

Developing the South Carolina 4-H Jr. Naturalist Program

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Purpose

South Carolina 4-H Jr. Naturalist is a nature-based program that takes place in the outdoors, provides experiential learning, and encourages teamwork and stewardship. Children today tend to suffer from “nature-deficit disorder”, which is a term that Richard Louv (2006) coined in his book, *Last Child in the Woods*, where he discusses the alarming and growing divide between children and nature. When children are exposed to direct hands-on learning experiences with nature and the outdoors, they are more likely to perform better in school and an ownership and responsibility to be a good steward of the land is created. Therefore, there is a growing need for programs like South Carolina 4-H Jr. Naturalist. This program impacts the young citizens of SC by providing educational experiences about natural resources, forest and aquatic ecology, and wildlife.

Objectives

Youth involved in the South Carolina 4-H Jr. Naturalist program will:

- Discover and explore the ecosystems of South Carolina
- Describe plants and animals in their habitats
- Understand abiotic factors in the environment,
- Realize a personal connection with nature
- Become young citizen volunteers and future environmental stewards.



Educational Methods

South Carolina 4-H Jr. Naturalist is a program developed to grow the next generation of environmental stewards through immersive, hands-on learning experiences in nature. Through outdoor place-based learning modules, youth are exposed to topics that correspond with state science curricula for grades 4 through 8. Jr. Naturalist fits these SC 4-H Program Areas: Natural Resources, Leadership and Citizenship, and Science.

Participation: Open to all youth ages 8-13

Delivery Methods: Modeled after the SC Master Naturalist Program, Jr. Naturalist was conducted at three host sites with different timeframes.

- Out-of-School Program (4, 7 & 8 months)
- Day Camp (3 days)

Host Sites:

- South Cove County Park, Seneca, SC
- South Carolina Botanical Gardens, Clemson, SC
- Sandhill Research & Education Center, Columbia, SC

Program Structure: Jr. Naturalist featured 8 learning modules

Orientation & Graduation- Jr. Conservationist :

Youth learn about energy and conserving/protecting our natural resources, as well as celebrate America Recycles Day or Earth Day with a community stewardship project.

Jr. Geologist:

Youth study the geologic composition of their local region and are introduced to geological processes and gain skills used by geologists in the field.

Jr. Botanist:

Youth learn about plant life, including flowers, trees, and shrubs, of a particular region and their habitat.

Jr. Entomologist

Youth study the behavior, diversity and ecology of insects to discover the exciting world of bees, butterflies, beetles, and more.

Jr. Aquatic Ecologist

Youth learn about water chemistry, stream habitats, and macroinvertebrates that live in freshwater streams and how to relate these variables to stream health.

Jr. Herpetologist

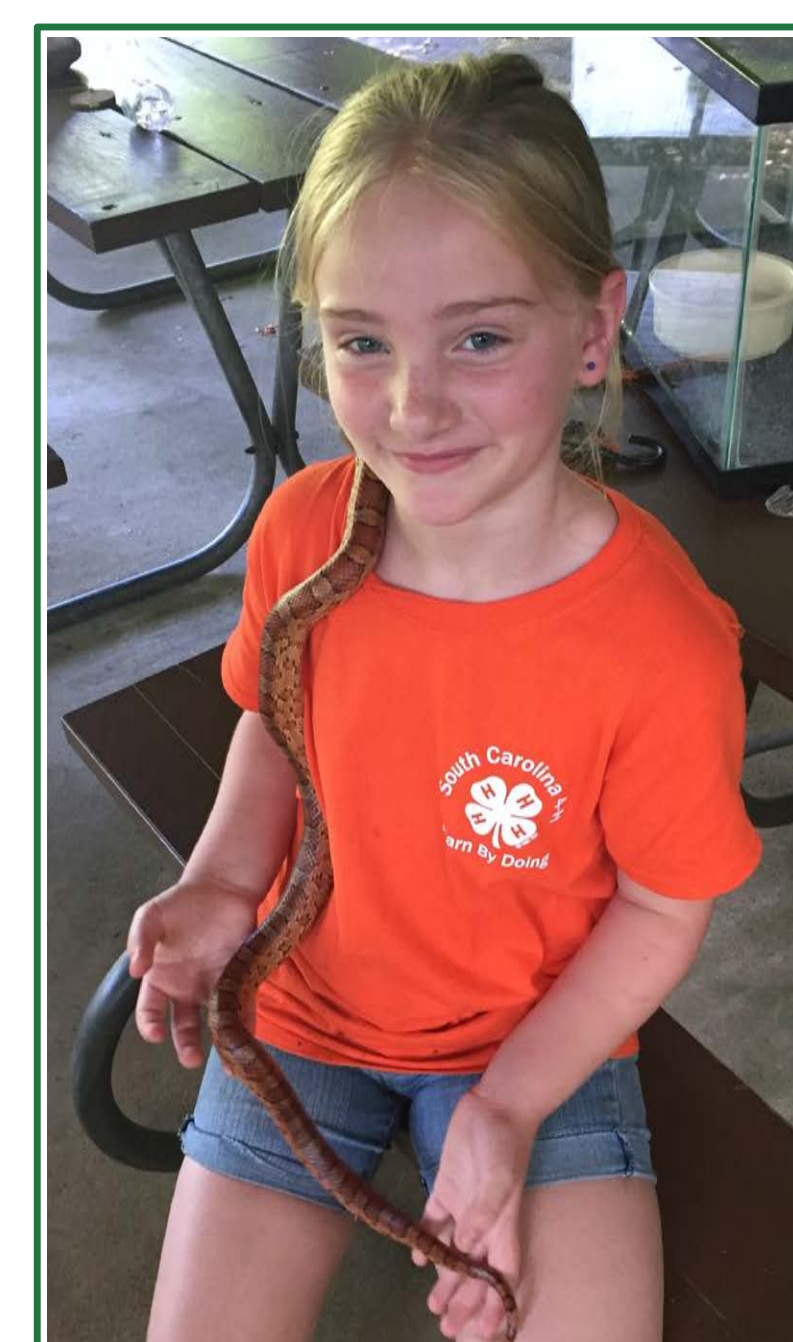
Youth learn to identify common species of reptiles and amphibians in their region by sight and sound.

