Shooting Sports and Youth Development

Ron A. Howard Jr. *

The Roots of the 4-H Shooting Sports Program

The creation of 4-H Shooting Sports rests in the shooting and hunter education communities, the arms and ammunition industry and 4-H itself. Each organization entered the cooperative venture of building the program with a different set of objectives. Later those objectives merged into a cohesive program structure.

Shooting and hunter education organizations shared a concern about recruitment and development. Although shooting is almost as attractive as track and field in international sporting events, competitive shooters were relatively rare and aging. Recruitment involved shooting organizations reaching out to people who were already interested in shooting sports. Like many other organizations, including 4-H, the recruitment efforts were directed at the easily reached audience of shooters who had a shooting tradition.

Hunter educators were concerned about teaching essential skills to produce safe and ethical hunters. The need was particularly acute for people coming from non-hunting and non-shooting backgrounds. Attacks on hunting made both recruitment and effective preparation more critical. They also outlined a need to broaden the base of understanding about hunting and other types of consumptive wildlife recreation or enterprise.

Industry had a strong, economic incentive. Sales of shooting equipment, ammunition and accessories were their livelihood. Also contributing to industry concerns were economic stresses, anti-gun activities and declining pool of skilled professionals in specialized areas of manufacture. Engravers, stock makers and other skilled artists or gunsmiths were in demand but rare and hard to find. Introduction of young people to safe and responsible use of shooting equipment and to careers related to shooting was viewed as a long-range solution.

The 4-H program also faced several problems. Males, both members and volunteers, were under-represented. Nationally, participants were nearly 65 percent female. Teens were grossly under-represented with a sharp decline in participation at about the age of 13. In many states the core of the 4-H program, the clubs, were experiencing a continued, long-term decline in membership. Birthright members made up as much as 95 percent of the membership in clubs. The increasing trend toward urbanization, coupled with the “cows and cooking” or “cows, sows and plows” image of 4-H resulted in barriers to participation that could be overcome only with creative programming.
Many youth shooting programs were available, so the subject matter of 4-H Shooting Sports was not unique. Several of the programs laid claim to a youth development foundation. Most of them used a volunteer corps to present the program to young people. A few of them even tried to link shooting to other areas of concern. The 4-H Shooting Sports Program tried to combine the best of all of these programs while keeping a relationship with the existing natural resources, safety or outdoor recreation programs. The materials and training programs emphasized young people and their life skills as the product of the program while using tested techniques and positive reinforcement to develop fundamentally sound shooters. Strong and continuing recruitment of volunteers, intensive volunteer equipping and management, minimal commitment of professional staff time and attractiveness to males and older teens have been and continue to be key elements in successful 4-H shooting programs.

The cooperation with other organizations and agencies, innovation within 4-H, skill development and recruitment of identified audiences, has been powerful. Where the program goes from here depends upon the orientation and commitment of the leaders and coaches who drive it.

**Ideal Youth Programs**

Defining any ideal youth program involves risk. Every person interested in young people has a point of view and a set of biases. When a committee defines and structures the program, often too many elements are included because of these opinions. A simple definition may be better.

Ideal youth programs seem to share several elements. Such programs are attractive to kids, parents and other volunteers. The leaders are well-prepared, positive and understand the objectives of the program. They guide program direction, involving the participating young people in determining the exact nature and content. All participants strive to expand their interests, skills and competencies. Youth development and the growth of their coping, competency and contributory skills is the foundation of the program. Those skills are integrated into a matrix with fun, pertinent, informative and positive activities valued by the young people. Parents and older youth are actively involved and given increasingly responsible duties. Relationships are more important than skills, achievement or awards, and those who lead and guide the program ensure that the priorities remain in order. Finally, the groups are kept small with a high ratio of leaders or coaches to young people to facilitate building relationships, mentoring and role modeling.
Youth Development

Many groups have analyzed young people and offered suggestions concerning their needs. Often, and with some justification, young people are viewed as a generation at risk. Their world is more complex. The impact of ignorance, errors in judgment or lack of preparation is more severe. Young people suffer from economic and social stresses within the economy, and those stresses are compounded by alterations in family structure. Development of fundamental life skills in a low-risk environment, where a young person can make a mistake and learn from it, is a critical need. The 4-H Shooting Sports Program can and must be a low-risk environment with abundant opportunities to practice and develop life skills.

Youth professionals in 4-H have lumped fundamental life skills into three major categories of skills: coping, competencies and contributory. Like any taxonomic scheme, this one is dynamic and open to interpretation and alteration. Others seem to span the major categories.

Coping skills are related to developing a positive self-concept, social skills, positive attitudes toward the future and a sense of control. These skills are strongly and positively linked to avoiding major risk factors for young people. A sense of future worth and personal value are insulators that help prevent dropping out of school, drug abuse, teen pregnancy and similar risk factors for young people. Social skills are vital to self-concept and positive interactions with others. They are learned, practical skills. Self-respect is the foundation of positive attitudes toward other people, the environment and productive use of one’s allotted time. Wise and productive use of leisure time is also essential to coping with the risks and stresses of today’s world. Decision making and analysis of alternatives are also part of coping with a world having a deluge of information and a dearth of analytical thinking. This list could go on and on.

Competencies are learned abilities that cover an unlimited range of critical areas. Young people must learn to use accepted practices of physical, mental, emotional and social health and safety. They benefit from exploring of careers and job opportunities, expanding their range of potential roles in the society and achieving self-satisfaction from tasks well done. Competency as a citizen demands basic understanding of the environment, social interactions and politics.

Finally, acquiring knowledge, attitudes and skills in the subject matter provided by the 4-H program increases the breadth and depth of information and analytical capability for the participant. Shooting sports has a particular strength in introducing areas of art and science related to physics, chemistry, mathematics, engineering, history, clothing and textiles, wood science, foods and nutrition, psychology, physical fitness and natural resources. Leaders and coaches must help participating young people see the potential linkages and build these competencies. Contributory skills involve productive discharge of personal, social and civic responsibilities. Developing leadership skills and exercising those skills in a progressively responsible manner is a strength of the 4-H program. Community service activities and involvement in community affairs should be encouraged to enhance these skills. Contributory skills are a natural out-growth of success and satisfaction with program activity. Leaders and coaches must be aware of participant interest and be prepared to encourage such activities.
Very few young people are interested in a program overtly focused on coping, competencies and contributory skills. The concept of life skills development is neither attractive nor exciting. As a result, these elements are imbedded in hands-on, experiential learning in subject matter that is FUN. Leaders and coaches must understand their role in teaching life skills, but they must carefully coat the medicine of life skills education with the easily swallowed activity of shooting and related interests. Opportunities to address the philosophy of life, roles in competition and cooperation, responsibility, emotional control, personal responsibility, decision making and other elements of life skills development will be abundant. However, the leader or coach must be looking for them and willing to address them. These concepts and principles can be threatening topics for a volunteer, but, like the discussion of ethics in hunter education, these issues can be among the most significant and rewarding for the instructor and member alike.
The Significance of State Workshops
For Leaders and County Programs

Ron A. Howard Jr. *

Shooting sports workshops are offered infrequently, and the scheduling is never convenient for everyone who might like to attend. The time commitment required for a workshop is significant, consuming a long weekend or more. Workshop costs are held to a minimum, but the financial investment is significant. Shooting sports materials are carefully controlled and volunteers deserve an explanation for this control and the significance of the workshops. This system is justified, perhaps even required, to continue delivering a strong, cohesive and effective 4-H program in shooting sports. Without exception, leaders who have invested in a workshop agree with this.

