



**UNIVERSITY OF GEORGIA**  
**EXTENSION**  
*Bartow County*



Bartow County Extension  
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 Cartersville, Georgia 30120  
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 Email: bartow.extension@uga.edu  
 www.ugaextension.org/bartow

## Bartow County Extension Education Specialties Guest Speakers and Career Days

### 4-H Youth Development Staff:

- Allison Perkins - youth animal and veterinary science (Equine)
- Kim Payne - youth consumer science and shooting sports (Project S.A.F.E.)

### Family and Consumer Sciences (FACS) Staff:

- Angelica Bridges - nutrition and food science (ServeSafe; SNAP)
- Karen Martin and Patti Hall – SNAP Educators
- Regina Shaw – Cartersville Farmers Market Coordinator

### Agricultural and Natural Resources (ANR) Staff:

- Paul Pugliese - agriculture and natural resources (Forestry, Horticulture, Plant Pathology, Entomology)
- Katie Martin - youth environmental science (Project Wet & Wild, School Recycling Program, Adopt a Stream, school gardens)
- Missy Phillips - Keep Bartow Beautiful Director



**College of Agricultural & Environmental Sciences**  
**UNIVERSITY OF GEORGIA**



**College of Family and Consumer Sciences**  
**UNIVERSITY OF GEORGIA**



**Bartow County**  
**Extension Volunteers**

**GEORGIA**

4-H





## **Tips for Raising Chickens at School**

By Paul Pugliese, Bartow County Extension

1. Hens begin laying eggs at around six months of age and can continue for 5 to 10 years, with peak production occurring in the first two years.
2. Chickens are omnivores. They eat grains, fruits, vegetables and insects. A healthy laying hen diet should also contain crushed oyster shell for egg production and grit for digestion. A mature hen will eat roughly 3 pounds of feed each week. A commercial layer ration is required for egg production in mature birds. Do not feed layer rations to younger birds (less than 18 weeks old) or starter/grower rations to birds producing eggs.
3. They love fruit and vegetable scraps from the kitchen and garden as well as bread. Scratch-cracked corn and oats are a nice treat for the chickens that does not supply all their nutritional needs but is fine in moderation. Stale bread, leafy vegetables and peelings – can also provide variety and decrease overall feed costs, but limit these treats to what the birds can devour within 10 to 20 minutes.
4. Chickens need to be fed and water changed daily. Feed consumption may increase in the winter when they burn more calories, and it may decrease in the heat of the summer. A critical part of a chicken's diet is continual access to clean, fresh water. This is especially true in the summer as they cool themselves by panting.
5. A quality coop is essential to backyard chicken production. Coops must provide protection from the weather and predators. Cover the top of the enclosure to prevent flying or climbing predators from entering. There should be a well-insulated area with a light bulb or heat lamp for the winter months as well as ventilation for fresh air. Be sure to have a minimum of 3 to 5 square feet per bird. Heat lamps are also useful to keep water from freezing.
6. Eggs should be picked up twice a day. They will lay roughly six eggs each week. Egg production drops each year when the hens molt (replace their feathers in the early fall) and as daylight hours are lost. Hens need at least 12 to 14 hours of light each day to continue laying eggs. A regular light bulb is sufficient to supply this light for egg production.
7. Hens may try to brood a clutch of eggs. Discourage this behavior if the eggs are to be eaten. A broody hen will stop laying eggs, may become aggressive and will sit on a nest to prevent other hens from laying eggs there.
8. The coop and pen should be cleaned out weekly to maintain sanitation and odor control. Use a good, absorbent litter material such as pine shavings. Hardwood shavings are not recommended because of mold issues. Feeders and waterers should be regularly disinfected.

9. It is important that at least once a year, usually in the spring, a thorough cleaning is done on the coop and yard. During this cleaning, safety precautions must be taken in dealing with dust. Wear a dust mask and mist the walls surrounding the area to control dust movement. Inhalation of dried chicken manure can be harmful to humans. Rake and clean out the yard. The inside of the coop needs to be disinfected — including troughs, perches and nests. To disinfect, use one-tablespoon chlorine bleach to one gallon of water.
10. Moveable shelters are a valuable tool for pasturing chickens and reducing cleaning time. Simply move the location of the house when manure begins to build up. It offers new space for chickens to graze and peck, and it provides free fertilizer for the lawn!
11. Healthy birds will be active and alert with bright eyes. They will be moving around — pecking, scratching and dusting — except on hot days when they will find shade. Chickens that are healthy and active will also talk and sing quietly throughout the day.
12. Healthy droppings will be firm and grayish brown, with white urine salts. Roughly every tenth dropping is somewhat foamy, smellier than usual and light brown.
13. If you begin selling eggs, you will encounter regulations that require you to have an egg candling certification with the Georgia Department of Agriculture:  
[www.agr.georgia.gov/egg-candling-certification.aspx](http://www.agr.georgia.gov/egg-candling-certification.aspx)
14. People can catch diseases from animals. Salmonella is a bacterial organism that birds carry on their feathers, secrete in their feces, and even pass into and on their eggs. Most people infected with salmonella develop diarrhea, fever, and abdominal cramps 12 to 72 hours after infection. The illness usually lasts four to seven days, and most people recover without treatment.
15. To minimize your chances of catching an illness from your backyard flock, follow these simple practices:
  - Don't kiss your chickens or put your hands around your face after handling chickens.
  - Wash your hands after handling your chickens, collecting eggs or working in the chicken house.
  - Don't wash chicken bowls and utensils in your kitchen sink.
  - Keep your chickens in your yard or in their coop; never allow them inside the school.
  - Never let chickens near areas where food is prepared or consumed.

