

Growing Quality Stewardship for Natural Resources in Tennessee

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Abstract: A primary goal of Extension Wildlife in Tennessee is to steer youth in a direction that will increase their chance of successful recruitment into society and make a positive difference in the way the public views and manages our natural resources. Tennessee's 4-H Wildlife Project is in its 35th year of growing quality stewardship by 1) teaching the basic principles of wildlife ecology and management, 2) helping students understand the importance of wildlife in our environment, and 3) promoting citizenship/leadership. These efforts may lead to informed participation in natural resource conservation and land-use decision making.

The University of Tennessee has collaborated with the Tennessee Wildlife Resources Agency (TWRA) to offer a more comprehensive wildlife curriculum, while also providing more engaging activities for our youth. The 4-H Wildlife Project consists of a Wildlife Judging contest (known nationally as the Wildlife Habitat Evaluation Program), a Food and Cover Establishment (FACE) contest, and a Junior High Wildlife Conference (Wildlife Camp). The FACE contest is being revised, incorporating a variety of wildlife habitat management techniques as a continuation of what 4-H'ers learn in Wildlife Judging. In addition, we are featuring the link between wildlife management and shooting sports by incorporating the 4-H Shooting Sports Curriculum and activities into our "Wildlife Camp." This adds engaging activities and interest-related curriculum. These efforts teach 4-H'ers how to manage our wildlife resources in a more hands-on manner, while grabbing their attention with fun activities. Impacts of the experience were evaluated with pre/post-testing and surveys. The pre/post-tests indicated a 34% increase of knowledge gained. According to surveys, 4-H'ers thoroughly enjoyed their camp experience. The Tennessee 4-H Wildlife Project and 4-H Shooting Sports Program are engraining principles in the minds of youth that will foster sound stewardship of our natural resources and increase their chance of impacting society in a positive manner.

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Extension Wildlife Specialists disseminate information to promote stewardship of natural resources. Efforts include explanations of wise use and management of our wildlife resources, why that is important, and how it can be implemented on the local level. Extension educates the adult public as well as youth (4-H program). This has a direct influence on land-use decision making as well as an influence on the next generations decision-making. University of Tennessee Extension attempts to steer youth in a direction that will increase their chance of successful recruitment into society and make a positive difference in the way we view and manage our natural resources. In Tennessee, we are growing quality stewardship through our 4-H Wildlife Project.

The Tennessee 4-H Wildlife Project, originated in 1972 by Jim Byford, seeks to 1) teach 4-H'ers about Tennessee's wildlife, 2) help them understand the importance of wildlife in our environment, 3) teach the basic principles of wildlife ecology and management, and 4) promote citizenship/leadership. This could lead to informed participation as adults in land-use decision making. Although the project has been through several iterations in 34 years, the TWRA has sponsored it continuously. In the past, participants could take part in three main activity areas including 1) the Wildlife Judging Contest (Nationally known as WHEP), 2) the Food And Cover Establishment (FACE) Contest, and 3) the Annual 4-H Junior High Wildlife Conference (Wildlife Camp). These activities teach wildlife management principles and give the 4-H member a chance to learn by doing and having fun.

The 4-H Wildlife Judging Contest originated in Tennessee in 1978, and was designed to teach 4-H youth about the fundamentals of wildlife science and management. Participants learn wildlife management principles including managing habitats and populations in both urban and rural settings. The state contest includes 1) identifying foods, 2) interpreting habitat from aerial photos, 3) prescribing wildlife management

practices, 4) developing a rural wildlife management plan, and 5) developing an urban landscape or backyard habitat plan. In 2006, 167 4-H'ers from 42 teams, representing 25 counties competed in one of 3 regional competitions, to earn a spot in the state competition and advance to the national contest. This program gives 4-H'ers invaluable experience toward becoming a wildlife biologist or natural resource land manager, but most importantly, it makes them a better-informed citizen later in life.

The 4-H FACE Contest allows 4-H'ers to be the land manager, planting food plots that are judged for plot size and shape, health and vigor, and location. In 2006, 430 4-H'ers from 44 counties planted FACE food plots in Tennessee. While this program has made a positive contribution by improving food availability for wildlife, caution must be made in the application. Food plots are not a "cure-all" for habitat management, and this issue is being addressed with a program revision. Another issue the FACE Contest has faced in recent years is that many plots are not being judged, despite the number of bags ordered and the number of plots planted. We believe this may be a result of county agents conservatively ordering seed to ensure enough for demand. Typically, participation only requires a portion of what was ordered. To prevent the seed from being wasted, the excess is often passed out to anyone willing to plant it. Over time, this has transitioned into somewhat of a free food plot seed source for county constituents. We believe the driving force for ordering, in some cases, has become public relations rather than 4-H youth development.

In an attempt to ensure the teaching of sound wildlife management principles and effectively reaching 4-H'ers, the program is being revised. The goal is to incorporate a more comprehensive set of wildlife habitat management practices. Participants will be required to implement at least one habitat management practice in addition to an optional food plot. Because some management practices are more intensive than others, the maximum point worth will be weighted accordingly. Management practice options will include three main categories: food establishment, cover establishment, and habitat maintenance. Food establishment could include practices such as planting warm/cool-season food plots or fruit/mast trees. Cover may be established by creating brushpiles, erecting nest boxes, or establishing native warm-season grasses and field borders with soft edges. Habitat maintenance includes, but is not limited to, prescribed burning, discing, selective agricultural harvest, and timber stand improvement. It is understood that young 4-H'ers cannot accomplish these activities by themselves. However, by getting a parent or other adult leader to help them, the impact is spread even further! If 4-H'ers choose to participate in Wildlife Judging and FACE, a good understanding of wildlife management should result.

