

Abraham Baldwin Agricultural College's Georgia Museum of Agriculture

The Working Cotton Farmer

In Georgia we grow What some call snow. What's been forgotten It is actually cotton!

And takes care of the weeds.

Then there is a sprout,

It is short and stout.

Then bud, flower, and boll

Now we're on a roll!

From this cotton we make
Some things that are great.
Towels, jeans, computers, décor
And so much more!

Growing cotton takes a very big crew, So next time you see a farmer Thank them for all they do!

My Family's Cotton Farm



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Project Partners:







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My name is Mason!
My family grows
cotton on our
family farm in
Berrien County,
Georgia.





You can see where we live on the Georgia map.
Our family grows cotton every year! It takes a lot of hard work to run the family farm.

GROWING **D**EEPER

Cotton grows in warm climates which is why the leading states in cotton production are: Alabama, Arizona, Arkansas, California, Georgia, Louisiana, Mississippi, Missouri, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Florida, Kansas, and Virginia. These states tend to be warmer for longer periods of time.

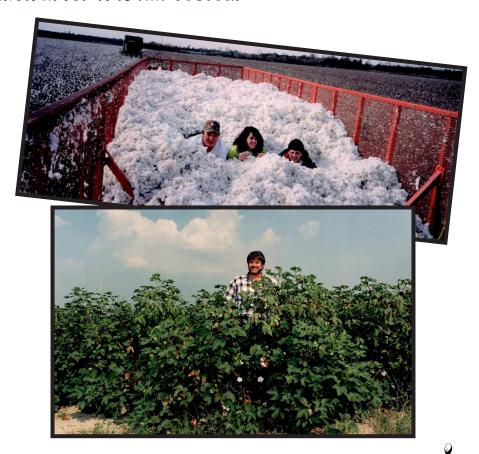


My great grandpa started our family farm. His name is Carl. My grandpa started working on a cattle farm when he was 10 years old!



Cotton is a plant that is used to make clothes and other products. It is a common crop grown in South Georgia. Today, our family farms over 3,000 acres of cotton. That is almost 3,000 football fields!

The entire family works on the farm! My dad is in charge of growing the cotton. Other crops we grow are peanuts and corn. I help Dad with different chores. I fill the planter with seeds, and I help turn on the irrigation system, which waters the plants. My Aunt Jaclyn runs the cotton gin where the cotton is taken after it is harvested.



GROWING **D**EEPER

In Georgia, there are more than I million acres of cotton planted a year. It is grown all over the world.

It takes all year to grow cotton, from January to December! There are many steps to growing cotton.



First, we test the soil to make sure it is ready for planting. Fertilizers are added to the soil. A fertilizer is something that is good for plants just like vitamins are good for us.

Next, we plant the cotton seeds. The cotton will grow for six to seven months. During those months, we water and fertilize the plants to make sure they stay healthy!



GROWING **D**EEPER

Seeds are planted a half-inch (0.5 inch or 1/2 inch) to one inch in the ground. The farmer controls the width and the number of seeds. The width is how far apart the seeds are planted. Planters can plant from 10 to 48 rows of seeds at one time!



Then, when the cotton is white and fluffy, it is ready for picking. This is called harvesting.



Finally, truck drivers move the bales of cotton from the field to our cotton gin. The cotton gin is where the cotton seeds are taken out of the cotton fiber.





It takes a lot of work to run a farm, but machines make the work easier and faster. Machines help farmers do more work in less time. Let's see the different machines we use on our family's cotton farm.

Planter

Our planter can plant 12 rows at one time! Do you see all the cotton seeds in this one bucket?



Sprayer

The sprayer spreads fertilizer and other liquids to protect the plants from pests and disease.

GROWING DEEPER

Did you know that cotton could grow to be a tree, about ten feet tall!

Farmers spray a liquid called a growth regulator that controls the height of the plant. The smaller plants produce more cotton and use less resources.





Cotton Picker

The cotton picker has two jobs. First, it pulls the cotton boll off the plant. Next, it rolls the cotton into a bale. The cotton is easier to move when in a bale. The cotton bale is taller than I am!

Tractors and Trucks
Are tractors and trucks
machines? Yes, they are!
Tractors pull the planter
and sprayer, and trucks
move the cotton bales to
the cotton gin.



GROWING DEEPER

The United States produces around 21 million bales of cotton. Each bale weighs up to 500 pounds. This is twice as much cotton as what was produced in the 1950s.

