

REPORT FROM THE HUNTING, FISHING AND WILDLIFE RECREATION PARTICIPATION COMMITTEE



OCTOBER 2011

*SOUTHEASTERN ASSOCIATION OF FISH AND
WILDLIFE AGENCIES*

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COMMITTEE OVERVIEW, CHARGE AND GOALS

The Hunting, Fishing & Wildlife Recreation Participation Committee (HFWRPC) was formed by the Southeastern Association of Fish and Wildlife Agencies (SEAFWA) Directors at their 2010 Spring Meeting. The initial meeting of the HFWRPC was held at the 2010 SEAFWA Annual Conference in Biloxi, MS. At this meeting, a foundation for the HFWRPC function was drafted and a charge to the committee was adopted by the Directors during the annual business meeting.

Committee Charge:

To inventory and assess state and national strategies for recruitment and retention of hunters, anglers, recreational shooters and other wildlife-related recreational participants; and to identify effective approaches for implementation of successful strategies, and to develop potential future strategies and recommend necessary actions, research or survey efforts to track and enhance effectiveness of recruitment and retention strategies.

Committee Goals:

1. Identify best programs and practices for recruitment and retention programs
2. Develop list of research needs for evaluation for the success of recruitment and retention programs
3. Identify tangible ways to assess and monitor southeast recruitment and retention programs efforts
4. Develop a systematic annual reporting system for southeast recruitment and retention programs efforts

In April 2010 a meeting was held by the HFWRPC. Twenty-five attendees representing 10 SEAFWA states, United States Fish and Wildlife Service (USFWS), National Wild Turkey Federation (NWTF), Responsive Management and Active Network participated in the meeting. The purpose of this meeting was to identify the Committee's objectives and begin addressing the goals identified above.

The HFWRPC reviewed the Western Association of Fish and Wildlife Agencies (WAFWA) Recruitment and Retention Committee report of March 2010 and agreed with the 6 topics adopted by them and the strategies listed to address those topics. The topics are Evaluation, Funding, Inter-agency, Intra-agency, Marketing and Partnerships. The Committee agreed that the Intra-agency topic is of growing concern and deserves special attention.

TOP RECRUITMENT AND RETENTION PROGRAMS

States and partners that were present provided reports to the Committee on their current activities aimed at successful recruitment and retention of hunters, anglers and other wildlife recreation enthusiasts. These reports were used to categorize and list the most popular programs being implemented by states and their partners.

Alabama Department of Conservation and Natural Resources

- The department has actively pursued range development - 11 division operated ranges, 8 built in last 10-years. Just completed fifth Community Archery Park and, hope to build 4 more in the future. (Parks & Recreation Department operates range and also offers archery programs. Parks & Recreation Departments are working towards hosting a State Archery Tournament) Division is in the process of hiring Archery Program Coordinator.
- The department is creating more access to public hunting land (Alabama has the least amount of public land of all Southeastern states).
- The department hosts Youth Dove Hunts (35-40 fields planted and managed per year – the foundation provides seed & fertilizer, 20-30% of kids are 1 time hunters and last year they began electronic registration form to capture contact information.

Florida Fish and Wildlife Conservation Commission

- National Archery in the Schools Program (NASP) has been successful and the commission has begun to offer Explore Bow Hunting programs.
- The commission offers fish camp summer day camps – evaluation shows pay off for license purchase likely due to week long emersion.
- The commission offers a Youth Hunting Program which is a weekend hunt run mostly by volunteers on private land with an agency trained hunt master (landowner determines hunt type).
- Hunter education courses are taught in youth camps during spring break and in the summer.
- Becoming an Outdoors Woman (BOW) is a successful program in Florida.
- The commission offers guest permits for quota hunt permit holders that allow them to bring a guest hunting with them on the quota hunt.
- The commission has begun a youth conservation center network partnership program. This program uses a hub and spoke concept between partner groups and the youth conservation centers in an effort to provide students with as many opportunities as possible to participate in youth conservation center education programs – an integral part of this program is a connection with local schools. This allows the commission to bring agency skills and conservation education programs to a much wider audience through partnerships with youth programs and schools.

