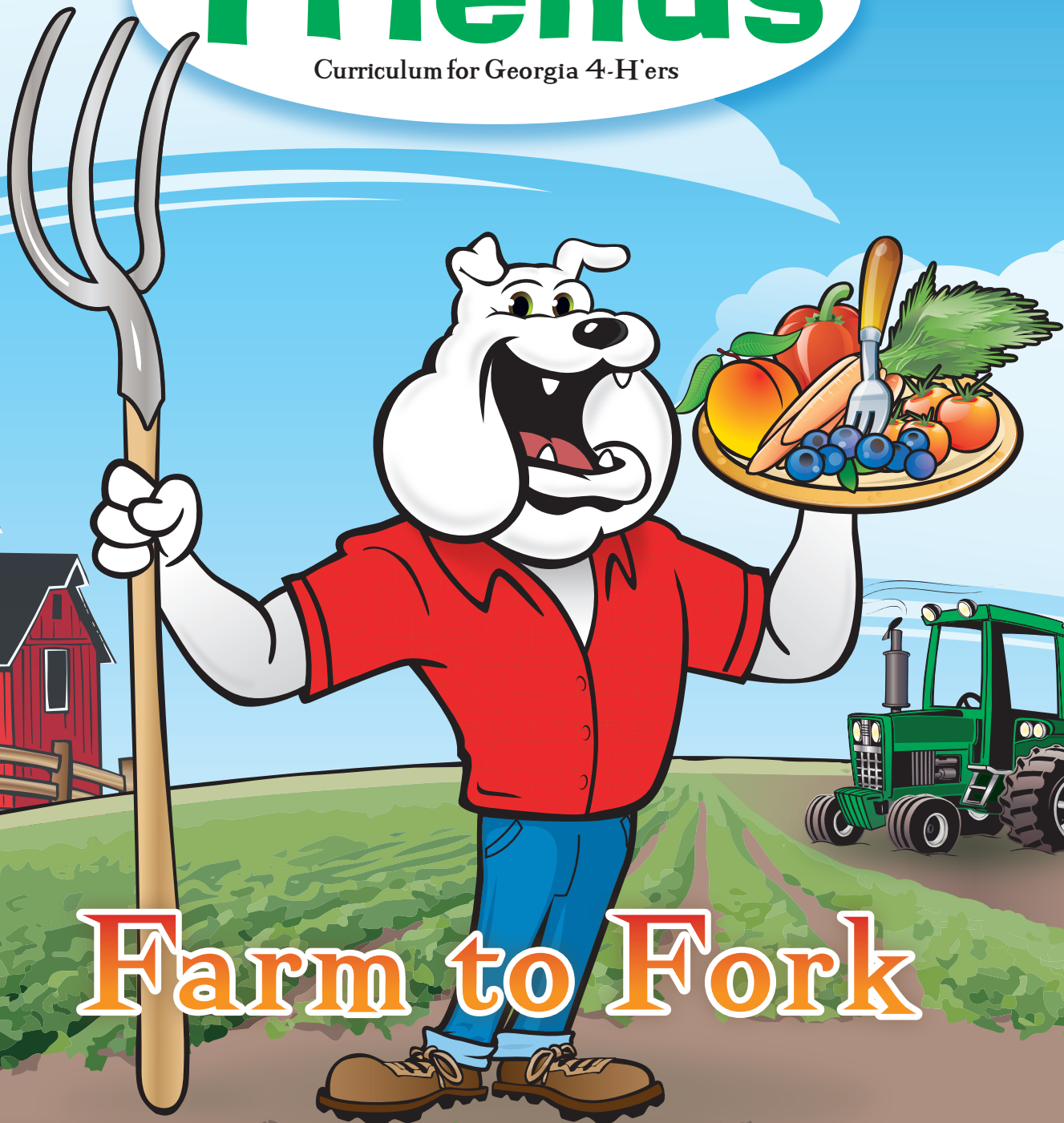




Friends

Curriculum for Georgia 4-H'ers



Farm to Fork

Name _____

Grade _____ Teacher _____

School _____



UNIVERSITY OF GEORGIA
EXTENSION





CONTENTS:

The Tapestry of Georgia's Farmland	3
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Can You Define Agriculture?