### **Other Helpful Resources:**

- UGA/FVSU Extension Backyard Poultry Zoom Class – April 5 @ 12pm:  
<https://ag.fvsu.edu/events/poultry-farming-backyard-style>
- UGA Extension Management Guide for the Backyard Flock:  
[https://secure.caes.uga.edu/extension/publications/files/pdf/C%20969\\_5.PDF](https://secure.caes.uga.edu/extension/publications/files/pdf/C%20969_5.PDF)



## **Top School Garden Questions and Mistakes**

By Paul Pugliese and Katie Martin, Bartow County Extension

1. Avoid planting summer vegetables that will bear fruit after kids leave school for summer break. Instead, plant winter vegetables (lettuce, spinach, carrots, radishes), perennial herbs, or perennial flowers.
2. Shallow-rooted vegetables do best in a container garden/potting mix, but still require fertilizer. Deep-rooted vegetables or perennials need clay soil to hold moisture and nutrients. Raised bed gardens that are filled with pure compost/topsoil and not mixed with clay soil (unless your goal is to create a “container” garden) will require more water and fertilizer to grow.
3. Remove existing grass/weeds before building a garden. In late summer, spray out existing grass with an herbicide containing only glyphosate (has no soil residual activity) or smother and cover using cardboard/landscape fabrics.
4. Be sure to add fertilizer – veggies won’t grow well without N-P-K nutrients. Note that compost, worm castings, or compost tea will not provide sufficient nutrients to grow most vegetables. Submit a soil sample to the Extension office for testing to check if the pH is balanced. This service is FREE for school gardens.
5. Avoid using a rain barrel to water vegetables, which could spread food-borne pathogens such as E. coli and Salmonella. Rain barrels are fine for non-edibles such as pollinator plants.
6. Avoid locating garden in an area that is “out of sight” and therefore “out of mind.” Gardens should be checked for weeds/pests and watered AT LEAST once or twice per week. Make sure there is a water tap within reach of a water hose.
7. Avoid locating garden in an area that has less than 6 hours of sunlight. Sides of buildings and shady courtyards block too much sunlight for vegetables/wildflowers to grow well.
8. Start with a small garden and expand as you get more comfortable. Wood pallets under-wrapped with landscape fabric and filled with potting soil make great raised bed gardens. Concrete blocks (8” deep) are the next cheapest option for rectangular raised beds and you can paint the blocks with school colors for aesthetics. Wood is the most expensive option, requires special tools/skills to build, and eventually will rot and need to be replaced.
9. Greenhouses are expensive to maintain and require watering plants EVERY DAY. Most teachers are not going to have the time to maintain plants in a greenhouse. Instead, consider starting plants under a grow light ([LED, CFL, or T5/T8 fluorescent](#)) and timer in the classroom or build a small “cold frame” planter to start plants outside.

10. Accept that some plants will die—vegetables are short lived (avg. 120 days). 1 out of 5 trees planted at a school MIGHT actually live... IF you can keep it watered through the first few summers. Accept failures as part of the learning process. Bugs, diseases, and extreme weather are part of farming and gardening! Use this as a teaching moment—call the plant doctor (Extension office) to assist with troubleshooting.
11. Protect the garden from lawn mowers, deer, and other hungry critters.
12. Avoid planting high maintenance fruit trees that you will never be able to spray for diseases/pests or keep up with pruning. If fruits are desired, we recommend low-maintenance crops that bear fruit in late summer/fall i.e. figs, persimmons, paw paws, some late-season blueberries.
13. Don't skimp on buying a high-quality water hose that won't kink, a hose reel, and a water wand or water breaker that has a misting option for seedlings. Be sure to unhook the hose in the winter when not in use to avoid freezing and cracking.
14. Don't be afraid to ask your school Master Gardener Extension Volunteer for help! Call the Bartow Extension office at 770-387-5142 or send an email to [bartow.extension@uga.edu](mailto:bartow.extension@uga.edu). You can even send us pictures of the problem.
15. At the end of the school year, put your garden in TIME OUT! Cover the entire garden with black plastic to solarize the soil and prevent weeds/diseases during the summer. This will allow you to start with a clean fall garden and not have to do as much work to cleanup at the end of summer. If you want to grow something “low maintenance” in the summer, plant sweet potatoes in the spring and harvest in the fall when students return to school. Apply a pre-emergent herbicide (Preen) over the sweet potatoes to minimize weeds in the summer.

