial) was created when the tidal/flood plain was drained and filled with materials, the Washington Monument grounds serving as a pivotal point.

Crops & Livestock

- Most native vegetation has been destroyed by urbanization. Rock Creek Park (1,754 acres), Fort Dupont (376 acres) and Glover-Archbold Park (183 acres) are the areas where native vegetation species still flourish.
- The DC and National Park Service provides the beautiful Cherry Tree displays, Botanical Gardens, Arboretum, Aquatic Garden, Azalea and Tulip Gardens, Parks, Zoo with vegetation from around the world, global nations Embassies provide a view of their native plants.
- DCs main livestock are honeybees, with 314 hives throughout the District on rooftops, schools, universities, churches, gardens, backyards, parks, botanical gardens, etc.
- There are also individuals who raise chickens, goats, sheep, birds, horses, rabbits, in small numbers and deer, racoon, opossum etc. wildlife thrive in the natural parks.
- DC Sustainable Urban Agriculture Act: DC is driving to develop a culture of environmental stewardship thru DC Environmental Literacy Plan which ensure that schools are creating unique and empowering opportunities both in and outside of the classroom for students to grow into environmental stewards and gain the knowledge, attitudes and skills necessary to make informed decisions concerning the relationships among natural and urban systems.

General

- 23.8 Million Visitors a year of which 21.9 million are from the USA. - 55% for vacation - 19% to visit friends and relatives - 11% for conventions - 8% for business - 6% for education
- Top three international country visitors are from China, U.K. and India
- True Cosmopolitan area, its inhabitant includes individuals from almost every country in the world (Embassies and Universities). There is at least one restaurant which serves food from almost every country in the world.
- Top 3 Best US City for Parks (a park within 4 blocks from any location)
- 58 Museums and Art Galleries which includes 21 Smithsonian Institutions
Ranked in Top 5 of most inspiring cities for young artists
In Top 15 of world's Best City for Arts and Culture
- DC has 5 Food Incubators, Ranked #1 Restaurant City of the Year in 2018
- Ranked #1 for Entrepreneurship Growth, #1 City for Woman in Tech, #2 in Female Entrepreneurship, 3rd Best Place to Start a Business
- Baseballs' seventh inning stretch began in WDC by President William Taft when it stood up to stretch and the crowd responded by standing.
- The Library of Congress is the largest library in the world.



A Look at *Florida* Agriculture

Capital: Tallahassee

Population: 21,477,737

Founded: March 3, 1845 (27th)

State Bird: Mockingbird

State Tree: Sabal Palmetto

State Flower: Orange Blossom

Number of Counties: 67

Largest City: Jacksonville - 911,507

Nickname: Sunshine State

Number of Farms: 47,000

Average Farm Size: 201 acres

Total Farmland: 9.25 million acres



www.agclassroom.org/fl

Climate & Soil

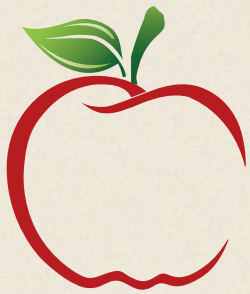
- The climate of Florida is very mild.
- The temperatures across the state average in the low 80's.
- The growing season ranges from 100-200 days or longer.
- Florida receives an average of 54 inches of precipitation each year. Central Florida is known as the lightning capital of the United States.
- Myakka fine sand soil is unique to Florida. This soil is recognized as the state soil because it occurs in 1.5 million acres of flatwoods, making it the single most extensive soil in the state.

Crops & Livestock

- Florida produces 44% of the annual US production of citrus. About 93% of commercial orange production in the state is destined for processing, mostly as orange juice.
- Greenhouse and nursery products are Florida's top leading crops financially yielding \$2.088 billion.
- Florida ranks 2nd in US production of fresh vegetables.
- Florida ranks 3rd in the Southeast and 13th nationally in the production of beef calves.
- Florida is consistently ranked in the top 10 states in total overall aquaculture value. Florida produces the greatest variety of aquatic species of any state in the nation.
- The top 5 agricultural commodities in 2018 were: greenhouse/nursery products, oranges, sugarcane, cattle and calves, and dairy products.
- The Florida Thoroughbred industry has produced 52 National Champions, 28 breeders cup winners, and a Triple Crown-winner.

General

- Florida ranks 20th nationally for total agricultural sales in the United States.
- Agriculture is the second largest industry in the state, tourism is the largest.



A Look at *Georgia* Agriculture

Capital: Atlanta

Population: 10.62 million

Founded: January 2, 1788 (4th)

State Bird: Brown Thrasher

State Tree: Live Oak

State Flower: Cherokee Rose

Number of Counties: 159

Largest City: Atlanta - 498,000

Nickname: Peach State

Number of Farms: 42,439

Average Farm Size: 235 acres

Total Farmland: 9.95 billion acres



www.gfb.ag/aitc

Climate & Soil

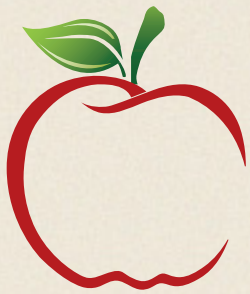
- A humid subtropical climate with mild winters and hot moist summers is characteristic of most of Georgia. This, combined with a variety of soil types from the coast to the mountains, makes it an ideal place to produce a diverse variety of crops and livestock.
- Monthly average temperatures range from a high of 92.2°F to a low of 32.6°F.
- The average annual rainfall varies from 40" in central Georgia to more than 75" in northeast Georgia.
- Geographically, Georgia can be divided into eight soil provinces or major land resource areas. They are Southern Appalachian, Sand Mountain, Blue Ridge, Southern Coastal Plain, Black Lands, Southern Piedmont, Sand Hill, and Atlantic Coast Flatwoods.
- Georgia is the leading kaolin clay-producing state in the U.S. Georgia is also a leader in the production of granite, marble, barite, and bauxite.

Crops & Livestock

- In 2018 Georgia peanut farmers grew almost half of all the peanuts in the United States. Their farm gate value was more than \$600 million.
- Georgia was the first colony to produce cotton commercially, first planting it near Savannah in 1734. Georgia ranks second nationally in cotton production. Its value was more than \$792 million in 2018.
- Although Georgia is called the Peach State, it actually ranks third in United States peach production behind California and South Carolina. In 2018, the Georgia peach crop sales totaled \$48 million.
- In 1986, Georgia passed legislation giving Vidalia onions, known by many as the sweetest onion in the world, legal status and defining the 20-county production area. The Vidalia onion was named Georgia's official state vegetable in 1990.
- Fruit and Vegetable production has increased significantly in Georgia. Georgia's top six fruits and vegetables are peaches, sweet corn, bell peppers, watermelon, blueberries and cucumbers.
- Georgia leads the nation in broilers and value of egg production. In 2018 broilers were valued at \$4.4 billion dollars and eggs at more than \$850 million dollars.
- Beef cattle are raised in all of the counties in Georgia.

General

- One of out of seven Georgians works in agriculture, forestry or a related sector.
- Agriculture contributes more than \$76 billion annually to Georgia's \$1.07 trillion dollar economic output.
- More than 67% of Georgia is in forestland. Forestry has a \$36 billion revenue output in Georgia.
- Georgia's top ten commodities in order of their rank are broilers, eggs, cotton, beef, timber, peanuts, greenhouse, dairy, blueberries and corn.
- Georgia ranks first in the U.S. in the production of peanuts, pecans, rye, eggs and broilers.
- Coca-Cola was invented in May 1886 by Dr. John S. Pemberton in Atlanta, Georgia.
- Plains is the home of Jimmy Carter, the 39th President and a Nobel Peace Prize Winner in 2002.
- Georgia was the first state to charter a state university, The University of Georgia. It was founded in 1785.



A Look at *Hawaii* Agriculture

Capital: Honolulu

Population: 1,295,178

Statehood: August 21, 1959 (50th)

State Bird: Nene (Hawaiian goose)

State Tree: Kukui

State Flower: Yellow hibiscus

Number of Counties: 5

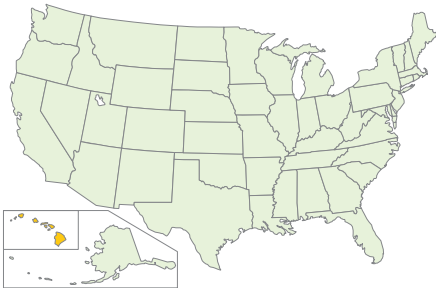
Largest City: Honolulu - 371,657

Nickname: Aloha State

Number of Farms: 7,500

Average Farm Size: 149 acres

Total Farmland: 1.1 million acres



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Climate & Soil

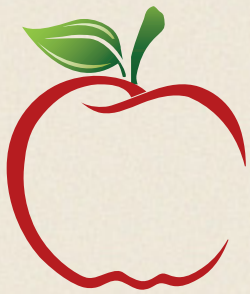
- Cool trade winds keep the climate of Hawaii mild all year.
- State average temp in July is 77°F, and in January 71°F.
- The average of amount precipitation is 400" in the mountains to less than 10" in the lowlands.
- Snow sometimes covers the highest points on the islands of Hawaii and Maui.
- The soil is very rich due to heavy rainfall.

Crops & Livestock

- Greenhouse and nursery products are the top commodities in the state. They account for almost a million dollars annually.
- Hawaii ranks sixth nationally for the sale of tree nuts.
- The island of Hawaii has several large cattle ranches. Cattle and calves are the fifth most important commodity in the state.
- The other top commodities in the state in 2008 were: sugarcane, macadamia nuts, and coffee.
- On the island of Oahu, dairy and egg farms are a major source of farm income.
- Pineapple is an important crop for the island of Maui.
- The islands of Maui and Kauai also raise cattle and hogs.

General

- Farmland accounts for 27% of Hawaii's total land useage.
- The Alphabet for the native Hawaiian language only has 12 letters A E H I K L M N O P U W.
- Hawaii has 152 certified organic farm operations.
- The average age of a farm operator in Hawaii is 59 years old.
- Hawaii ranks 42nd nationally for total agricultural sales within the United States.



A Look at *Idaho* Agriculture

Capital: Boise

Population: 1,787,065

Founded: July 3, 1890 (43rd)

State Bird: Mountain Bluebird

State Tree: Western White Pine

State Flower: Syringa

Number of Counties: 44

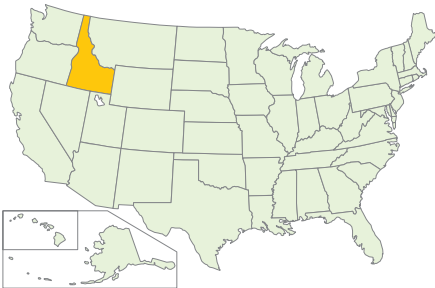
Largest City: Boise - 228,950

Nickname: Gem State

Number of Farms: 24,600

Average Farm Size: 467 acres

Total Farmland: 11.5 million acres



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Climate & Soil

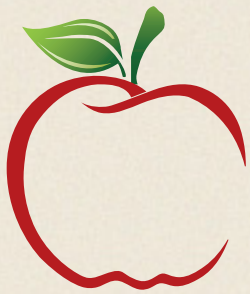
- Southern Idaho typically receives 12" of rain each year and Northern Idaho typically receives 25".
- The climate is influenced by Pacific weather patterns, which help moderate temperature extremes.
- The Northern part of Idaho averages 22°F in January and 85°F in July. The Southern part of Idaho averages 21°F in January and 90°F in July.
- There are 50 Soil Conservation Districts in Idaho.

Crops & Livestock

- Idaho is ranked in the top ten in the nation for 26 different crops and livestock.
- Idaho ranks first nationally for potato production with nearly 1/3 of the US total. Idaho grows 14 billion pounds per year of America's favorite vegetable.
- Idaho also ranks 1st in production of barley, peppermint, and Alfalfa hay.
- Idaho supplies 70% of the commercial trout production in the U.S. making it the No. 1 trout-producing state in the country.
- Idaho is the 2nd largest grower of sugarbeets and hops in the U.S.
- Idaho ranks 3rd in the nation for milk and cheese production.
- Idaho is known for its seed industry producing 70% of the hybrid temperate sweet corn seed produced in the world; and is also a leading supplier for alfalfa seed, Kentucky Bluegrass seed; and carrot, onion, turnip, and lettuce seeds.
- First grapes grown in Idaho date back to 1864 and Idaho now has over 1,600 acres that produce both wine and table grapes with more than 50 wineries.

General

- Idaho produces more than 185 commodities from over 24,000 farms and ranches.
- Idaho has two time zones – Northern Idaho (dry land farming) is in the Pacific time Zone. Southern and Eastern Idaho are in the Mountain Time Zone.
- Idaho has a very extensive system of dams, reservoirs, canals and drainage ditches allowing water to be used many times in many different ways. There are 3.2 million acres of irrigated land with the state.
- Idaho covers an area of 82,751 square miles or 52.8 million acres.
- The McDonald French Fry was developed by Idaho Agriculture Leader J. R. Simplot who developed the dehydrated shoestring potato that could be quickly frozen.



A Look at *Illinois* Agriculture

Capital: Springfield

Population: 12,630,000

Founded: December 3, 1818 (21st)

State Bird: Cardinal

State Tree: White Oak

State Flower: Violet

Number of Counties: 102

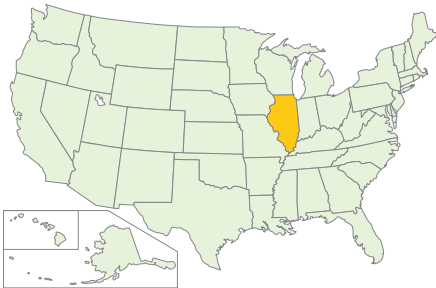
Largest City: Chicago - 2,693,000

Nickname: Land of Lincoln

Number of Farms: 75,900

Average Farm Size: 375 acres

Total Farmland: 27 million acres



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Climate & Soil

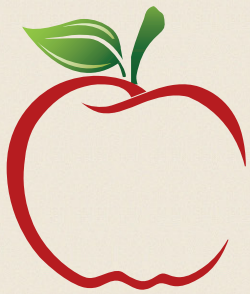
- The climate of Illinois is good for crop growth.
- Hot summers help plants grow and cold winters help soil replenish itself.
- Southern Illinois typically receives 40" of rain each year and Northern Illinois typically receives 34".
- Winds from the Gulf of Mexico bring most of the rain and snow to Illinois.
- The Northern part of Illinois averages 25°F in January and 75°F in July. The Southern part of Illinois averages 36°F in January and 79°F in July.
- The average depth of top soil in Illinois is 12.6".
- Illinois has some of the richest and most productive soil in the world.
- "Drummer" soil series has been designated the official state soil.
- Illinois has approximately 1,500 different soil types.

Crops & Livestock

- Corn and soybeans are the top Illinois crops. Corn and Soybeans combined account for over \$13 billion dollars in farm sales.
- Most corn is used for livestock feed, but can also be used for ethanol (a fuel additive), plastics, foods, and much more.
- Illinois produces enough corn each year to fill a train of box cars stretching more than 7,600 miles from here to Hong Kong.
- Most soybeans are used for livestock feed but can also be used for soybean oil, medicines, soy ink, paints, cosmetics, and much more.
- Illinois led the nation in the production of soybeans in 2018 and 2019, and typically ranks #2 nationally in corn production.
- Illinois leads in the production of pumpkins and horseradish, both of which are specialty crops.
- There are 1,380,000 cattle, 4,050,000 pigs, 69,000 sheep and 200,000 horses in Illinois.
- Illinois dairy cattle produce over 1.8 million pounds of milk each year.
- Illinois poultry producers produce over 1.4 million eggs each year.

General

- Each Illinois farmer feeds 156 people.
- In Illinois, 27 million acres of land is used for agricultural purposes. 4.3 million acres are urban and built up land. 1.9 million acres are rural transportation and governmental lands.
- Illinois ranks 6th nationally in agricultural sales in the United States.



