4-H Natural Resources Program

Club Guide
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Palmetto - the official state tree of South Carolina

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4-H Natural Resources Program Overview

Current Need for Programs
South Carolina habitats range from the mountains to the ocean. As land use is converted from rural to urban uses and the human population continually increases, new challenges are imposed on the natural beauty and wildlife species of our state. Conservation practices provide a positive response to these challenges.

4-H natural resource clubs provide youth with the knowledge and skills they need to be local stewards of our habitat. Club activities teach youth about their environment, and show them how to integrate fun, family focused conservation activities into a lifelong habit.

Objectives
- To teach decision making, teamwork, self-discipline, self-confidence, and problem solving.
- To enhance development of self concept, goal setting, and personal growth through a safe, educational and socially acceptable program.
- To encourage an appreciation and understanding of natural resources.
- To promote the highest standards of safety, sportsmanship and ethical behavior.
- To expose participants to the broad array of vocational and life-long leisure activities related to natural resources.
- To strengthen families through participation in life-long recreational activities.
- To develop leadership skills while building character and a willingness to assume citizenship responsibility.

Meetings
Each club should meet at regular intervals throughout the year (ex. twice a month for at least 6 months). These meetings should typically be 60-90 minutes long.

Members
Each club should have at least five members and must be led by an approved 4-H Volunteer. Club members can be 5-19 years old. At least one volunteer in each Shooting Sports Club must be 4-H Certified Shooting Sports Instructors in the specific discipline of the club project. Shooting Sports club members should be at least 9 years old.

Officers
Clubs may choose to elect officers to conduct the meetings, assist in the planning of the club’s activity calendar, provide some type of project information and/or demonstration at the meetings, schedule guest speakers, do roll call, and lead icebreakers and recreation activities. 

4-H Guide to Business Meetings and Youth Leadership in 4-H Clubs
http://www.clemson.edu/4H/pubs/index-new.htm

Club Leaders
4-H Alumni, conservation officers, hunter education trainers, or local gun clubs may have members that would be interested in volunteering as 4-H club leaders.
Types of Natural Resources Projects

4-H Clubs may choose to incorporate a variety of these projects into their club program, or they may elect to focus on one specific project. All of these projects work to provide youth with the knowledge and skills they need to be local stewards of our habitat.

Ecology
Through the Exploring Your Environment 4-H Project, youth experience the challenge and excitement of the ecology, science, and technology of the environment. As youth experience the four elements of life they discover the connections among living things and how all plants and animals are affected by these elements.

Forestry
The 4-H Forestry Project opens the world of forests to youth. At every age level youth engage in activities to learn about trees, forests, forest ecology and human reliance on forests. Youth discover forest resources near home and around the world.

Outdoor Recreation
The 4-H Outdoor Recreation Project provides youth with educational experiences related to food, shelter, Leave No Trace ethics, safety, navigation, and camp management. Activities can progress from day hikes to overnight camping trips and finally to extended backpacking expeditions.

Shooting Sports
The major disciplines offered through 4-H Shooting Sports Projects include archery, BB gun, hunting, muzzle loading, pistol, rifle, and shotgun. This project is flexible and adaptable to nearly any audience – rural or urban. Youth learn marksmanship, the safe and responsible use of firearms, career exploration, and much more.

Sports Fishing
Learning how to tie knots, cast to a target, rig a line, make a lure, and naming fish parts is just the beginning in a 4-H Sports Fishing Project. Along with all the basics of fishing, youth will discover the secrets to customizing their tackle, research fishing regulations, and respond to ethical situations related to fishing.

Wildlife
The objective of a 4-H Wildlife Project is to help youth understand how our wildlife species fit into nature’s scheme of things and how they relate to human activities. Learning about the intrinsic, environmental and economic values of wildlife resources help youth understand how good management can perpetuate and improve habitats and encourage an increase in wildlife populations.
Ages and Stages of Youth Development

The following tips are intended to provide volunteers with guidance for working with youth in each age group. By following these tips, volunteers will be able to enhance the educational experience and will better assist youth in the development of their interpersonal skills.