Here's a simple definition: The science or practice of farming, including cultivating the soil, producing crops, raising livestock and in varying degrees, the preparation and marketing of the resulting products. Georgia's Agriculture and Georgia 4-H have been "Friends" for more than one hundred years. In fact, the first 4-H members in Georgia were kids learning how to increase corn yields on their family farms. Georgia 4-H and Cooperative Extension at the University of Georgia have used the research of the College of Agricultural and Environmental Sciences to improve agricultural production practices of Georgia farmers. As a result of this research-based education, our nation's farmers are producing food and fiber for much of the world.

Agriculture is the United States largest industry, but consider this interesting fact: Less than two out of every 100 people in the US are involved in farming. Knowing this, join me, Arch the Dawg, as we explore the many careers that are involved from Farm to Fork!

Georgia 4-H is a partner in public education and strives to incorporate state curricula standards and studies in career awareness in the educational materials produced for in-school use.

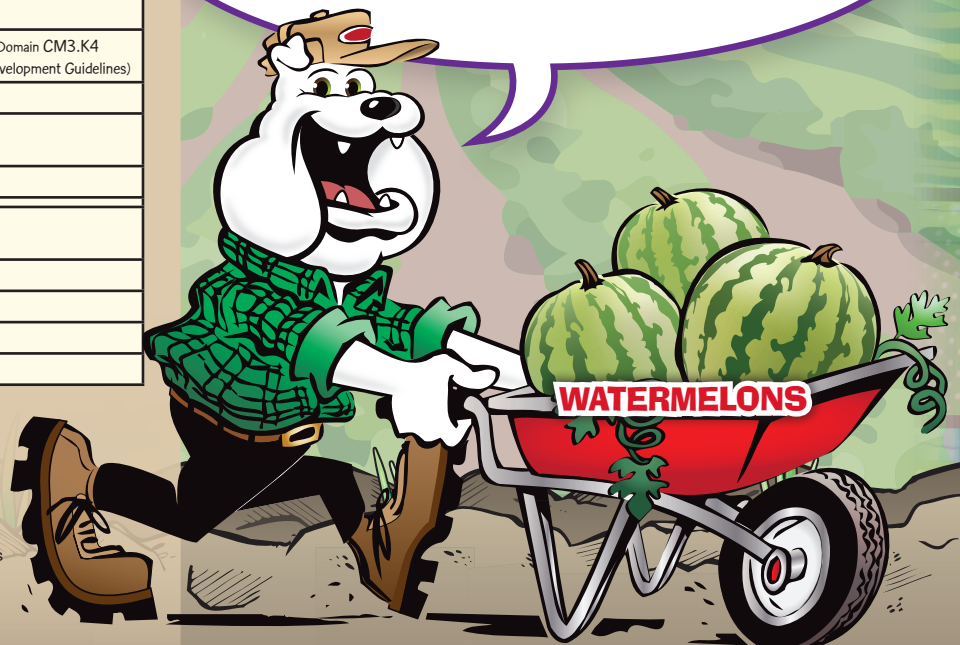
Career Cluster/Guidance 4th GRADE	Standard
STEM	Career Management Domain CM3.K4 (National Career Development Guidelines)
Manufacturing	CM3.K4 (NCDG)
Business Management & Administration	CM3.K4 (NCDG)
Architecture & Construction	CM3.K4 (NCDG)
Career Cluster/Guidance 5th GRADE	Standard
Finance	CM3.K4
Information Technology	CM3.K4
Marketing	CM3.K4
Government & Public Admin.	CM3.K4

National Career Development Framework: ncca.org



Think Green!

Not just 4-H Green...but let's help do our part to recycle and reuse. Save this book, reread it or pass it along to a friend. If it's too worn, please recycle it.