A Look at *Indiana* Agriculture

Capital: Indianapolis

Population: 6.83 million

Founded: December 11, 1816 (19th)

State Bird: Cardinal

State Tree: Tulip tree

State Snack: Popcorn

Number of Counties: 92

Largest City: Indianapolis - 882,039

Nickname: Hoosier State

Number of Farms: 56,649

Average Farm Size: 264 acres

Total Farmland: 15 million acres



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Climate & Soil

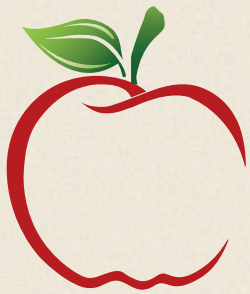
- Indiana's growing season ranges from 160 to 190 days.
- The state's average annual rainfall ranges from 37" in the north to 47" in the south.
- Indiana's normal temperature ranges from 70 to 80° F in the summer and 25 to 35° F in the winter.
- Altitude varies from a high of 1,257 feet above sea level in east central Wayne County to a low of 320 feet in southwestern Posey County.
- The flat areas of Miami soils are used mainly for corn, soybeans, or winter wheat.
- The steeper areas are used as pasture, hayland, or woodland.
- There are 794,994 acres of Miami soils in Indiana.
- Indiana is nationally ranked for agricultural production because of the highly productive Miami soils along with other prime farmland soils in the State.

Crops & Livestock

- Indiana ranks 5th nationally in the production of corn; producing 982.8 million bushels in 2018.
- Indiana ranks 5th in the production of soybeans with 346.32 million bushels produced in 2018.
- Indiana ranks 5th in the production of hogs with 4.2 million hogs.
- Indiana is the 2nd largest producer of popcorn in the nation producing more than 20% of the U.S. popcorn supply.
- No. 1 in commercial duck production, wood office furniture and wood kitchen cabinet manufacturing No. 2 in popcorn production, chickens and total eggs produced.
- No. 3 in spearmint, tomatoes (all) and cropland planted with a cover crop.
- No. 4 in pumpkins, peppermint and turkeys raised.
- No. 5 in watermelon production.

General

- Agriculture contributes an estimated \$31.2 billion to Indiana's economy.
- Indiana is the eighth largest agricultural exporter in the nation, exporting just over \$4.6 billion in 2017.
- The value of unprocessed agricultural commodities sold was \$11.1 billion in 2017.
- The average age of an Indiana farmer is 55.5 years old.
- In 2020 Indiana farmers planted a new state record of 1.5 million acres of living or overwintering covers (cover crops).
- Indiana is the tenth largest farming state in the nation.
- Eight major interstate highways cross the state and provide easy one-day access to 80% of the U.S. population.



A Look at *Iowa* Agriculture

Capital: Des Moines

Population: 3,190,369

Founded: December 28, 1846 (29th)

State Bird: Eastern Goldfinch

State Tree: Oak

State Flower: Wild Rose

Number of Counties: 99

Largest City: Des Moines - 215,636

Nickname: The Hawkeye State

Number of Farms: 85,300

Average Farm Size: 359 acres

Total Farmland: 30.6 million acres



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Climate & Soil

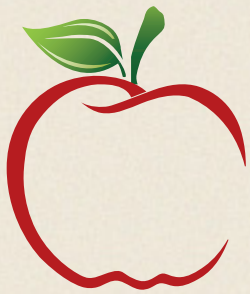
- Iowa temperature averages 23°F in January and 75°F in July.
- Iowa's average precipitation is 34", with January being the driest month and June is the wettest. Snowfall accumulation averages 30".
- Iowa is ranked 2nd for generating wind energy. Iowa ranks first in percentage of electricity powered by wind at 36%.
- The Iowa state soil is a series called "Tama." Most of Iowa's soil parent material is Loess or Glacial Till.
- Iowa has at least 11,000 different soils.
- Iowa has some of the richest and most productive soil in the world.

Crops & Livestock

- Iowa ranks 1st in the US in corn production and 2nd in soybean production. Iowa ranks 1st in total grain storage capacity, holding 3.6 billion bushels!
- The average corn yield is 182 bushels per acre. Iowa farmers harvested 13.5 million acres of corn (2.3 billion bushels) in 2020.
- The average soybean yield is 53 bushels per acre. Iowa harvested 9.3 million acres (493 million bushels) in 2020.
- In 2020, Iowa produced 5.7 million bushels of oats and ranks 5th nationally.
- 45% of Iowa's corn crop is used to produce ethanol.
- Iowa leads the nation in hog, egg, and commercial red meat production. In 2019, Iowa's commercial red meat industry produced 8.96 billion pounds. Iowa also ranks 3rd in milk goats (29,000 head).
- There are 24.8 million hogs in Iowa (more than 30% of the nation's hogs) in Iowa. That's over 7 hogs per person in the state!
- Iowa has 47 million egg laying hens that produced 12.4 billion eggs in 2020. That means chickens outnumber people 18:1! Iowa produces enough eggs to feed every American one egg per day for 52 days.
- Iowa recorded 3.9 million cattle in January 2020 and is ranked 7th in the nation in cattle and calves inventory.
- As of January 2021, Iowa has 220,000 head of dairy cows. The dairy industry produced 5.62 billion pounds of milk in 2019. Each month, the average cow produced 2012 pounds of milk.
- Iowa produced over 355 million pounds of cheese in 2020, and ranks 9th in cheese production.
- There are 151,000 head of sheep in Iowa as of January 2020. 108,000 head of those are raised specifically for breeding programs.
- 135,000 sheep were shorn in 2020, producing 795,000 pounds of fleece.
- In 2020, 11.7 million turkeys were produced in Iowa, which ranks 7th nationally in turkey production.

General

- Iowa has 56,272 square miles of land. Around 85% of Iowa's land is used for agriculture.
- Iowa has the capacity to produce 4.1 billion gallons of ethanol with 42 corn ethanol plants and 2 cellulosic plants. In 2020, Iowa produced 3.7 billion gallons, which puts Iowa first in the nation in ethanol production.
- Iowa ranks 3rd in number of farms.
- Iowa ranks 2nd in cash receipts- in 2019 it amounted to \$27.3 billion.
- Iowa ranks 2nd in total agricultural exports. Iowa farmers exported \$12.6 billion worth of agricultural products in 2020.



A Look at *Kansas* Agriculture

Capital: Topeka

Population: 2,818,747

Founded: January 29, 1861 (34th)

State Bird: Meadowlark

State Tree: Cottonwood

State Flower: Sunflower

Number of Counties: 105

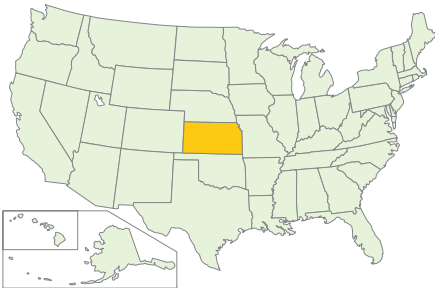
Largest City: Wichita - 389,938

Nickname: The Sunflower State

Number of Farms: 58,569

Average Farm Size: 781 acres

Total Farmland: 46 million acres



www.agclassroom.org/ks

Climate & Soil

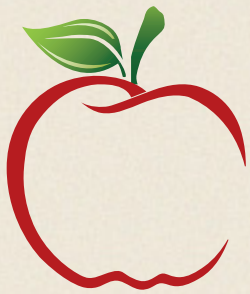
- Average Yearly Precipitation: 27.23 inches
- Average January Temperature: 28.9 degrees
- Average July Temperature: 78.7 degrees
- Average Yearly Rain in Western Kansas: 20 inches
- Average Yearly Rain in Eastern Kansas: 36 inches
- Average Topsoil Depth: 7-16 inches
- Number of Soil Series: 450 (A series is defined as a group of soils that have similar horizons and properties.)
- State Soil: Harney Silt Loam.

Crops & Livestock

- In 2019, Kansas ranked first in sorghum grain produced, first in wheat produced and second in cropland. As of Jan. 1, 2020, Kansas ranked third in cattle and calves on farms and feedlot with 6,450,000. The state also ranked fifth in sunflowers produced, fourth in hay production, sixth in corn grain and eighth in soybean production.
- In 2019, approximately 6.9 million acres of wheat were planted in Kansas. The state harvested 6.5 million acres.
- In 2019, approximately 6.4 million acres of corn were planted in Kansas. Approximately six million acres were harvested for grain.
- Kansas' dairy cattle produced 3.8 billion pounds of milk in 2019.
- As of Dec. 1, 2019, there were 2.2 million head of hogs in Kansas.

General

- The average Kansas farmer is 58 years old.
- Approximately 88% of the state's land is under agricultural production.



A Look at *Kentucky* Agriculture

Capital: Frankfort

Population: 4,914,113

Founded: June 1, 1792 (15th)

State Bird: Cardinal

State Tree: Tulip Tree

State Flower: Goldenrod

Number of Counties: 120

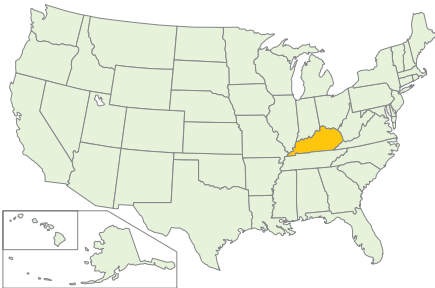
Largest City: Louisville: 1,307,647

Nickname: Bluegrass State

Number of Farms: 85,300

Average Farm Size: 164 acres

Total Farmland: 13.9 million acres



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Climate & Soil

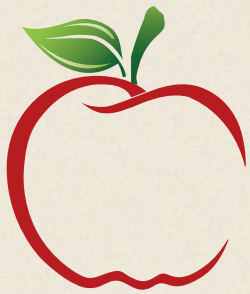
- The state of Kentucky has a moderate climate, characterized by warm, yet moist conditions. Summers are usually warm, and winters cool.
- Monthly average temperatures range from a high of 87.6° F to a low of 23.1° F.
- Kentucky's weather patterns are influenced by the Gulf of Mexico, especially during summer.
- Much of Kentucky's average 46" of precipitation a year falls in spring, the rainiest season. From south to north, precipitation decreases.
- Southern Kentucky receives the highest average precipitation, about 50" a year, while the north averages only 40".
- Kentucky is located in a path several storm systems follow. Storms happen year-round; however most storms occur between March and September.
- The Crider soils are extensive, making up about 500,000 acres in Kentucky and occurring in 35 counties in the state.
- The Crider series consists of very deep, well drained, moderately permeable soils on uplands.
- The Crider series was established in Caldwell County, Kentucky, in 1957. It is named after a community in the county.
- Crider soils are highly productive. Corn, small grain, soybeans, tobacco, and hay are the main crops grown in this soil.

Crops & Livestock

- Lexington is the world's largest burley tobacco market. Annually, Kentucky produces 262,500,000 pounds of burley tobacco.
- Union county is the top producing county of both corn and soybeans in the state.
- Kentucky ranks 1st in the production of non-alfalfa hay.
- Livestock and livestock products account for about half of Kentucky's farm income.
- Kentucky ranks 1st in both the thoroughbred horse breeding industry and in the value of sales at \$1 billion.
- The top agricultural commodities in 2008 were: horses & mules, broiler/meat chickens, corn, cattle & calves, and soybeans.

General

- Farmland covers 54%, of the total acreage in the state.
- Kentucky is in the top five nationally for having the highest number of farms within a state.



A Look at *Louisiana* Agriculture

Capital: Baton Rouge

Population: 4,410,796

Founded: April 30, 1812 (18th)

State Bird: Eastern Brown Pelican

State Tree: Bald Cypress

State Flower: Magnolia

Number of Counties: 64

Largest City: New Orleans, 1 million

Nickname: Pelican State

Number of Farms: 30,000

Average Farm Size: 269 acres

Total Farmland: 8.1 million acres



www.agclassroom.org/la

Climate & Soil

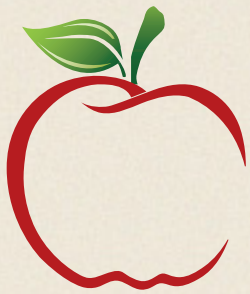
- Climate is humid, subtropical.
- The average annual precipitation ranges from 48" in the northwestern part of the state to 70" in the southeastern part of the state.
- January is the coldest month with temperatures ranging from 32°F to 55°F.
- July is the warmest month with temperature ranging from 73°F to 93°F.
- Louisiana is divided into 5 natural regions based on differences in relief, soil, and vegetation: Mississippi Floodplain, Terraces, Marsh, Red River Valley and the Hills.
- Elevation ranges from approximately 4 feet below sea level in New Orleans to 535 feet above sea level on Driskell Mountain in Bienville Parish.

Crops & Livestock

- More than 40% of the U.S. grain exports move through Louisiana ports.
- Poultry is the largest animal industry in the state; in 2000, 1.1 billion pounds of broilers and 35.7 million dozen eggs were produced.
- Louisiana ranks #1 in the nation in the production of crawfish, shrimp, alligators, menhaden, and oysters.
- The commercial fishing industry produces 25% of all seafood in the U.S. and includes shrimp, menhaden (pogy), crabs, and several species of finfish.
- Forestry is the #1 agriculture industry in Louisiana (13.9 million acres of forests).
- The other top crops in Louisiana are rice, corn, sugarcane, soybeans, and cattle and calves.
- Ranked 3rd nationally for rice production.
- Louisiana is the sole source of the Tabasco pepper, a popular condiment known around the world and for perique tobacco, which is used as flavoring with other tobaccos.

General

- The top three industries in Louisiana are the petrochemical industry, agriculture and tourism.
- Louisiana is the 3rd largest producer of petroleum and the 2nd largest producer of natural gas in the United States.
- Louisiana has the greatest concentration of crude oil refineries, natural processing plants and petrochemical products facilities in the Western Hemisphere.
- Louisiana has the longest coastline of any state – 15,000 miles.
- Louisiana has 5,000 miles of navigable waterways.
- Louisiana is home to 41% of the nation's wetlands.
- The Mississippi River, which ends its journey in Louisiana by emptying into the Gulf of Mexico, drains at least 31 states. It is the Mississippi River that has formed much of the state.



A Look at *Maine* Agriculture

Capital: Augusta

Population: 1,329,000

Founded: March 15, 1820 (23rd)

State Bird: Chickadee

State Tree: White Pine

State Flower: White Pine Cone and Tassel

Number of Counties: 16

Largest City: Portland - 66,363

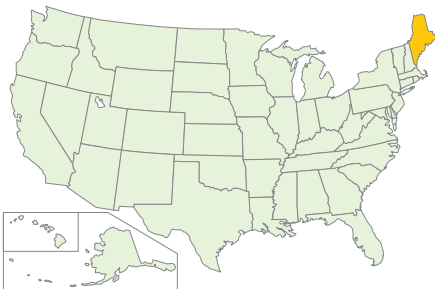
Nickname: Pine Tree State

Number of Farms: 8,100

Average Size of Farms: 166 acres

Total Farmland: 1.3 million acres

Maine Farms (leased): 1,328 acres



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Climate & Soil

- Maine's weather is characterized by rapidly changing conditions. The normal daily mean temperature ranges from 38.8°F in northern Maine to 45.4°F in southern Maine.
- The average number of days in which the temperature reaches 90° F or above ranges from one in northern Maine to five in southern Maine, while the average number of days in which the temperature is 32°F or below ranges from 187 days in northern Maine to 156 days in southern Maine.
- The cumulative annual precipitation is 45.4", the growing season is about 135 days.
- The soils of most of central and northern Maine are characterized as glacial till. The soils of this region are somewhat acidic but treated with lime they are highly productive for farming.
- Much of the soil in southern and central Maine are lake and ocean bottom soils which are free of stones and are excellent for farming.