## **Other Helpful Resources:**

- School Garden/STEM e-Newsletter listserv for Bartow County teachers.
- Facebook Group: “School Gardens in Bartow County”:  
<https://www.facebook.com/groups/bartowschoolgardens>
- Kingston Elementary School Outdoor Classroom Tree Walk:  
<https://www.plantsmap.com/collections/33739>
- Great Georgia Pollinator Census:  
<https://ggapc.org>
- UGA Extension School Garden Resources Page:  
<https://extension.uga.edu/programs-services/school-garden-resources.html>
- Texas A&M Extension Junior Master Gardener Curriculum:  
<https://jmgkids.us/>
- UGA/FVSU Extension Backyard Poultry Zoom Class – April 5 @ 12pm:  
<https://ag.fvsu.edu/events/poultry-farming-backyard-style>

# MICROORGANISMS OR “GERMS” LIKE BACTERIA, VIRUSES, AND PARASITES CAN MAKE US SICK IF WE EAT CONTAMINATED FRUITS AND VEGETABLES!

## KEEP YOUR GERMS OUT OF THE GARDEN!

- 🐾 Wash your hands with soap and warm, running water before entering the garden. (If no soap and water are available, at least use hand sanitizer.)
- 🐾 Don't litter! Don't drop used tissues, food, chewing gum, etc. in the garden.
- 🐾 Don't go into the garden if you are sick.

## KEEP THE GARDEN'S GERMS OUT OF YOU!

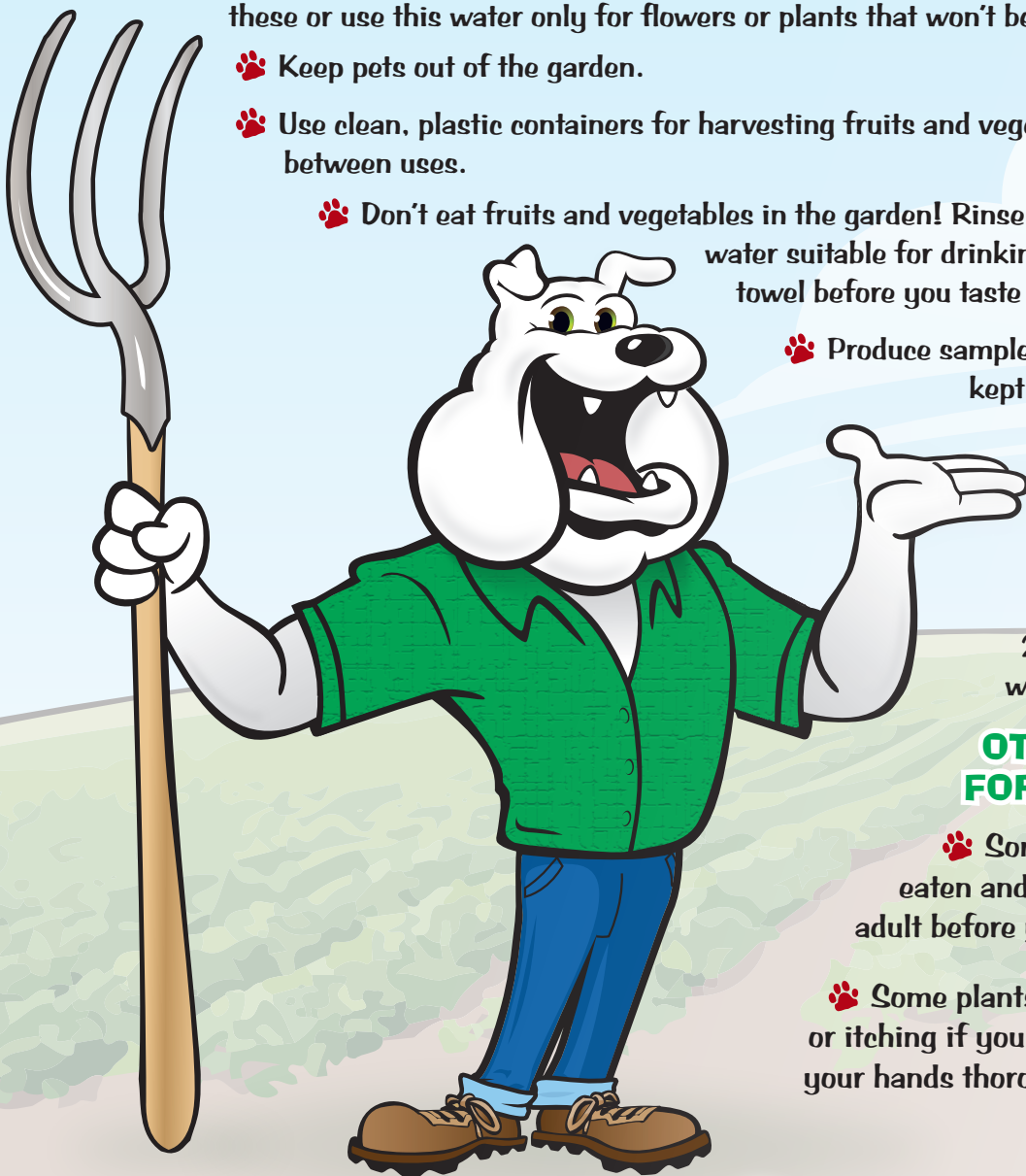
- 🐾 Don't feed birds or other animals near food growing areas. Animal poop can be a source of germs!
- 🐾 Don't put untreated rainwater from rain barrels directly on fruits or vegetables. Water only the soil around these or use this water only for flowers or plants that won't be eaten.
- 🐾 Keep pets out of the garden.
- 🐾 Use clean, plastic containers for harvesting fruits and vegetables, and wash containers between uses.
- 🐾 Don't eat fruits and vegetables in the garden! Rinse fruits and vegetables well in clean water suitable for drinking and dry them with a clean paper towel before you taste them.