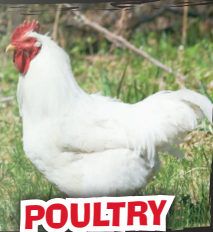
THE TAPESTRY OF GEORGIA'S FARMLAND

Georgia's farmland is like a patchwork quilt across our state.

Have you ever seen a quilt? A quilt has many individual squares that have their own design and pattern. When sewn together, the squares form a large and colorful covering. Many people think of quilts as a treasure because of the time and effort invested in constructing them. Quilts are often handed down as family heirlooms, and *we can think of Georgia's farmland much the same way*. Many family farms have been handed down from generation to generation, giving us a rich history of farming in our state. In fact, 87% of Georgia's farms are family owned!

Georgia has many different types of farms, and the differences we find in growing seasons, soil, and climate make our ability to produce agricultural products very diverse. Let's take a look at the tapestry of Georgia's Agricultural Farmland and see some commodities from Georgia farms.

**The impact of Agriculture
on Georgia's economy is
\$73.3 Billion a year!**



POULTRY

**Broilers
(chickens) are
Georgia's top
commodity**



COTTON



EQUINE



CORN



PEACHES



PECANS

**Georgia has
ranked No. 1
in pecan
production
nationwide for
decades.**



EGGS

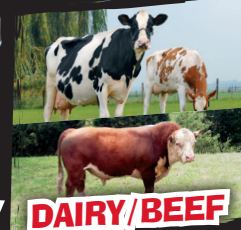
**Georgia
laying flocks
produce 4.29
billion eggs!**



FORESTRY



GREEN INDUSTRY



DAIRY/BEEF

**The average
cow in Georgia
produces about
2,188 gallons of
milk per year!**



VIDALIA ONIONS



BLUEBERRIES

**Blueberries
contributed a
value of \$283.9
million to the
total agricultural
impact on the
economy.**



SWINE



PEANUTS

**Peanuts are the
official state
crop. Georgia's
1.65 billion pound
yield accounts for
almost half the
nation's peanuts!**

CULTIVATING 4-H KNOWLEDGE

Georgia 4-H has a core program called 4-H Project Achievement. In 4-H Project Achievement you explore a topic of interest, develop a speech and poster and present your information in a public forum. We have many projects that connect to Agriculture. Take a look at 4-H Project Achievement here: georgia4h.org/projectachievement



WHERE IS GEORGIA'S AGRICULTURE?

As we have already discovered, the economic impact of Agriculture in Georgia's is \$73.3 billion each year. Because our state is so large, Agriculture looks different in each of the 5 growing regions in Georgia. Georgia farmers (we can also call them producers) grow all types of crops, including **cotton, peanuts, watermelon, blueberries, pecans, apples, peaches, Vidalia onions, peppers** and much more! They also raise **beef cattle, bees, dairy cattle, horses, poultry, sheep, goats, and swine**. Some farmers even grow fields of trees, and we call this commodity **timber**.

Georgia Grown is a program from the Georgia Department of Agriculture that helps producers, processors, suppliers and consumers as they grow, process and sell agricultural products that are grown in Georgia. You can find out more information at georgiagrown.com



Arch the Dawg is ready to map agriculture in our state... let's journey together to discover what grows where!

Key Terms

- A **commodity** is another word we can use to describe agricultural products like cotton, peanuts and poultry.
- Poultry producers raise birds, like chickens and turkeys, for their eggs or meat. **Broilers** are chickens raised for meat and they are Georgia's number one agricultural product.
- Some farmers in Georgia produce **timber**, which are trees grown to produce wood for building, carpentry and paper products.

Did You Know?