Crops & Livestock

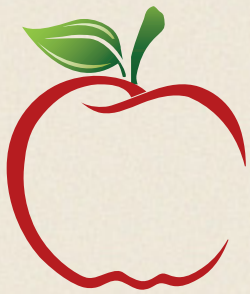
- Maine leads the world in production of wild blueberries.
- Maine is 2nd in the nation in the production of maple syrup and Maine's Somerset County produces more maple syrup than any other county in the country.
- Maine ranks 8th in the nation among producers of fall potatoes.
- Many Maine farmers are producing fresh fruit and vegetable crops and value-added agricultural products for direct sale to consumers.
- Maine boasts a vibrant and diverse organic farming community and many Maine farmers are involved in sustainable agricultural production.
- Maine's top agricultural commodities include potatoes, dairy, wild blueberries, greenhouse/fresh produce and brown eggs.
- Sheep, goats, hogs, equine and poultry have always been important on Maine farms; new livestock ventures such as elk and deer herds, as well as camelids (llama and alpaca) and ratiities (emu) are becoming more common on Maine farms.

Aquaculture

- With over 5,300 miles of coastline and cool, clean waters, Maine has ideal conditions for growing animals and plants in the water.
- Maine water farmers grow salmon, trout, baitfish, halibut, oyster, scallops, mussels, clams, aquarium ornamentals, kelp and other aquatic plants.
- Maine has 187 marine grow-out farms, 6 marine hatcheries, and 18 freshwater hatcheries.
- Maine water farmers grow products in both salt and fresh water.
- Maine has more freshwater than any other state east of the Mississippi.

General

- Natural resource and agricultural tourism is highly important to Maine's economy.



A Look at *Maryland* Agriculture

Capital: Annapolis

Population: 6,045,680

Founded: April 28, 1788 (7th)

State Bird: Baltimore Oriole

State Tree: White Oak

State Flower: Black Eyed Susan

Number of Counties: 23 , plus

Baltimore City

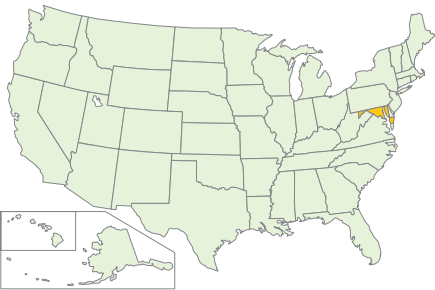
Largest City: Baltimore - 593,490

Nickname: Little America

Number of Farms: 12,429

Average Farm Size: 161 acres

Total Farmland: 2 million acres



www.agclassroom.org/md

Climate & Soil

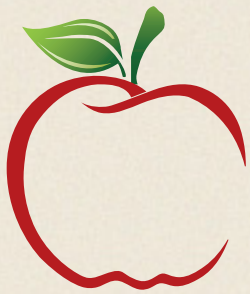
- The mean annual air temperature is 45°F in the northern parts of the state compared to 42°F in the southern parts of the state.
- Sassafras series consisting of very deep, fine-loamy, siliceous, semiactive, well drained, moderately permeable soils formed in sandy marine and old alluvial sediments of the Coastal Plain.
- These soils are categorized as prime farmland and best suited to construction, onsite effluent disposal, and recreational development.
- Mean annual precipitation 35"-50" and frost free period 130-250 days.

Crops & Livestock

- 32% of Maryland's land is in agriculture – over 1.9 million acres - with the majority of that as cropland.
- Extensive research and work is done by farmers to implement best management practices that protect our land & the Chesapeake Bay Watershed while providing the food and fiber products necessary for our existence.
- Known as "America in Miniature", Maryland agriculture is as diverse as that of the nation.
- Grain represents the largest commodity grown by acreage in Maryland. This includes corn, wheat, barley, and hay (including alfalfa).
- Maryland growers produce 2.8 billion pounds of corn each year, which is mostly used for livestock, feed, and industrial uses.
- Apples, peaches, plums, and cherries are among the popular fruit tree varieties grown in Maryland, as are berries, grapes, figs, and currants.
- Exotic plants and spices are a growing niche sector in the state, with 14 different spice companies in Maryland.
- Poultry is Maryland's number one agricultural industry with over 1,900 farms. Eggs and poultry make up \$1.2 billion in sales in the state.
- Maryland has over 101,000 horses in the state, more than any other state! Horses and the horse racing industry have always played a major role in Maryland's heritage, economy and recreation.
- Despite blue crabs being Maryland's most popular aquaculture industry, mollusks, like oysters, actually bring the largest income at \$11.5 million. There are 55 aquaculture farms in all in Maryland, 35 of them mollusk operations.
- Poultry, nursery and turf production, seafood, dairy, corn, soybeans, racing and pleasure horse industries now dominate Maryland agriculture.

General

- Maryland's Food & Fiber production industries (agriculture, forestry, and aquaculture) account for \$19.66 billion in economic activity and 83,619 jobs.
- 70% of all farms in Maryland are smaller, between 1-99 acres each.
- 83% of Maryland farms are owned by families or individuals with an average farmer age of 57.
- The number of principle female farmers has increased in Maryland by nearly 33% from 2012, now totaling 8,148.
- While Maryland has many sprawling urban and suburban areas, including the 10 or more cities across the state with a population greater than 20,000, it's important to note that over 50% of its land consists of farms and forests. Specifically, of Maryland's 6.3 million total acres, 3.5 million of that is working farmland and forest land.



A Look at *Massachusetts* Agriculture

Capital: Boston

Population: 6,745,000

Founded: 1788 (6th)

State Bird: Chickadee

State Tree: American Elm

State Flower: Mayflower

Number of Counties: 14

Largest City: Boston - 645,966

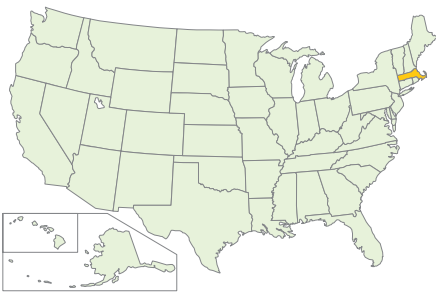
Nickname: Bay State

Number of Farms: 7,755

Average Farm Size: 68 acres

Total Farmland: 523,000 acres

Employment in Agriculture: 68,000



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Climate & Soil

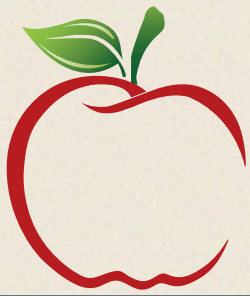
- The climate varies greatly between the eastern sea coast and the western mountains
- Massachusetts has cold winters and mild summers
- The eastern part of Massachusetts is a coastal plain with marsh, beach and ponds whose weather is modified by the Atlantic ocean and trade winds
- The middle part of Massachusetts is rolling hills and lakes
- The western part of Massachusetts includes part of the Appalachian Mountains and is affected by sub Arctic and northern Atlantic winds
- The highest temperature of record is 107° F on August 2, 1975, at New Bedford (coast) and Chester (middle). The lowest of record was -35° F on January 12, 1981, again at Chester.
- The average annual temperature ranges from about 46 degrees Fahrenheit (° F) in the western division to 49 in the central, and to around 50 in the Coastal division.
- Massachusetts is one of the few areas not to have a dry or rainy season, but precipitation year round
- Average precipitation is 40 to 50 inches, about 25 to 30 inches fall over eastern parts and 60 to 80 inches in the western part
- Massachusetts soil varies and is classified as Paxton, with very deep, well drained soil on glacial till uplands in the western part and types to sandy and mucky, loamy coarse sand and peat in the eastern parts

Crops & Livestock

- The top five agriculture outputs in Massachusetts are greenhouse & nursery products, cranberries, produce, aquaculture and dairy
- Greenhouse and nursery products are 28% of agriculture outputs with over 1,000 commercial greenhouses
- Cranberries are the second highest agriculture output (20%) with over 400 growers in the Commonwealth. 70% are family farms with bogs of 20 acres or less
- The produce sector is third in the state, and has an annual market value of \$96 million with nearly 1,600 producers, 40% growing vegetables and 60% growing fruit
- Aquaculture is the fourth largest agriculture output. Farms produced primarily oysters and quahogs on 1,000 acres of intertidal and sub-tidal land
- There are 151 remaining dairy farms, which is the fifth highest agriculture output
- Grapes is a growing agriculture industry Massachusetts and has two viticultural appellations in the mild climate of southeastern Massachusetts
- Oyster farms operate hatcheries on the coast of Massachusetts growing oysters

General

- Massachusetts farmers harvest from both the land and sea
- Massachusetts ranks #1 in the percentage of farms offering Community Supported Agriculture (CSA) programs
- Massachusetts is the third most densely populated state in the country and among the top three states for farmland value at \$12,000 per acre
- 80% of Massachusetts farms are family owned
- New Bedford, Massachusetts is the leading fishing port in the US (seafood value)
- Approximately half of Massachusetts is forest land
- Cranberries were first used by Native Americans in Massachusetts as early as 1550 for medicine, food and clothing dye



A Look at *Michigan* Agriculture

Capital: Lansing

Population: 9,909,877

Founded: January 26, 1837 (26th)

State Bird: American Robin

State Tree: White pine

State Flower: Apple Blossom

Number of Counties: 83

Largest City: Detroit - 688,701

Nickname: Great Lakes State

Number of Farms: 47,641

Average Farm Size: 25 acres

Total Farmland: 9.6 million acres



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Climate & Soil

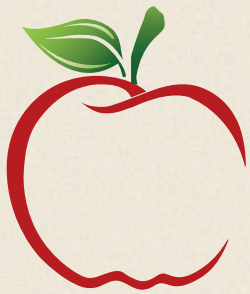
- Michigan has many microclimates which support the growth of over 300 commodities on a commercial basis, making the state the second most agriculturally diverse state in the nation.
- Michigan has nearly 10 million acres of farmland with 2.3 million acres of those acres enrolled in some form of conservation program through the Natural Resource Conservation Service.
- The Kalkaska Series of soil, which cover over 750,000 acres in both the upper and lower peninsulas and 29 of 83 counties was named the state soil on December 4, 1990.
- The soil series supports the growth of hardwood timber trees like sugar maple, yellow birch and Christmas trees.

Crops & Livestock

- Michigan is the national leader in the production of tart cherries, having grown more than 201 million pounds, or 70% of the U.S. total in 2018.
- Michigan also ranks 1st nationally for the production of pickling cucumbers, black and cranberry beans, asparagus, chestnuts, Niagara grapes, impatiens, begonias, Easter lilies, geraniums, hostas and petunias.
- Michigan is 2nd nationally for celery, snap beans, and squash.
- Michigan ranks 3rd in the nation in apple production with about 1 billion pounds in 2018. We also rank 3rd in growth of Christmas trees harvested, supplying approximately 1.6 million trees in 2018.
- Michigan ranks 4th in the nation in raising carrots for fresh consumption raising approximately 152 million pounds annually.
- Approximately 424,000 dairy cows make more than 1.3 billion gallons of milk each year. Michigan ranks 6th nationally in milk production in 2019.
- Egg production in 2018 totaled 4.5 billion eggs from 15.4 million laying hens.
- There were more than 1.2 million beef cattle in the state in 2017 and 1.2 million hogs, 89,300 sheep and 29,200 dairy goats.

General

- Production agriculture, food processing and related businesses employ 805,000 Michiganders nearly 17% of the state's workforce.
- Agriculture is Michigan's second largest industry, generating \$104.7 billion annually to the state's economy.
- 96% of Michigan farms are family owned. The remaining 4% are operated by universities, research facilities, or are tribal lands.
- Michigan exports nearly \$2 billion in food and agricultural products annually which have an additional \$5.6 billion impact locally.



A Look at *Minnesota* Agriculture

Capital: St. Paul

Population: 5.64 million

Founded: May 11, 1858 (32nd)

State Bird: Common Loon

State Tree: Norway Pine

State Flower: Pink and White Lady Slipper

Number of Counties: 87

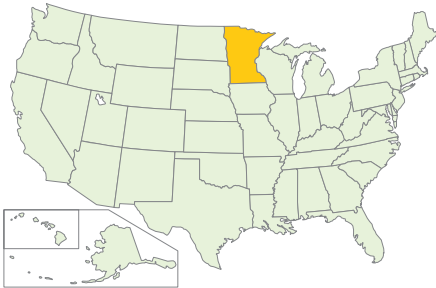
Largest City: Minneapolis - 425,403

Nickname: Land of 10,000 Lakes

Number of Farms: 74,542

Average Farm Size: 372 acres

Total Farmland: 26 million acres



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Climate & Soil

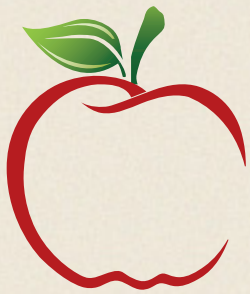
- In Minnesota, the average temperature ranges from 0°F – 74°F, with extremes reaching -20°F and the lower 100s°F.
- Minnesota's growing season varies depending on where you are in the state: 100 days in the north to 150 days in the south.
- The average annual precipitation in Minnesota ranges from about 30" in the southeast to less than 20" in the northwest.
- In Minnesota, the number of annual frost free days range from 96 in the north to 163 in the south.
- Minnesota is home to three of North America's ecological region's; Laurentian Mixed Forest, Eastern Broadleaf Forest and Prairie Parkland.
- The Minnesota state soil is "Lester".
- The Lester soil is well suited for growing annual crops, forages, and forest production. Most areas of Lester soils are in cropland, but some areas are grazed by livestock or used as forestlands.

Crops & Livestock

- Corn and soybeans are the state's top producing crops. Nationally, Minnesota ranks fourth in soybean and corn production.
- Minnesota has 20 ethanol plants and three biodiesel plants. Total projected ethanol production for 2017 is 1.1 billion gallons. The state currently has a 10% mandate for ethanol blend and 10% for biodiesel. By 2018, state law mandates the blending of 20 percent biodiesel into the fuel supply.
- Minnesota also has the most E85 stations in the nation.
- Minnesota leads the nation in producing sugarbeets, turkeys, sweet corn and green peas. The state is number two in wild rice and hogs, number three in oats and number four in field corn.
- Minnesota is unique in the production of wild rice, with both cultivated paddy wild rice and traditional Native American hand harvested wild rice.
- Minnesota leads the nation in turkey production. The state is also a major producer of hogs, dairy and beef cattle.
- Hogs are Minnesota's top-producing livestock commodity.
- There are 9 million pigs on 3,000 Minnesota hog farms.

General

- Minnesota has 74,542 farms totaling 26 million acres and about half (51%) of the total land area.
- Minnesota has 86,943 square miles of land.
- The Agriculture and Food Industry is the 2nd largest employer in Minnesota.
- Two-thirds of all agricultural jobs are off-farm, in processing, distribution, supply and service sectors.
- Minnesota is the 4th largest agricultural exporting state in the U.S. with China, Canada, Mexico and Japan being the state's largest export consumers.
- Mississippi River: Starts in Minnesota. 680 miles of its 2,552 total miles flow through Minnesota. The Mississippi transports 66% of all grain exported from the United States.



A Look at *Mississippi* Agriculture

Capital: Jackson

Population: 2,938,618

Founded: December 10, 1817 (20th)

State Bird: Mockingbird

State Flower: Magnolia

State Tree: Magnolia

Number of Counties: 82

Largest City: Jackson - 184,256

Nickname: Magnolia State

Number of Farms: 42,000

Average Farm Size: 273 acres

Total Farmland: 11.4 million acres



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Climate & Soil

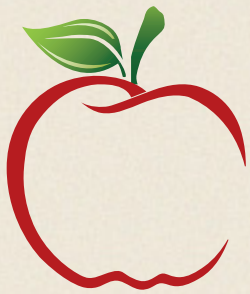
- Mississippi is warm and moist with long summers and short winters.
- The average temperature for July 81° F and the average January temperature is 46° F.
- The average precipitation is about 50" in the northwest and about 65" in the southeast.
- Most of the fertile earth is silt that is deposited by floodwaters of the Mississippi River.

Crops & Livestock

- Broiler (meat) chicken and soybeans are Mississippi's most valuable agricultural products.
- Cotton is grown in the northwest part of the state, and the northeast part grows the majority of the cotton.
- Cattle farms are common in all parts of Mississippi except the Mississippi Delta.
- Mississippi ranks fourth nationally for the production of rice. The crop was valued at \$178 million dollars in 2009.