- 🐾 Produce samples that are cut or sliced should be kept on ice or in a refrigerator. Throw away cut samples if they have been held at room temperature for more than 2 hours or more than 1 hour at temperatures above 90°F.

- 🐾 Wash your hands for at least 20 seconds using soap and running water after being in the garden.

## OTHER SAFETY TIPS FOR THE GARDEN:

- 🐾 Some plants have parts that can be eaten and parts that are poisonous. Ask an adult before you touch or taste!
- 🐾 Some plants can cause skin irritation, rashes or itching if you come in contact with them. Wash your hands thoroughly after being in the garden.



## Tracks:

Selected by Local County Extension Office

### Agriscience:

4-H'ers will experience lessons that relate to Earth and Life sciences as stated in the new Georgia Performance Standards. Lessons feature a hands-on approach to the standard and connect the standard to research based information of the College of Agricultural and Environmental Sciences and College of Family and Consumer Sciences at the University of Georgia.

### Nutrition and Healthy Lifestyles:

4-H'ers will gain awareness, knowledge and skills related to eating a healthy diet and getting physical activity. Emphasis will be placed on key items of importance for Georgia's youth, which include increasing fruit, vegetable and calcium consumption, as well as the importance of breakfast and regular physical activity.

### Garden Earth Naturalist:

(County Selected for Grant)

4-H'ers will experience science through viewing the Earth as a garden! Garden Earth Naturalist helps children understand Earth's ecosystems, value the services provided by these ecosystems, and take positive actions through service learning projects to protect these ecosystems.

\*A partnership of:

The State Botanical Garden of Georgia  
Georgia Museum of Natural History  
Georgia 4-H

Georgia Partnership in Science and Math (PRISM)



Compiled by:  
Mandy B. Marable  
Extension 4-H Specialist

## Georgia 4-H

In School  
Club Meetings

Learning for Life

## Georgia 4-H a Partner of Georgia Schools:

### Background:



Near the turn of the past century, Newton County Georgia School Superintendent G.C. Adams was interested in making learning useful and practical for his students. His ideas became 4-H. From its inception, 4-H was founded on the principle of taking research based information from the Land Grant University and making the science and practices both available and practical to students.

The process of teaching science by involving youth in experiential education has not changed. In 1904, students applied new techniques to increase their corn yield. In 2006, fifth grade 4-H students will participate in classes engaging them in understanding traits and genetics by using real world application with plant material. These lessons will compliment and enhance part of the Georgia Performance Standards criteria. Mr. Adams probably did not have an acronym in 1904 but we are confident his schools did have standards. Standards that 4-H enhanced.

4-H is led in every county by University of Georgia faculty members. 4-H is authorized and mandated to provide education as part of the University of Georgia and the United States Department of Agriculture.

