



History of South Carolina Agriculture

Lesson Title: What does the future hold?

Adapted by: South Carolina Ag in the Classroom Curriculum

Learning objectives: Upon completion of this lesson, students will be able to:

- Define the term commodity.
- Discuss South Carolina's top agriculture commodities.
- Discuss the importance of agriculture in South Carolina.

Subject Area: Social Studies

Grade level: Variations of activity can apply to 4,5,6,7,8 grades

South Carolina Curriculum Standards Alignment:

- 5th Grade Social Studies: 1865- Present
 - 5-1.2- Explain the effects of Reconstruction and the move from plantation system to sharecropping.

Resources:

- <http://ed.sc.gov/scdoe/assets/file/agency/ccr/Standards-Learning/documents/Grade4SupportDocuments.pdf>
- South Carolina Farm Bureau Ag In the Classroom Curriculum-
<http://www.scfb.org/programs/ag-in-the-classroom/teacher-resources>
- <http://www.scfb.org/Media/Default/AITC/commoditymap.pdf>

Materials:

- SC Agriculture Commodity Map
- Copies of Scavenger Hunt

Lesson Activities:

- Find a local agriculture museum or facility in your county and coordinate a tour to learn about local agriculture.
- SC Agriculture Scavenger Hunt
 - Using the commodity map provided, have students participate in a scavenger hunt to find the most correct answers. The student with the most gets a prize.
- For more complete and detailed lesson activities on the history of SC agriculture, use the South Carolina Farm Bureau Federation software/cd resource for 3rd and 8th grades. This software uses instructional design and innovative technology to bring an in-depth meaning to historical events in agriculture. The program focuses on the important role agriculture has played in South Carolina's development.

Lesson Content:

Agriculture in SC Post- Civil War

- Large numbers of people, black and white, left South Carolina following the Civil War. Those who stayed had to rebuild. Many wealthy plantation owners who had never worked before had to learn to grow their own food, cook, and chop wood for fuel. Some former slaves and poor whites were able to get their own land, but many had to work for the farmers who owned the land before the war.
- This developed into the tenant and sharecropping systems, where people rented the land they farmed in exchange for money or a percentage of what they grew. They often had to buy supplies on credit, and they were not always able to pay back their debts at the end of the season.
- Railroads continued to expand into the upper part of the state and a few mills opened, but conditions at the mills were often not much better than those of sharecroppers. By the late 1800s, there was concern over the declining agriculture of South Carolina.
- That led to push for agricultural schools and societies to improve farming. Fertilizers helped to improve the overworked soils.
- Electricity became available, but mainly only in cities and some mill towns. Higher quality seeds, such as those from Coker's Pedigreed Seed Company in Hartsville, SC, continued to make cotton the most common crop, but droughts and pests took a toll on farmers' profits.
- Hard times continued in South Carolina until the U.S. joined World War I in 1917 and the demand for cotton increased farmers' profits.
 - What new pest wiped out much of South Carolina's cotton crop?
 - How did the New Deal bring relief to farmers?
 - What organization was formed to become a voice for agriculture in South Carolina?

Agriculture in SC Post- WWI

- After World War I, the price of cotton dropped again, and a new pest wiped out much of South Carolina's cotton crop. The boll weevil, which destroys the fibers of the cotton plant, worked its way north through South Carolina starting in 1917, and by the 1920s many farmers lost most of their cotton to the pest.
- Because few farmers saved their extra money when cotton was valuable, many lost their farms and moved to the cities or to other states.
- When the Great Depression hit in 1929, South Carolina was already struggling. Over-farming ruined the state's soils, and farmers could no longer grow enough cotton to make a living.
- President Franklin D. Roosevelt's New Deal brought some relief to farmers. The Civilian Conservation Corps (or CCC) provided jobs for young men who built roads, parks, and other public amenities.
- Education also continued to help farmers. The Soil Conservation Service taught farmers how to save their soils from ruin. The South Carolina Farm Bureau Federation, established in 1944, became a voice for agriculture in the Legislature and it worked to improve the lives of farmers and rural lifestyles.
- During this time electricity and other modern conveniences, which improved the lives of farmers and their families, expanded to more rural areas and farms.
- World War II brought a new influx of jobs into the state and gave training to many young men and women from South Carolina. Those who served in the armed forces returned home with the opportunity for an education and an interest in making their lives and their state better.
 - What changes occurred in South Carolina after World War II?
 - How did modern transportation affect South Carolina agriculture?