Jr. Ornithologist

Youth learn about and observe birds that live in their region for all or part of the year.

Jr. Wildlife Biologist

Youth gain the many skills needed in the field of wildlife biology, such as identifying tracks and scat of wildlife common to their region.

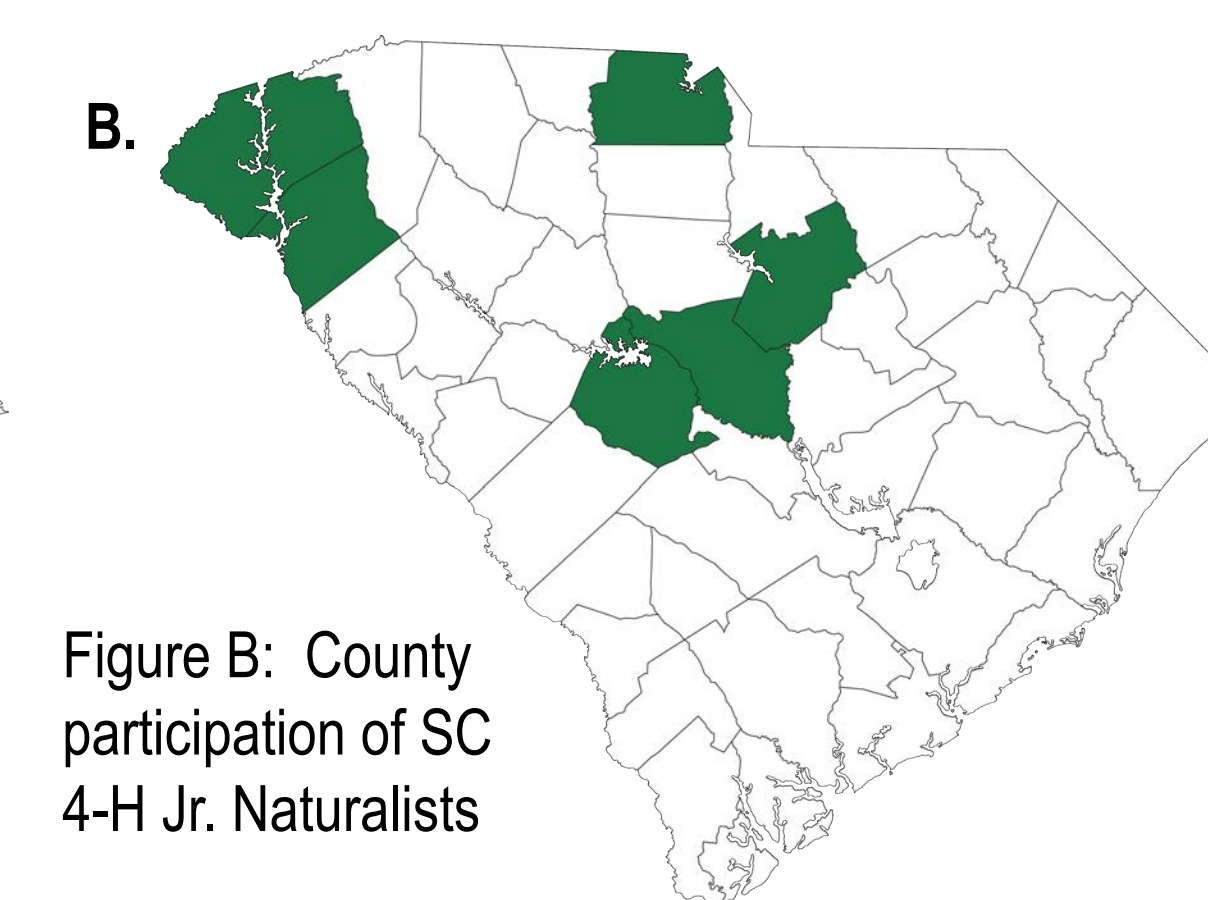
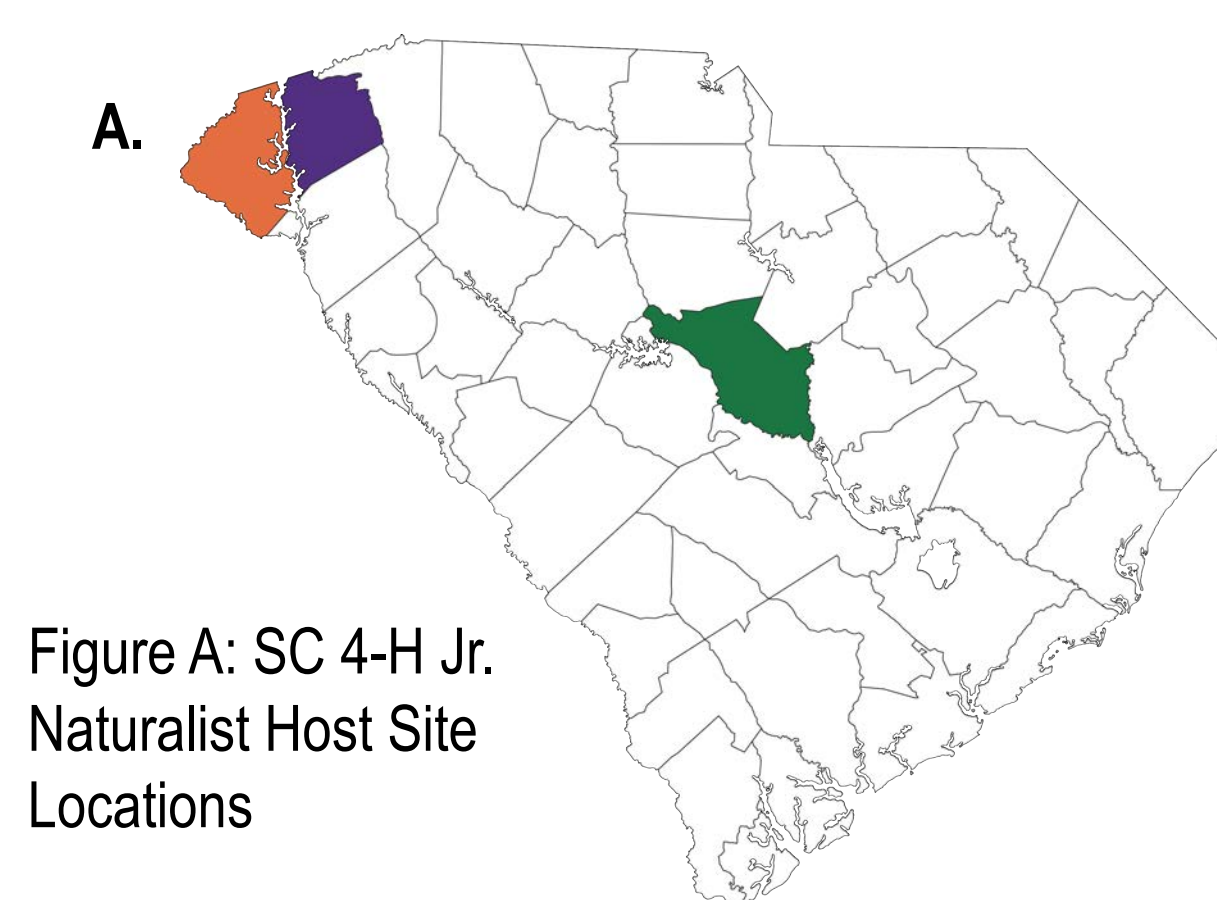