Numerous reasons for exceptions to the workshops have been offered, but none have been convincing. Where exceptions to the workshop-based system have been tried, avoidable difficulties with program content, objectives, orientation, recruitment methods, methods and continuity were encountered. This caused the programs to drift from the core of 4-H program objectives and incidence of program failure. Where a strong workshop-based foundation is built, the program has been an outstanding recruiter and an excellent tool for delivering youth development and conservation messages. In addition, it offers opportunities to expose youth to other 4-H programs. To take advantage of those potentials, young people need to interact with well-prepared, highly motivated and interesting leaders. Responses to common questions about the program follow:

Is shooting a traditional 4-H program?

Yes and no. Shooting sports is both traditional and innovative. It is traditional in the sense of including all the core elements of a 4-H program – a youth development base, safety education, skill development, interaction with positive adult role models and career exploration. The roots in natural resources, riflery and archery are also traditional. The hands-on teaching methods are traditional, and the leader development model is a major innovation that is becoming traditional in delivery of other programs. The team-teaching approach, the relatively free format for delivery and the audiences are relatively non-traditional. In many states, the proportion of adult volunteers and youth not previously 4-H members (or birthright 4-H families) prior to enrolling in shooting sports exceeds 80 percent. The program is traditional where it counts. Its non-traditional components may be showing the way for new innovations and impacts in the 4-H program across the nation.
How much agent time is required to develop and maintain the program?

The amount of time county staff must devote to the program varies with organizational style, willingness to develop volunteer management systems and personal interests. Original development may require as much as 40 to 80 hours over the course of a year, including attending a workshop. Some agents have spent as little as 15 to 20 hours getting the program started effectively. Maintenance time also varies. It may require as little as 8 to 12 hours per year giving advice and consent to a volunteer committee and handling normal communications with leaders, committees, state staff and youth.

Some agents elect to maintain a higher profile and deeper involvement. My advice would be to limit your involvement to the amount needed for visibility, understanding and personal satisfaction.

How much time is expected from a volunteer?

The time commitment for volunteers varies dramatically. Many shooting sports volunteers are deeply committed to the content and process. The biggest challenge with them is managing that willingness to avoid burn-out and high volunteer turn-over. A comprehensive, basic program can easily involve 50 to 80 hours of direct youth contact in instruction alone. Involvement with practice sessions, shoots, fund-raising and planning activities can multiply that time commitment. If a small team of instructors (worst case scenario: team – one) commits that kind of time, they usually burn out within two to five years. Three years is about the average. Use a large team of volunteers to deliver small segments of the total program with small individual commitments. One program grew in volunteerism from 16 leaders for 32 kids to 56 leaders in a single year. The next year involved 86 leaders. Within three years the leadership had grown to over 100 adults. Some of them gave as little as one hour. Others committed up to 40 or so hours.

Having so large a leader corps ensures a high leader to youth ratio. It also increases the potential for youth-adult mentoring, development of “significant other” relationships and multiple approaches to program elements. It requires constant recruitment of volunteers by volunteers and meaningful involvement of newly recruited leaders. Like the training model, this shared leadership model holds great potential for 4-H use in today’s environment. Very few potential leaders will refuse to invest one or two hours in something they enjoy with a youth audience. Usually the problem is getting leaders to pick limits to their commitment rather than trying to get more time from them.

Why can’t I simply use any existing hunter education instructors or instructors certified by other agencies or organizations to conduct a program?

Existing hunter education instructors, NRA certified instructors or coaches, certified archery instructors or similar individuals are excellent resources for starting the program. For them, the prime function of the workshops is orientation to the scope, intent, orientation and methods of working within the 4-H program. Without that background, the programs that emerge are often renamed repetitions of the existing programs.
available through those other organizations. The distinctive orientation, approach and methods of this program make it uniquely 4-H. Without those elements and guidelines for program management and support, the program risks its integrity and effectiveness, as well as value as a 4-H recruitment tool. Workshop content is designed to help leaders deliver an effective, high-quality and self-sustaining youth development program using shooting as a vehicle. The workshops seek to assure quality control and program consistency.

Testimonials from NRA training counselors, NRA instructors, NAA instructors, hunter educations instructors (and coordinators), police firearms instructors, NBEP instructors and others who are highly qualified and experienced in teaching their disciplines underscore the value of these workshops to persons who are already qualified by another organization. One NRA training counselor and chief firearms instructor for a metropolitan sheriffs department attended four of the programs. He said, “Even very experienced instructors will find this workshop well worth the time. I learned several new techniques in each session.”

Do the 4-H techniques differ significantly from those used in other programs?

The proven techniques we are using in the 4-H program are compatible with the currently existing programs offered by other organizations. They differ in being pointedly based upon youth development objectives and in addressing shooting sports broadly rather than as a disconnected set of individual disciplines. Young people and adult leaders are our products. The highly successful techniques we promote yield high success rates with both personal development and shooting skill.

What kinds of content are covered in a shooting sports workshop?

The workshops are a microcosm of the shooting sports program. The core centers on safety and responsibility, teaching skills, coaching principles, 4-H objectives and organization, sources of support and means of linking shooting sports to other 4-H programs. A set of basic disciplines (archery, coordination, hunting and wildlife, muzzleloading, pistol, rifle and shotgun) branches from the core. Additional workshops may be offered in more advanced elements of those disciplines (skeet, trap, sporting clays, light rifle, silhouette and waterfowl identification). Every leader receives the core materials, and each one is equipped in a specialization. Only one may be taken at any given workshop because of the time requirements and content load that must be communicated. The basic elements are essential before a leader may go on to more advance training.

A dynamic team approach to teaching and program management is strongly encouraged. Each instructor receives more training than required for certification by the outside certification organization in their discipline. The objective is to teach them how to teach using 4-H methods in the 4-H way with 4-H objectives. Shooting ability is not necessarily a prerequisite to effective instruction, since completely naïve persons have become effective instructors through the program. Enhanced marksmanship is a frequent by product of the training, but teaching the instructor how to shoot better is a bonus and a demonstration of the effectiveness of the techniques.
Why is shooting sports a valuable addition to the offerings in my county?

Shooting sports has the highest value to your county program when it is used as a recruitment device for young people and adults not already in the 4-H program. It has appeal to a wide range of youth in all socio-economic levels in both urban and rural settings. It promotes learning fundamental life skills, has direct links to natural resources education and leads to exploration of careers and life-long avocational pursuits. It provides many links to the rest of the 4-H program, including leadership development. In short, it is another tool you can use to increase the impact of 4-H in your community.

Why do we equip leaders through state-level workshops?

Quality control, leader preparation and efficient use of the volunteers and professionals who make up the state training team all contribute to using this approach.

Who does this training?

Instruction is provided by people with national training in their disciplines or by persons groomed to provide equivalent instruction. Outside instructors with a 4-H orientation are also employed when available. Nearly all the instructors are certified by other organizations or agencies, and the instruction provided surpasses the requirements for instructor certification by those organizations and agencies.

What kind of training is included?

A summary of the training content is listed above in the “content” question. The current format for the workshops includes instructional experiences and cross-training in another discipline of choice.

Why send a team of leaders?

A team of leaders provides mutual support, broader insight and stronger program development for the county. As the team gets larger (at least up to 15 to 20 persons), the intensity, depth and breadth of the program tend to increase.

Why can’t a single leader cover this project?

It is too large of a program to take that approach. Training in a discipline requires 16 to 18 hours. Common subject matter requires another 10 to 12 hours. The format of the workshop cannot be extended enough to permit multiple certifications in a single workshop.

In addition to the constraints of the training, two other problems, both potentially more serious, arise. First, the leader may feel over-whelmed by the sheer mass of the program, electing either to give up or to limit it to his or her own special interest. While having a program delivered by someone with that special interest is ideal, limiting the program to one element severely cripples recruitment and retention potentials. The other
serious impact is the burn-out problem outlined above. Asking one leader to cover everything on shooting sports is like asking one leader to cover everything in livestock. They may try. They may even have some success. BUT they will be gone very quickly because of the stress of trying to do more than they can accomplish effectively without support.