Academic time and education based on the research of the land grant university is part of the 4-H program in all Georgia counties. While 4-H has many extracurricular programs, there is a significant amount of 4-H that is academic and classroom in its nature. Specifically, University of Georgia Cooperative Extension has constantly worked in concert with Georgia schools to insure that 4-H classes complement and enhance the curriculum in school settings. 4-H lessons and curriculum for elementary and middle school are designed to compliment, enhance and meet Georgia Performance Standards.

## Agriscience Lessons:

### Poison Pump

#### Description/Lesson Overview:

In this lesson, a "killer" has swept through the streets of London; hundreds are dead! Would you believe that an accomplice to this terrible crime is something you use everyday? Through a series of clues, students solve a mystery to discover that water can also produce negative effects for people. Students should analyze and interpret data (clues), leading them to understand that water is a shared resource and can spread diseases.

#### Standards:

- S5CS1 Students will be aware of the importance of curiosity, honesty, openness and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.
- S5CS4 Students will use ideas of system, model, change and scale in exploring scientific and technological matters.

### Georgia Barrier Islands

#### Description/Lesson Overview:

In this lesson, students will examine the dynamics of barrier islands and locate the barrier islands of Georgia. Causes of erosion will be discussed through examination of the current state of Jekyll Island. Exploration of Georgia's barrier islands with emphasis on Jekyll Island and the consequences of beach erosion.

#### Standards:

- S5E1 Students will identify surface features of the Earth caused by constructive and destructive processes.

### Vidalia Onions

#### Description/Lesson Overview:

In this lesson, students will discuss the importance of Georgia agriculture and highlight how Vidalia Onions are only grown in Georgia. The students will discover that Vidalia Onions are only grown in the loamy soil of Southeast Georgia.

#### Standards:

- S5L2. Students will recognize that offspring can resemble parents in inherited traits and learned behaviors.

### Plant Classification

#### Description/Lesson Overview:

In this lesson, students will learn to classify plants based on plant category, leaf type, leaf arrangement, leaf shape, and root type. The lesson engages the learner through small group, hands-on classification of plant material.

Students will be engaged in a hands-on experience classifying plant material and generalizing to real life.

#### Standards:

- S5L1 Students will classify organisms into groups and relate how they determined the groups with how and why scientist uses classification.

### Microorganisms-Mean, Miserable, Menacing Microbes

#### Description/Lesson Overview:

In this lesson, students will be introduced to microorganisms through demonstrations of how germs (microorganisms) spread. Students will also discover the harmful effects of microorganisms if proper hand-washing techniques and food preparation are not followed. The student will make a real life connection with how microorganisms are spread. The students will be made aware of the harmful effects of microorganisms on our bodies.

#### Standards:

- S5L4. Students will relate how microorganisms benefit or harm larger organisms.

### Mickey the Microbe

#### Description/Lesson Overview:

In this lesson, students will be exposed to foods that are products of good microorganisms. Students will also engage in a hands on experiment demonstrating the effects of beneficial microorganisms and how they contribute to certain foods in our diets.

#### Standards:

- S5L4. Students will relate how microorganisms benefit or harm larger organisms.

### Mold-What is that Growing on my Bread?

#### Description/Lesson Overview:

In this lesson students will explore the different types of mold and where mold can be found. The student will identify mold and observe the effects of stages of mold.

#### Standards:

- S5L4. Students will relate how microorganisms benefit or harm larger organisms.

### Inherited Traits

#### Description/Lesson Overview:

In this lesson, students will experience how traits are expressed in plants due to pollination. Students will understand trait expression using supportive evidence to show that traits are transferred from a parent organism and that those traits that an offspring receives from a parent may not always be visible.

#### Standards:

- S5L2 Students will recognize that offspring can resemble parents in inherited traits and learned behaviors.

### Minerals Rock

#### Description/Lesson Overview:

In this lesson, students will experience an explanation of rocks and brief relation to minerals, classify rock types, examples of the rock types that are found in Georgia, and have an overview of the rock cycle. Students will know how to identify different rocks and minerals in their everyday life.

#### Standards:

- S5E1. Students will identify surface features of the Earth caused by constructive and destructive processes.
- S5L1. Students will classify organisms into groups and relate how they determined the groups with how and why scientist use classification.