General

- Mississippi ranks fifth nationally for poultry and poultry products. It's approximate value in 2009 was \$384 million dollars.
- Livestock and crops each provide about half of the state's total farm income.
- Aquaculture, or fish farming, is also an important part of the state's agricultural production.



A Look at *Missouri* Agriculture

Capital: Jefferson City

Population: 6,021,988

Founded: August 10, 1821 (24th)

State Bird: Bluebird

State Tree: American Dogwood

State Flower: Hawthorn

Number of Counties: 114

Largest City: Kansas City - 464,310

Nickname: Show-Me State

Number of Farms: 99,170

Average Farm Size: 285 acres

Total Farmland: 28.3 million acres



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Climate & Soil

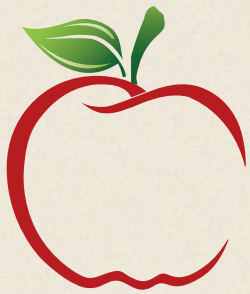
- Missouri has approximately 700 types of soil
- There is not an official state soil type, but menfro is proposed for this honor
- Menfro soil has a dark brown silt loam surface layer with brown silt loam substance
- Daniel Boone is buried in menfro soil
- Soils North of the Missouri River are glacial till and loess
- Soils South of the Missouri River are loess and residuum
- It takes 100 to 1,000 years to develop 1" of topsoil
- Missouri has a wide range of climate good for both crops and livestock
- The annual average precipitation is 35"
- The annual average temperature in Northern Missouri is 50 degrees
- The annual average temperature in Southern Missouri is 60 degrees
- Spring is tornado season in Missouri

Crops & Livestock

- Missouri dairy cows produced 1,349,000,000 pounds of milk in 2013
- In 2012, Missouri had 3,900,000 head of cattle and 83,000 sheep
- Missouri ranks 2nd in the number of beef cows
- Missouri produces over 7.5 million turkeys
- Missouri ranks 4th in turkey production
- There are over 117,000 horses and ponies in Missouri
- Corn and Soybeans are the top row crops in Missouri
- 54% of Missouri land is used for crops
- Missouri ranks 4th in soybean production and 11th in corn production
- Hay is the most widely produced crop
- The Bootheel region is the most intensively cropped area
- Cotton and rice are predominant in some Southeastern counties
- Missouri produces numerous fruits, vegetables, and specialty crops

General

- Missouri ranks #2 in number of farms
- Missouri had \$9.1 billion in value of agricultural products sold
- 17% of Missouri farm operators are under 44 years of age
- Agriculture exports in Missouri exceed \$2 billion
- The top 5 exports include: soybeans, live animals, feed grains, cotton, and rice



A Look at *Montana* Agriculture

Capital: Helena

Population: 967,440

Founded: November 8, 1889 (41st)

State Bird: Western Meadowlark

State Tree: Ponderosa Pine

State Flower: Bitterroot

Number of Counties: 56

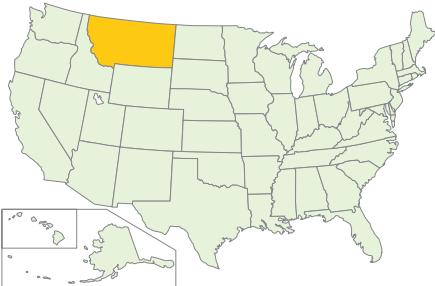
Largest City: Billings - 105,845

Nickname: Big Sky Country

Number of Farms: 29,500

Average Farm Size: 2,079

Total Farmland: 61.3 million acres



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Climate & Soil

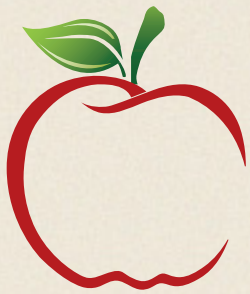
- In western Montana, as compared with the eastern plains area, winters tend to be milder while summers are cooler.
- The growing season is shorter in the west, where some intermountain areas experience only 50 to 100 days without frosts a year.
- Eastern Montana has colder winters, warmer summers, less cloudiness, the heaviest precipitation in late spring and early summer, and considerably higher average wind velocities. Frost-free periods in the east and in the state's low-lying river valleys range from 120 to 150 days per year.
- Snowfall normally is heaviest in the mountains of the west, with as much as 300" falling in some years. Storms of several types occur in Montana.
- Summer hailstorms may cause severe crop and property damage.
- Land in Conservation or Wetland Reserve Programs: 3.5 million acres.

Crops & Livestock

- In 2009, all field crops harvested in the state of Montana were valued at 1.8 billion dollars.
- Montana ranked second nationally, in 2007, for the production of lentils, dry peas and barley. The same year, the state ranked third for total wheat production.
- January 1, 2009: Cattle and calves: 2, 550,000 head, Sheep and Lambs: 255,000 head
- Montana raises lots of sheep and goats on its rangeland. The state ranks 10th nationally for sheep and goat production and their products, like wool.
- Montana's most valuable crop is wheat, followed by hay, and then barley.
- Montana ranked second in 2009, nationally, for the production of Safflower and third for Canola. This seeds is used to make healthy cooking oils.
- Montana has many honey producers. The state is ranked fourth nationally for honey production.
- In 2009, Montana livestock were valued at 1.2 billion dollars.

General

- The total land area of the state is 93.1 million acres. Approximately 66% of the total land areas are dedicated to farmland or agriculture.



A Look at *Nebraska* Agriculture

Capital: Lincoln

Population: 1,932,549

Founded: March 1, 1867 (37th)

State Bird: Western Meadowlark

State Tree: Eastern Cottonwood

State Flower: Goldenrod

Number of Counties: 93

Largest City: Omaha - 443,885

Nickname: Cornhusker State

Number of Farms: 47,400

Average Farm Size: 954 acres

Total Farmland: 45.2 million acres



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Climate & Soil

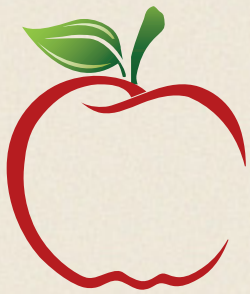
- Nebraska has a typical Midwestern climate, which means big extremes between the four seasons – hot summers, cold winters, and moderate precipitation.
- The Nebraska State Soil is Holdrege. This soil is ideal for crops, pasture, or rangeland.
- From east to west, Nebraska experiences a 4,584-foot elevation difference.
- Most of Nebraska's soil was formed from wind-blown silt and clay or loess while soil in north central Nebraska, also known as the Sandhills, was formed from wind-blown sand.
- The average annual precipitation is 30.25" and decreases one inch every 25 miles from east to west across the state.

Crops & Livestock

- Nebraska's ten leading commodities (in order of value) for 2016 cash receipts are cattle and calves, corn, soybeans, hogs, dairy products, wheat, hay, chicken eggs, dry beans, and sorghum.
- In 2017, Nebraska ranked 1st in commercial red meat production. Cattle outnumber people in Nebraska 4 to 1.
- In 2017, Nebraska ranked 3rd in corn for grain production – 1,683,300,000 pounds.
- Nebraska's production of corn, livestock, and ethanol is known as "Nebraska's Golden Triangle."
- In 2017, Nebraska ranked 4th in soybean production and alfalfa hay production.
- Each year, Nebraska harvests between 55 and 70 million bushels of wheat.
- In 2017, Nebraska ranked 5th in sugar beet production. The sugar beet is a root crop used for sugar production.
- Nebraska has the 6th largest swine herd in the nation.
- In 2017 Nebraska ranked 1st in Great Northern Bean Production and was listed as a top producer of pulses, a group of crops that includes field peas, dry beans, chickpeas, and lentils.
- More than 9.5 million chickens populate Nebraska's chicken laying farms.
- There are approximately 50,000 bee colonies in Nebraska.

General

- 91% of the state's total land area is utilized for farms and ranches.
- 1 in 4 jobs in Nebraska are related to agriculture.
- Every dollar in agricultural exports generates \$1.28 in economic activities such as transportation, financing, warehousing and production. Nebraska's \$6.58 billion in agricultural exports generates \$8 billion in additional economic activity.
- The average age of a Nebraska farmer or rancher is 56.
- Nebraska's current director of agriculture is Steve Wellman.



A Look at *Nevada* Agriculture

Capital: Carson City

Population: 3,080,156

Founded: October 31, 1864 (36th)

State Bird: Mountain Bluebird

State Tree: Single Leaf Pinion and the
Bristlecone Pine

State Flower: Sagebrush

Number of Counties: 17

Largest City: Las Vegas - 651,319

Nickname: Silver State

Number of Farm: 3,350

Average Farm Size: 1,821 acres

Total Farmland: 6.1 million acres



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Climate & Soil

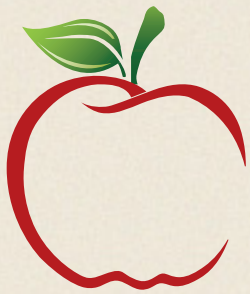
- Mostly mountainous and desert terrain. Much of Nevada is uninhabited, sagebrush-covered desert.
- In the driest state in the nation, with an average annual rainfall of only about 7".
- The wettest part of the state receives about 40" of precipitation per year, while the driest spot, less than 4" per year.
- SOIL: Oroveda Soil
- MINING: Nevada was made famous by the discovery of the Comstock Lode, the richest known U.S. silver deposit, in 1859.
- Over the years its mines have produced large quantities of gold, silver, copper, lead, zinc, mercury, tungsten, uranium, manganese, titanium, iron, mercury, opal, barite, molybdenum, magnesite, diatomite, talc, gypsum, dolomite, lime, turquoise, fluorspar, brucite, antimony, perlite, pumice, salt, sulfur oilshale, magnesite, lime, and other minerals.
- Coal and oil are also underground resource.

Crops & Livestock

- Agricultural crops consist mainly of alfalfa hay, sold as cubes and compressed bales, alfalfa seed, potatoes, barley, wheat, rye, oats, vegetables, mint, garlic and onions, and some fruits.
- The state's leading agricultural industry is range livestock production.
- Cow-calf operations predominate.
- Dairy, sheep and lambs, and hogs are among Nevada's other livestock enterprises.
- The larger cattle and sheep ranches are in the northern half of the state.
- The greatest number of dairies are in northern Nevada, the largest dairy is in the south.
- Horses and poultry are also raised.

General

- Agriculture is one of Nevada's most important industries, contributing significantly to the economies of rural communities and the state as a whole.
- Nevada's total land area amounts to 110,567 square miles. Eighty-five percent of the state is managed by the federal government.



A Look at *New Hampshire* Agriculture

Capital: Concord

Population: 1,324,575

Founded: June 21, 1788 (9th)

State Bird: Purple Finch

State Tree: White Birch

State Flower: Lilac

Number of Counties: 10

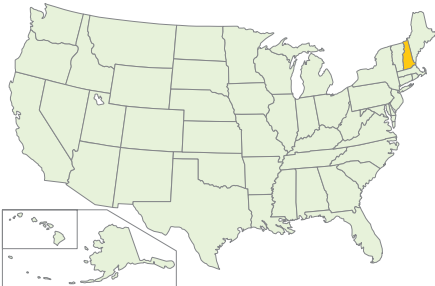
Largest City: Manchester - 109,395

Nickname: The Granite State

Number of Farms: 4,400

Average Farm Size: 108 acres

Total Farmland: 471,911 acres



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Climate & Soil

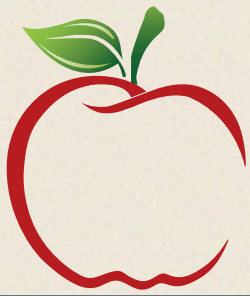
- The growing season averages 120 days throughout most of the state.
- Humid short summers, long cold winters.
- Variation in temperature depending on if you are near the mountains or the ocean.
- January temperature average 12°F to 26°F with July temps average 63°F to 70°F.
- Precipitation averages 40", although the White Mountains receive about 46".
- The soil is typically stony and relatively infertile.
- Soils classified as spodosols are common in northern NH, while inceptisols are prevalent in the south.

Crops & Livestock

- The chief commercial crops raised in New Hampshire are greenhouse and nursery crops, vegetables including sweet corn, apples and other fruit. Christmas trees are also grown in NH and the state ranks 14th nationally in Christmas tree sales.
- Hay is the major field crop grown to feed livestock
- An average of 130,000 gallons of maple syrup are produced on 500,000 taps annually in New Hampshire (3 year average). The Granite State makes 4 percent of US maple syrup production.
- Milk and greenhouse/nursery sales account for more than half of the state's total agricultural cash receipts (approximately \$53 million each).
- Livestock raised includes cattle, hogs, sheep and poultry

General

- New Hampshire ranks no. 1 in the US for direct sales as a percentage of all farm sales
- New Hampshire ranks no. 1 in the US for organic sales as a percentage of all farm sales
- New Hampshire ranks no. 3 in the US for women farm operators as a percentage of total farm operators



A Look at *New Jersey* Agriculture

Capital: Trenton

Population: 8,899,339

Founded: December 18, 1787 (3rd)

State Bird: Eastern Goldfinch

State Tree: Red Oak

State Flower: Purple Violet

Number of Counties: 21

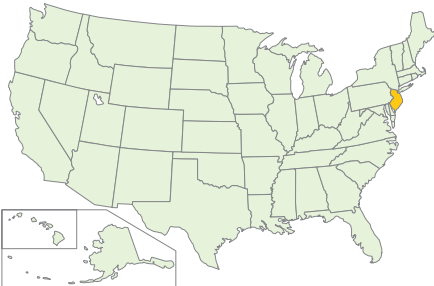
Largest City: Newark - 281,402

Nickname: Garden State

Number of Farms: 9,883

Average Farm Size: 74 acres

Total Farmland: 734,000 acres



www.agclassroom.org/nj

Climate & Soil

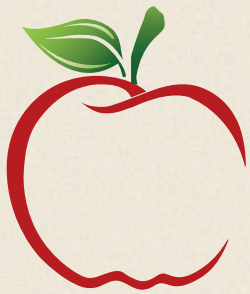
- The average annual rainfall is 45" per year.
- The average temperature in January is 33° F, and in July it is 74° F.
- In the summer, New Jersey is hot and humid, but the afternoons are often marred by thunderstorms.
- The state soil of New Jersey is the Downer Soil.
- Downer soils occur on 291,319 acres in New Jersey. These soils are dominantly in the 11 counties of southern New Jersey.
- Downer soils are used mostly as woodlands, but some areas are cultivated for high-value vegetable and fruit crops.
- They have medium natural fertility and require fertilization for maximum crop production.
- The Downer series was established in Gloucester County, New Jersey, in 1960.

Crops & Livestock

- The market value of agricultural products sold in the state in 2017 was \$1.1 billion dollars.
- New Jersey grows over 100 varieties of fruits and vegetables.
- New Jersey produces four major fruit crops. They are apples, blueberries, cranberries and peaches.
- The state ranked 4th in the nation in total production of cranberries in 2017. The harvest accounted for \$16.45 million in agricultural sales.
- New Jersey was ranked 4th in the production of bell peppers in 2017 with 86.8 million pounds harvested.
- New Jersey also ranked 4th in the production of spinach in 2017 with a harvest of 8.8 million pounds.
- New Jersey ranked 6th in the nation in blueberry production growing 43.9 million pounds of berries in 2017.
- Farmers grew 56.3 million pounds of peaches in 2017, 2nd in the nation.
- The state was home to 42,500 horses as of 2007.
- Fish and seafood also are valuable commodities with tons of bluefish, tilefish, flounder, tuna, shellfish and other species harvested annually. The commercial fishing industry landed 123.6 million pounds of seafood with a dock value of \$193 million in 2016.
- As of December 2017, New Jersey had 50 licensed wineries and ranked 13th in the nation in wine production.

