

# SOIL

Soil is super important—just like the air we breathe and the water we drink. Without soil, we wouldn't have any food! Soil is where all plants grow, and everything on Earth depends on it. But how much do you know about soil?

Soil is made up of things like dead plants, rocks, water, air, and tiny creatures. Some of these creatures are so small, you need a microscope to see them! The main parts of soil are sand, silt, and clay. When they mix in different ways, they create different types of soil.


**In Georgia, there are over 300 types of soil! Some of the main types are:**

- **Loamy soil:** The best soil for plants because it has a good mix of sand, silt, and clay. It holds water and nutrients well, so plants grow strong.
- **Sandy soil:** Light and dry, it doesn't hold nutrients well. It's made of small bits of broken-down rock.
- **Silt:** Soft, smooth soil that's rich in nutrients, perfect for growing vegetables and lawns.

Soil has layers, like a cake! The top layer is called topsoil, and it's where most of our food comes from. Below it are other layers like subsoil and bedrock, but topsoil is the most important for growing plants. Sometimes, rain, wind, or ice can wash or blow the soil away, which is called erosion. Erosion can make it harder for farmers to grow food. To prevent this, farmers use special tools, plant grass, or cover the soil with other plants to keep it in place.

About 34 percent of the land in Georgia is used for farming. Healthy soil is essential for growing food, raising animals, and producing crops that support the economy and local communities. Whether we eat plants grown in soil or feed them to animals, soil provides the food we need!

## Earth Worms



Soil is full of life—more than you might imagine! In just one tablespoon of healthy soil, there are more organisms than people on Earth! Some we can see, but many are so tiny we need a microscope to spot them. These creatures help break down plants and keep the soil healthy. Did you know that one acre of cropland (about the size of a football field) has over **1.4 million earthworms**?

Earthworms help improve the soil by adding nutrients.

### Earthworm Fun Facts:

- They have five hearts.
- They can eat their weight in soil every day.
- Earthworms breathe through their skin!
- Earthworms don't have eyes, but they can sense light!
- There are over 7,000 species!

## Circle the Right Answer

1. One tablespoon of soil has less organisms than people on Earth.

a. True b. False

2. Joshua Grant's favorite subject in school was:

a. Physical Science b. Biology c. Entomology d. Chemistry

3. There are over 300 types of soil in Georgia.

a. True b. False

4. What kind of vineyard does Sylvia Crowe, at Sunwoman Farm have?

a. Oranges b. Muscadine c. Apple d. Peaches

5. What is NOT a main parts of soil?

a. Silt b. Clay c. Sand d. Rocks

6. There are over 1.4 million earthworms in an acre of soil.

A. True b. False



# Joshua Grant

County Extension Agricultural  
& Natural Resources Educator  
- Barrow County

**How long have you been an agriculture and natural resources agent?**

*"About 8 years."*

**What does your job involve?**

*"My job is all about answering questions and helping people with their land, plants, and animals. People come to me with all sorts of problems—like figuring out what's wrong with their trees or grass, learning how to grow better gardens, or even taking care of their cows and chickens. I get to work with a lot of different people and learn something new every day!"*

**What's the hardest part of your job?**

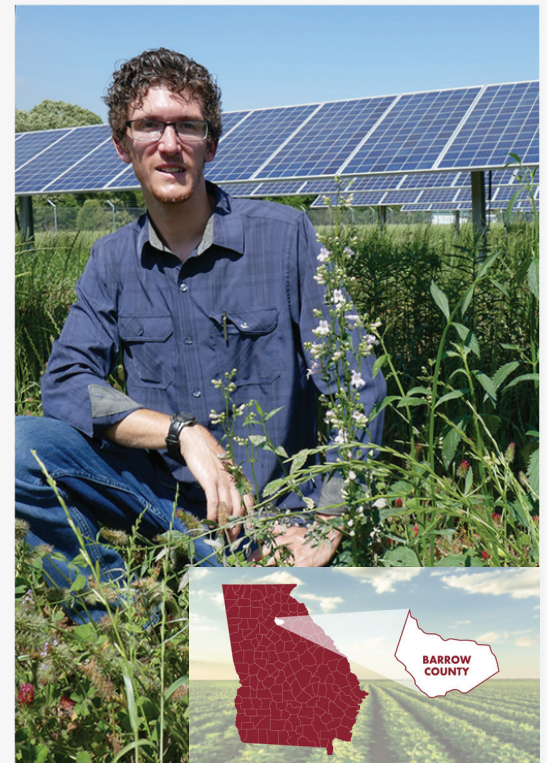
*"The biggest challenge is finding the right answers for everyone. Every question is different, so I often have to do a lot of research or talk to other experts to make sure I'm giving the best advice. It can be tricky, but it's also really exciting to solve the puzzle and help people."*

**What's your favorite part of your job?**

*"I love that every day is different! Some days, I'm outside working with plants, insects, or animals, and other days, I'm teaching people how to care for their land or gardens. I enjoy being outdoors and helping others, and it's so rewarding to see the positive impact my work has on their lives."*

**What school subjects helped you the most?**

*"Science classes, especially biology and animal science, have been the most helpful for my job. My favorite subject is entomology, the study of insects, which play an important role in our environment. I use what I learned every day!"*



Scan the code or go to [gfb.ag/grant](http://gfb.ag/grant) to learn more about Joshua Grant and how to check your soil's health!



# Sylvia Crowe

SunWoman Farms Owner  
-Oconee County

**Tell us about your farm.**

*"We've always grown our own vegetables, and sometimes we have so many that I bring the extra ones to work! People would tell me to sell the extras, and that's how I started. Our farm began with 3 chicken houses, and now we have 7! We also have 2 greenhouses (with 2 more being built right now), a muscadine vineyard, and a few acres of outdoor vegetables."*

**What is involved in growing fruits and vegetables?**

*"It's important to love being outside and growing things! Growing food is hard work because you have to be on time for planting and picking. Keeping the weeds away is very important because they can take over the plants. I also have to figure out which fruits and vegetables will sell the best. Sometimes, I try new things that aren't very common to see if people will like them. If they do, I sell them! I also give away some new items for people to try, and then they come back to buy them."*

**What subjects in school helped you the most on the farm?**

*"Math, Science, and Horticulture (the study of plants) have been very helpful! These subjects teach me how to take care of the soil, use different chemicals, and figure out how much water and sunlight my plants need."*

**What do you like best about being a farmer?**

*"I love knowing where my food comes from and how it's grown. Being a farmer is hard work, but it's worth it! I enjoy telling people what we do on our farm and sharing why it's important to know where our food comes from."*



Scan the code or go to [gfb.ag/sunwoman](http://gfb.ag/sunwoman) to learn more about