## Educational Experiences Within Georgia 4-H

### Georgia 4-H Core Programs

*Core programs serve as an integral part of all county 4-H programs.*

County 4-H Curriculum / Club Meetings  
4-H Camp  
4-H Project Achievement  
State 4-H Council

### Georgia 4-H Environmental Education

*EE Programs available to all K-12 school groups in Georgia*

Wahsega 4-H Center, Dahlonega  
Fortson 4-H Center, Hampton  
Rock Eagle 4-H Center, Eatonton  
Burton 4-H Center, Tybee Island  
Camp Jekyll & 4-H Tidelands Nature Center, Jekyll Island

### Agriculture & STEM

- Beef School
- Beekeeping Essay
- Dean's Award: Agriculture & Environmental Sciences
- Georgia Jr. National Livestock Expo & State Animal Education Shows: Breeding Ewes, Market Lamb, Commercial Doe, Meat Goat, Commercial Dairy Heifer, Breeding Heifer, Market Hog, Market Steer, & Horse
- Horse Show and Educational Contests
- Judging: Dairy, Forestry, Horse, Land, Livestock, Poultry, Wildlife, & Hippology
- Georgia Junior Beef Futurity
- Knowledge Quiz Bowl: Dairy & Horse
- Livestock Project Record Books: Commercial Dairy Heifer, Breeding Heifer, Market Goat, Market Hog, Market Lamb, Market Steer
- Marine Resources Camp
- Mission Make-It: Georgia 4-H Engineering Challenge
- National Youth Science Day
- Pumpkin and Watermelon Contests
- Robotics
- STEM Ambassadors

### Citizenship

- 4-H Day at the Capitol
- 4-H Issue Ambassadors
- Certified Teen Leader
- Clovers & Co. Performing Arts Group
- Citizenship Washington Focus
- Communications and Technology Team
- Cooperative Youth Conference
- Dean's Awards: Citizenship, Communication & the Arts, & Leadership
- District Conferences, Camps, & Workshops
- Fairs and Festivals: Talent Contests, Challenge Bowl, Mini-Exhibits, & Speech Contests
- Fall Forum
- Junior & Senior Conferences
- Leadership in Action
- Music Education Matters Summit
- National 4-H Conference
- National Youth Summit Series
- Officers/Officer Trainings (Local/County, District, State)
- Photo Contests
- Senior Camp
- Step Up and Lead
- Weekend in the Classic City—Collegiate Preview

### Healthy Living

- 4-H Day at Recreational & Sporting Events
- Chicken Barbecue Contest; Turkey Barbecue Contest
- Cotton Boll & Consumer Judging
- Dairy Month Poster Contest
- Dean's Award: Family and Consumer Sciences
- Egg Preparation Demonstration
- Fairs and Festivals: Food Contests
- Food Challenge
- Food Product Development Contest
- Health Rocks!/Action Leaders
- Healthy Living Team
- LifeSmarts
- MilkMake Contest & Peanutrition Contest
- National Youth Summit Series
- Pantry Pride Recipe Contest
- Project S.A.F.E.—Shooting Awareness, Fun, & Education (Archery, BB, Air Pistol/Rifle, .22 Rifle & Shotgun)
- Senior EXTREME Camp
- Youth Foods & Nutrition Certification
- Wilderness Challenge Camp

### Continuing Opportunities for 4-H Alumni & 4-H Volunteer Leaders

#### Collegiate 4-H Experiences

- 4-H Camp Counselor Program
- 4-H Collegiate Scholarships
- Collegiate 4-H Program; Collegiate 4-H Conference

#### Adult & Volunteer Leader Experiences

- Certifications & Trainings
- Conferences
- Extension Leadership System/Program Development Team

Georgia

# 4-H

# project achievement



The Georgia 4-H Project Achievement experience enables youth to acquire confidence and develop skills in researching, assembling, and presenting information.

# PRESS PLAY

5 mini lessons available for your teaching convenience! [Georgia4h.org/ProjectAchievement](http://Georgia4h.org/ProjectAchievement)

# 88%

Of 4<sup>th</sup>-6<sup>th</sup> grade participants acquired presentation skills

# 84%

Of participants indicated confidence in public speaking

Teachers provide essential support in building leadership and public speaking skills in youth.



## Contact Your County Extension Office Today!

770-387-5142

320 W. Cherokee Ave. 30120

## Project Achievement Introduction Video for Teachers

[https://kaltura.uga.edu/media/t/1\\_tkekgp0w](https://kaltura.uga.edu/media/t/1_tkekgp0w)

- archaeology
- arts
- beef
- between Meal Snacks
- bicycle
- cat Care
- clothing & Textiles
- communications
- companion and Specialty animals
- computer Technology
- crafts
- creative Stitchery
- current People, Places,
- event
- dairy

- Dog Care & Training
- Engineering & Mechanics
- Entomology
- Environmental Science
- Flowers, Shrubs, & Lawns
- Food Fare
- Food for Fitness
- Food for Health & Sport
- Food Safety & Pres
- Forestry, Wood Science
- Fresh Water Fish & Shell
- Fruits, Veg, & Nuts
- General Recreation
- General Science
- Geology
- Health