Agriculture in SC Post- WWII

- South Carolina agriculture modernized after World War II. Farmers began to switch from mules and plows to tractors and other farm machinery. Farm machinery improved agriculture and allowed farmers to cultivate larger farms and grow more crops. Because new farm equipment was expensive, farmers who couldn't afford it often lost their farms because they couldn't compete in growing commodity markets.
- Successful farmers often bought these farms and expanded their operations. Also, farm machinery made it so fewer people were needed to work on farms, which caused many farm workers to lose their jobs.
- Many people who once worked on farms moved to cities to work in industries, often related to agriculture, such as processing, packing, selling agricultural products, producing machinery used on farms, and researching better ways to produce food or conserve soil, water, and other resources.
- Modern transportation also transformed agriculture. Better roads and refrigerated trucks allowed farmers in rural areas to transport their products easily to markets elsewhere in the state, country, and world. Truck farming became important in South Carolina. South Carolina farmers grew crops that were taken by truck to other parts of the United States.

For people in colder climates, this meant they could enjoy fresh fruits and vegetables even when it was too cold to grow them in their own region. South Carolina agriculture became a part of the larger web of agricultural production that provides food all over the country and the world.

- What crops do South Carolina farmers cultivate today?
- What technology helped improve agriculture in South Carolina?

Agriculture in SC Today

- Agriculture continues to be important to South Carolina's economy, and South Carolina agricultural products are important in the world food market. By the end of the first decade of the 21st Century, agribusiness was the number one economic sector in South Carolina worth 34 billion dollars a year creating more than 200,000 jobs.
- Today, South Carolina farmers grow a wide variety of crops. Though some still grow cotton, they also produce soybeans, peanuts, peaches, corn, tobacco, sweet potatoes, tea, fish, poultry, milk, meat, eggs, vegetables, and other farm products. Farmers also grow timber and tree products, which are an important contribution to South Carolina's agriculture and its natural beauty. Some important discoveries like new varieties of crops that are easier to grow, better fertilizers and management techniques to make soil more productive, continue to improve South Carolina's agriculture.
- Innovations in technology, like the Global Positioning System (or GPS) and the geographical information systems (or GIS), help farmers with farm planning, field mapping, soil sampling, tractor guidance, crop scouting, and yield mapping. This is all known as precision agriculture. Better, faster transportation means South Carolina products can quickly reach markets across the U.S. and the world.
- South Carolina farmers face many challenges in the twenty-first century. Farmers have to continue to work hard, be creative, and think about the future to stay in business.
- Despite the challenges, farmers, young and old, continue to work hard and succeed. In fact, each farmer grows enough food to feed 155 people around the world. Regardless of the type of agriculture they practice, farmers remain an important part of South Carolina today and agriculture continues to be a strong and vital thread in the fabric of the Palmetto State's history.



The Year was 1837. It came to John Deere's attention that the farmers of the area were having some major problems with their old cast-iron plows in the thick, rich soil of the Midwest. John made his first self-clearing plow out of steel from an old saw. It worked like a charm, and John Deere, being the innovator he was, did something quite unusual at that time. John started making his new plows before he ever got any requests for them. This was unusual in that blacksmiths made items only on demand for their customers.