General

- The Garden State is the most densely populated state in the US.
- New Jersey was the first state to have a state-sponsored produce branding program – Jersey Fresh!
- New Jersey is one of only four states to have the School Breakfast and Lunch programs administered by the state Department of Agriculture.
- New Jersey was the first state to adopt a comprehensive school nutrition policy banning candy, soda and other junk food from schools.
- New Jersey is the only state to hold an annual industry convention that sets policy for the coming year.



A Look at *New Mexico* Agriculture

Capital: Santa Fe

Population: 2.09 million

Founded: January 6, 1912 (47th)

State Grass: Blue Grama

State Vegetables: Chile and Beans

State Question: Red or Green?

State Flower: Yucca

State Tree: Two Needle Piñon Pine

State Motto: "It Grows as is Goes"

State Bird: Greater Roadrunner

State Cookie: Biscocho/Biscochito

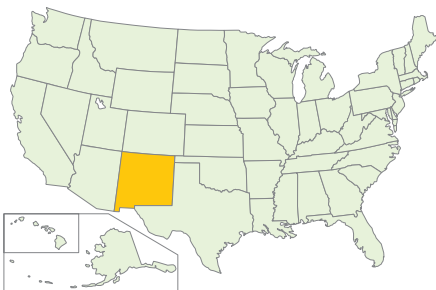
Number of Counties: 33

Largest City: Albuquerque

Nickname: Land of Enchantment

Number of Farms: 24,700

Agricultural land: 43.3 million acres



www.agclassroom.org/nm

Climate & Soil

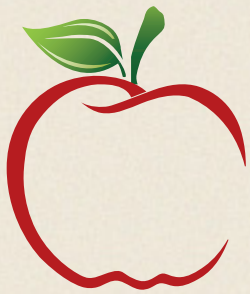
- New Mexico is home to six of the seven life zones in the world. (Life zones refer to groups of plants and animals that grow in certain temperatures and elevations.)
 - Lower Sonoran- below 4,500 ft.
 - Upper Sonoran-between 4,500-8,000 ft.
 - Transition- between 8,000- 9,5000 ft.
 - Canadian-between 8,500-12,000 ft.
 - Hudsonian- above 11,000 ft.
 - Artic- Alpine [De Angelis, Therese. New Mexico. NewYork: Scholastic, 2009. Print.]
- Due to its geographic diversity, New Mexico's annual precipitation varies from 6 inches in the San Juan Basin to over 46 inches in the Sangre de Cristo Mountains. However, most New Mexican farms are irrigated because the soil is too dry during the growing season
- The growing season ranges from 60 days in the North, 110 days in the Rio Grande Corridor, and 190 days in the South.
- Penistaja soils are the state soil of New Mexico and cover more than 1 million acres. In Navajo, "Penistaja" means "forced to sit". This type of soil is productive for livestock grazing and wildlife habitat.

Crops & Livestock

- [Top agricultural products for New Mexico](#) include milk, beef cattle & calves, pecans, hay, sheep, onions, chile, greenhouse/nursery, cotton, corn, wheat, poultry and eggs.
- Farming and ranching have deep roots in New Mexico. About 2500 years ago the Mogollon native people grew corn, squash, and beans. Native Americans, Spanish explorers, and Anglo pioneers all brought unique contributions that are still important to New Mexico agriculture today.
- Beef cattle were said to have been officially introduced into New Mexico in 1598. Juan de Oñate is credited with bringing 799 cows, steers, & bulls to what was then a Spanish colony.
- Many ranchers use state trust lands for grazing and the fees they pay help fund the state's education system.
- 93% of New Mexico's ranches are family owned and have been handed down through multiple generations.
- New Mexico, along with Texas and Georgia, [consistently ranks as one of the top 3 pecan producing states in the nation.](#)
- New Mexico has some of the largest dairy herds in the nation (about 2,193 milking cows per herd) thanks to our large land base.
- [NM cows rank amongst the highest producing in the nation in milk productivity](#) (more milk per cow) thanks to excellent climate conditions.
- New Mexico consistently ranks among the top 10 states in the nation in milk production and among the top 5 in cheese production.
- Southwest Cheese LLC, one of the world's largest manufacturers of American style cheese, is located in the eastern part of NM. They take in about 285 tanker loads of milk per day.
- New Mexico State University (NMSU) [leads the nation in chile research](#) with the Chile Pepper Institute.

General

- New Mexico offers the most diverse record of volcanic activity in the nation. The youngest volcanic rocks are roughly 3,800 years old, while the oldest being 25 million years old.
- The Palace of the Governors in Santa Fe, built in 1610, is one of the oldest public buildings in America. Santa Fe is also the oldest capital city in the U.S.
- Acoma Pueblo (Sky City), New Mexico, inhabited since 1150, is the oldest continuously inhabited community in the United States.



A Look at *New York* Agriculture

Capital: Albany

Population: 19,849,399

Founded: July 26, 1788 (11th)

State Flower: Rose

State Bird: Bluebird

State Tree: Sugar Maple

Number of Counties: 62

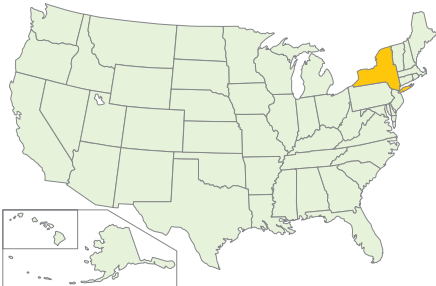
Largest City: NYC - 8.55 million

Nickname: The Empire State

Number of Farms: Over 35,000

Average Farm Size: 205 acres

Total Farmland: 7.3 million acres



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Climate & Soil

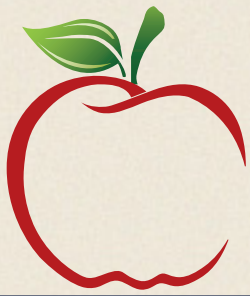
- New York has a temperate climate with annual precipitation of 47" per year.
- The temperature ranges between 106°F and -25°F, but the Atlantic Ocean tends to moderate weather extremes in the city.
- State Soil: Honeoye
- The soils in the state fall generally into the groups classified as spodosols. They are acid in reaction and generally light in both color and texture. They are not superior agricultural soils, but because of the proximity of New York's agricultural areas to its heavily populated consuming centers, many of the better soils are intensively cultivated.

Crops & Livestock

- Fruit - New York's fruit crops were valued at \$399 million in 2017.
- Apples and grapes lead New York fruit crops in value. New York ranks 2nd nationally in apple production, with production valued at \$343 million in 2017. New York ranks 3rd in wine and juice grapes with grape-related production activities contributing \$340 million in total economic impact.
- Vegetables - The value of vegetables totaled \$378 million in 2017. Fresh Market vegetables rank 6th and processing vegetables are 5th among all states. Leading crops in New York are Cabbage, Snap Beans, Green Peas, and Squash.
- Field Crops - New York produces a variety of field crops largely in support of its dairy industry. Hay, corn, and soybeans are the most widely grown crops. New York ranks 4th in corn silage, valued at \$423 million. Production of grain corn ranked 22nd with a value of \$300 million.
- Dairy - Milk is New York's leading agricultural product and is produced all across the state. Milk sales account for almost one-half of total agricultural receipts. Production in 2017 was 14.9 billion pounds, with a value of \$2.5 billion. New York is the nation's 3rd leading producer, and Wyoming is the state's leading county. New York also ranks first nationally in cottage cheese, sour cream, and yogurt production.
- New York ranks fourth for milk and dairy production in the United States.
- Meat - New York livestock producers marketed 289 million pounds of meat animals during 2017, bringing in \$191 million in cash receipts. Sales from cattle and calves accounted for \$315 million of the total, hogs and pigs returned \$24 million, and sheep and lambs provided \$4.4 million.
- The state has over 225 thousand ducks. It ranks fifth nationally for the production of duck meat and duck products.
- Eggs made up \$89.1 million of the total followed by broilers at \$6.57 million. New York ranks 18th among all egg producing states.
- Maple syrup is a very important crop in New York agriculture. New York ranks 2nd in maple production behind Vermont with 760,000 gallons produced, valued at \$26.1 million.

General

- Agriculture is important to New York State.
- Agricultural production returned almost \$4.8 billion revenue and contributed nearly \$2.4 billion to the State's gross domestic product in 2017.
- About 23 percent of the state's land area is used to produce a very diverse-array of food products.



A Look at *North Carolina* Agriculture

Capital: Raleigh

Population: 10,273,419

Founded: November 21, 1789 (12th)

State Bird: Cardinal

State Tree: Pine

State Flower: Dogwood Blossom

State Mammal: Gray Squirrel

State Dog: Plott Hound

State Insect: Honey Bee

State Shell: Scotch Bonnet

State Saltwater Fish: Channel Bass

State Precious Stone: Emerald

State Beverage: Milk

State Rock: Granite

State Reptile: Eastern Box Turtle

State Historic Boat: Shad Boat

Number of Counties: 100

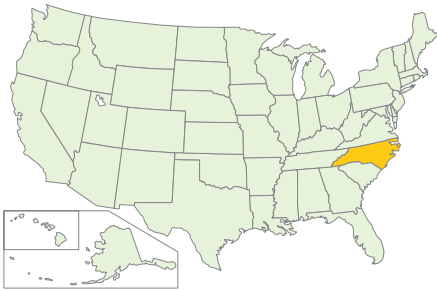
Largest City: Charlotte - 842,051

Nickname: The Tarheel State

Number of Farms: 47,800

Average Farm Size: 169 acres

Total Farmland: 8.1 million acres



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Climate & Soil

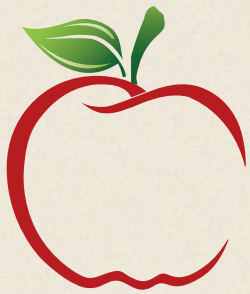
- North Carolina has a broad range of climate conditions due to its three distinct regions: the Appalachian Mountains, the Piedmont, and the Coastal Plains. This topographical variety along with the presence of the Gulf Stream off the coast, gives our state the largest climate variability of any state east of the Mississippi.
- The growing season growing season ranges from 130 days in the northern mountains to 242 in 270 days along the coast.
- The eastern 2/5 of North Carolina is characterized as coastal plain and tidewater. Moving west, the next 2/5 of North Carolina, about 200 miles wide, consists of a piedmont plateau. In the west, the land slopes upward from gentle to rugged rolling hills to the high southern Appalachian Mountains containing the Blue Ridge and Great Smokey Mountains.
- There are over 400 different soils in North Carolina. A variety of crops flourish on almost all of the soils in North Carolina if they receive proper management. Cecil soils occur on the largest number of acres of the soils with the type location in North Carolina. They make up 1,601,740 acres in the state. About half of the acreage is cultivated, and the rest is used for pasture or forest. The most common crops are small grains, corn, cotton, and tobacco.
- Monthly average temperatures range from a high of 89 degrees to a low of 30 degrees.

Crops & Livestock

- North Carolina ranks number one nationally in the production of flue-cured tobacco, sweet potatoes, and poultry and egg cash receipts; second in the production of Christmas trees; third in fresh market strawberries; fourth in pumpkins; and fifth in burley tobacco and cucumbers.
- Hogs and pigs, turkeys, broilers, cattle and calves are the main animals raised by North Carolina farmers. North Carolina ranks second in the nation for the production of hogs and turkeys and fourth in the nation for broilers.

General

- Mount Mitchell is the tallest point in North Carolina, rising to 6684 ft.
- North Carolina's agriculture industry, including food, fiber and forestry, contributes over \$84 billion annually to the state's economy, and employs over 17 percent of the work force.



A Look at *North Dakota* Agriculture

Capital: Bismarck

Population: 762,062

Founded: November 2, 1889 (39th)

State Bird: Western Meadowlark

State Tree: American Elm

State Flower: Wild Prairie Rose

Number of Counties: 53

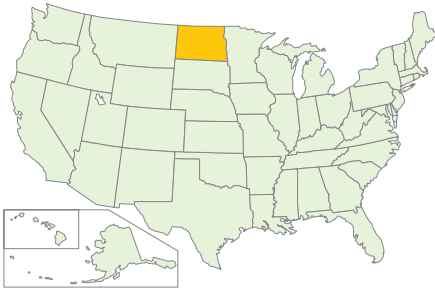
Largest City: Fargo- 129,530

Nickname: Peace Garden State

Number of Farms: 26,100

Average Farm Size: 1,238 acres

Total Farmland: 39.6 million acres



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Climate & Soil

- North Dakota's climate is described as sub-humid continental, excellent for production of small grains and livestock.
- Annual precipitation ranges from 13" per year in the northwest to more than 20" in the southeast.
- January is the coldest month with average temperatures of 2°F in the northeast to 17°F in the southwest.
- July is the warmest month with average temperatures of 67°F in the northeast to 73°F in the south.
- North Dakota weather can be extreme! The state's highest temperature reading – 121°F – and all-time low reading – 60°F below zero – were recorded less than six months apart in the same year, 1936!
- North Dakota soil ranges from thick black loam in the Red River Valley, some of the richest agricultural land in the world, to more porous, sandy soils in the west.
- North Dakota farmers are experts in no-tillage and reduced tillage practices that help save the soil.
- The North Dakota State Soil is Williams.
- The motto, "Strength from the Soil," appears on the state's coat of arms and governor's flag.

Crops & Livestock

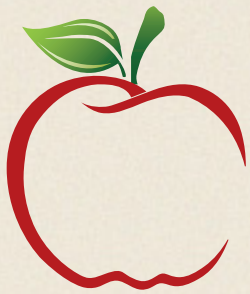
- North Dakota ranks first in the nation in the production of many crops, including:

	<u>% of U.S. total</u>
Spring wheat	50%
Durum	53%
Dry edible peas	52%
Dry edible beans	35%
Pinto beans	62%
Navy beans	40%
Flaxseed	89%
Canola	82%
Honey	23%

- North Dakota is also an important producer of sugar beets, potatoes and oats. Specialty crops include canola, lentils, field peas and buckwheat.
- Every time you eat spaghetti, chances are there's North Dakota durum in it.
- There are 1.86 million head of cattle, 142,000 pigs, 75,000 sheep in North Dakota.
- North Dakota dairy cattle produce 326 million pounds of milk.
- North Dakota produces about 1.2 million turkeys annually.

General

- North Dakota is 68,976 square miles in area with an average of 9.7 people per square mile.
- Farms and ranches occupy more than 39 million acres, almost 90% of North Dakota's land area.
- North Dakota's Agriculture Commissioner is Doug Goehring, farmer.



A Look at *Ohio* Agriculture

Capital: Columbus

Population: 11,542,645

Founded: March 1, 1803 (17th)

State Bird: Cardinal

State Tree: Buckeye

State Flower: Scarlet Carnation

Number of Counties: 88

Largest City: Columbus - 757,885

Nickname: Buckeye State

Number of Farms: 75,000

Average Farm Size: 184 acres

Total Farmland: 13.9 million acres



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Climate & Soil

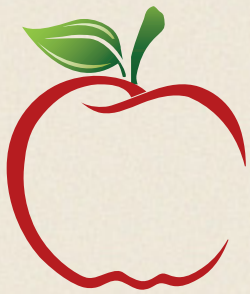
- The climate of Ohio is good for crop growth.
- Ohio typically receives 36" of rain each year.
- Most of Ohio's precipitation is from rainfall and thunderstorms.
- Monthly average temperature range from a high of 85.8°F to a low of 15.5°F.
- Ohio has 4" to 12" topsoil
- Ohio has a great diversity of soils, some of which are very productive.
- The Miamian Soil Series, named after Native Americans in the region, has been nominated as the official state soil.
- Ohio has 400 different soil types.
- Ohio is one of only four states in which over 50% of its land is classified as "prime farmland."