*If I cannot send a team, what is the best way to get the program started?*

Bring someone who is willing to explore the coordinator’s role and assist in recruiting a cadre of key leaders who are willing to take the state training and take that material home. It may require a longer time, but this approach has shown its value many times in the past. Unlike the lone, single-discipline instructor, the coordinator is positioned to organize a team of supportive instructors and to press for high-quality training for them. This is also a means of getting access to the basic materials distributed at the workshop so they can be used as a recruitment tool for leaders.

*What kind of experience or background is necessary for leaders?*

The prime requisite is a commitment to helping kids develop a willingness to learn. An open and active mind is also essential. Willingness to take the risk of trying new methods or new ideas in order to build successful programs is also helpful. Training, certification or shooting skills can be helpful, but they are not essential. Experience with shooting and shooting instruction using dated materials may pose some barriers to learning sound instructional methods.

Excellent target shooters may or may not be excellent instructors. The key is not shooting ability, but coaching and instructional ability. The objective of the instruction cannot become the trophy or the winner’s circle. It must remain the development of the young person to make “every kid a winner.”

Send us caring, self-disciplined people with a love for and desire to help kids…and we will send back a well-founded and prepared shooting sports instructor.
What is Shooting Sports

Ron A. Howard Jr. *

Shooting sports is an active program attractive to youth and adult audiences. The curriculum is designed to assist young people in personal development, establish a personal environmental ethic and explore life-long vocational and avocational activities. The program uses experiential learning and positive interactions with youth and adult role models to help young people develop self-concept, self-assurance and a positive self-image.

The content provides a framework of knowledge and skills for lifetime participation in recreation, hobbies and careers related to shooting sports and wildlife. Core concepts stress safety, ethical development, personal responsibility and lifetime recreational skills.

The program promotes responsibility, decision making and identifying realistic, personal goals. Participants may elect to compete at a level appropriate for their abilities or pursue other objectives. Participants have shown high achievement in the field, shop or classroom and on the target range, but personal development for young people and leaders is the real objective. The program strives to make “every kid a winner,” and to “make the best better.”

Like other 4-H projects, shooting sports has a subject matter base. It has strong links to natural resources, wildlife, outdoor recreation and safety. The content is drawn from sports medicine, psychology, education, biological and physical sciences, engineering, mathematics, technology, as well as American traditions, folklore and history.

The proportion of volunteers and participants new to 4-H is as high as 80 percent in shooting sports programs. Links with other 4-H programs allow the program to introduce the wide array of activities and learning experiences 4-H has to offer. The program promotes positive interaction between young people and concerned, interested and well-prepared adults with shared interests. Those relationships result in recruitment of both youth and adults not being reached by other programs.

The content continues to grow, and its scope is limited only by the availability of leaders and the imaginations of participants. The program is flexible and adaptable to nearly any local audience – rural or urban. Equipment and facilities are also flexible, and numerous funding alternatives are available. Its major disciplines include archery, hunting and wildlife, muzzleloading, pistol, rifle and shotgun. A foundation of basic programs leads into more advanced activities.

Shooting Sports involves too much for a single leader to deliver successfully. It is designed to be delivered by a committee or team of volunteers with agent advice. Consent and support. It emphasizes the value of a cohesive and dynamic group of volunteers, each with limited responsibility to present a program that is better than any one of them could present alone. Identifying, recruiting, selecting and equipping leadership teams is one of the most significant keys to success. State and regional workshops equip leaders to deliver and promote the program.

If you like kids, have an interest in shooting or related activities and are willing to learn, the 4-H shooting sports program and youth of your community need you. For more information, contact your county Cooperative Extension office, state 4-H shooting sports coordinator, or state 4-H office. We will be happy to help you get a program started.

* 4-H and Youth Development Specialist, Texas Agricultural Extension Service
The 4-H Shooting Sports Program is simple at its surface, a recreational shooting and safety program with obvious links to natural resources programming through the hunting and wildlife section of its program. By design and in practice it is much more than that. Each of the items listed below (and many more that are not mentioned) could be inserted in the blank spaces in the title. All of them are addressed either in the materials, in the delivery of the program, or in the relationships that develop of necessity during the program.

Youth Development
Safety Education
Natural Resources
Self-Concept Development
Stress Management
Educational Achievement
Social Development
Violence Prevention
Career Exploration
Motor Skills Development
Citizenship Development
Leadership Development
Progressive Learning
Personal Responsibility
Family Centered
Moral/Ethical Development
Competitive Events
Cooperative Learning
Critical Thinking
Science Literacy
Analytical Skills
Consumerism Training
History and Heritage
Community Service
Avocational Development
Volunteer Management
Volunteer Development
Adult Development
Parenting Skills
Survivorship Skills Training
Mentor/Role Model Based
Life-long Recreation Development
Youth Oriented and Based
4-H Introduction and Expansion
Highly Adaptable
4-H Recruitment
Long-term Relationships
Family Relationships
Rural and Urban
Concentration Development
Youth Leadership
Physical Fitness
Goal Setting and Achievement
Shooting Skills

Does any of that sound familiar? That is what 4-H is all about. The attractiveness of shooting is used to accomplish all of these program objectives in a safe, positive and societally acceptable manner. It is part of the preventative model of youth education and development – an ounce of prevention for a better future.

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1 Condensed from suggestions collected in workshop sessions with the Arkansas 4-H staff, 1994.

2 Professor and Extension 4-H Youth Development Specialist, Texas Agricultural Extension Service
One of the greatest challenges we face as leaders of youth programs is that of working with an audience that is voluntarily present and interested in hands-on activity. In truth there are two such audiences; the young people who are our focal objective and the parents or other adults who come with them and are potential resources to assist in the process. This is intended to be a reminder for each of you attending a training workshop. It is here for your reference later. There will come a time when reviewing it will help keep you fresh, keep your programs attractive to both audiences, and assist you in recruiting and equipping those adult assistants.

We can start out by asking a simple question: “How many things must a person know to fire the first shot, shoot the first arrow, cast a baited hook, etc.” When we get right down to the basics that set of requirements is quite small. On the issue of firing the first shot, we started with the three cardinal rules.

1. Keep the muzzle pointed in a safe direction.
2. Keeping the action open and empty until ready to fire.
3. Keep your finger off the trigger until ready to fire.

To make the obvious clear, that means that we need to know the following.

1) What is a muzzle?
2) What is a safe direction?
3) What is the action?
4) How can we know that it is empty?
5) What is the trigger? And
6) When are we ready to fire?

We might add a couple that we may use in the actual process of shooting, including:

7) What is the butt of the gun?
8) What are the front and rear sights (rifles and pistols)?
9) What does “loaded” mean?
10) What is the fore-end or forearm of the gun? And
11) What is sight alignment (rifles and pistols)?

Since we are loading for the shooter and passing a “loaded and ready to fire” arm to them, they do not need to know either the parts involved or how to use them. They do need to know answers to those simple questions. As they progress, you can add more information to the basics, but this gets you to the shooting as soon as possible. Thus these are the MUST KNOW items and the rest is NICE TO KNOW. Your first task is to separate those two sets of information and to determine when each element is best taught.

The next basic principle is to teach the basics before the application. That means that the full set of basic information must be taught sequentially until the “firing a shot” sequence is a known process.

Breaking the learning into logical parts is next on the agenda. Let’s use the shotgun lesson plan as an example. First we determine eye dominance. That lets us align the eye and the barrel of the shotgun. Next we stand more or less square to the target and learn to SEE the target. That goes beyond mere vision or “looking” to intense focus on it. Then we point a finger at that target and follow it to the ground. This is generating both hand-eye coordination to point at the target and follow through. Then we have the “shooters” yell “BANG!” when the finger touches the target, then follow it to the ground. This process allows for shooting practice without equipment. It also allows us to catch “aimers” and turn them into “pointers,” a transition vital to good shotgun shooting. Then we place an open and empty shotgun in the hands of the “shooter” and have them repeat the pointing process before playing a ball and dummy game leading to the first live shot. This process has taken the shooter one step at a time to the point where they have broken their first target formally. A single complex action was broken into parts that could be repeated multiple times, leading to the successful first shot. In it we went from known things, like pointing a finger, to unknown things, like firing at a moving target.