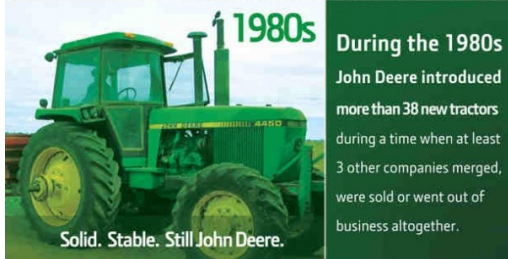
In March 1918, Deere & Company purchased the Waterloo Cast-Iron Engine Company which manufactured the popular Waterloo Boy Tractor at its facilities in Waterloo, Iowa. Deere & Company continued to sell tractors under the Waterloo Boy name until 1923.

In 1959, after making more than 1.25 million two-cylinder tractors, John Deere switched to four- & six-cylinder engines.



In 1963, John Deere introduced the 4020, which was the best-selling tractor Deere & Company ever made.

10 Series
early 1961 - 1963
20 Series
early 1964 - 1972
30 Series
early 1973 - 1977
40 Series
early 1978 - 1981



During the 1980s
John Deere introduced more than 38 new tractors during a time when at least 3 other companies merged, were sold or went out of business altogether.



1994 was a red-letter year in tractor development for John Deere because that year brought about the most revolutionary row-crop tractor the industry had seen at to time.

5000
6000
7000
8000
9000



8R/RT Series

The 2010 8R/RT Series followed John Deere's new name and numbering system, which allows the tractor's engine horsepower to be used in the model number.

For example, "8" is the frame size, "345" is the model's engine horsepower, "R" is the spec level, and "T" is the configuration in this case, tracks.



- A more spacious, refined, and comfortable cab.
- A new computerized control system and all new controls.
- 360° interior lighting.
- Integrated cooling.
- Blow storage and a convenient work station.
- Efficient, high-performance air conditioning system.
- Integrated entertainment features with MP3 and Bluetooth® connectivity.

What does the future hold?
Whatever it is, Nothing Runs Like a Deere.



What does the future hold?

For more advanced students: have them think about the following questions:

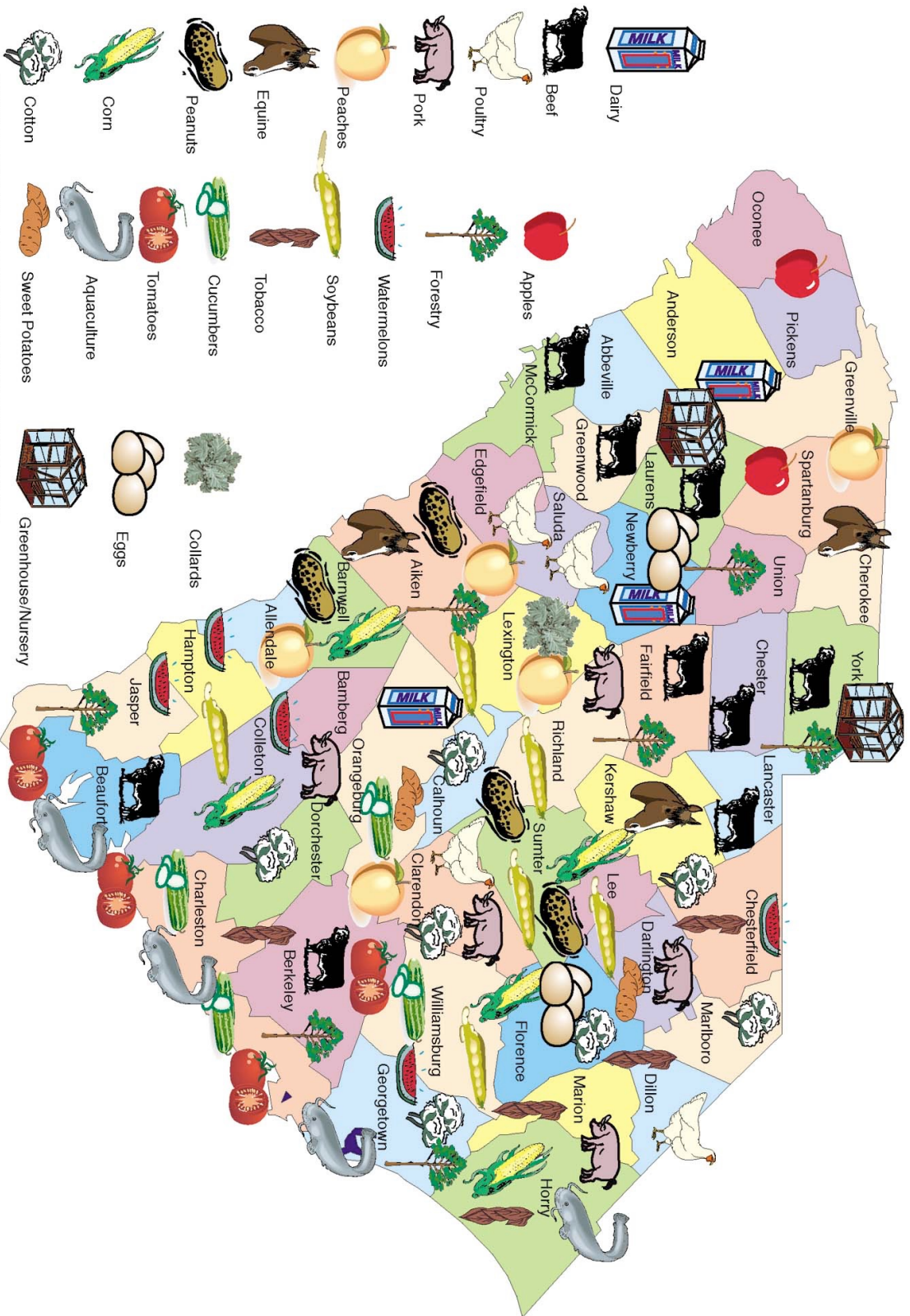
What types of technology has helped farmers improve practices and increase yields?