Crops & Livestock

- Corn and soybeans are the top Ohio crops.
- Ohio leads the U.S. in production of Swiss cheese.
- Ohio has 3,400 beekeepers containing 29,900 bee colonies.
- Other Ohio crops include winter wheat, hay, tomatoes for processing, apples, grapes, poinsettia's, sweet corn, mushrooms, maple syrup and many, many more.
- Ohio harvested over 1 million pounds of tomatoes in 2008. The state is ranked 5th for fresh tomato production and 3rd for processing tomatoes.
- The hills of Ohio's eastern and southern regions are blanketed in hardwood forests. Ohio wood carries an international reputation for its tight pattern and shape. Red and white oak and walnut are primarily exported as the world's finest logs, lumber, chips, and dimension pieces for use in the veneer, furniture, and paper industries. An estimated 300 to 400 million board feet are harvested each year.
- There are 1,470,000 cattle, 2,000,000 hogs, and 115,000 sheep in Ohio.
- Ohio dairy cattle produce over 5.13 billion pounds of milk each year.
- Ohio poultry produce 7.1 billion, or 592 million dozen eggs per year.
- Ohio ranks 16th in beef production with 15,000 beef farms with 292,000 cows.

General

- Ohio has 40,948 square miles of land.
- Ohio has approximately 800 food processing plants throughout the state.
- Ohio's agricultural industry contributes \$93 billion to the state's economic growth and employs one-in-seven Ohioans in areas such as wholesaling and retailing, farm production, marketing and processing, and agribusiness.



A Look at *Oklahoma* Agriculture

Capital: Oklahoma City

Population: 3,956,971

Founded: November 16, 1907 (46th)

State Bird: Scissortail flycatcher

State Tree: Redbud

State Flower: Mistletoe

Number of Counties: 77

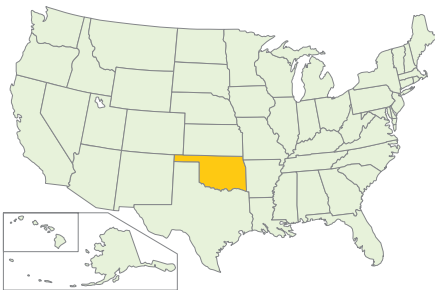
Largest City: Oklahoma City 649,021

Nickname: Sooner State

Number of Farms: 77,300

Average Farm Size: 445 acres

Total Farmland: 35 million acres



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Climate & Soil

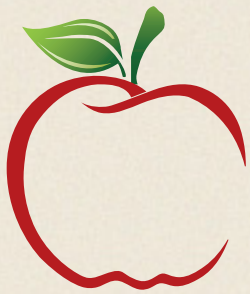
- Temperatures range from below zero in the winter to over 100°F in the summer. Strong winds make it seem much colder in the winter. Oklahoma is a “plains” state, with no mountains to stop the wind. It is known for its thunderstorms and tornados, which usually occur in the spring.
- The southeast part of the state is the wettest, receiving an average of 56” of rain annually.
- The Panhandle is driest, averaging less than 17” of rain annually.
- In the winter, the snowfall ranges from 30” in the Panhandle to occasional snow in the southeast.
- The growing season in Oklahoma ranges from 168 days in the Panhandle to 238 days in the southeast part of the state.
- Oklahoma has 2,500 different types of soil.
- Oklahoma is known for its red soil, which is red because of the iron content.
- Although Oklahoma is often associated with the Dust Bowl, it actually only affected the Oklahoma Panhandle. Drought in the years 1934-37 occurred on grasslands that had been plowed and planted with wheat to meet the demands of World War I. With no grass root system to hold the soil in place, it simply blew away. Conservation measures changed the Oklahoma landscape. Because of the man-made lakes, created as one conservation measure, Oklahoma now has more miles of shoreline than the Atlantic and Gulf coasts combined.

Crops & Livestock

- Winter wheat, hay, sorghum for grain, corn for grain, soybeans, peanuts, and cotton are the top Oklahoma crops.
- Hay is a good crop to grow on land that is rolling and steep. These lands would erode away if they were tilled for row crops. Native grass and alfalfa are the most popular kind of hay to grow.
- Oklahoma ranks 1st in the nation in the production of rye; 2nd in the nation for beef cows and calf crop; 3rd in the nation for cattle operations; 4th in the nation for meat goats and and cattle/calf production; 5th in the nation for winter wheat and pecan production; 6th in the nation for canola and grain sorghum production; 7th in the nation for hay; 8th in the nation for cotton; 9th in the nation for cottonseed production, hog production, and cattle on feed; and 10th in the nation for silage sorghum and peanuts.
- In 2019, Oklahoma harvested over 70 million bushels of winter wheat; 5.1 million tons of hay; and 18 million pounds of pecans. Oklahoma has 5.3 million cattle; 4.4 million chickens; 2.1 million hogs; 84,000 meat goats; and 50,000 sheep.
- Oklahoma beef cattle, hogs, sheep, meat goats, and broilers produce 1.2 billion pounds of meat per year.
- Oklahoma poultry produce 697 million eggs per year.
- Oklahoma dairies produce 725 million pounds of milk each year.

General

- The name “Oklahoma” comes from two Choctaw words: “okla,” which means “people,” and “humma,” which means “red,” so the state’s name means “red people.”
- Oklahoma has over 44 million acres of land.
- The grocery shopping cart was invented and first used in Oklahoma.
- Oklahoma is a grassland and home to one of the last remaining tall grass prairie preserves, located in Osage county in the northwest part of the state.
- Oklahoma ranks 4th in the nation for number of farms.
- Oklahoma agriculture employs 321,454 people



A Look at *Oregon* Agriculture

Capital: Salem

Population: 4,217,737

Founded: February 14, 1859 (33rd)

State Bird: Western Meadowlark

State Tree: Douglas-fir

State Flower: Oregon Grape

Number of Counties: 36

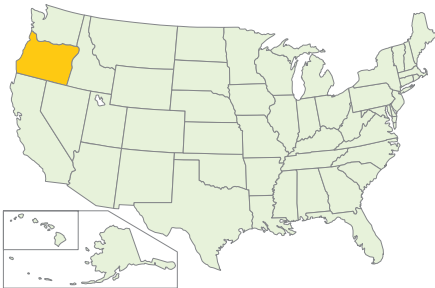
Largest City: Portland - 619,360

Nickname: Beaver State

Number of Farms: 37,616

Average Farm Size: 430 acres

Total Farmland: 16 million acres



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Climate & Soil

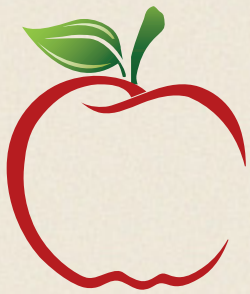
- Oregon's climate is ideal for the production of numerous crops.
- Oregon has seven distinct growing regions: the Oregon Coast, Willamette Valley, Southwest Oregon, High Desert, Columbia Basin, Northeast Oregon and Southeast Oregon.
- Oregon averages 31" of rainfall, however areas on the Oregon coast average over 90" per year while Eastern and Southern Oregon are much drier. Fourteen of the 36 counties average 15" of rainfall or less.
- Oregon summers are very dry. The state relies heavily on irrigation. Nearly 78% of water usage in Oregon goes for farm irrigation, compared to 40% nationally.
- Oregon has approximately 2,000 different types of soil.
- The depth of Oregon's topsoil averages about 10". This varies greatly from the coastal areas, forests, valleys, and Southern and Eastern regions of the state.

Crops & Livestock

- Crops account for 66% of the state's total sales.
- Greenhouse and nursery, cattle and calves, hay, grass seed, milk, wheat, wine grapes, potatoes, blueberries and pears are the leading crops in Oregon.
- Oregon leads the nation in the production of hazelnuts ryegrass seed, orchardgrass seed, crimson clover, fescue seed, sugarbeet for seed, red clover seed, potted florist azaleas, Christmas trees, and rhubarb.
- Oregon ranks #2 in the nation for the production of white clover seed.
- Beef cattle and dairy products are the most important livestock commodities to Oregon and rank as first and fifth on the top commodity list.
- Groundfish, crab, shrimp, tuna, salmon, and oysters are important to the commercial fishing industry in Oregon.
- Livestock and poultry account for 34% of the state's total sales.

General

- More than 225 different commodities can be found throughout Oregon.
- Oregon exports about 80% of its agricultural products, with nearly 40% leaving the country.
- More than 100 farmers markets are in Oregon.



A Look at *Pennsylvania* Agriculture

Capital: Harrisburg

Population: 12,801,989

Founded: December 12, 1787

State Bird: Ruffed Grouse

State Tree: Hemlock

State Flower: Mountain Laurel

State Beverage: Milk

Number of Counties: 67

Largest City: Philadelphia-1.6 million

Nickname: Keystone State

Number of Farms: 52,700

Average Farm Size: 139 acres

Total Farmland: 7.3 million acres



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Climate & Soil

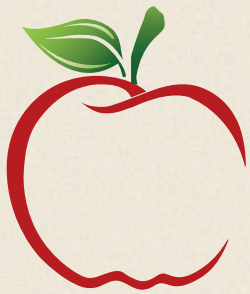
- Pennsylvania has climates that are generally known as humid continental. There are distinct seasonal variations and an abundance of rainfall.
- Lowland Pennsylvania has comparatively long summers and mild winters, with growing seasons ranging from six to seven months. Mean annual temperature for the region is 57°F.
- In Upland Pennsylvania, summers are short and winters are comparatively severe. The growing season is confined to a frost-free period of about 130 days. The mean annual temperature is 47°F.
- Rainfall averages 41" a year.
- The best agricultural soils tend to be found in southeastern Pennsylvania.
- In the valleys of Central Pennsylvania, limestone-derived soils predominate which are some of the most productive soils in the state and are used intensively for agriculture.

Crops & Livestock

- Pennsylvania ranks 1st in the nation in producing mushrooms, with annual production of 578 million pounds, or 64 percent, of all mushroom production in the United States.
- Corn, soybeans, winter wheat and oats are all important crops grown in Pennsylvania. Our farmers produce \$2.8 billion in total crop sales each year. Thanks to our climate, soil and location to markets, Pennsylvania is one of the leading states in selling produce directly to consumers.
- Pennsylvania ranks within the top five nationally in the growing of fruits like apples, peaches and grapes. Biglerville, located in Adams County, is the Apple Capital of the USA and home to the National Apple Museums.
- The sale of livestock products accounts for 70% of Pennsylvania's farm income.
- Milk production is the leading segment of the agriculture industry, our farmers produce 10.2 billion pounds of milk each year. Pennsylvania is the 6th largest milk producing state in the United States.
- Pennsylvania ranks 14th nationally in the total value of livestock, poultry, and their products valued at \$5.0 billion in 2017.

General

- Pennsylvania ranks 19th nationally in agriculture products sold, at \$7.8 billion in 2017.



A Look at *Rhode Island* Agriculture

Capital: Providence

Population: 1,053,209

Founded: May 29, 1790 (13th)

State Bird: Rhode Island Red

State Tree: Red Maple

State Flower: Violet

Number of Counties: 5

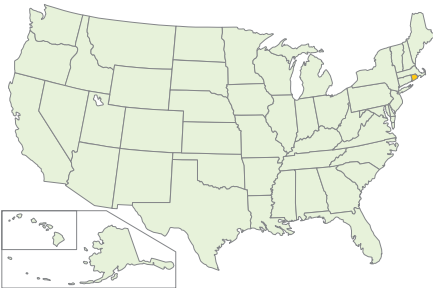
Largest City: Providence - 175,600

Nickname: The Ocean State

Number of Farms: 1,220

Average Farm Size: 56 acres

Total Farmland: 67,819 acres



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Climate & Soil

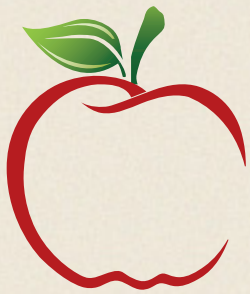
- The climate of Rhode Island is very mild because of the warm winds from Narragansett Bay.
- The yearly precipitation in Rhode Island averages about 44".
- The extreme temperatures averages for Rhode Island are 29° F and 71° F.
- The richest soil in Rhode island is around the Narragansett Bay
- Gloucester stony loam is the state's least fertile soil.

Crops & Livestock

- The top agricultural commodities in the state are greenhouse and nursery products, dairy products, sweet corn, aquaculture (seafood), and apples.
- Farmers grow potatoes mostly in the southeastern region of the state.
- Milk is the second most important source of agricultural income for the state of Rhode Island.
- The annual fish catch for the state is about \$85 million.

General

- Farmland covers 10% of the state's total area.
- Rhode Island is a small state. It ranks 49th out of 50 states in agricultural exports within the United States.
- The state's top industries are health services, tourism, manufacturing, and agriculture.



A Look at *South Carolina* Agriculture

Capital: Columbia

Population: 5,148,714

Founded: May 23, 1778 (8th)

State Bird: Carolina Wren

State Tree: Palmetto

State Flower: Yellow Jessamine

Number of Counties: 46

Largest City: Columbia - 138,458

Nickname: Palmetto State

Number of Farms: 24,600

Average Farm Size: 195 acres

Total Farmland: 4.8 million acres



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Climate & Soil

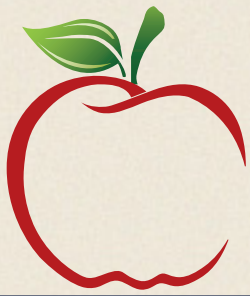
- The state's annual average temperature varies from the mid-50s in the mountains to low-60s along the coast.
- During the winter, average temperatures range from the mid-30s in the mountains to low-50s in the Lowcountry.
- During summer, average temperatures range from the upper 60s in the mountains to the mid- 70s in the Lowcountry.
- Average annual precipitation is heaviest in northwestern South Carolina, and annual totals vary directly with elevation, soil type, and vegetation:
 - Mountains – 70" to 80" annually
 - Foothills – 60" to 70" annually
 - Piedmont – 45" to 50" annually
 - Midlands – 42" to 47" annually
 - Coastal Plain - 50" to 52" annually
- In general, the Southern Piedmont is a reddish soil that has a high amount of clay near the surface.
- The Carolina Sandhill is a band of deep sandy soil that goes through the middle of the state.

Crops & Livestock

- Broilers (meat chickens) were the top commodity in 2019. They accounted for over 30% of the state's total agricultural sales.
- South Carolina is home to the only tea farm in North America.
- South Carolina's top agricultural crops in 2019 were: broilers, corn, cotton, cattle and calves, soybeans, eggs, peanuts, peaches, wheat and turkeys.
- Second only to California, South Carolina is the largest peach producing state on the East Coast. Sorry, Georgia!
- South Carolina is also second nationally in collard green and kale production. Lexington County is the top producing county for collards.
- South Carolina grows a wide variety of fresh fruits and vegetables including: peaches, watermelons, strawberries, blue berries, peppers, tomatoes, squash, cucumbers, potatoes and sweet potatoes.
- Specialty crops include exotic mushrooms, ginkgo and pecans.
- South Carolina greenhouse and nursery products generated \$150 million in cash receipts in 2017.
- In 2019, South Carolina had 345,000 head of cattle, 195,000 hogs, 245 million broilers (meat chickens), 7.5 million turkeys and 743,465 quail.
- Cattle and calves are raised in every county in the state. Jasper County has the fewest with 500 head, while Anderson County tops the chart with 36,000 head.

General

- Agribusiness returns nearly \$42 billion each year to South Carolina's economy and supports over 212,000 jobs, 10.5% of the state's workforce.
- There are over 12 million acres of forestland throughout South Carolina, with 74% privately owned.
- South Carolina is home to many ag-related festivals, such as the Okra Strut, the World Grits Festival, the Rice Festival, the Chitlin' Strut, and several festivals featuring peaches, watermelons, shrimp, oysters, and catfish.