Georgia Wildlife Resources Division

- NASP - 179 schools have been certified and 96 are actively participating in the program and almost 800 students completed in the state tournament.
- The division's hunter education program, shooting sports program and hunter recruitment and retention programs were reorganized under the Hunter Development Program
- The division operated 16 shooting ranges and 10 archery ranges.
- The division hosts hunter education skills challenge programs for hunter education graduates. These programs allow students an opportunity to compete against other graduates in field skills such as archery, air rifle, orienteering, game recovery, wildlife conservation and hunter responsibility and ethics.
- The division hosts Shooting Sports Summer Day Camps.

- The division sponsors 300 Kids fishing events for over 30,000 youth each year.
- The division piloted a Community Fishing program in Chatham County.
- Recently the division launched its Go Fish GA initiative which has 3 components: angler access – address by developing a Bass Fishing Trail with mega-boat ramps, a state of the art fish hatchery to improve the division’s stocking capacity, and the opening of the Go Fish Education Center.
- The division offers an early renewal discount for license buyers and multi-year licenses with special pricing options.
- The division has begun sending e-mail renewal notifications.
- The division has begun a partnership with Georgia Southern University to develop a collegiate Shooting Sports Complex on the Georgia Southern campus that will be part of the University’s athletics and campus recreation program.

Kentucky Department of Fish and Wildlife Resources

- NASP - 950 schools are participating and 350,000 students have been through the program and 2,600 students competed at the state tournament.
- The department hosts Fishing in Neighborhoods Programs (FINS) – Stocking program in which ponds & lakes in urban areas are stocked with Rainbow Trout and Channel Catfish to provide angling opportunities in urban areas. Participants must cost share 25/75 with state fish & wildlife agency.
- Department fishing events targeted to youth or other specific groups have been effective.
- Elk Hunting Program has been popular and even helped reach lapsed hunters.
- The department is conducting an Explore Bow Hunting pilot study and a mentor network pilot study.

National Wild Turkey Federation

- Women In The Outdoors, Wheelin’ Sportsman and Juniors Acquiring Knowledge Ethics and Skills (JAKES) were all designed for recruitment of new hunters.
- The JAKES Take Aim program received a grant from the Midway Foundation for Shooting Sports Trailers Air Rifle Trailer, with more powerful air rifles as well.
- Federation teacher education programs include: Wild About Turkey Education Boxes and teacher workshops.
- The federation also publishes magazines, TV shows, and news blasts designed to recruit and retain hunters.
- The federation offers mentored hunts through the local chapters.
- The federation was also a founding member of “Families Afield and NASP”. NWTF has contributed over \$1,000,000 to NASP.

North Carolina Wildlife Resources Commission

- NASP, Hunter Education, Aquatic Education, Community Fishing and Tackle Loaner Programs have all been successful.
- The commission has hired an associate to oversee recruitment and retention efforts and to assist with the hunter education program and NASP.
- Recruitment and retention coordinator has attended landowner workshops to gain perspective on landowner opinions and attitudes regarding hunter angler access.

- Hats On! Mentor Campaign: This program allowed the commission to solicit mentorship pledges and also characteristics, opinions and attitudes of 3,800 mentors. Mentors were given a hat with 4 logos and talking points for each logo. Mentors were asked to “pledge to make a good faith effort” to mentor an apprentice hunter during the upcoming hunter season.

Oklahoma Department of Wildlife Conservation

- NASP - 268 schools are participating in the program, Oklahoma received a Hunting Heritage Program grant to pay 100 NASP teachers a \$200 stipend to become hunter education instructors and another \$200 stipend to teach a hunter education course to their students. (73 teachers completed each requirement and received the full stipend).
- The department worked with Oklahoma Center University (the state teaching school) to develop an Oklahoma specific hunter education manual and certified over 4,000 Oklahoma public school students in hunter education, resulting in the most ever (18,000+) hunter education certifications in one year.
- Oklahoma is a pilot state for Explore Bow Hunting.
- The department has a goal to have 100 schools teaching hunter education, 50 schools teaching explore bow hunting, 50 schools teaching aquatic education and 300 schools teaching NASP by next year.