- Historic Places and Events
- Historic People
- Horse
- Housing
- Human Development
- Interior Design
- International
- Marine & Coastal Ecology
- Outdoor Recreation
- Outdoor Survival Skills
- Paleontology
- Performing Arts - General
- Performing Arts - Instrumental
- Performing Arts - Vocal
- Photography and Videography
- Plants, Soils & Fertilize

- Poultry
- Public Speaking
- Rabbits
- Robotics
- Safety
- Sheep & Meat Goats
- Sports - Individual
- Sports - Team
- Target Sports
- Time and Money Mgmt
- Veterinary Science
- Wildlife
- Workforce Preparation & Career Development



THE UNIVERSITY OF GEORGIA  
**COOPERATIVE EXTENSION**  
College of Agricultural and Environmental Sciences & Family and Consumer Sciences



## Georgia 4-H Base Programming

### Poultry Judging Contest

#### Description of Learning Experience:

The Poultry Judging Contest is a 4-H program which develops self-motivation, self-esteem and responsibility. Students have the opportunity to strengthen their communication and leadership skills in an environment which allows contribution to group effort; encourages teamwork and promotes acceptance of differences. Cloverleaf, Junior and Senior 4-H members are eligible to compete in Poultry Judging. There are Junior and Senior divisions; Cloverleaf 4-H'ers who are at least nine years old may compete in the Junior division. During the contest, participants judge both live specimens and market poultry, identify parts of birds already prepared for market, and evaluate eggs as to their quality and readiness for market. For at least one class, typically a live production class, participants are asked to justify their placing decisions through a set of oral reasons. Participants compare their opinion of an animal against the ideal as specified by industry experts, and learn organizational skills as they compose their thoughts into a cohesive set of reasons justifying their decisions. Competing as team members assists youth with the development of social skills, cooperation and managing feelings, as they become comfortable with working alongside others toward a common goal; integrity, sportsmanship, decision-making abilities and public speaking skills are also strengthened through the Poultry Judging experience. Participants are able to develop a knowledge and respect for the poultry industry and its importance to the community and to the international economy.

#### Learning Outcomes:

- Learn and understand standards used in poultry and egg production and marketing, and to apply the standards in a realistic decision-making situation.
- Develop the techniques of logical, accurate decision making, learn to recognize reasons for decisions and develop the ability to express reasons orally, and thereby acquire the skills of decision making, critical thinking, and problem solving.
- Develop leadership abilities, build character and assume citizenship responsibilities, and develop skills, knowledge and attitudes for lifelong use.

#### Georgia Performance Standards:

##### Elementary School Level (Grades 4<sup>th</sup> and 5<sup>th</sup>)

S4CS1 and S5CS1 Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

S4CS2 and S5CS2 Students will have the computation and estimation skills necessary or analyzing and following scientific explanations.

S4CS3 and S5CS3 Students will use tools and instruments for observing, measuring, and manipulating objects in scientific activities utilizing safe laboratory procedures.

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State Contact: Heather Shultz, 706-542-4H4H or hkalino@uga.edu

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**4-H helps young people experience: An increased desire to make a difference in their communities - High levels of leadership, self esteem, public speaking, communication and planning skills - Improved School Performance - Motivation to help others - Overall improvement in civic identity and civic engagement.**



THE UNIVERSITY OF GEORGIA  
**COOPERATIVE EXTENSION**  
College of Agricultural and Environmental Sciences & Family and Consumer Sciences



## Georgia 4-H Base Programming

ELA4LSV1 and ELA5LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions.

ELA4C1 and ELA5C1 The student demonstrates understanding and control of the rules of the English language, realizing that usage involves the appropriate application of conventions and grammar in both written and spoken formats.

ELA4R3 and ELAR5R3 The student understands and acquires new vocabulary and uses it correctly.

### Middle School Level (Grades 6<sup>th</sup> - 8<sup>th</sup>)

S6CS1 through S8CS1 Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

S6CS4 through S8CS4 Students will use tools and instruments for observing, measuring, and manipulating equipment and materials in scientific activities.

ELA6RC3 through ELA8RC3 The student acquires new vocabulary in each content area and uses it correctly.

ELA6C1 through ELA8C1 The student demonstrates understanding and control of the rules of the English language, realizing that usage involves the appropriate application of conventions and grammar in both written and spoken formats.

ELA6LSV1 through ELA8LSV1 The student participates in student-to-student, student-to-teacher, and group verbal interactions.

### High School Level (Grades 9<sup>th</sup> – 12<sup>th</sup>)

SCSH1 Students will evaluate the importance of curiosity, honesty, openness, and skepticism in science.

SCSH2 Students will use standard practices for all classroom laboratory and field investigations.