1  Professor and Extension Specialist, Texas Cooperative Extension, Texas A&M University System
An old friend, Dr. Otis Curtis, once shared two principles from his time as a captain in the Marine Corps. The first one was strategic: **Do not commit your reserve forces unless it is likely to make a difference in the battle.** That one has saved a number of flat forehead-syndrome injuries over the past 30 years. The second one is tactical, the **PPPPPP principle.** Loosely translated it states that Prior Planning Prevents P*** Poor Programs. We are attempting to assist you in having a solid plan before you attempt your first training with a 4-Her.

What we are after is SPE – Sneaky Prophylactic Education. (This irritates some of my colleagues who do not understand the true meaning of prophylaxis, but that is why we have dictionaries on our desks.) Many young people are seasoned against overt instruction. They experience it daily in school. Our approach is sneaky because we teach life skills by sneaking behind the participants while they are having fun and actually teaching them skills and practices that will prevent problems later. Since “prophylaxis” means “prevention” you are welcome to use that word if you are bothered by the real one. On the other hand, often the use of the precise meanings of words is the most simple approach to the transfer of information. Finally, the entire program is about education. Without that connection, we cannot justify our involvement in this program. It includes a broad set of educational objectives that are built into the process of teaching kids to shoot: life skills education, science education (chemistry, physics, mathematics, and biological sciences), sequential learning processes, iteration of positive responses, extinction of negative responses, personal responsibility, and much, much more.

The commonly used notion that practice makes perfect is a lie! Practice does not make perfect. It fixes (embeds, inculcates, reinforces) those things being practiced. Perfection comes from practicing perfection. It takes a lot of repetitions to fix a way of doing anything. Perfect practice makes perfect performance. That is what we want to teach. If a youngster can only fire six shots with their full attention and at top performance that is all they should fire before resting. Endurance will come with continued effort.

**WE must know when to stop one form of practice in favor of another.** An example may help in understanding that approach. As a bow hunter and archer, I find that any layoff will grossly reduce the numbers of arrows I can shoot before fatigue starts to introduce errors. To increase stamina without practicing bad habits, I stop shooting immediately when group size starts to increase. Then I draw, anchor, count slowly to twenty, and let down without releasing the shot. After twenty repetitions of that non-shooting process, I put the bow away. In the process, I gain a muscle toning workout and built endurance without introducing form faults that need to be corrected later had I continued to shoot. Apply that principle to working with kids.

You might note that the objective was to reach the ability to shoot 200 arrows without loss of form or concentration, and all of that practice was in preparation to shoot one arrow in the real “match.” That same principle applies to developing stamina for other matches. There is an obvious difference between those shooters who practice in match length sessions or longer compared to those who shoot shorter courses of fire in preparation for a longer match. It is about endurance and fatigue factors under match pressure.

The best way to teach a topic is to bring it to a context that the learners understand. This is Meeting Them Where They Are! As an instructor or coach, you must be able to put yourself in the minds of the student/shooter, and find methods to aid them that will start where they are and build toward where they need to be.

All of us have seen the diagram of capability versus challenge. When challenge overwhelms capability the learner becomes frustrated. When capability is far beyond the challenge the learner becomes bored. Sometimes “boring” is used in both situations. In most cases any group will have learners of mixed capability on any given challenge. Getting personalized in instruction then becomes vital. A steady diet of either boredom or frustration generally results in the participants voting with their feet. Most of the time, you only get a chance to commit either error once! Using the program suggested by Richard Wolters in *Water Dog*, offers excellent counsel. Start with a warm up in the comfort zone. Move to a challenging new element or one still in the learning process, then return to the comfort zone for a final element. It works on kids, too. You should spend from 40 to 60 percent of the time in any session in the comfort zone with the remaining time (judged by the actions of the learners) in the challenge phase. Remember that every individual has his or her own learning rates and boundaries between comfort and challenge!

That means you must learn your kids!
Finally, nobody likes to be around someone who can always find fault but hardly ever provides a supportive word of praise. Keeping a positive philosophy in your teaching is vital to keeping kids involved! An excellent example occurred in a workshop a few years ago. Archers are taught to use “oreos” in changing things – start with something positive, attempt to correct a problem, then end with another positive element. At one workshop, I was instructing the coordinators and we were touring the other disciplines. When we got to archery, they wanted to use us as “training dummies” for what they had learned. I played it straight on the first end, but attempted to make multiple errors on the second one. I shot from the shelf instead of the rest, nocked the arrow above the indicator, drew with four clenched fingers, squeezed the bow’s grip, stood very obliquely to the target, and several other things. When it was critique time, the new instructor started out with “Ron” ummmmm…..nice shoes” before attempting to fix one item at a time. I had to offer praise on that effort because I had fouled up nearly everything in some way, and he had risen to the challenge.

I leave this element with a quote from Dr. Bill Dilger, ethology (animal behavior) professor in a class at Cornell University in 1969. “Don’t go starting vast projects with half-vast ideas!” Teaching in any discipline of shooting sports is really a vast project. It is challenging and complex. Be prepared to dedicate yourself to remembering the basics while adding to your knowledge and techniques every time you teach or coach. If you do so, you will do well; and so will the young people who work with you!
Experiential Learning:
*A Powerful Pedagogical Strategy for 4-H Science Educators*
Martin H. Smith, Lynn Schmitt-McQuitty, Richard L. Mahacek, & Steven M. Worker
University of California, Division of Agriculture and Natural Resources

**The connection between 4-H Science and Experiential Learning**
An essential component of 4-H Science programs is the framing of activities around the experiential learning cycle. Experiential learning provides opportunities for participants to construct meaning through engaging experiences. According to research:

- The foundation of experiential learning lies in the learner’s experience (Andresen, Boud, & Cohen, 2000). However, isolated experiences that lack opportunities for learners to reflect upon their new understanding and apply that knowledge to authentic situations do not necessarily ensure that learning has occurred (Dewey, 1938).
- The 4-H experience emphasizes “hands-on, learning-by-doing”; however, “hands-on” does not always translate to experiential learning (Enfield, 2001). Experiential learning must, by design and through implementation, include opportunities for reflection and application (Enfield, Schmitt-McQuitty, & Smith, 2007).

4-H Science programs create opportunities for extension educators to improve youths’ knowledge, skills, and positive attitudes in science, engineering, and technology. By engaging youth in concrete experiences that are followed by reflection and application educators can help ensure deep learning.

**Components of Experiential Learning**

**Concrete Experience:** This is an opportunity to engage learners in an investigation through an activity of some kind (Enfield, 2001; Kolb, 1984), but is done with little or no help from the facilitator/teacher. However, the experience must include defined learning objectives.

For example, in the new National 4-H curriculum *There’s No New Water!*, youth engage in an experience that involves transferring varying amounts of water from several buckets representing water resources in urban and rural areas. The principal learning objective of activity is to have youth gain an understanding of similarities and differences between urban and rural water use and their impacts on water quality and availability.

**Reflection:** The reflection component of experiential learning involves the seamless movement through three distinct phases where by the teacher/facilitator guides the learners to share thoughts and feelings with others in order to process and generalize their experience (Enfield, 2001).

Following from the previous example, when youth are investigating the similarities and differences between urban and rural water use in the *There’s No New Water!*
curriculum, they compare water use in 2010 with the projected use in 2025. Subsequently, the youth discuss ways in which different and increased uses of water might impact water quality and water conservation. The facilitator does not provide the answers, but help guide youth to the learning objectives through open-ended questions as they reflect upon their experience.