- Georgia supplies nearly one-half of the nation's peanuts.
- Poultry, beef and dairy cattle, and horses can be found in all five physiographic regions of Georgia
- Cordele, GA is known as the Watermelon Capital of the World because of the quality and quantity of their watermelons. Who doesn't love to eat a tasty watermelon on a hot summer day?
- Georgia's top 5 **Vegetable** Commodities are:

1. Onions
2. Sweet Corn
3. Watermelon
4. Bell Peppers
5. Cucumbers



The Georgia Food Bank Association

launched its "Farm to Food Bank" program to source donations of fresh fruits and vegetables from Georgia farmers, growers and packers for

distribution by Georgia's seven regional food banks. We source donations of wholesome, but unmarketable fruits and vegetables due to size, blemishes or some aesthetic imperfection. Adding Georgia grown fruits and vegetables to the tables of the 1 in 5 Georgians who need food assistance

CULTIVATING 4-H KNOWLEDGE

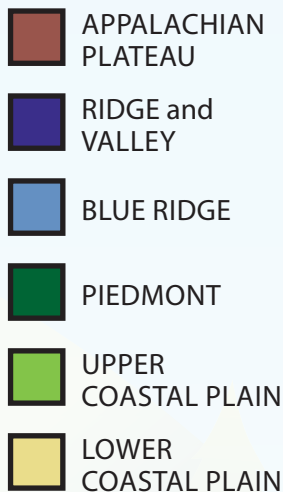
Georgia 4-H has many opportunities for you to participate in that have a direct tie to Agriculture. Here are Horse Quiz Bowl, Forestry Judging, Livestock Judging, Poultry Judging, Land Judging, Hippology Contests call these 4-H'ers Youth Exhibitors. To learn more about judging events go to georgia4h.org



KNOW YOUR REGION

The State of Georgia extends from the Atlantic Ocean into the Blue Ridge Mountains. The State is divided into five regions based upon physical geography. These regions are called Physiographic Provinces. The five physiographic provinces of Georgia are the **Coastal Plain**, the **Piedmont Region**, the **Blue Ridge Region**, the **Ridge and Valley Region**, and the **Appalachian Plateau**. Vegetation varies among these provinces and within them. You can find out more about these regions on the New Georgia Encyclopedia website: georgiaencyclopedia.org

GEORGIA PHYSIOGRAPHIC MAP



Let's learn more about where Georgia's Agriculture can be found among the regions

The **Appalachian Plateau** is the smallest region and is found in Georgia's northwest corner. Farmers in this region produce beef and poultry and small grains (like wheat). Wheat is harvested for grain and then baled for straw.

Farmers in the **Ridge & Valley** Region produce commodities like corn and soybeans and also grow and produce food for dairy cattle, beef cattle, and horses. We call this food hay and **forage** (bulky food such as grass). **Silage**, (grass that is compacted and stored in silos), is another commodity grown to support dairies in the region.

In the **Blue Ridge** region of Georgia you'll find apples, peaches and grapes. You will also find vegetables to support the many local farmers markets (multi-stall market at which farmers or producers sell agricultural products directly to the general public) throughout the region.

The **Piedmont** Region is one of the largest regions in Georgia and is in the northern part of the state. Agriculture in this region includes many commodities like beef, poultry, eggs, ornamental horticulture and dairy.

The **Upper Coastal Plain** and **Lower Coastal Plain** are home to the state's vegetable and fruit producing regions. Farmers in the Coastal Plain produce a wide variety of crops like cotton, peanuts, timber, watermelons, blueberries, peaches, peppers, pecans, soybeans, and Vidalia onions.

Test your Agricultural and Geographic knowledge!

Can you define the word **Commodity** in your own words?

List a few commodities that you have learned about that grow in your physiographic region:

- ---
- ---
- ---
- ---

Share one interesting fact about Georgia's Agriculture that you have learned:



increases the nutritional value of their meals. We know that hunger and obesity are two sides of the same coin, because people who don't know where their next meal comes from don't always have access to a balanced diet when food is available. Adding fresh fruits and vegetables is an important goal of Georgia's seven regional foodbanks.