South Carolina Department of Natural Resources

- In the past the department had a marketing professional on staff and this position proved extremely valuable to the agencies recruitment and retention efforts.
- Take One Make One Mentor Program.
- South Carolina (SC) Youth Shooting Program - (Scholastic Clay Target Program has 1,000 student participants, the agency has a goal to put a range in all 46 SC counties).
- Social Media has been an effective tool.
- Natural Resource Schools (Superintendent of SC Schools approached SC director with the goal of adding shooting sports as a team sport to SC schools. These schools integrate Project WILD into the school curriculum and conduct Hunter Education classes after school. One school had their teachers meet at the shooting range on their first day back to school.
- Apprentice license program has helped reduce barriers to hunting.
- The department is also developing a database management system and managed lands website. Hunters also get a thank you note from South Carolina Department of Natural Resources (SCDNR) after they purchase their license and then get weekly newsletter from the agency.

Tennessee Wildlife Resources Agency

- NASP - 188 schools are participating and 35,000 students participate in the program each year.
- Becoming an Outdoors Woman is a popular program in Tennessee – the agency hosts one large weekend each year for over 125 participants. The agency also offers Beyond Becoming an Outdoors Woman workshops that focus on topics such as: bird watching, Fishing, canoe trips and muzzleloader hunting (this workshop is extremely popular).

- The agency hosts Wounded Warriors Program – Cooperating with Ft Campbell to host bass tournaments and duck hunts.
- The agency is starting a National Fishing in the School Program - 1 school participating so far.
- Tennessee’s winter trout stocking program is popular with anglers.
- Tennessee operates rod loaner program in 32 state parks.

Virginia Department of Game and Inland Fisheries

- NASP - 500 schools participating and 200,000 students have participated in the program. State tournament is so popular that a waiting list had to be developed.
- Virginia’s lapsed angler program returned \$300,000 to agency just by maintaining contact with anglers.
- Statewide Birding & Wildlife Trail - 680 sites form 65 loops. An evaluation conducted by VA Tech revealed that 640,000 unique visitors utilize the trail each year.
- Project WILD, Hunter Education, Trout in the Schools and Explore Bow Hunting are also popular programs.

West Virginia Division of Natural Resources

- NASP has been successful.
- The division has implemented a lifetime senior license.
- The division offers Trailblazer Adventure Days.
- The division is seeking to work with boy scouts to offer scouts the NWTF Conservation Badge.

The state programs listed above can be summed as follows:

- **Education Programs** – Hunter Education, NASP, Explore Bowhunting, Becoming an Outdoors Woman, Project WILD/WET, Hunting and Fishing Camps, Scholastic Clay Target Program, Natural Resource Schools
- **Range Development** – Community Archery Program, shooting range construction, shooting sports centers
- **Youth Hunting/fishing Opportunities** – Adult/child hunts, youth only days, kids fishing events
- **Access Programs** – land acquisition and/or leasing, boat ramp construction, fishing in neighborhoods, statewide birding trails
- **Licensing Tools** – apprentice or youth licenses, multi-year licenses, lifetime licenses, license renewal discounts, senior licenses
- **Communications** – Social Media for immediate notifications of events, e-mail and texting for renewal notices, updates, event notifications, use of websites for information

REPORTS/PRESENTATIONS TO THE COMMITTEE

John Martin, Chief Information Officer of Georgia Department of Natural Resources (GADNR), made a presentation to the HFWRPC regarding interstate coordination and collaboration on data and information sharing. State Departments of Transportation (DOT) have been cooperating through the American Association of State Highway and Transportation Officials (AASHTO) to share data and increase purchasing power. The basis of this presentation was to demonstrate that models exist for sharing of information and technology and to ask: 1) Can the DOT AASHTO Model work for state wildlife agencies? and, 2) Could SEAFWA or AFWA collaborate on technology, data, license systems and other initiatives to help reduce costs and develop common applications, processes and data models?

Mark Duda, Executive Director of Responsive Management (RM), made a presentation to the HFWRPC on information gathered by RM on factors influencing hunting participation, awareness of state agencies, their recruitment and retention programs and participation in such programs (Appendix B). In his presentation, Mr. Duda discussed reasons for the decline in participation, dissatisfactions of active and inactive hunters, characteristics of successful access programs, awareness of programs and other factors. One study revealed that there are as many as 450 different recruitment and retention programs in existence, and yet another underscored the need for developing a consistent assessment system that will help categorize programs from beginning to progressively advanced levels.