**Application:** Application follows the experience and reflection components of experiential learning and provides opportunities for learners to apply new knowledge to authentic situations in order to help deepen and extend their understanding (Carlson & Maxa, 1998). A key means by which application is accomplished in the *There’s No New Water!* curriculum is through the identification and implementation of service learning projects around water issues in the communities where 4-H youth live.

Another key point of emphasis is that the experiential learning process is a "recurring cycle" (Kolb, 1984). Learning gained through one experience builds upon itself and leads to new ideas, questions, and further experiences.

Although several published experiential learning cycles with diverse numbers of stages (three, four, or five) exist, the 5-step learning cycle is most commonly used in the 4-H Youth Development Program (Figure 1).

Figure 1. 5-Step Learning Cycle (UC-STEL, 2005).
Experiential Learning: Best Practices in 4-H Science

Experiential Learning in 4-H Science can take place in a variety of contexts, but always encompasses the essential components of a concrete experience, reflection, and application. Examples in published literature of how some extension educators have put this methodology into practice include:

- Hairston (2004) described engaging 4-H teens in community service activities that involved planning and implementing a meaningful experience and reflecting upon it.
- Smith and Enfield (2002) developed the “Step-Up” Incremental Training Model to train 4-H teens as teachers of science.
- Spiegel et al. (2005) described the adaptation of an existing curriculum in order to incorporate elements of experiential learning for 4-H.

Experiential Learning: Promising Practices in 4-H Science

4-H Youth Development professionals from Iowa State University, Oregon State University, the Ohio State University, the University of Minnesota, and the University of Nebraska were interviewed with the purpose of identifying practices used in 4-H Science that show promise related to the training and support needed to ensure the use of experiential learning in 4-H Science programming. Common themes include:

- Utilizing curricula that include the experiential learning cycle as the basis of the lesson plan design and automatically imbeds the use of the cycle into science lessons.
- Providing opportunities to model and practice questioning strategies that are open-ended.
- The use of face-to-face training paired with subsequent webinars to train staff and volunteers in experiential learning. This strategy allowed for multiple contact points with participants and information.
- Conducting on-site observations of staff and volunteers delivering 4-H Science programs. This allows for further coaching and identification of future training needs.

Experiential Learning: Challenges in Delivering 4-H Science

The same set of 4-H professionals interviewed for promising practices identified challenges related to the full integration of experiential learning in 4-H Science. Interviewees stated that if staff and volunteers have only been taught using lectures or demonstrations that these will be the methods they most commonly revert to when delivering 4-H Science. Since experiential learning is more than hands-on activities, and this teaching strategy may be new for many 4-H educators, practice and feedback on delivering experiential learning is important. Therefore, as Extension educators, we need to ensure that we model best practice, provide on-going support, and utilize relevant materials that help facilitate experiential learning.
Resources and Tools for Experiential Learning

Websites:
- UC Davis Experiential Learning website: http://www.experientiallearning.ucdavis.edu/default.shtml
  This site features pedagogical and theoretical information about experiential learning and provides tools, resources, and module outlines for use by other educators.
  The author addresses possibilities and issues associated with David A. Kolb's model of experiential learning. Additional resources are provided for further reading.

Associations:
- The Association for Experiential Education: http://www.aee.org
- International Consortium for Experiential Learning: http://www.icel.org.uk/
- National Society for Experiential Education: http://www.nsee.org/

Selected References:
Experience with establishing and servicing shooting sports programs suggests that a successful approach to building a strong program involves 10 major steps.

1. **Identify a key leader or leaders in your county.**

Conservation officers, hunter training instructors and officers in local gun clubs are a good place to start. If you have no personal knowledge of these people, contact local sporting goods dealers, outdoor writers, conservation officers or even police agencies. Be sure to ask contact people if they have any additional suggestions of interested people, even if they prove not to be interested personally. In general, it is best to look outside the present corps of 4-H leaders to recruit shooting sports leaders. This expands the leadership base and recruitment potential. Remember, interest in kids, not targets, is a key to locating good leaders.

2. **Identify a group of potentially interested persons in cooperation with your key leader or leaders.**

These people should meet the criteria listed above and represent a broad range of shooting disciplines. Every major component of the shooting sports curriculum should be represented by at least one person: archery, hunting (wildlife), muzzleloading, pistol, rifle and shooting. If possible subdivide further to have representatives for trap, skeet, silhouette, position rifle, hounds, bird dogs, retrievers, bow hunting, etc. at the initial meeting. The more inclusive the group is, the broader your support base will be. Remember, asking a person to work with young people in one of his or her interest areas is not an imposition. It is a very strong compliment.

3. **Invite the large group of potential leaders to an initial meeting to discuss organizing a county shooting sports project.**

Be prepared to discuss the philosophy, content, purposes and objective of the program. Assistance from the state specialist, a nearby member of the state shooting sports committee or a leader from a successful county program is extremely valuable.

4. **Meet with the people that want to form a county team or teams that will be trained to implement the program.**

This team will learn to recruit and train other instructors when they attend a training workshop. The group can benefit from having a preliminary discussion of the county’s potentials before they attend the training session.

5. **Attend a training workshop.**

Accompany at least one full team to the workshop. If the agent does not attend, there will be no bond of common knowledge between the agent and his or her committee. If a partial team attends, the members will become very frustrated and the program content will be limited by the training of the people present. If your county does not have a full team, join another county to produce a cooperative complete team. Do not assume these people will not attend a workshop for any of the traditional reasons. *Shooting sports leaders are different?*

6. **Develop a county (or multi-county) plan.**

This process will start with the training session. Continue to refine the plan as soon as the team returns from training. Do not let more than a couple of weeks pass. The excitement and confidence built at the workshop may fade or become modified if too much time elapses from training to implementations.

7. **Develop the necessary support for the program: human, financial and material.**

Your team coordinator will have extensive training in this area. Equipment and facilities are not limited factors if a little creativity is applied.

8. **Set the county plan in motion by recruiting leaders and youth.**

Be prepared to have moderate success in the first attempt and try to keep the size of the group manageable. Be alert for opportunities to recruit volunteers during the course of the program. Be sure to involve new volunteers quickly in activities appropriate to their interests and abilities.

9. **Let the volunteers run the program.**

The agent needs to maintain some presence, but the program should belong to the volunteers. The committee is where agent oversight will be demanded, expected and desired. Consider the evaluation process while the program is being planned, run and critiqued.
Encourage immediate debriefings of the leaders after each segment of the program is completed. Those comments should mold evaluations in the future.

10. **Draw advanced participants in the program into junior leadership and coaching roles.**

This program like other 4-H programs needs to have advancement opportunities for the participants. The second-generation leadership will come from youth involved in leadership roles while they are members.

From start to finish, the process of developing a local shooting sports program should take a minimum of three to six months. Later programs become increasingly easier, and a flow of new leaders develop naturally. New approaches and ideas develop for more advanced programming. Capitalize on the availability of the leaders and young people to further develop the county program. Be sure to share new ideas and approaches with your state coordinator so they can share them with others in the state. Your innovation may hold the key for success in another area.
Positive Youth Development (PYD) and Life Skills Development occur at all levels of this model. The main message of this model is for program focus and priority to be on education, not competition. In order for a land-grant university to be involved with 4-H Shooting Sports, education must be the foundation of the program.
Building a Spider Diagram for 4-H Shooting Sports

Ronald A. Howard Jr.¹

Humans can perceive a three-dimensional world, even though we can conceptualize multi-dimensional constructs. G. E. Hutchinson’s ecological niche concept, for example, is considered an n-dimensional hypervolume. Even very young children can grasp that meaning, if not the words, when concrete examples are used with familiar plants or animals. Simplifying that construct to a two dimensional diagram, even if perspective is added to give the appearance of three dimensions results in loss of richness. The same thing is true for other things that have a complex structure. We often depict them as simplified diagrams, usually in two dimensions, in an attempt to capture some of the content. 4-H Shooting Sports included a triangle or pyramid model for many years.

