



Project Achievement Development Guide

for 9th - 12th Graders

Environmental Science

Georgia 4-H Project Achievement empowers young people with skills for a lifetime. Through a competitive process, students explore their interests, unleash their creativity, share their work, and celebrate their achievements! This guide provides 9th—12th graders with examples for getting started with their project exploration.

Description of Project:

4-H'ers may explore the intersection of ecology, humankind, and the environment including conservation of resources, the impact of environmental issues, and environmental impacts. Through this project 4-H'ers may:

- learn of environmental trends and issues relating to ecosystems, humankind and the environment, pollution, and waste management
- develop an understanding of public concerns for the environment
- demonstrate the value and benefit of both current and experimental practices which strive to promote solutions to environmental challenges
- identify limited resources and the practices employed to promote the conservation, reuse, and recycling of these resources
- promote awareness of critical issues and trends in environmental issues
- describe the impact of human activity on ecosystems and the environment
- apply scientific, economic and social perspectives to the challenges and alternatives to environmental concerns
- explore career opportunities related to environmental science

Overview: \Rightarrow Choose project \Rightarrow Develop skills in: - Project - Leadership - Service \Rightarrow Prepare portfolio for work completed from January 1— December 31 \Rightarrow Prepare presentation \Rightarrow Practice

- \Rightarrow Compete
- \Rightarrow Reflect

Examples of Project Development Experiences:

- Join Adopt-A-Stream to monitor chemical, plant, and fish population fluctuations in a nearby water source
- Interview your local county commissioners to discuss pressing environmental concerns
- Survey households in your community to determine what residents consider environmentally urgent or important. Determine what is being done, or planned for, to address these concerns
- Develop and/or maintain recycling efforts at home, school, and the community
- Explore zoning and land-use policies in your county
- Take the 40 Gallon Challenge to reduce water in your household



Georgia4h.org/programs/project-achievement

Project Sharing and Helping Examples:

- Assist your county Extension agent in programs that utilize • Project WILD, Project Learning Tree and Project WET in order to learn activities that address environmental concerns
- Organize collection campaigns for creative recycling and reuse efforts (i.e. chip-a-tree following the holidays, cell phone refurbishments for those in need, tennis shoes for tracks, etc.)
- Start an "Endangered Species" information program to make others aware of the potential loss of animal and plant species. Each month, choose one animal or plant to study and make active plans for helping to ensure its survival
- Serve your community as an EarthTeam volunteer with the Natural Resources Conservation Service
- Work with your local beautification organization to adopt a stretch of highway to regularly clean and beautify
- Plan and lead activities or events that promote conservation efforts, such as Arbor Day and Earth Day festivities
- Volunteer for a wildlife agency or group to evaluate fish • populations and health, review current hunting and management practices, or evaluate wildlife habitats
- Display a mini-booth about the benefits of recycling

Recommended **Resources:**

- Georgia4h.org/ ProjectAchievement
- Georgia4h.org/ee •
- tidelands4h.org •
- gatrees.org
- energy.gov
- epa.gov •
- nmfs.noaa.gov
- nps.gov/index.htm
- nrcs.usda.gov
- nrcs.usda.gov/wps/ portal/nrcs/main/ national/people/ volunteers

Special Considerations:

- Youth should practice safety when communicating with new people online or in person.
- A best practice is to take a friend or parent to shadow your interview or copy your parent/guardian on online communications.
- Consider how general or specific populations (human, other • animal, or plant life) are involved in interrelationships that are considered beneficial and/or harmful to the environment.
- Remember to consult with your local county Extension staff when organizing community-wide projects.

Prepared by: Chloë Scott and Natalie Bock

Reviewed by Keri Hobbs, Jason Estep, Jenna Daniel, and Bivens Walker Date: 5/24/2017

Sources:

The University of Georgia CAES. 2016. Project Achievement. http://www.georgia4h.org/projectachievement/



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At Competition:

Environmental Science 4-H projects may use posters, artifacts, biofacts, and/or technology to support their presentation. The time limit for these presentations is 12 minutes.

Computers, projectors, screens, and other technological devices may be used.