A Look at *South Dakota* Agriculture

Capital: Pierre

Population: 812,383

Founded: November 2, 1889 (40th)

State Bird: Chinese Ring-Necked Pheasant

State Tree: Black Hills spruce

State Flower: Pasque

Number of Counties: 67

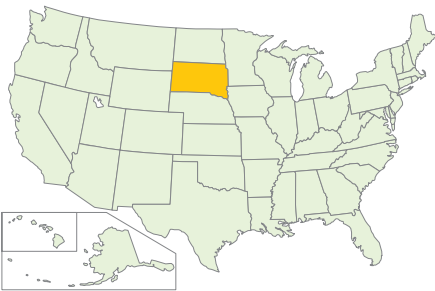
Largest City: Sioux Falls - 157,935

Nickname: Mount Rushmore State

Number of Farms: 31,800

Average Farm Size: 1,374 acres

Total Farmland: 44 million acres



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Climate & Soil

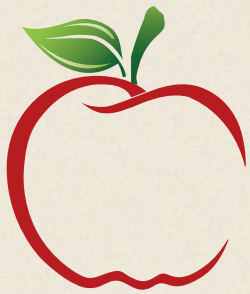
- South Dakota receives from 14-25" of rain and from 25-100" in snow across the state.
- Temperatures range from 10°F to 96°F throughout the state.
- The state experiences all four seasons. The summer often has hot days and cool nights while the winter allows for excellent winter sporting activities.
- Topsoil in our state ranges from 10-12" thick in the east to 5-7" thick in the western part of the state. The range is due to climactic differences. Soil scientists have identified over 650 different soil types in South Dakota.
- The South Dakota Legislature made Houdek (pronounced hoo-deck) the official state soil in 1990. Houdek soil is not found in any other state. It was chosen because it, and closely related soils occur on more than two million acres across South Dakota.

Crops & Livestock

- Wheat: South Dakota produces 3 different types of wheat: hard red winter, hard red spring and durum. In an average year, almost 3 million acres are planted to wheat.
- Corn: More than 4 million acres of corn are planted in South Dakota in an average year. It is grown primarily east of the Missouri River, mainly in the southeast. It is our most frequently irrigated crop. We harvest over 400 million bushels each year. Ethanol plants, which process the corn into ethanol fuel and distillers grain, are prevalent across our state.
- Soybeans: South Dakota grown soybeans are processed into meal and oil at our locally owned processing plant in Volga, SD. Nearly 4 million acres are planted to beans, producing 100 million bushels annually. South Dakota State University is a leader in the development of varieties that are suitable to our growing conditions.
- Sunflowers: Two types of sunflowers are grown in South Dakota—oilseed and confectionery. The confectionery variety is used for human consumption and birdseed. The state ranks 2nd in sunflower seed and oil production in the United States.
- Other crops: South Dakota is also a leading producer of a variety of small grains including oats, barley, rye, flaxseed, sorghum and alfalfa.
- Beef: In South Dakota there are approximately 17,000 ranchers and cattlemen that produce 3.7 million head of cattle--we have more cattle than people! In South Dakota, the cattle industry is a family business with nearly all of the cattle businesses having been in the same families for more than 25 years.
- Pork: South Dakota's pork farmers raise 1.4 million hogs per year. John Morrell & Co. alone handles over 17,000 hogs a day. South Dakota's pork industry provides nearly 6,900 jobs in our state.

General

- Agriculture is the state's leading industry. It has a \$21 billion impact on the state's economy.
- The state encompasses 77,123 square miles. It is 380 miles from east to west and 245 miles from north to south. South Dakota is 16th in size among the 50 states.
- South Dakota ranks in the top 10 in the production of 25 agricultural commodities.



A Look at *Tennessee* Agriculture

Capital: Nashville

Population: 6,214,888

Founded: June 1, 1796 (16th)

State Bird: Mockingbird

State Tree: Tulip Poplar

State Flower: Iris

Number of Counties: 95

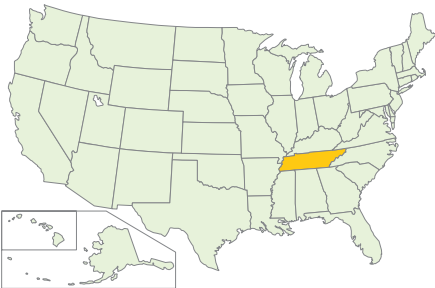
Largest City: Memphis - 670,100

Nickname: Volunteer State

Number of Farms: 79,000

Average Farm Size: 138 acres

Total Farmland: 10.9 million acres



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Climate & Soil

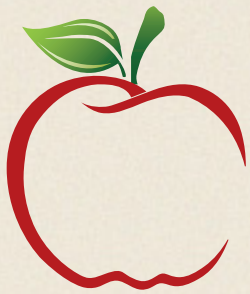
- The climate of Tennessee is good for crop growth.
- Tennessee typically receives 50" of rain each year.
- Winds from the Gulf of Mexico bring most of the rain and snow to Tennessee.
- Tennessee averages 40°F in winter and 78°F in summer. West Tennessee averages 5" of snow while northeastern Tennessee gets 16".
- Tennessee has 3 regional land types:
 - West: row crop land
 - Middle: fertile rolling land
 - East: hilly to mountainous
- The Tennessee state rock is Limestone.
- Tennessee is home to Milan No-till Field Day, the largest field day devoted to conservation tillage.

Crops & Livestock

- Nursery products, soybeans, and corn are the top Tennessee crops.
- Tobacco plants grow five to seven feet tall.
- Cotton is harvested using a picker or stripper.
- Tennessee has more species of trees than any other state.
- Tennessee ranks #2 in the U.S. for hardwood and #3 for tobacco production.
- Tennessee's top agricultural commodities are cattle and calves, broilers (meat chickens), soybeans, corn, and greenhouse/nursery products.
- There are 2,040,000 cattle, 131,400 goats, 2,808,000 chickens and 210,000 horses in Tennessee.
- Tennessee dairy cattle produce over 909 million pounds of milk each year.
- Tennessee farmers produce 323 million eggs per year.

General

- Tennessee has 42,244 square miles of land. (27 million acres)
- In Tennessee, 80 percent of the land is used for agricultural purposes including forestry.



A Look at *Texas* Agriculture

Capital: Austin

Population: 29,995,881

Founded: December 29, 1845 (28th)

State Bird: Mockingbird

State Tree: Pecan

State Flower: Bluebonnet

Number of Counties: 254

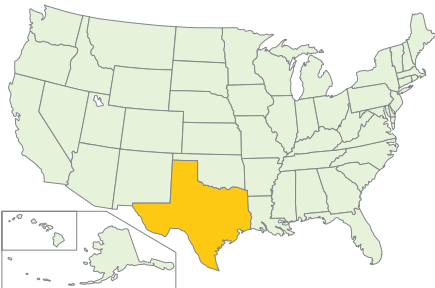
Largest City: Houston - 2.3 million

Nickname: Lone Star State

Number of Farms: 248,416

Average Farm Size: 511 acres

Total Farmland: 127 million acres



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Climate & Soil

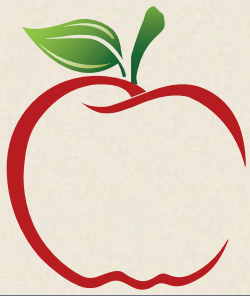
- Texas enjoys a long growing season with planting beginning in February in the southern part of the state; April and May in the north.
- It becomes very hot during the months of June, July, & August. The Central Plains being the hottest in the state, with temperatures sometimes as high 114-120°F.
- The four different regions of Texas vary in average annual rainfall, decreasing from east to west.
 - Coastal Plains 30-55"
 - Central Plains 20-30"
 - High Plains 15-20"
 - Mountains & Basins 0-16"
- Texas diverse weather is due to the vast amount of land and two air masses that meet, Rocky Mountain, Canadian cold air mass and the Gulf of Mexico's warm, moist air.
- Texas has approximately 1,100 different soils within its borders.
- The Texas state soil is Houston Black Clay.

Crops & Livestock

- Cotton, one of Texas top 10 commodities, was growing wild in the 16th century. Cotton is now a major cash crop of Texas. Texas ranks first in the U.S. for cotton production.
- The top five commodities in Texas are:
 - Cattle
 - Broilers
 - Cotton
 - Dairy
 - Corn
- There were 8,923,912 bales of cotton produced in 2017.
- Texas was the leading state in cattle operations and cattle & calves for 2017. There were 152,882 cattle operations and a total of 12,573,876 head of cattle/calves.
- There were 729,438 sheep and lambs in Texas in the year 2017. They produced 2,224,455 pounds of wool.
- Texas is #1 in the nation in:
 - Cattle
 - Cotton
 - Sheep & goats
 - Mohair
 - Hay production

General

- Agriculture contributed \$25 Billion to the economy in 2017.
- Agriculture is the second largest industry in the state, generating \$80 billion for the economy annually.
- Texas has 266,807 sq. miles of land or 172 million acres.
- Big Spring, TX - named for one the states largest natural springs.
- Texas was an independent nation from 1836-1845.
- Before 1836, Texas was a part of Mexico.
- The Alamo in San Antonio is known as the "Cradle of Texas Liberty".



A Look at *Utah* Agriculture

Capital: Salt Lake City

Population: 3,206,000

Founded: January 4, 1896 (45th)

State Bird: California Seagull

State Tree: Quaking Aspen

State Flower: Sego Lily

Number of Counties: 29

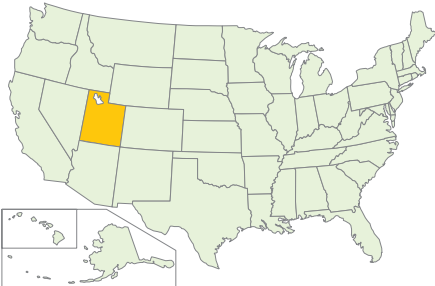
Largest City: Salt Lake City: 200,567

Nickname: Beehive State

Number of Farms: 17,800

Average Farm Size: 601 acres

Total Farmland: 11 million acres



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Climate & Soil

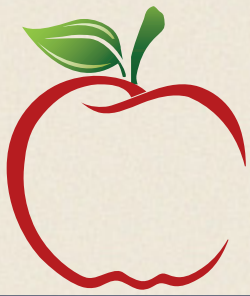
- Utah is the rooftop of the U.S. The average elevation of the tallest peaks in each of Utah's counties is 11,222 feet above sea level—higher than the same average in any other state.
- The growing season ranges from 60 days in Northern Utah to 190 days in the southern part of the state.
- Due to its geographic diversity, annual precipitation varies greatly. The average annual precipitation is approximately 12". Utah is the second driest state in the nation.
- Irrigation of the rich but arid land has long been crucial to agricultural development. Utah's agriculture is dependent upon numerous reservoirs and vast reclamation projects.
- Lake Bonneville was Utah's Ice Age Lake. The water formed a huge lake that spread over the flat land of the Great Basin. It covered much of Utah, spreading through canyons and mountain valleys.
- After the recession of Lake Bonneville, the mountain streams flowed down to the lake, carrying loads of sediment. These sediments formed wide areas of loose soil, gravel, and sand, and are now some of the best soil and gravel deposits in the state. These soils are located along the Wasatch Front.
- Average topsoil depth ranges from 1" in the southern part of the state to 12" in the northern part.

Crops & Livestock

- Utah grows barley, wheat, dry edible beans, onions, and corn. Crop production accounts for 23%, or \$414 million, in farm cash receipts.
- Utah is well-known for its homegrown sweet corn and tomatoes that are sold across the state at local farmers markets.
- Nationally, Utah ranks 2nd in tart cherries, 3rd in apricots, 8th in sweet cherries, and 15th in peaches.
- Thirty-eight percent of Utah's farm cash receipts, \$662 million, comes from meat sales (beef, hog, and sheep).
- Seventy-six percent of the state's farm cash receipts, \$1.32 billion, comes from the combined total of all livestock and livestock products (including sheep, wool, cattle, milk, eggs, hogs, and other products).
- Utah relies heavily on grazing allotments on public land (Bureau of Land Management) to support its range cattle industry.
- Nationally, Utah ranks 2nd in wool, 5th in sheep, and 11th in trout production.
- Nationally, Utah ranks 5th in safflower, 9th in other spring wheat, and 11th in alfalfa hay.

General

- The Great Salt Lake encompasses 1,060,000 acres; Utah is the top producer of brine shrimp.
- Utah produced \$1.74 billion in cash receipts for crops, livestock, and produce in 2017.
- Utah encompasses 84,916 square miles; 65 percent of that land is owned by the federal government for national parks, military facilities, mining, public land and other entities.



A Look at *Vermont* Agriculture

Capital: Montpelier

Population: 621,760

Founded: March 4, 1791 (14th)

State Bird: Hermit Thrush

State Tree: Sugar Maple

State Flower: Red Clover

Number of Counties: 14

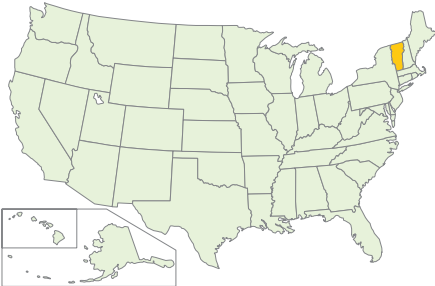
Largest City: Burlington - 38,889

Nickname: Green Mountain State

Number of Farms: 7,000

Average Farm Size: 177 acres

Total Farmland: 1.2 million acres



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Climate & Soil

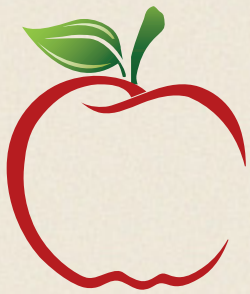
- Vermont, like most of New England, has changeable weather and four distinct seasons. Although it is a year-round vacation destination, thousands of visitors arrive in autumn to see the fall foliage, which usually peaks some time between the end of September and mid October.
- Spring comes late in Vermont. Generally, by May or June warm weather has arrived, and summers are generally mild and dry. The temperature range is 51-82° F. July is the hottest month, with a few days in the 90s.
- Vermont averages about 44" of precipitation per year. Precipitation is generally well-distributed throughout the year, but Vermont has experienced spring flooding and moderate drought over the last four years.
- Winters are quite cold with a range of 0 to 30° F though the weather varies from place to place. Burlington and southern Vermont have somewhat milder temperatures. The annual snowfall averages 55"-65".
- Much of Vermont's terrain is very hilly and some of it can be quite rocky. This is one of the reasons Vermont is ideal for raising livestock of all kinds from cows and sheep to llamas and goats.
- Vermont has a wide variety of soils ranging with its most fertile land near Lake Champlain on Vermont's western border and in the Connecticut River Valley which makes up much of Vermont's Eastern border. Though hilly, much of Vermont's land is excellent for raising hay. Vermont is the largest hay producing state in New England.
- In 1985 the Vermont Legislature designated the Tunbridge Soil Series as the official State Soil.
- Vermont's soil was formed in loamy glacial till and it has good potential for agriculture and forestry.

Crops & Livestock

- Vermont produces a wide variety of crops including: apples, honey, corn, hay, greenhouse & nursery products, Christmas trees, maple syrup, fruits and vegetables, dairy products, eggs and fiber products.
- Dairy represents about 72% of Vermont's total agricultural economy.
- Vermont is the biggest producer of maple syrup in the United States producing about 36% of the nation's total output.
- When people think of Vermont, they often think of black and white Holstein cows that give milk. The truth is, you can find most of the world's major cow breeds in Vermont as well as beef cattle sheep, llamas, alpacas, goats, chickens, turkeys and other rare poultry breeds, and even emus!
- Vermont is world famous for being the home of the Morgan horse breed.

General

- Vermont's population is just over 602,000 which ranks it 48th in the nation.
- Vermont's highest peak is Mount Mansfield at 4,393 feet.
- Vermont is called the Green Mountain state because of the Green Mountain ridge which runs down the center of the state. Vermont is also the home of three other mountain ranges including the Appalachian, the Hoosac, and the Taconic.
- Vermont covers 9,615 square miles making it one of the smallest states in the country.
- Inventor John Deere who made the plow that allowed the soils of the Great Plains to be tilled by settlers moving westward, was originally from Vermont.