The base of the triangle represents education, and we feel that is the most fundamental of the levels we must address. Recreational shooting comprises the majority of the second tier. Competitive shooting is placed at the top of the box, with the tip representing the international level of competition. The model is heuristically pleasing. It shows that most of our efforts should be in education and the development of recreational shooting, with relatively smaller proportions of our efforts being devoted to competitive shooting. It carries the implication, however, that competition shooting and international competition particularly are the height of achievement and the ultimate objective of the program. Substitution of “Achievement” and “High Achievement” could make the model more broadly applicable, but it still carries a two dimensional construct for the program as a whole. Since the 4-H Shooting Sports Program more closely resembles an “n-dimensional hypervolume,” a more realistic model is needed to demonstrate its nature and objectives.

That structure can be modeled in numerous ways. A molecular model, for example, shows that achievement can be individually defined and that nearly an infinite number of ultimate endpoints are available. This model starts with a large core of basic content and program objectives represented by a large ball. Slightly smaller balls are attached to that core representing the central disciplines of the shooting sports: archery, hunting/wildlife, muzzleloading, pistol, rifle and shotgun. In a very real sense, other could be added if desired, like coordinators, volunteer developments, family relationships...

Secondary, disciplines, represented by slightly smaller balls can be attached to each one. Archery, for example, might include bowhunting, target archery, 3-D archery, recreational shooting, equipment and crafting, or others. Hunting could be divided into big game, small game, upland birds, waterfowl, hunting equipment and related skills. Muzzleloading could be divided into hunting, muzzleloading firearms, reenactments, buckskinning, target shooting, and recreational shooting. Pistol might include plinking and recreational shooting, target shooting, silhouette shooting, hunting, and related skills. Rifle might include

¹ Professor and Extension 4-H Youth Development Specialist, Texas Agricultural Extension Service
plinking and recreational shooting, target shooting, silhouette shooting, hunting, and rifle equipment and related skills. Shotgun might include recreational shooting, hunting, clay target games, and shotgun equipment and related skills. Note that cross-linking is already apparent at this level and that it becomes more complex as the process continues.

A tertiary layer of skills, modeled by the next smaller series of balls, includes items that can be attached to each of the secondary items. The clay target shooting games discipline, for example, might include skeet, trap, sporting clays, miscellaneous shotgun games, and informal games. These could have another layer attached with smaller balls representing division of those disciplines. For example:

- **skeet**: international and American skeet
  - American skeet: all bore, smallbore (20 gauge), sub-smallbore (28 gauge) and .410
- **trap**: international trap, modified (wobble) trap, international doubles trap, ATA trap, informal trap games
  - ATA trap: 16 yard, handicap, doubles
- **sporting clays**: tradition sporting clays, five-stand
  - traditional sporting clays: quail walk, tower shoots…

Continuing to subdivide the disciplines with progressively smaller balls until five to seven layers of structure are visible and the smallest balls are about the size of marbles is instructive. Each one of these could be represented by a triangle of achievement. Perhaps a youngster that you find through an archery program will go on to become the next great engraver of sporting arms. Perhaps a kid attracted through hunting will be the next John Browning of firearms engineering. Perhaps a pistol shooter will become the next Jack O’Connor or Warren Page in sporting journalism. Perhaps…perhaps…perhaps – maybe the youngster will just learn to handle firearms safely and prevent an accident or find that shooting is the key to stress relief. All of it is positive. Any of these represent achievement. Ultimate achievement must be defined by the kids themselves, not by someone external to them; and achieving their objectives, however defined, represents a defensible and worthy endpoint of involvement.

The molecular model is best assembled in parts by the volunteers in a discipline session with the challenge of making their segment as expansive (beyond the basics) as possible. Guidance from discipline leaders is helpful in getting a well-organized product, although nuances of organization are not critical. Once each discipline group has finished, assemble their segments on the common core, having volunteers from that group support the model. Even with short connectors a model 15 to 20 feet across is easily generated, giving a graphic image of the scope of this program.

A similar approach can be taken using a human “spider diagram.” Although limited by the number of people in the group and the number of attachments they can make (unless strings or other connectors are used), this approach has some advantages over the molecular model. It relieves the long sitting spell that usually is part of the start-up segment of a workshop. It gets the volunteers to meet other people in the group, within and outside their discipline group. Finally, it begins to stretch their minds beyond their own experience and interests toward the potential outreach and impacts of the 4-H Shooting Sports Program. That stretching process is vital to long-term program recruitment, since casting the net broadly at the beginning tends to recruit from a wider array of volunteer and youth interests. That provides a robust springboard for diversification of the program as it grows in strength. Limited models are seldom as successful as those that use an introductory smorgasbord followed up by more in-depth experiences in areas of youth and volunteer choice and specialization.

Try these techniques to promote a broadly defined, mutually supportive program from a group of volunteers with intense loyalty to individuals disciplines. Remind your volunteers that the foundation upon which all of this rests is the 4-H commitment to youth development, positive adult-youth relationships, support for families, and making the best better.
CAN YOU NAME THIS SPORT?  
By R.A. Soldivera

1. The epitome of athletic achievement is the Olympiad! This sport is an Olympic event. Only two other sports attract more participating countries.

2. Generally speaking, if a young man or woman is not proficient in a sport by the time they enter high school, there is little or no chance that they will be permitted to participate in a school sport. Most coaches want established winners. This sport does not require previous experience. As a matter of fact, it is very possible for a person to start in this sport as a high school junior and compete on a national level before they enter college.

3. In some sports an athlete’s peak performance will ebb at 16 years of age, other sports at 20, and still others at 28 or even 30 years of age, but beyond the age of 30, an athlete is definitely “over the hill.” Not in this sport. This sport has had a national champion who was over 60 years old and also a 16 year-old, and every age in between.

4. There are girl’s sports and boy’s sports, but this sport is both.

5. There are indoor sports and outdoor sports. This sport is both.

6. There are winter sports and summer sports. This sport is both and is featured at winter and summer olympics.

7. Football requires a team, while an individual can compete in track. This sport offers individual participation, team participation, or both at the same time.

8. Chances are, the high schools in your area do not offer one sport with a zero injury record. Serious injury is a part of most sports. This sport is the safest of all sports.

9. Sports arenas, courses, courts, gymnasiums and the like, use up a great deal of real estate and usually cost millions of dollars. This sport requires little more than a 50 foot long by 20 foot wide room.

10. This is among the most disciplined of all sports. Many students report a marked improvement in their ability to concentrate when they apply the principles of this sport to their academic pursuits.

11. “PURITY” is a term used in sports to describe the degree of precision with which a physical function must be executed. This sport requires the highest degree of purity.

12. Sportsmanship: “quality and conduct of a person who accepts victory and defeat graciously.” In many sports it is not unusual to see one athlete physically attack another. To date there is no record of such behavior in this sport.

13. In most sports, physically handicapped people are treated like invalids. Which, by the way, they resent. Not in this sport.

14. College scholarships are awarded in this sport. (These scholarships can be won by both men and women on the same team.)

15. Qualifying for a team is not a guarantee that one will get a chance to play. Coaches enter their best athletes and the rest sit on the bench. In this sport, everyone participates.
National 4-H Shooting Sports Code of Ethics

A complete 4-H shooting sports program must convey life skills development and be presented in a way that is safe, technically competent, and helps to instill 4-H values in participants through teaching and example. Certified shooting sports instructors and volunteers must be cognizant of their role as a moral and ethical mentor, as well as teacher to youth and adults in their state and community.

As a 4-H Shooting Sports Instructor or Volunteer:

- I will respect the participants, volunteers and property associated with the 4-H shooting sports program.