COMMITTEE GOAL, OBJECTIVES AND STRATEGIES

The HFWRPC then began discussions to identify the overarching goal, objectives of the committee and strategies to achieve the goal. The planning session resulted in the following goal, objectives and strategies.

Goal: Increase participation in hunting, angling, recreational shooting and other wildlife recreation in the Southeastern United States.

Objective 1: Increase the number of southeastern participants in hunting, angling and recreational shooting by 2% from 2011-2016 (as measured by certification, license sales and the 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation).

Objective 2: Identify at least 5 of the most effective programs and/or program elements for recruitment and retention of hunters, anglers, recreational shooters and other wildlife-related recreationalists that can be implemented by state fish and wildlife agencies and their partners.

Strategies:

- Increase number of hunter education graduates who move into hunting
- Increase number of apprentice license holders to move into hunting


- Work with Council for the Advancement of Shooting Sports to develop Southeast marketing plan (Identify new markets and target audiences e.g. “Localvores”)
- Coordinate with other like-minded regional and national recruitment and retention committees
- Implement common evaluation instrument for recruitment and retention programs
- Examine state license structure to better capture certified license holders
- Develop reliable mechanism to quantify recreational shooters on state by state basis (this could possibly be included in the 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation)
- Conduct a review of hunter education requirements to determine if it is a barrier to hunting
- Explore and identify the best hunting and fishing access programs in the southeast
- Explore and review opportunities for regulation simplification and standardization
- Define or design a central data storage database for evaluation and distribution of recruitment and retention program data
- Identify the form and vehicles for reporting and distributing recruitment and retention programs information and data (i.e. printed report, websites, meetings, conferences webinars etc)
- Develop recruitment and retention programs best practices list

APPENDIX A: LIST OF PARTICIPANTS

Attendees	Agency
Jackie Burns	Active Network
Jaspal Saraw	Active Network
Ray Metzler	Alabama Department of Conservation and Natural Resources
Diane Eggeman	Florida Fish and Wildlife Conservation Commission
Dan Forster	Georgia Wildlife Resources Division
Mark Whitney	Georgia Wildlife Resources Division
Alex Coley	Georgia Wildlife Resources Division
Rusty Garrison	Georgia Wildlife Resources Division
Walter Lane	Georgia Wildlife Resources Division
John Martin	Georgia Wildlife Resources Division
Michael Spencer	Georgia Wildlife Resources Division
Matt Thomas	Georgia Wildlife Resources Division
Terry West	Georgia Wildlife Resources Division
Brian Clark	Kentucky Department of Fish and Wildlife Resources
Tom Hughes	National Wild Turkey Federation
Brad Gunn	North Carolina Wildlife Resources Commission
Colin Berg	Oklahoma Department of Wildlife Conservation
Andrea Crews	Oklahoma Department of Wildlife Conservation
Mark Duda	Responsive Management
Don Winslow	South Carolina Department of Natural Resources
Don Crawford	Tennessee Wildlife Resources Agency
Michael Piccirilli	U. S. Fish and Wildlife Service
Jimmy Mootz	Virginia Department of Game and Inland Fisheries
Jeff Trollinger	Virginia Department of Game and Inland Fisheries
Paul Johansen	West Virginia Division of Natural Resources


APPENDIX B: PRESENTATION TO COMMITTEE

Fishing, Hunting, and Shooting Recruitment and Retention



Presented at the 2011 SEAFWA Hunting, Fishing, and Wildlife Association Recreation Participation Committee

April 13, 2011
Mark Damian Duda, Responsive Management

Responsive Management 

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This Month at Responsive Management


Celebrating 20 years of survey research for natural resource and outdoor recreation agencies and organizations.

Responsive Management has recently completed over 20 projects on public opinion on and attitudes toward natural resource and outdoor recreation issues. The recently completed projects include studies on attitudes of hunters, anglers, and the general population as well as assessments of hunting and fishing access, behavior and wildlife management programs, and overall viewing and evaluation projects, such as the USFWP.

A study of New Hampshire residents' opinions on and participation in outdoor recreation.