Working with 5 - 8 Year Olds

Learning Characteristics of 5 - 8 Year Olds
- Thinking is in the here and now
- Attention span is about 20 - 30 minutes
- Begin to develop friendships, usually with youth of the same sex
- Want to be liked and please adults
- Learn best when physically active
- Have a special attachment to older youth
- Differentiation between fantasy and reality can be difficult

Tips for Teaching 5 - 8 Year Olds
- Vary the length of activities based on how interested the youth are
- Plan activities that youth can do in groups rather than individually
- Let youth know when they have done a good job
- Allow youth to participate in activities where they can use physical energy
- Allow youth to choose an older youth to be their helper and role model
- Build in transitions and discussions to help distinguish the imaginary from the real

Working with 9 - 12 Year Olds

Learning Characteristics of 9 - 12 Year Olds
- Learn best when physically active
- Are easily motivated
- Feelings of competence enhance self-respect
- Attention span is about 45 minutes
- Acceptance by peer group is important
- Enjoy both cooperation and competition

Tips for Teaching 9 - 12 Year Olds
- Allow youth to participate in activities where they can use physical energy
- Use encouragement to keep them motivated
- Provide activities that will let youth feel good about themselves and succeed
- Recognize them for their accomplishments
- Use varied activities to keep them interested
- Use the peer group to recognize good work (e.g.-applauding completed activities and avoiding put-downs
- Plan activities so that sometimes youth work together, and sometimes they compete with each other
Working with 13 - 15 Year Olds

Learning Characteristics of 13 - 15 Year Olds
- Can take responsibility in planning and evaluating their work
- Can plan social and recreational activities
- Can discuss current events, international affairs, and social issues with some help
- Want to make decisions but still depend on adults
- Can be quite self-conscious
- Choices are often unrealistic

Tips for Teaching 13 - 15 Year Olds
- Give youth responsibility for planning, implementing, and evaluating group activities
- Provide opportunities for youth to work together; form committees to plan recreational and social activities
- Use discussion activities and games that encourage awareness of current events and issues
- Establish guidelines that give parameters for youth and adults
- Avoid asking youth to share their work individually until they feel more comfortable with the group
- Assist youth in making realistic choices; review their plans, discuss alternatives, and help them weigh options before making decisions

Working with 16 - 19 Year Olds

Learning Characteristics of 16 - 18 Year Olds
- Personal philosophy begins to emerge
- Enjoy discussing the world situations, as well as personal activities
- Abstract thinking and problem solving reach a higher level
- Strong desire for status in peer group

Tips for Teaching 16 - 18 Year Olds
- Use activities where youth search for experiences that will allow them to identify their own philosophies
- Encourage discussion of events and feelings
- Put youth into real-life, problem-solving situations
- Develop a climate in which youth are encouraged and supported by peers
Experiential Learning Model

1. **Experience**
   Notice that the model begins with an experience—action. In each activity, the experience is the “do” part of the activity. This immediately focuses the attention on the learner rather than the teacher.

2. **Share**
   The last four steps of the model are addressed in questions at the end of each activity. The questions are structured to elicit answers beyond a “yes,” “no,” or single word response. As the model shows, sharing is simply asking the group or individual: What did you do? What happened? This step will generate lots of information and lead to the process step.

3. **Process**
   The “Process” questions focus on what was important about the experience. Common themes that emerge from the sharing session are explored in more depth. The key teaching points relating to the subject matter and life skill are discussed.

4. **Generalize**
   In this step, discussion becomes more personal. The “generalize” questions are the “so what?” of the activity. They ask, “What did the experience mean to me personally and to my everyday life?” The discussion should include both the subject matter learned and the life skill practiced. If the method employed required the youth to work in teams to complete the activity, questions about teamwork would be appropriate.