- I will set a good example as a mentor and role model for 4-H shooting sports youth and volunteer leaders.

- I will conduct myself and my 4-H shooting sports program in a professional and ethical manner.

- I will strive to be knowledgeable of the life skills embodied in the 4-H shooting sports program and aid positively in the development of youth through adherence to those principles.

- I will strive to be technically competent in the subject matter I teach and adhere to the national 4-H shooting sports guidelines and curriculum.

- I will respect the dignity of each participant in the 4-H shooting sports program regardless of gender, origin, ability, achievement or conviction.

Name

Date
The National 4-H Shooting Sports Committee, recognizing the diversity of the 4-H shooting sports programs within each state recommends the following Best Practices in the implementation of a state level 4-H Shooting Sports program:

• The National 4-H Shooting Sports Curriculum is the established adult teaching curriculum for training adults to teach youth the shooting sports within the 4-H program.

• All instructors accept and abide by the National 4-H Shooting Sports Code of Ethics.

• State, County, and Club level 4-H Shooting Sports Programs should have written risk management plans which includes items such as emergency response and preparedness, insurance, safe storage of firearms and ammunition, state-level reloading policies, etc.

• All certified 4-H shooting sports instructors are a minimum of 21 years of age and have completed a state level 4-H shooting sports workshop in the specific discipline they will be teaching.

• State level 4-H Shooting Sports Instructor certification workshops provide a minimum of fifteen (15) hours of instruction; including a minimum of twelve (12) hours instruction in each specific discipline taken and a minimum of three (3) hours instruction in teaching youth development, life skills, and risk management.

• To maintain certification as a 4-H shooting sports instructor, one must teach or assist in instruction within the discipline certified at least once every three (3) years.

• Only factory ammunition is used at 4-H shooting sports competitive events.

• Regarding simulated combat sports including but not limited to, paintball guns, air-soft, laser guns, archery tag. Pointing any type of gun including paint ball guns, air-soft guns, laser guns, laser paint-ball, archery tag bows & arrows or sighting devices at any person or any humanoid shaped target is inappropriate in any 4-H program activity.
National 4-H Shooting Sports
Objectives of 4-H the Shooting Sports Program

The 4-H Shooting Sports Program strives to enable people, their parents and adult volunteers to become responsible, self-directed and productive members of society. Agents, leaders, instructor and coaches must understand the goals and objectives of the program in order to manage or present it properly. These goals and objectives are consistent with the goals and objectives of the 4-H program. The program transfers knowledge skills and attitudes to develop human capital, using the subject matter and resources of the land-grant universities.

The specific goals and objectives of the 4-H Shooting Sports Program include, but not limited to, those listed below.

1. To encourage participation in natural and related natural science programs by exposing participants to the content through shooting, hunting, and related activities.

2. To enhance development of self-concept, character and personal growth through safe, educational and socially acceptable involvement in shooting activity.

3. To teach safe and responsible use of firearms and archery equipment including sound decision-making, self-discipline and concentration.

4. To promote the highest standards of safety, sportsmanship and ethical behavior.

5. To expose participants to the broad array of vocational and life-long avocational activities related to shooting sports.

6. To strengthen families through participation in life-long recreational activities.

7. To complement and enhance the impact of existing safety, shooting and hunter education programs using experimental educational methods and progressive development of skills and abilities.
BEST MANAGEMENT PRACTICES
National 4-H Shooting Sports

Eye Protection: Adequate eye protection (shooting glasses, safety glasses or safety goggles, or hardened prescription glasses are required for all competitors in black powder, pistol, rifle, and shotgun games. This includes hunting live fire events. Such protection is strongly advised for archery events as well. Coaches or spectators on or near firing lines are subject to the same requirements. See Safety Glasses ANSI – Eyewear Standard

Ear Protection: In hunting live fire, muzzleloading, shotgun, smallbore pistol, and smallbore rifle, all competitors and those on firing lines must have adequate hearing protection. Where electronic hearing protection is used, it may not include radio or similar broadcasts as background noise, since that could interfere with range commands. This protection is strongly advised for spectators who are close to such ranges.

Footwear - Any participant while on the shooting line or shooting in any outdoor shooting event is required to wear shoes that completely cover their feet. Examples of footwear that are not acceptable include, but not limited to: sandals, clogs, crocs, flip-flops, and bare feet.

Suggested Best Management Practices – 4-H Shooting Sports Equipment – Storage & Transportation
In many states, the storage of Shooting Sports equipment has not been consistent nor have any standards been set forth to assist states in developing policies related to equipment storage and transportation. This is a list of suggested guidelines for states to consider.

Inventory Control

1. Inventory list of equipment should be maintained by one individual in charge of equipment for the local group/county program/state program. A sign-out process will be used to record who/when/what/when returned.
2. Only approved, current instructors may sign out program equipment from inventory.
3. Extension staff responsible for the 4-H Shooting Sports program in the county/state should also have access to all program equipment, the inventory list, and sign-out records.
4. Equipment inventory should be audited at least annually (or more often if requested) by local and/or state Extension personnel responsible for 4-H Shooting Sports program. The state Extension staff person responsible for 4-H Shooting Sports program has the ultimate authority to remove 4-H Shooting Sports program equipment from any 4-H Shooting Sports club or instructor based on lack of safety practices, inadequate storage and transportation safeguards, concerns about inventory control, inadequate emphasis on positive youth development, or other reasons based on professional judgment.
Storage of Firearms

1. All Firearms will be stored unloaded in a commercial firearm safe when not in use. *(should we include a requirement for open action indicators and/or trigger locks?)*
2. All gun safes should be secured in a locked storage area, following local statutory requirements, if applicable. If no local laws apply, suitable locations include local law enforcement department firearm storage, storage closet or room with limited access, etc.
3. Keys and combinations should be available only to certified instructors, county coordinators, and state coordinators. Extension staff responsible for the 4-H Shooting Sports program in the county/state should also have access to all program equipment.

Storage of Air Guns

1. Air guns will be stored in gun cases that can be locked and stored in a storage room accessible only to instructors, county coordinator and state coordinator.
2. Keys to the storage area should only be available to instructors, county coordinator and state coordinator. Extension staff responsible for the 4-H Shooting Sports program in the county/state should also have access to all program equipment.

Storage of Archery Equipment

1. Archery equipment will be stored in a locked closet or room accessible only to instructors, county coordinator or state coordinator.
2. Doors should be double locked and key should only be available to instructors, county coordinator and state coordinator. Extension staff responsible for the 4-H Shooting Sports program in the county/state should also have access to all program equipment.

Storage of Muzzleloading Equipment

1. All muzzleloading guns will be stored unloaded in a commercial firearm safe when not in use.
2. All gun safes should be secured in a locked storage area following local statutory requirements, if applicable. If no local laws apply, suitable locations include local law enforcement department firearm storage, storage closet or room with limited access, etc.
3. Keys and combinations should be available only to certified instructors, county coordinators, and state coordinators. Extension staff responsible for the 4-H Shooting Sports program in the county/state should also have access to all program equipment.
Ammunition

1. All ammunition, shotgun shells, rifle shells, pistol shells, powder, caps, BB’s and pellets will be stored separate from the guns which use them. Access to the ammunition should have access limited: the instructors, county coordinator or state coordinator. Extension staff responsible for the 4-H Shooting Sports program in the county/state should also have access to all program equipment.

2. Ammunition should be stored in a closet or room where there are at least two separate locks on the door.

3. Recommend that only factory loaded ammunition be used in all 4-H shooting sports program.

Transportation of Equipment

1. All applicable local, state and federal laws are to be followed when transporting firearms, ammunition and other 4-H Shooting Sports program equipment and supplies. Only licensed individuals age 18 or older are permitted to drive vehicles transporting 4-H Shooting Sports equipment.