A Look at *Virginia* Agriculture

Capital: Richmond

Population: 8,400,000

Founded: June 25, 1788 (10th)

State Bird: Cardinal

State Flower: American Dogwood

State Tree: Flowering Dogwood

Number of Counties: 95

Largest City: Virginia Beach- 437,994

Largest County: Fairfax - 1,138,652

Nickname: Old Dominion

Number of Farms: 44,000

Average Farm Size: 181 acres

Total Farmland: 8.1 million acres



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Climate & Soil

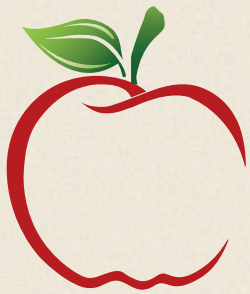
- The average high temperature in Virginia is 69.5°F, while the average low is 48°F. The average annual rainfall is 43.3".
- Virginia is organized into 5 different regions, which vary widely by climate, soil, and topography. From east to west the regions are Coastal Plain, Piedmont, Blue Ridge Mountain, Valley and Ridge, and Appalachian Plateau.
- Winters in the western part of the state can be bitterly cold while other parts of the state have longer growing seasons and temperatures that rarely drop below 0°F.
- Similarly, annual rainfall totals can vary from 33" in the Shenandoah Valley to more than 60" in the mountains of southwestern Virginia.
- Pamunkey soil is the state soil of Virginia. Pamunkey soils were first identified on a farm near Jamestown, Virginia which is known as the oldest tilled farm in the United States.
- The soil in the Coastal Plain region has the highest concentration of sand. West of Virginia's fall line the soils are clay based, with the Valley and Ridge and Appalachian Plateau regions having darker clay because of the higher mineral content.

Crops & Livestock

- Virginia's agricultural production is one of the most diverse in the nation due to its varying geography and climate.
- The top agricultural commodities in Virginia include broilers, cattle, dairy, soybeans and turkeys.
- Many Virginia commodities and products rank in the top 15 nationally. These commodities include: leaf tobacco, fresh market tomatoes, apples, grapes, peanuts, cotton, turkeys, and broilers.
- Virginia's equine industry has an annual impact of over 1 billion dollars. Famed Triple Crown winner Secretariat was born in Doswell, VA.
- The cultivation of tobacco as a cash crop was a major contributing factor to the success of Jamestown, the first permanent English settlement in the new world.

General

- Agriculture is Virginia's largest industry by far! The industry has an economic impact of over \$70 billion annually and provides nearly 334,000 jobs in the Commonwealth. The industries of agriculture and forestry together have a total economic impact of \$91 billion. Every job in agriculture and forestry supports 1.7 jobs elsewhere in the Virginia economy.
- The top export market for Virginia agriculture is China.
- Nearly 90 percent of Virginia farms are owned and operated by individuals or families.
- Virginia has nearly 44,000 farms, the average size of which is 181 acres. Farms cover 32 percent of Virginia's total land area.



A Look at *Washington* Agriculture

Capital: Olympia

Population: 7,797,095

Founded: November 11, 1889 (42nd)

State Bird: Willow Goldfinch

State Tree: Western Hemlock

State Flower: Coast Rhododendron

Number of Counties: 39

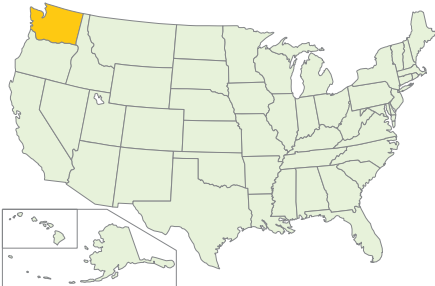
Largest City: Seattle - 767,000

Nickname: Evergreen State

Number of Farms: 35,700

Average Farm Size: 412 acres

Total Farmland: 14.7 million acres



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Climate & Soil

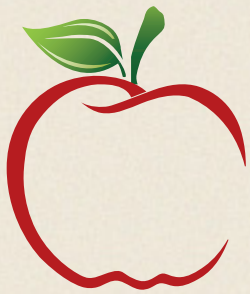
- Washington has several different climate zones which is a reason this state produces such a wide variety of crops.
- The westerly winds from the Pacific Ocean place this area in the Maritime climate zone and help to keep the western side of the state cool during the summer and warmer in the winter. Rainfall in the lowlands averages 40" each year.
- Washington has a rain forest in the Olympic Mountains where more than 140" of precipitation falls annually.
- The Cascade Mountains divide the state and prevent much of the coastal moisture from getting to the east side of the state. The world record for the most snowfall in one season (1140") occurred on Mt. Baker in the WA Cascades in the winter of 1998-99.
- Much of Eastern Washington is in the Steppe climate zone. It has hot summers and cold winters. Because of the rain shadow of the Cascade Mountains, average rainfall is only 10-20". There is also a Desert climate zone in central Washington where rainfall is less than 10" per year.
- Much of Eastern Washington is known as 'channeled scablands'. About 40 times, between 12 and 18,000 years ago, the Continental glaciers receded and caused ice dams on the Clark Fork River at the Idaho/Montana border to break. This flushed the land with water from Lake Missoula. These flows have been estimated at 10 times the combined flows of all the rivers in the world and raged to the Pacific Ocean in less than 48 hours. These floods scraped the land down to bedrock. Giant boulders imbedded in ice were carried as far as the Willamette Valley, south of Portland, Oregon.
- Receding glaciers across the state scraped topsoil and created huge valleys and many rivers and streams. Tons of fertile soil washed down from mountains and settled into the fertile flood plains.
- The soils from the Palouse region in SE Washington were built up from fine materials carried by the wind, creating giant soil dunes with extremely deep, fertile topsoil.

Crops & Livestock

- Washington ranks 12th in the nation in terms of total agricultural cash receipts, but is second only to California in the diversity of crops grown (about 230 different ones).
- Washington's highest dollar crop is apples. This state produces 65% of all the apples in the nation at a farmgate value of \$2.19 billion.
- Milk is the second most valuable agricultural commodity, followed by wheat, potatoes, and cattle and calves.
- Washington leads the nation in the production of several crops: 85% of red raspberries for processing, 73% of all hops, 68% of the nation's supply of spearmint oil, 71% of sweet cherries, 46% of concord grapes, 49% of pears, 25% of all peppermint oil, and 70% of all wrinkled seed peas.
- Other crops grown include: barley, alfalfa hay, corn, lentils, onions, wine grapes, apricots, peaches, canola, garbanzo beans, blueberries, aquaculture, forest products, and many varieties of vegetable seed.
- Washington also produces oysters, mussels, clams, geoducks, and trout.

General

- Central Washington is a desert, yet is considered the most productive agricultural land in the state, all because of irrigation. Grand Coulee dam was built in 1941 for irrigation purposes, with the sale of hydro-electric power as the means to pay for the project. The first half of the Columbia Basin Irrigation Project has made the desert bloom over half a million acres.



A Look at *West Virginia* Agriculture

Capital: Charleston

Population: 1,819,777

Founded: June 20, 1863 (35th)

State Bird: Cardinal

State Tree: Sugar Maple

State Flower: Rhododendron

Number of Counties: 55

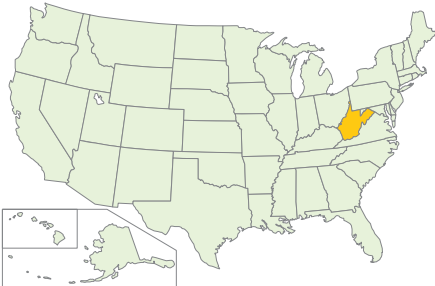
Largest City: Charleston - 50,381

Nickname: Mountain State

Number of Farms: 23,200

Average Farm Size: 157 acres

Total Farmland: 3.7 million acres



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Climate & Soil

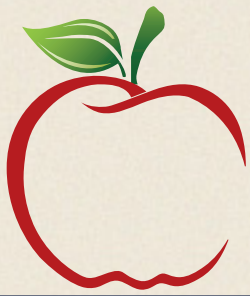
- West Virginia gets approximately 4" of rain each month.
- The average temperature in January is 34° F.
- The average temperature in July is 72° F.
- West Virginia is known for shallow, clayey, and acidic soil.
- River flood plains provide blacker more fertile soils and limestone bedrock helps neutralize soil acidity.

Crops & Livestock

- The state ranks 10th for apple production, 12th for trout production, 14th for turkey production, 15th for peach production within the United States.
- Hay, grown to feed the state's livestock, is the #1 crop, providing 2% of West Virginia's total agricultural receipts.
- Other major crops of West Virginia are apples, corn for grain, soybeans and tobacco.
- Peaches and wheat are also grown in the state.
- Broilers (young chickens) are the state's #1 agricultural commodity, generating about 31% of West Virginia's total agricultural receipts.
- Beef cattle and calves produce about 21% of the state's total agricultural receipts.
- Chicken eggs, dairy products, and turkeys are other major livestock products produced by the State of West Virginia.
- Sheep and lambs, hogs, farm chickens, honey, farm-raised fish, and wool are also produced in West Virginia.

General

- Approximately 95 percent of West Virginia farms are family-owned; the highest in the U.S.
- The state is the third most-forested state within the nation. Total forested area is 12 million acres.
- In terms of revenue generated West Virginia's top five agricultural products are broilers (young chickens), cattle and calves, hay, dairy products, and turkeys.



A Look at *Wisconsin* Agriculture

Capital: Madison

Population: 5,832,655

Founded: May 29, 1848 (30th)

State Bird: Robin

State Tree: Sugar Maple

State Flower: Wood Violet

Number of Counties: 72

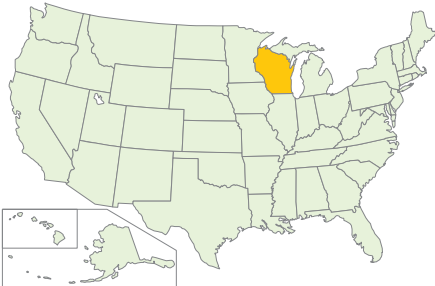
Largest City: Milwaukee

Nickname: America's Dairyland

Number of Farms: 64,900

Average Farm Size: 220 acres

Total Farmland: 14.3 million acres



www.agclassroom.org/wi

Climate & Soil

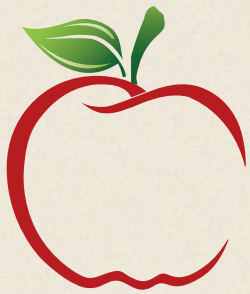
- Warm summers help Wisconsin plants grow and cold winters help the soil replenish itself.
- Average annual precipitation in Wisconsin is 34 inches.
- The state average high temperature is 27°F in January and 83°F in July.
- Wisconsin's fertile upland soils are well suited for alfalfa production, helping to feed our 1.3 million dairy cows.
- Glaciers during the last two million years determined the topography and soils except for the 13,360 square miles in southwestern Wisconsin.
- Glaciers created a rolling terrain with nearly 15,000 lakes and several areas of marshes and swamps.
- Wisconsin's state soil is Antigo Silt Loam.

Crops & Livestock

- Wisconsin leads the nation in production of snap beans, cranberries, cheese, mink pelts, corn for silage, and dry whey for humans.
- Each year, Wisconsin growers harvest sold more than 700,300 Christmas trees.
- In the turf industry, there are 399 golf courses in Wisconsin adding \$1.2 billion to the economy.
- Cranberries are now grown in 20 counties throughout central and northern Wisconsin.
- A mechanical cherry shaker can harvest 60 to 100 trees in an hour.
- Wisconsin chicken farms produce 2.16 billion eggs.
- Wisconsin's nearly 1,200 licensed cheesemakers produce over 600 types, styles and varieties of cheese – nearly double the number of any other state.
- State mink producers produce 1.02 million pelts each year – tops in the nation.
- Wisconsin ranks #1 in dairy goats with 82,000 head.
- There are 1.2 million acres of turf in Wisconsin.
- Wisconsin leads the nation in both the number and diversity of dairy farms. Our 6,907 dairy farms include rotational grazing operations, organic producers, and conventional dairy operations of all sizes.
- The state ranks third in the nation in potato production harvesting potatoes on 68,000 acres.
- There are 1,508 horticulture production venues in Wisconsin including greenhouses, nurseries, and floriculture production.

General

- The state's top agricultural export markets include Canada, China and Mexico.
- Wisconsin leads the nation in the export of bovine semen, ginseng roots, and prepared/preserved cranberries and sweet corn.
- Wisconsin's agriculture industry generates \$104.8 billion in economic activity annually.
- Over 99% of Wisconsin's farms are family-owned.
- Agriculture contributes 435,700 jobs and 11.8% of our workforce, rely directly on agriculture for their jobs.
- Sales from food processing industrial sales total \$82.7 billion.
- On-farm production contributes 154,000 jobs and processing contributes 282,000 jobs.
- Wisconsin boasts many cherry orchards producing 59% of the nation's supply.



A Look at *Wyoming* Agriculture

Capital: Cheyenne

Population: 544,270

Founded: July 10, 1890 (44th)

State Bird: Meadowlark

State Tree: Plains Cottonwood

State Flower: Indian Paintbrush

Number of Counties: 23

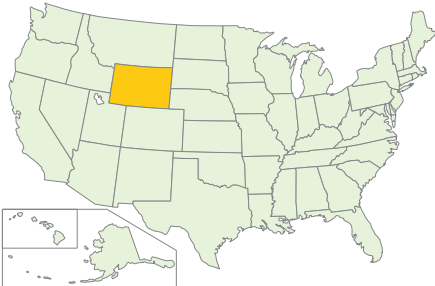
Largest City: Cheyenne - 55,641

Nickname: Cowboy State

Number of Farms: 11,000

Average Farm Size: 2,726 acres

Total Farmland: 30.2 million acres



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Climate & Soil

- Wyoming has the second highest mean elevation in the United States at 6,700 feet above sea level. The highest point of elevation is Gannett Peak at 13,804 feet in Fremont and Sublette counties, and the lowest level, 3,125 feet, is on the Belle Fourche River in Crook County.
- The climate of any area in Wyoming is largely determined by its latitude, altitude, proximity to oceans and its local topography. Annual precipitation is 15.45". Temperature can vary from below 20°F in the winter to above 90°F in the summer, however the average temperature is 45.6°F for Wyoming.
- The growing season ranges from 140 days in the eastern side (lower elevation) of the state to 60 days in the higher elevation (central and western) part of the state.
- The Great Plains meet the Rocky Mountains in Wyoming. The state is a great plateau broken by a number of important mountain ranges. The majority of Wyoming's land surface is mountainous. The natural vegetation in the grasslands and mountains makes Wyoming a favorable place for livestock production.
- As a "headwaters" state, Wyoming provides water to streams and rivers that span the U.S. The continental divide cuts through Wyoming from the northwest to the south central border. Rivers east of the divide drain into the Missouri River Basin and eventually the Atlantic Ocean..

Crops & Livestock

- Wyoming grows hay, barley, wheat, dry edible beans, sugarbeets and corn. Hay is the leading crop in Wyoming in terms of value of production - \$65 million in 2008. Barley had the next highest crop value in 2008, at \$32 million followed by wheat at \$31 million followed by corn for grain at \$28 million.
- Wyoming ranks 8th nationwide in barley production, 20th in Hay, and 33rd in wheat production.
- The cattle industry is by far the largest component of Wyoming agriculture. Cattle led the way in 2008 in terms of value of production at \$599 million dollars.
- Wyoming sheep producers produced 3,124,299 pounds of wool in 2007. Wyoming is ranked 4th in lambs and sheep. Wyoming inventory of sheep and lambs was 411,952 head. Ewes one year old and older was 258,096 in 2008.
- Livestock inventories for Hogs and pigs in 2007 was 107,180, Horses and ponies at 80,476, and colonies of bees were 45,633.

General

- Wyoming's economic well-being revolves around three industries- minerals, agriculture and tourism.
- Historically, agriculture has been an important part of Wyoming's economy. It is also an essential part of Wyoming's culture and lifestyle. The main agricultural commodities produced in Wyoming include beef, hay, sugar beets, grain (wheat and barley), and wool. More than 91% of land in Wyoming is classified as rural.
- Wyoming is the 9th largest state in the U.S., it covers 97,914 square miles. Forty-two percent of the land is owned by the federal government.