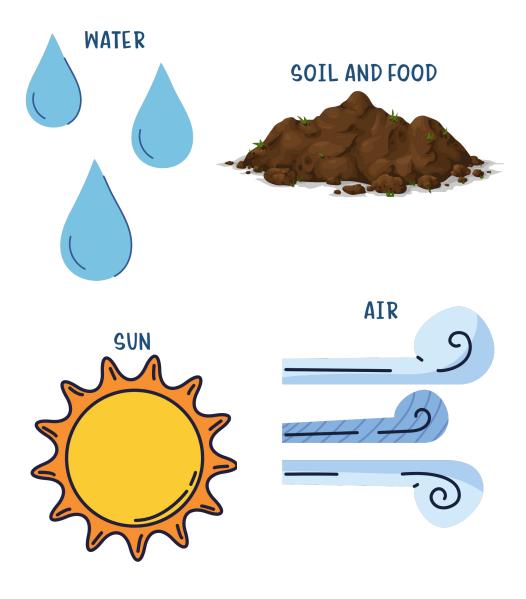
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Cotton plants have needs to grow just like you and I do! Farmers make sure their plants have everything they need to grow healthy and strong.

Can you name what plants need? Look at the pictures for hints!



During the dry months, like July and August, we have to irrigate the cotton crops. This means we have to water the plants because sometimes it does not rain very much.



To irrigate our crops, we use pivots. This is a giant sprinkler that hangs over the crops. When turned on, it pours water down.

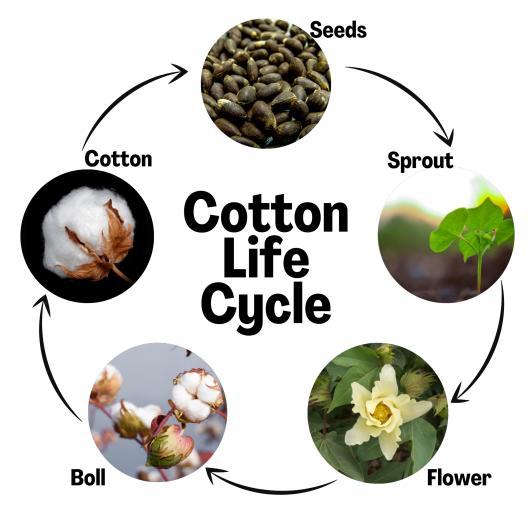
Too much water can also be bad for the plants! We have to watch the weather every day. If it rains a lot, then we do not turn on the pivots.

GROWING DEEPER

Cotton plants need 0.28 inches of water per day or 1.96 inches of water per week during peak growing season. This usually occurs once the plants are fifty to sixty days old and already blooming.

Inside every seed is a baby plant ready to come out! After planting, it can take three to seven days for the baby plant to sprout.

Each white or yellow flower will make a cotton boll. The seeds and white fibers are made inside the cotton boll. We know the cotton is ready for harvest when the boll turns brown, dries up, and splits open. The white fiber spills out of the dried boll. It is this white fiber that can be used to make clothes!





Farmers watch for signs of pests, or insects, which can hurt the crops. Dad looks for grasshoppers, whiteflies, and stinkbugs. A stinkbug will lay eggs in the cotton boll. This will ruin the white fibers people use to make clothes!

If too many plants are hurt by pests, then we would not have enough cotton. Farmers control hurtful pests in a way that is safe for the plants, for the workers, and the environment.





GROWING DEEPER

The boll weevil was a very harmful pest in North America, causing millions of dollars of damage. It is a little gray beetle with a long snout and eats the growing cotton bolls. With help from the Boll Weevil Eradication Program, no boll weevils have been found in Georgia since 2002.

Our family cannot do it alone! Growing cotton takes a lot of people besides the farmer. Mechanics are like machine doctors! They make sure all the machines are working and will fix the machines when broken.

Dad cannot drive all the tractors by himself! Drivers help Dad drive the tractors, combines, and anything else needed on the farm and at the cotton gin.





The cotton scout helps care for the cotton plants. Once per week, they look for pests or sickness in the plants.

GROWING **D**EEPER

Agriculture is a large contributor to Georgia's economy. One in seven people in Georgia works in an agriculture or forestry related field. The cotton industry's role within Georgia agriculture includes 125,000 jobs as well as over \$21 billion worth of product.

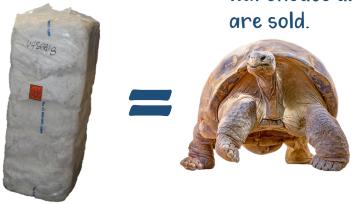


Our family also runs a cotton gin! We process our cotton and the cotton from other farmers. My Aunt Jaclyn is in charge of our cotton gin.