2. When transporting firearms, air guns, ammunition and muzzleloading guns, the transporter should have the guns in locked hard cases with gun locks on each gun (either a trigger style gun lock or a cable style gun lock).

3. Equipment should be transported in such a way that the equipment cannot be seen from outside the vehicle. Some examples of concealment include transporting in the vehicle’s trunk, in a locked trailer, beneath a pick-up truck bed topper, etc. The vehicle should not be left unattended when equipment is being transported.

Youth & Adult Participation

1. A 4-H Shooting Sports Instructor has the right to refuse any participant from the shooting sports activity in the interest of safety for the participant and others in the program.

2. Instructors are encouraged to identify strategies to accommodate youth / adults with disabilities.

3. 4-H Shooting Sports Programs are open to all youth 8 to 18 years of age (as of Jan. 1 of the current year) without regard to race, color, sex, handicap, religion, age or national origin. 4-H Clovers (age 5-7) are not eligible for any aspect of 4-H shooting sports programs as these are not age appropriate activities.
SAFETY GLASSES / ANSI – Eyewear Standard

SAFETY GLASSES SHOULD BE WORN BY ALL PARTICIPANTS IN 4-H SHOOTING SPORTS ACTIVITIES INCLUDING ACTIVITIES INVOLVING ANY FIREARM EITHER POWDER CHARGED OR PELLET/BB AIR CHARGED. THE STANDARD FOR SAFETY GLASSES IS ANSI Z87.1

ANSI is the acronym for the American National Standards Institute, a nonprofit organization that serves as administrator of the United States private sector voluntary standardization system. The primary objective of ANSI is to promote and facilitate voluntary consensus standards and conformity assessment systems. ANSI does not have authority to enforce such standards, but their standards are used by Occupational Safety and Health Administration (OSHA) to be sure that certain safety devices, such as eyewear, provide adequate protection for workers.

The ANSI Z87.1 standard sets forth requirements for the design, construction, testing, and use of eye protection devices, including standards for impact and penetration resistance. All safety glasses, goggles, and face shields used by employees under OSHA jurisdiction must meet the ANSI Z87.1 standard. The eyewear standard includes the following minimum requirements:

- Provide adequate protection against the hazards for which they are designed
- Be reasonably comfortable
- Fit securely, without interfering with movement or vision
- Be capable of being disinfected if necessary, and be easy to clean
- Be durable
- Fit over, or incorporate, prescription eyewear

Many manufacturers of sports eyewear and other protective eyewear not used in a work environment also comply with the ANSI Z87.1 standard. If you need protective eyewear of any kind, look for products that comply with the ANSI standard or consult with an optometrist, ophthalmologist, or optician before purchasing.
CONDUCT
(From National Invitational Rules yet Applicable to on-going programs)

The National 4-H Shooting Sports Invitational is a youth event, as such the use of tobacco and alcoholic beverages, during an event or on the grounds of the National 4-H Shooting Sports Invitational is not permitted. Violation of this policy by a participant is grounds for dismissal from the National 4-H Shooting Sports Invitational.

**Dress Code** - Participants are expected to dress appropriately for the events in which they will participate. Team uniforms or shirts are encouraged, but not required. Both young people and adults should wear attire appropriate for the weather while remaining modest and socially acceptable. Clothing with sexually suggestive wording or graphics; and alcohol or tobacco advertisement is not appropriate. Range officials have the final word concerning the dress code and may announce or address specific cases. All participants and coaches should remember that they may be having photographs taken or be asked to interview for the media. Remember that you represent all of 4-H Shooting Sports. Make it a positive image!

**Footwear Policy** - Any participant while on the shooting line or shooting in any outdoor shooting event is required to wear shoes that completely cover their feet. Examples of footwear that are not acceptable include, but not limited to: sandals, clogs, crocs, flip-flops, and bare feet.

**Behavior and Sportsmanship** - All participants, coaches, and spectators are expected to demonstrate the highest level of sportsmanship, supporting the objectives and ideals promoted by the 4-H program in general and the 4-H Shooting Sports Program in particular. Participants or coaches will render aid and/or testimony if asked to do so by any match official. All participants, coaches, and observers are expected to conform to appropriate state 4-H Code of Conduct expectations or volunteer agreements, and the National 4-H Shooting Sports Program Code of Conduct, not only to the letter, but to the intent.

**Knowledge of Rules and Procedures** - Where possible, each of the national events have been associated with a National Governing Body (NGB). An exception to any NGB rule is noted in the “Synopsis”. It is the responsibility of each participant and coach to read the NGB rulebook, understand the procedures used in each event, and comply with the rules and standards of the events. Questions are encouraged to clarify any areas of misunderstanding or lack of knowledge. Ignorance of the rules in any event does not obviate their existence. Participants are responsible for knowing the rules of their event and staying within them. Learning the rules of the events is part of the educational process for shooting sports participants.
**4-H VOLUNTEER JOB DESCRIPTION**

**POSITION TITLE:** Discipline Instructor (Air Pistol, Archery, Rifle, Shotgun, Black Powder, Hunting & Wildlife) – 4-H Shooting Sports Program

**TIME COMMITMENT:** Length of service is one year. (Renewable) Three-year commitment preferred. Program ranges from 8 – 36 hours (preparation time is not included).

**LOCATION:** Serve within the country/area.

**TYPE OF POSITION:** Volunteer key leader; no direct salary.

**SUPERVISION:** Shooting sports coordinator and Extension professional in charge of 4-H (youth) programs.

**GENERAL PURPOSE:** Be responsible for the overall teaching of knowledge and skills related to a specific discipline to 4-H members, ages 8-18.

**SPECIFIC RESPONSIBILITIES:**

1. Stress shooting safety. Teach the program following the National 4-H curriculum and Recommended Best Management Practices as provided.
2. Coordinate activities with shooting sports coordinator.
3. Coach members on proper shooting techniques.
4. Attend all shooting club meetings and activities.
5. Recruit and train assistant instructors as needed.
6. Inform Coordinator about and help secure needed equipment and facilities.
7. Recruit parents and members.
8. Participate in all additional training programs the local shooting sports committee decided to include (i.e. Hunter Education, Red Cross First Aid, 4-H Leadership).
9. Help plan the yearly program.
10. Actively encourage and support members by working with them individually to review project work and related records.
11. Encourage members to participate in other 4-H events and activities.
12. Publicize 4-H Shooting Sports activities and results.
13. Maintain records on activities or project work.
14. Assist on obtaining, screening, appointing and utilizing project and activity leaders for the club.
15. Communicate regularly with the 4-H Office.
16. Provide transportation for 4-H members to related events and activities.

**QUALIFICATIONS REQUIRED:**

1. Age 21 or older for all disciplines.
2. Ability to work with youth and adults.
3. Have an interest in shooting and some knowledge of shooting techniques.
4. State certification in specific discipline and recertified is required.
QUALIFICATIONS REQUIRED:

5. Be familiar with 4-H objectives and philosophy and/or willing to learn about them.
6. Moral standards consistent with the 4-H philosophy.

SUPPORT TO BE PROVIDED:

1. 4-H shooting sports instructor training workshop (20 hours minimum).
2. 4-H shooting sports curriculum handbook upon completion of the workshop.
3. Local volunteer training programs.

AFFIRMATIVE ACTION: To assist with providing 4-H activities to all eligible persons regardless of race, color, gender, religion, age, national origin or handicap.

TRAINING: 4-H Faculty will provide:

- Leadership training
- Program and resource materials including projects, films and books as available.
- Newsletters to leaders and club members.
- Country-wide activities which are open to all 4-H participants (camp, fair, communication, workshops, etc.)
- Leader manuals for projects.
- Project books for youth.

CONTACT PERSON: Conrad Arnold
Extension Educator, 4-H
Maryland Cooperative Extension / Dorchester County
501 Court Lane, Room 208
P.O. Box 299
Cambridge, MD 21613
(410) 228-8800

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