What changes do you think can be made to the current equipment to make it better?

South Carolina Agriculture Scavenger Hunt

In the SC state chart, the top agriculture commodities are listed for each county. Use the map to find the answer to the following questions. Use a map of South Carolina to answer location questions.

1. Find 3 counties that produce tomatoes.
2. What counties have the most horses?
3. What 4 counties produce peanuts?
4. Which counties have livestock?
 - a. Swine
 - b. Cattle
5. What 2 counties produce milk?
6. Where is the most timber harvested?
7. Does South Carolina have fruits such as oranges?
 - a. Why or why not?
8. What 6 counties produce the most soybeans?
9. Does South Carolina produce cotton? If so, where?
10. Where are peaches grown?



This map represents many of the major commodities produced in South Carolina.

AGRICULTURE sustains *life*



food



fibers



raw materials



fuel

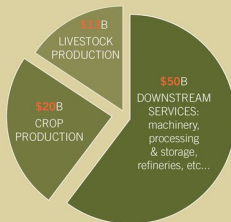
GLOBAL

to feed **9.1** billion people by **2050** we need to...

increase food
production
by **70%**



invest **\$83** billion annually
in developing countries



UNITED STATES

in 1940 **1** farmer could feed **19** people

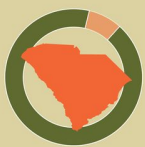


in 2011 **1** farmer could feed **155** people



SOUTH CAROLINA

agriculture has a direct economic impact
of **\$33.9** billion a year



92% of land in
South Carolina is
farm or forest

200,000 Jobs
Created and
Supported



27,000 farms



4.9M farm acres



CLEMSON

U N I V E R S I T Y

has been sustaining agriculture
for nearly **125** years.

Thos. G. Clemson

SOURCES: Food and Agriculture Organizations of the United Nations: <http://www.fao.org/news/story/en/detail/201200001>
Economic Impact of the Agriculture Industry in South Carolina: <http://agriculture.southcarolina.gov/economic-impact/2012>
2010 State Agriculture Overview: http://www.southcarolina.gov/statistics/2010/StateAg_Overview/2010



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