The third 4-H Wildlife Project activity is the 4-H Junior High Wildlife Conference. From 1972 to 2005, the intensive, weeklong wildlife camp highlighted wildlife and fisheries science and management. The camp format and curriculum has been revised several times but traditionally covered the same content. Last year, the camp was changed to offer a more engaging suite of courses. A collaborative effort between The University of Tennessee and the TWRA combined the 4-H Shooting Sports Program with "Wildlife Camp," creating a natural relationship between the programs.

The National 4-H Shooting Sports Program's focus, like all 4-H Programs, is designed to develop youth as individuals and responsible and productive citizens. The activities of the program and the support of caring adult leaders provide young people with opportunities to develop self-confidence, discipline, responsibility, sportsmanship, teamwork, and much more. This personal growth occurs while gaining knowledge, skills, and lifelong recreation that can be shared with family and friends for fellowship opportunities.

4-H Shooting Sports is a national program that is drawing youth participation from a variety of backgrounds for many reasons. Some want to socialize with friends or carry out a family tradition. Others intend to use this opportunity to build skills for a hobby or for healthy competition that may result in scholarship for college education or even Olympic medals. In fact, there are 198 collegiate schools in the United States (5 in Tennessee) that have shooting sports programs, many of which offer scholarships and equipment. Over 300,000 boys and girls, ranging from 8 to 18 years old with rural and urban upbringings, learn a shooting sport with hands-on experience each year in the National 4-H Shooting Sports Program. Tennessee 4-H'ers have the opportunity to be trained in safety, ethics, and marksmanship of each discipline.

It is important to remember the program's focus is not to "teach kids how to shoot guns." Rather, as a 4-H program, child development is the primary goal of shooting sports. Knowledge and skills gained are secondary benefits.

With a solid safety record of zero accidents in the state of Tennessee and only one accident in the nation since its establishment in 1975, certified instructors are confident this is one of the safest and most beneficial youth development programs offered. Safety and responsibility are threads in all shooting sports activities. 4-H Shooting Sports deters violence by developing our youth's minds in a healthy manner and rigorously training them to handle firearms properly to prevent accidents.

There are benefits of this change in camp programming for 4-H'ers, The University of Tennessee, and the TWRA. Wildlife management and shooting sports complement each other and are fundamentally similar. Shooting and hunting are primary techniques used in wildlife management. Conversely, hunting is one of the core disciplines in the National Shooting Sports Curriculum (NSSC) and is essentially an intensive hunter education course. Teaching both at the same camp is not difficult because the curricula are inter-related. In fact, portions of the NSSC include what is already being covered in the "Wildlife Camp" Curriculum (wildlife conservation and management, habitat management, and wildlife identification). Both programs have great potential for increased participation, because the 4-H Shooting Sports Program is one of the fastest growing and safest youth development opportunities in the nation, and the "Wildlife Camp" has been ongoing for more than 30 years. Incorporating 4-H Shooting Sports into the "Wildlife Camp" is an ideal opportunity to add interest-related participation and hands-on fun to both programs.

The revised 2006 camp curriculum and format combined wildlife and fisheries management with shooting sports courses and activities. Campers attended the traditional courses of wildlife conservation and management, habitat management, wildlife identification, and fisheries management. The history, safety, and mechanics of archery, muzzleloading, modern rifle, shotgun, and hunting disciplines have been added. This included considerable time shooting on the range, gaining hands-on shooting experience. Special programs presented during the conference included K-9 units in wildlife law enforcement, Duck Calling 101 (each 4-H'er took a call home), and use of rocket nets to capture wild turkeys and other wildlife. Other opportunities for 4-H'ers included a shooting sports competition (including a hunter skills course), creek and pond wildlife exploration, bird watching, outdoor cookery, fishing, canoeing, and pond seining.

Knowledge gained by participants of the 2006 "Wildlife Camp" is evident from test scores and surveys. Fifty-nine conference participants were given exams prior to and at the conclusion of the conference. Average test scores were 52% (pre-test) and 71% (post-test), representing an increase in knowledge of 34%. The top scorers on the exam participated in the wildlife and shooting sports quiz bowl held after the awards banquet. At the conclusion of camp, youth who were not previously certified had the chance to apply their new knowledge to become a safe hunter recognized by the TWRA. Twenty-one of 23 4-H'ers who opted to take the hunter safety exam are now certified. According to surveys, the campers thoroughly enjoyed the camping experience. The Tennessee 4-H Jr. High Wildlife Conference and Shooting Sports Camp is engraining principles in the minds of youth that will foster sound stewardship of our natural resources and increase their chance of impacting society in a positive manner.

A steward is any person who has the ability to directly implement conservation. By this definition, a landowner implementing wildlife habitat management practices is a steward, and a 4-H'er who learns about it now and implements conservation practices later in life is a steward. 4-H'ers that participate in the Tennessee 4-H Wildlife project should increase their chance of successful recruitment into society and make a positive difference in the way natural resources are viewed and managed. Hence, quality stewardship is grown through our 4-H Wildlife Project.