Results

Since the initial pilot program of SC 4-H Jr. Naturalist in the fall of 2017, there have been 50 graduates of the program from seven counties across the state. Youth who graduated in SC 4-H Jr. Naturalist increased their participation in other natural resources programs on the state level, like the SC 4-H Small Garden Project, the SC 4-H Wildlife Food Plot Project, and the SC 4-H Wildlife Habitat Education Program. Participants reported what they liked best about the Jr. Naturalist Program was the hands-on and outdoor activities, animals, crafts, learning about nature, and being with friends.

Table 1: Survey Responses (n=42) by graduates of the SC 4-H Jr. Naturalist Program using a 5 point Likert scale

Declarative Statement Used:	% Strongly Agreed or Agreed	Mean
<i>The SC 4-H Jr. Naturalist Program...</i>		
Helped me learn new plants and animals.	93	4.52
Increased my knowledge of natural resources.	88	4.50
Gave me a “hands-on” experience to help with future 4-H projects/ programs.	88	4.48
Made me a better steward of the environment	86	4.40
Helped me to better understand non-living parts of the environment	79	4.17
Increased my interest in a natural resources career	69	4.19



Future Outlook

With a strong presence in the Upstate of South Carolina, SC 4-H Jr. Naturalist is looking to identify and form new host sites and partners in the midlands and coastal regions of South Carolina. SC 4-H Jr. Naturalist hopes to have a curriculum “Field Guide” completed to help assist those wanting to start this program in their area.



South Carolina 4-H
Jr. Naturalist
A CLEMSON EXTENSION PROGRAM