5. **Apply**
   Here the youth express what they really learned and how they can use the life skill and subject matter expertise. Or they might actually show they have mastered the skill by performing another activity that requires use of the new skill. Remember that the questions are your way of assessing what has been learned. The answers you get will help you evaluate each youth’s level of skill mastery.
Volunteer Training and Club Management Resources

The following resources provide the 4-H volunteer leader with guidance on his/her role and responsibilities. Additionally, these resources answer many common questions that 4-H volunteers have and offer information on a variety of subjects related to 4-H clubs and working with youth.

Resources, information and mentoring are also available through your local 4-H extension office. Extension staff have access to the latest materials and information on upcoming events and training activities.

Becoming a 4-H Volunteer  
http://www.clemson.edu/4H/volunteers/index.htm

4-H Leader Training Series  
http://www.clemson.edu/4H/Volunteers/LTS/index.htm

4-H Guide to Business Meetings and Youth Leadership in 4-H Clubs  
http://www.clemson.edu/4H/pubs/index-new.htm

4-H Honor Club Criteria  
http://www.clemson.edu/4H/awards/4hhonorclub.htm
Project Area Educational Resources

Curriculum available from National 4-H (http://www.4-hcurriculum.org):
- Citizenship Public Adventures
- Communications Series
- Exploring Your Environment Series
- Fishing For Adventure Series
- Forest of Fun Series
- Geospatial CD
- Outdoor Adventures Series
- Service Learning Series
- Step Up To Leadership Series

Curriculum available from Clemson University Public Service Publishing (http://dprod4.clemson.edu/olos/asp/searchmain.asp):
- 4-H Member Record Books (archery, hunting/wildlife, muzzle loading, pistol, rifle, and shotgun)
- 4-H2O Pontoon Classroom Instructors Guide & Student Manual
- 4-H Wildlife Manual Series
- Enviro Shopping: Shopping with Concern for the Environment
- Forestry Program Series
- South Carolina Policies & Programs to Protect
- White Tailed Deer: Field Care and Handling (video)
- Wildlife Fact Sheets

Useful web sites:
- American Hiking Association (http://www.americanhiking.org)
- American Fisheries Society (http://www.fisheries.org/afs)
- Civilian Marksmanship Program (http://www.odcmp.com)
- Ducks Unlimited (http://www.ducks.org)
- Exploring the Secret Life of Trees (http://www.urbanext.uiuc.edu/trees2/index.html)
- National 4-H Shooting Sports Foundation (http://www.4-Hshootingsports.org)
- National Audubon Society (http://www.audubon.org)
- National Rifle Association (http://www.nra.org)
- National Shooting Sports Foundation (http://www.nssf.org)
- National Wildlife Turkey Federation (http://www.nwtf.org/jakes)
- National Wildlife Federation (http://www.nwf.org)
- North Carolina 4-H Wildlife Books (http://www.nc4h.org/teachers/enrichment/index/php)
- South Carolina Department of Natural Resources (http://www.dnr.sc.gov)
- South Carolina Wildlife Federation (http://scwf.org)
- U.S. Fish & Wildlife Service (http://www.nfwf.org/AM/Template.cfm?Section=Home)
Resource/Equipment Available from State Office

Arrangements for the use of the below resources should be made by contacting Rick Willey, Extension 4-H Natural Resource Specialist

4-H2O Education Program Kit - This kit includes most equipment and supplies needed to conduct a successful 4-H2O county camp. The kit or components can be checked out by contacting Kit includes the following:

- Dissection kits, latex gloves, and dissecting pans
- Professional secchi discs
- Plankton nets
- Deep water samplers
- Whirl-Paks
- DO meter
- DO, pH, and fecal coliform test kits
- Kickscreen
- D-fram nets
- 2 way microscopes
- Sampling Trays
- Fishing Rod and Reels
- Backyard Bass
- Insect and Fish Flash ID cards
- Fish Seine Net

4-H Shooting Sports Mobile Air-Rifle Range – The mobile range is a 12’X6’X6’ cargo trailer that converts into an air-rifle range. It is equipped with a standard 2” ball hitch and can be pulled with a standard pick up. It is fully equipped with all the necessary equipment and materials. It is easy to assemble and operate and can be used safely in almost any environment, both indoors and outdoors. The mobile range is an excellent resource for county events both as a promotional tool and as a fund raiser. There is a nominal daily fee for the use of the trailer. These monies are used for general maintenance and to refurbish supplies, such as pellets and targets.