Some things to consider: Cotton Boll & Consumer Judging, Dairy Judging, Dairy Quiz Bowl, Horse Judging, and Wildlife Judging. We also have youth who show livestock, we



OPPORTUNITIES IN SCIENCE

It takes many **STEM** (science, technology, engineering, and math) careers to get food from the farm to your family. In fact, one in every seven Georgians works in agriculture, forestry, or a related field. Take a closer look at what it takes to have a career in agriculture by selecting an agricultural-related career, conducting your own research, and completing the "Wanted Poster" below.

Places to visit for research help: gaaged.org/Careers_in_Agriculture and agriculture.purdue.edu/usda/careers.

Choose one of these careers to explore – OR – explore your own area of interest!

- Agronomist
- Beef Producer
- Breeding Manager
- Climatologist
- County Extension Agent
- Economist
- Entomologist
- Food Product Developer
- Food Safety Inspector
- Geneticist
- Geographic Information Systems (GIS) Specialist
- Horticultural Scientist
- Plant Pathologist
- School Nutrition Director
- Scientific Illustrator
- Soil Conservationist
- Soil Scientist
- Teacher/Educator
- Turfgrass Farm Operator
- Vegetable Farmer
- Waste Management Specialist

WANTED

CAREER: _____

SKETCH A PICTURE OF THIS CAREER IN ACTION

AKA (Also Known As) – Describe in your own words what the responsibilities of this job include.

WORK ENVIRONMENT: Describe in your own words where this professional might work and what the work conditions might be like.

PARTNERSHIPS AND NETWORKS: Describe some of the types of people and organizations that might work with someone in this career. Who are some people that benefit from the work? From who will this person need additional help?

IMPORTANT CHARACTERISTICS/SKILLS: What types of skills and characteristics will make someone successful at this job?

SALARY: What might you expect someone in this job to earn?

CULTIVATING 4-H KNOWLEDGE

Georgia 4-H has several contests related to Agriculture that you can enter. Those contests are: Egg Preparation, Chicken Barbecue, Food Product Development, Pantry Pride, Peanutrition, and MilkMake. We also have Pumpkin growing, Watermelon growing and Water Wise Scholarship contests.



MEET THE EXPERTS

SPOTLIGHT ON CAREERS

A **Career** is defined as an occupation undertaken for a significant period of a person's life with opportunities for progress. Your teachers and parents are charged with the task of helping you to begin to think about career choices based on your strengths and interest. As educators we are

charged with helping you to be College and Career ready so that you have the skills and knowledge necessary to qualify for schooling or job training after high school. An ideal way to explore career choices is to get to know what types of careers exist. Let's take a look at some careers that you can find from the Farm to the Fork... it begins with a farmer, but there are lots of people who contribute to the agricultural industry in our state.

Child Nutrition Programs Director

– **Michele Chivore** Michele Chivore serves as the Atlanta Community Food Bank's Director of Child Nutrition Programs where her role is to develop the strategy around and implementation of the Atlanta Community Food Bank's programs aimed at reducing child hunger. This includes **outreach programs** to increase capacity and participation in federally funded child nutrition programs while strategically exploring new opportunities to reduce the prevalence of childhood hunger across the Food Bank's service area. Prior to joining the Atlanta Community Food Bank, she served as Campaign Director for Childhood Hunger Programs at the Georgia Food Bank Association (GFBA) where she worked in conjunction with GFBA member food banks, local nonprofit and national partners to implement a state childhood hunger advocacy, communications, and marketing plan. She gives her time and talent to serve on the Georgia 4-H Advisory Committee.



Registered Dietitian Nutritionist (RDN)

– **Alison (Ali) Berg** is an Assistant Professor and serves as the Extension (an outreach unit of UGA) Nutrition and Health Specialist. She coordinates programs at the University that teach people about the prevention and control of chronic diseases (long lasting condition that can be controlled but not cured) and does research on the effectiveness of these

programs (how well they work). Since 2007, Dr. Berg has worked as an RDN in various settings such as public health clinics helping women feed their babies, in schools creating menus and ensuring students get healthy meals, and at the University in research studying how different diets help older people be stronger and healthier. Dietetics is a rewarding career with opportunities to do many different things in many places.