A cotton gin separates the cotton fibers from the seed. This is another machine that is a huge time saver! Separating the cotton from the seed is hard to do by hand.



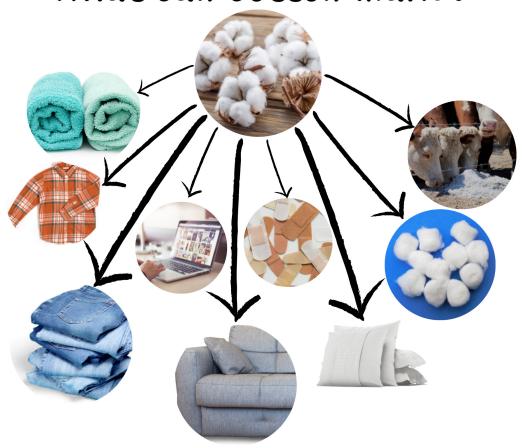
After the seed is out of the fibers, the cotton is pressed into bales. One bale weighs 500 pounds! That is the same weight as a large land tortoise! The bales wait inside a warehouse until they are sold.



GROWING DEEPER

The cotton gin was created by Eli Whitney in 1793. It revolutionized the cotton industry by greatly speeding up the process of removing seeds and husks from cotton fibers. The cotton gin replaced the work of 50 workers.

What can cotton make?



Every part of the cotton plant is used! Did you know cotton is also in our furniture for stuffing? The leftovers from the cotton gin (dried plant parts and small seeds) are used for farm animal feed and fertilizer. Cotton is even in our computers! Many people know cotton is used for our clothes, but cotton is in many other products.

Cotton by The Numbers

The following can be made from just one bale of cotton:

215 pairs of jeans



690 bath towels



249 bed sheets



4,321 socks



3,085 diapers



GROWING DEEPER

Not only is cotton breathable and comfortable, but it is also hypoallergenic and moisture-controlling. Cotton is the most used fiber in the world! There are many advantages to using cotton over other fabric materials.

Growing cotton on our family farm is not easy, but our family loves it! As Dad says, "Farming is not just a job, but a way of life." Hopefully our family farm will continue to grow cotton and other crops important to Georgia's agriculture far into the future.





Glossary

Acre: a unit of measuring land; about the size of a football field.

Bale: a tightly packed bundle of hay, cotton, or other crops; allows farmers to move and weigh easily.

Cotton: a common southern plant grown on farms; soft, white fibers (or small strings) that are used to make many products. Cotton boll: rounded, mature fruit where the white fibers (or small strings) and seeds grow.

Cotton gin: a machine that separates the cottonseed from the cotton fiber.

Grop: a plant grown for food or human use.

Harvest: the process of gathering crops, removing them from the place where they have grown.

Hypoallergenic: does not cause an allergic reaction.

Fertilizer: a substance packed with nutrients and other things that plants need to grow; like vitamins for humans.

Fiber: small strings or threads usually from a plant material.

Irrigate: the action of giving water to crops on a farm.

Irrigation System: moving water to crops on a farm; does not include natural rain.

Machine: a device, or tool, that helps people do work.

Pest: a harmful insect or another animal that attacks crops, food, and livestock.

Pivot: on a farm, a giant sprinkler used to bring water to the crops.

Product: an item that is made from putting other items together; usually something people buy and use.

Sprout: when the seed starts growing and breaks through the ground.

Fun Facts About Cotton



 Q_{ij} Cotton has been used for over 7,000 years.



United States 'paper' money is made out of 75% cotton and 25% linen.



Cotton is used more than any other fiber in the world.



Cotton has hundreds of uses from daily use to industrial use



Gottonseed gets crushed into three different products: oil, meal, and hulls.



Cotton is the leading row crop in Georgia.



Thomas Edison used cotton filaments in the first commercial light bulb.



The whole cotton plant gets used.





Cotton Harvesting Timeline



Janua<u>ry</u>

The field is checked for planting

February

Lime is used to treat the field

March

Field is treated again

April

Fertilizer is spread

May

Cotton seeds are planted

June

Cotton begins to sprout

July

Cotton begins to bloom

August

Bolls begin to form on the cotton

September

Bolls have grown bigger

October

Cotton is ready to be picked

November

All cotton has been picked and baled

December

Cotton is sent to the gin to be processed

States Growing Cotton





Join Mason as he tells you what it's like to be a cotton farmer! Learn how cotton starts as a seed and grows into the cotton that we use every day. Discover the machines that help Mason's family, and how farming is more than a job, but a way of life!



Tifton, GA. www.gma.abac.edu/destinationag