4-H Shooting Sports Equipment – The State 4-H Shooting Sports program has equipment in all the shooting disciplines which can be made available for use by the counties on a limited, short-term basis, if available. First priority goes to supporting the state program and state events. Equipment which may be available includes the following:

- Shotguns
- Shotgun Traps
- 0.22 rifles, Air-rifles, BB rifles
- Pellet and BB traps/backstops
- Bow and Arrows
- Archery Targets
- Archery Safety Equipment (Arm Guards and Finger Protection)
- Safety Glasses
- Ear Protection
Club Meeting Outline

Sample Agenda

1. CALL TO ORDER (The President calls the meeting to order.)
2. PLEDGE OF ALLEGIANCE / 4-H PLEDGE
3. ROLL CALL
4. INTRODUCTION OF GUESTS & NEW MEMBERS
5. OFFICER REPORTS
   Secretary reads minutes of last meeting
   Treasurer gives report (income, expenses, approval for payment, balance)
   Other officers
6. CORRESPONDENCE
7. COMMITTEE REPORTS
8. OLD BUSINESS
9. NEW BUSINESS
10. ANNOUNCEMENTS
11. ADJOURNMENT (The formal part of the club meeting should be adjourned by the President before the activities such as committee work, a program, a presentation, or a social event begin.)
12. PROJECT AREA DEMONSTRATION
13. PROJECT AREA EDUCATIONAL PROGRAM / ACTIVITY
14. REFRESHMENTS
Meeting Ideas and Suggestions

Roll Call Ideas
Roll call provides an opportunity for everyone to get to know each other better. Request that members of your club respond to roll call by answering questions such as:

- Name your favorite shooting sports activity
- Name one rule of shooting sports safety
- Name your favorite conservation organization
- Name your favorite wild animal
- Name a South Carolina native plant
- Name a state symbol (state bird - Carolina wren; state flower - yellow jasmine; etc.)

Activity / Program Ideas
The following are examples of activities that are good subjects for educational programs / activities:

- Casting and fishing
- Taking your first shot (rifle, shotgun, bow)
- Making artificial lures
- Tree measurement and identification
- Planting a food plot
- Compass use and pacing

Demonstration Topic Ideas
Encourage those who present demonstrations to participate in the county demonstration contest. The following are examples of topics for club members to prepare and give demonstrations to their fellow members:

- How to properly carry and handle a firearm
- How to clean a gun
- Archery safety equipment and its uses
- How to cast a rod and reel
- How to prepare for a hunting or fishing trip
- How to properly get into the four positions of rifle shooting

Community Service Ideas
Every club should strive to complete at least one community service effort each year. The following are examples of community service activities that a club or an individual within a club could do:

- Conduct a gun safety clinic for young children
- Plant trees or a butterfly garden at a local retirement home
- Plan and implement a mock camping adventure at a local day care center
- Help at a local hunt club with stand preparation, food plots, brush clearing, etc.
- Give a wildlife presentation at a local school or community event
- Hold a beach or stream clean up day
Refreshment Ideas
Since health is one of the four H’s in 4-H, refreshments should reinforce a healthy lifestyle.