Plant Breeder – **Dr. Scott NeSmith** is a global leader in the field of blueberry breeding. He currently has developed 14 commercial blueberry **varieties** (types of plants). Dr. NeSmith spends time working with blueberry growers and studying research plots in various locations in Georgia to determine how blueberries can be improved to meet the needs and desires of the industry. He works with UGA plant

pathologists and **entomologists** to address disease and insect problems that Georgia blueberry growers face. Under Dr. NeSmith's leadership, the blueberry has become Georgia's number one fruit crop, surpassing the state's namesake, the peach, and Georgia has become the top blueberry producing state in the U.S. In 2013, he was awarded the prestigious Inventor of the Year Award from the UGA Research Foundation.

Engineer – **Michael Reeves** is the owner of the **civil engineering** (engineering discipline that deals with the design, construction and maintenance of the natural environment) firm Reeves Design Services, LLC. His firm specializes in helping private and government clients with civil engineering projects such as wastewater treatment systems, sizing storm sewer systems, water distribution systems, roadway designs and site layouts for residential, commercial and industrial developments. Growing up on a farm provided him experience in problem solving and having to think of alternate methods to repair or resolve an issue. That problem-solving experience has helped him in the career of engineering where he helps solve client's problems or helps turn their ideas into developments. He is a graduate of the University of Georgia and studied Agricultural Engineering while a student at UGA. He has over 19 years of consulting engineering design experience. He also volunteers his time to serve Georgia 4-H by advising Georgia 4-H's State 4-H Board of Directors.



2017 Georgia Farmer of the Year

Dairy Owner – **J. Everett and Carol Williams** of Madison, Georgia, own and operate WDairy LLC., founded in 1958 by Everett's father, John E. Williams. Over the years WDairy LLC has grown to its current size of 1,696 milk cows, 1,580 head of young stock, 2,000 acres of owned and rented land and 27 full-time plus 2 part-time employees. In 2012, a new 72 stall rotary and a third freestall barn were built to accommodate the increased herd size and replace facilities that had been in use since 1958. All **forage crops** (a commodity grown to feed animals) are grown on the farm and fed in the form of silage, harvesting 29,000 tons in 2013. No-till and irrigation is used to improve crop production, and manure is recycled by applying it to crop land to improve soil productivity. Paying attention to details, researching new ideas and the willingness to try new concepts has allowed the dairy to grow and improve.



Photo by Lucy Ray

youtube.com/watch?v=kmi1oCju4PU



Write down what you ate and drank today. Now circle the foods you can identify that came from a farm.

Health is part of the 4-H pledge and has been an important focus of 4-H for more than 100 years. As you charted your food today and traced it to the farm where it was grown, we want to remind you that healthy habits are important at every age. Everyone needs a food plan based on the My Plate Guidelines. To learn more about healthy food choices, visit choosemyplate.gov/kids

Take a look at your school's breakfast and lunch menu. The School Breakfast Program and the National School Lunch program can help you to understand how farmers, growers, food processors, distributors, school nutrition directors and the United States Department of Agriculture work collaboratively to supply food to schools.

Do you know how 4-H is connected to School Nutrition? We are both part of the United States Department of Agriculture; we just connect with you through different avenues.

Take time to thank a farmer, a producer, a cafeteria manager or school food service worker for the delicious meal you had today. If you brought your lunch from home, ask your parents where they got the food. Pay close attention to the fruits and vegetables you ate since many grocery stores are marketing locally grown produce in support of our Georgia farmers.

To learn more about the Farm to School Food movement go to: fns.usda.gov/farmentoschool/farm-school



Parents! Thank you for taking time to review this publication with your child. Please help your 4-H leader know that you have learned more about Georgia 4-H with your child.

Date _____

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Georgia Grown—A Guide to Georgia's Farms, Forests, Food and Exports. Georgia Department of Agriculture. (2012-2013; 2013-2014)
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www.youtube.com/watch?v=kmi1oCju4PU

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