SZ5 Students will evaluate the relationships between humans and other animals.

ELA9-12SV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions.

\*This list could expand based on the 4-H'ers main project work/area of interests.

### **Essential Elements:**

Primary: Mastery and Independence; Secondary: Belonging and Generosity

### **Mission Mandates:**

Science, Engineering and Technology

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State Contact: Heather Shultz, 706-542-4H4H or hkalino@uga.edu

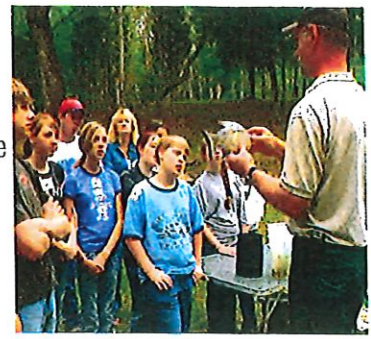
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**4-H helps young people experience: An increased desire to make a difference in their communities - High levels of leadership, self esteem, public speaking, communication and planning skills - Improved School Performance - Motivation to help others - Overall improvement in civic identity and civic engagement.**



# Keep Bartow Beautiful

The mission of **Keep Bartow Beautiful** is to encourage community environmental activities and behaviors, resulting in a more *beautiful Bartow*.



Environmental Education Department of Bartow County  
P. O. Box 786, 320 West Cherokee Avenue, Cartersville, GA 30120,  
770-387-5167, [www.bartowcountyga.gov/kbb](http://www.bartowcountyga.gov/kbb)

To schedule a program contact – Director [Missy Phillips](mailto:phillipsm@bartowcountyga.gov) at [phillipsm@bartowcountyga.gov](mailto:phillipsm@bartowcountyga.gov) or Programs Educator [Katie Martin](mailto:martink@bartowcountyga.gov) at [martink@bartowcountyga.gov](mailto:martink@bartowcountyga.gov). Most programs are free and are 1 hour in length. Ask for details.

## Swat A Litter Bug

Students learn how to **"Swat a Litter Bug"** through activities based on Keep America Beautiful's *"Waste In Place"* lessons. Litter enforcement officer presents badges, certificates; Students are sworn in as *"Litter Patrol"*. This great out reach program targets 3rd thru 5th grade classes and is keyed to Georgia Performance Standards. Students receive litter bags with bookmarks and activity books at no cost. Follow-up activities.

## Recycling Rodeo Puppet Show

This professionally produced puppet show tells the story of Recycling Ranger *"Bart O'County"* and his battles with the evil villain Hasty McWaste. The scene is a Rodeo where characters such as *"Crush A Can Cassidy"* and *"Petula Plastic"* compete in Rodeo Events. Targeted toward Elementary School grades, K thru 5. A great event to boost recycling programs or as an Earth Day or Science Day Environmental Lesson. Keyed to Georgia Performance Standards.

## Interview With a Darter

The story of Clean Water and The Fish Who Love It! Meet *"Etowah"* and *"Cherokee"* Darter. Utilizes puppetry, art, Storytelling, and our table top *"Enviro-Scape Model of a Watershed"* to teach the importance of clean water for all living things. Students learn how water pollution is created and how **"THEY"** can stop it. This Lesson targeted to Georgia Performance Standards Elementary Grades 1st thru 3rd.

## As the Worm Turns

A Composting Lesson – Learn about **Worm Behavior, Worm Anatomy, and How A Worm Creates COMPOST!** Students participate in the *"Worm Olympics"* as well as create a classroom Worm Box for Composting. Targeted to Georgia Performance Standards Elementary Grades 3 thru 5. Worms and worm-box is provided. One per participating teacher.

## Landfill & Recycling Center Tours

Acceptable for grades 3 – 12. Particularly useful for 3rd grade environmental science GPS using Keep America Beautiful *"Waste In Place"* Curriculum. Students learn about what happens to their garbage. Call for information. 1hr 30min.

## TreesBartow – Johnny Appleseed

John Chapman, although a "real" person, has become folklore. In real life he really was one of our first environmentalists. Through his story, students can realize the need for trees and how necessary trees and greenspace are to our environment. They also can experience properties of measure (circumference of a tree) and interactively bar graph apple crops. Targeted toward Georgia Performance Standards for 1st & 2nd grades.

## Spring Bank/Pettit Preserve – Outdoor Classroom

A unique Environmental partnership combining one of Bartow County's protected Greenspaces and The Pettit Preserve, a privately protected ecological habitat. Both sites have tree I.D. trails and natural water habitats. An award winning program can be tailored to meet teacher requests (targeting GPS) to area Middle Schools (200+ groups). Excellent for Field Trips. Must sign up early.