- Fresh fruits (apples, bananas, oranges, grapes, or watermelon)
- Tomato, orange, or grapefruit juice
- Party mix made from cereals
- Carrots, celery, or broccoli served with dips made with yogurt or reduced fat sour cream
- Bagels
- Pretzels or popcorn
- Sherbet or frozen yogurt

Family Activity / Field Trip Ideas
Because Natural Resources are a popular recreational activity for the whole family, encourage club members to plan and carry out a family activity. Some suggestions are listed below:

- Take a trip to the zoo
- Enjoy a nature hike
- Go on a day long or overnight camping / fishing / hunting trip
- Visit a local gun or hunt club
- Spend time at a state park or natural preserve
Club Recognition Opportunities

Recognition is an acknowledgment and affirmation of the personal growth in an individual. It can be public or private. It can be within the individual or provided by others. Recognition in 4-H is the encouragement and support for learning. It comes as a result of participation in educational experiences.

4-H uses recognition as one strategy to help youth become more capable and competent. It does this through recognizing and appreciating each person's effort and providing positive reinforcement to continue participating in learning activities. 4-H'ers experiences must be structured so as to incorporate opportunities to build positive esteem and self-reliance. Recognition is a significant incentive to further learning. Recognition properly used can inspire young people to continue participating and learning. If properly designed and used, it will match the needs of young people. Young people become active in 4-H because they benefit personally, not because it is a good program. They make choices depending on their need for security, new experiences, response or recognition.

Recognition must be continually revised to meet the needs of individual participants. Individual progress must be recognized and individual enthusiasm must be encouraged. There is no one way of encouraging and supporting young people. They come from varied backgrounds and with different experiences. They vary in their interests, values, needs, attitudes and aspirations. For some youth intrinsic, or internal, recognition is far more powerful than any extrinsic, or external, recognition. Motivation is determined by a complex blend of environment, attitude, and self-concept. It is what energizes a person and directs individual activity.

The following is a starter list of suggestions. Clubs are encouraged to develop their own way of recognizing their membership. Clubs have the flexibility to select awards and recognition strategies that most closely relate to the individual personality of its members. It is important to ensure that every member receives some form of recognition during the year.

Members

4-H Officer - Members who have represented an office for a club or teen council for the past year may be recognized for their peer leadership.

4-H Membership – Recognition pins may be given for to youth for each year they competed as an active 4-H member in good standing.

4-H Spirit – To recognize that member who consistently exemplifies the 4-H spirit.

Volunteers

Members may make a small homemade card, craft, scrapbook, or baked good annually to thank their volunteers for their efforts throughout the year.

Members may write a letter to the editor for their local newspaper recognizing their volunteers.
State Activities and Events

State 4-H BB Gun Match
Participants in the 4-H BB Gun Match test their shooting skills from four different positions: prone, sitting, kneeling, and standing. In addition, youth take a written safety test.

State 4-H FACE (Food And Cover Establishment) Project
The purpose of the 4-H FACE project is to educate youth in the proper techniques of food plot establishments to benefit small game and other wildlife species. Each youth receives enough seed to create and develop a 1/8 to 1/4 acre wildlife plot for which they must maintain and document observations.

State 4-H Forestry Contest
The purpose of the 4-H Forestry Contest is to evaluate the practical forestry skills of youth. Participants compete in four areas: tree measurements; compass and pacing; tree identification; and a written examination. In combination, these skills help youth develop an appreciation of the need and importance of conserving woodlands as a source of income, raw materials, and enjoyment necessary for quality living.

State 4-H2O Instructor Training
4-H2O is a hands-on science inquiry program that provides knowledge of local water resources and teaches field, analytical and critical thinking skills. The instructor training provides practical learning experiences while reviewing the instructor’s guide, the student manual, equipment, materials, resources, and safety. Participants leave prepared to implement a 4-5 day intensive ecology education program or camp for local youth.

State 4-H Natural Resources Field Day
A fun packed family oriented day, open to youth of ages 5-19, to introduce them to the wide diversity of the 4-H Natural Resource program. Hands-on activities and demonstrations may include: fishing, compass and pacing, nature hikes, trapping activities, camouflage games, dog retrieving exhibits, hunting ethics, and shotgun and air rifle activities.

State 4-H Shooting Sports Instructor Training
The South Carolina 4-H Shooting Sports Program requires the use of National or State Trained 4-H Certified Instructors at the county level (in the appropriate discipline) to operate a live-fire range or to conduct any class in which firearms or archery equipment are handled. Certification is provided in rifle, shotgun, pistol, muzzle loading, archery, and hunting. Aside from specific discipline training, workshop topics include teaching and working with youth, ethics, policy, risk management, and finding club resources.
State 4-H Shotgun Shoot Out
Participants in the 4-H Shotgun Shoot Out test their shooting skills in the disciplines of trap, skeet, and sporting clay.

State 4-H Wild at Webb Camp
4-H Wild at Webb Camp provides opportunities to learn about biodiversity, habitat composition, environmental change, issues investigation, and responsible conservation action. In addition, youth participate in a hunter safety education course and practice their shotgun, rifle, and archery skills.

State 4-H WHEP (Wildlife Habitat Evaluation Project) Contest
4-H WHEP is an educational and competitive program designed to teach youth the fundamentals of wildlife management. The contest has five core elements: identifying common wildlife foods and their consumption; interpreting wildlife habitat from aerial photographs; prescribing wildlife management practices; developing a wildlife management plan; and developing an urban backyard wildlife management plan.
National Activities and Events

The state teams are selected through the state contests, age eligibility, funding availability, and other qualifying criteria.

National BB Gun Competition
Participants in the 4-H BB Gun Match test their shooting skills from four different positions: prone, sitting, kneeling, and standing. In addition, youth take a written safety test. Teams from across the nation and Canada compete from various shooting organizations such as 4-H, Jaycees, Boy Scouts, American Legion, etc.
   http://www.ibbgcm.home.att.net/

National 4-H Forestry Invitational
4-H Foresters participate in forestry skills and knowledge events over 2 days of competition. Events include tree identification, tree measurement, forest evaluation, compass orienteering, topographical map use, forest insect and disease identification, forestry quiz bowl, and a written exam. Additional activities may include local tours, campfires and fun woodsman skills games.
   http://www.aces.edu/N4HFI/

National 4-H Shooting Sports Invitational
4-H'ers from across the nation compete for individual and/or team awards in 1 of the following disciplines: shotgun, air rifle, pistol, hunting, muzzle-loading, or archery. 4-H'ers can only compete in 1 discipline/year and can only compete in that discipline 1 time. They can come back in subsequent years but only in a different discipline. 4-H'ers can also apply to become a 4-H Shooting Sports Ambassador as part of the invitational. Ambassador applicants also attend the Invitational and go through interviews, training and selection process while attending.
   http://www.4-Hshootingsports.org

National 4-H WHEP Contest
4-H WHEP is an educational and competitive program designed to teach youth the fundamentals of wildlife management. The contest has five core elements: identifying common wildlife foods and their consumption; interpreting wildlife habitat from aerial photographs; prescribing wildlife management practices; developing a wildlife management plan; and developing an urban backyard wildlife management plan.
   http://www.whep.org
Annual Calendar

Dates and events are subject to change. This list is designed to give you a general time frame for state and national 4-H natural resources events. Please refer to the South Carolina State 4-H web site for actual dates. (http://www.clemson.edu/4H/calendar/htm)

**September**
State 4-H Natural Resources Field Day

**October**
- State 4-H2O Instructor Training
- State 4-H Forestry Instructor Training
- State 4-H WHEP Instructor Training
  (rotating years)

**November**
State 4-H Forestry Contest

**January**
State 4-H Shooting Sports Instructor Training

**February**
State 4-H WHEP Contest

**March**
State 4-H Shotgun Shoot Out

**April**
- State 4-H FACE Project
- State 4-H Presentation Contest

**May**
State 4-H BB Gun Match

**June**
- State 4-H Wild at Webb Camp
- National 4-H Shooting Sports Invitational
- National BB Gun Competition

**July**
National 4-H Forestry Invitational
National 4-H WHEP Contest

**August**
State 4-H Shooting Sports Instructor Training