An assessment of Archery, Quail, resident attitudes toward bear and moose population levels and management strategies.

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SEAFWA

Hunting, Fishing, and Wildlife Association Recreation Participation Committee



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Reach of Responsive Management

- 500 human dimensions projects
- Almost \$50 million in research
- 48 states – 15 countries
- Fishing, hunting, wildlife viewing, wolves, bears, marine mammals, parks, litter, water...

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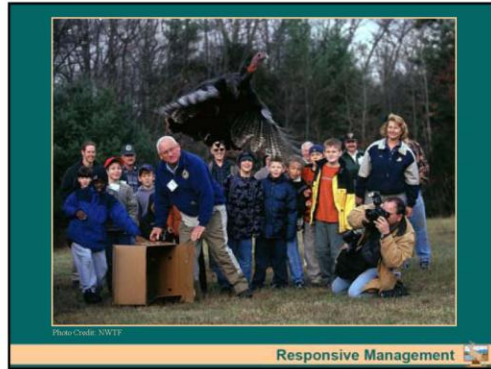
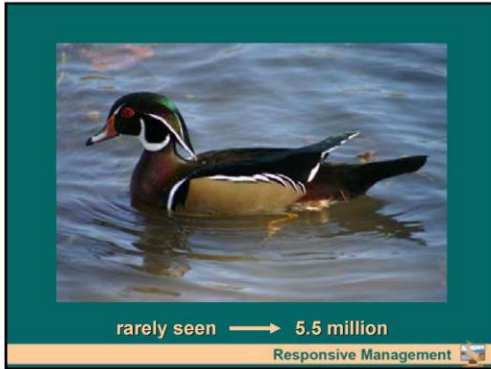
650,000 → 7 million

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40,000 → 1 million

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Responsive Management Research

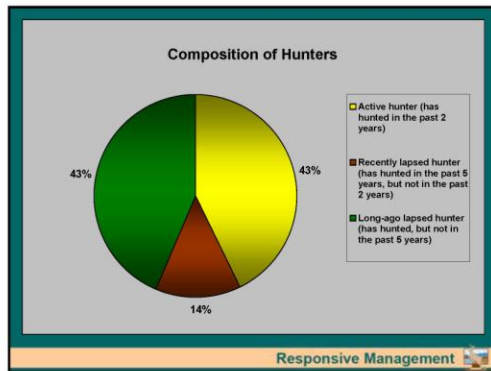
- The Sportsman's Voice Book
- The Future of Hunting and the Shooting Sports
- Evaluating the Effectiveness of Hunting, Fishing, and Shooting Recruitment and Retention Programs
- Lapsed Hunters' License Purchasing Behaviors and Their Opinions on Messages Encouraging Them To Purchase Hunting Licenses
- Issues Related to Hunting Access in the United States
- An Examination of Activities in Competition with Hunting and Shooting

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Responsive Management Research

- Increasing Hunting Participation by Investigating Factors Related to Hunting License Sales Increases Against Hunting License Sales Decline
- An Evaluation of the HHP Grant Program: Assessing the Results of Hunter Recruitment and Retention Strategies Funded Through NSSF's HHP Grant Program
- Assessing Experienced Hunters' Attitudes Toward Mentoring and Their Opinions on and Interest in a Mentored Hunt Program in Arizona
- Identifying Sport fishing's Competition to Improve Angler Recruitment and Retention

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Active hunters are more likely than are inactive hunters to have the following characteristics:

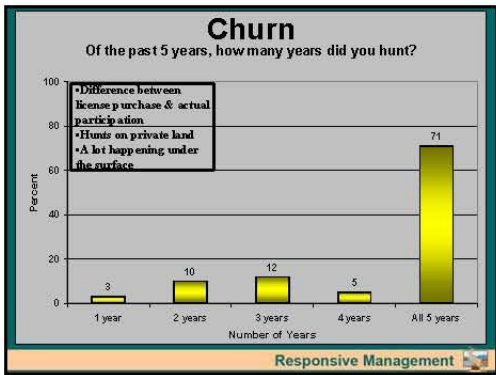
- Currently has family members who hunt. ← **social support**
- Has fished in the past 5 years.
- Has camped in the past 5 years.
- Has friends who hunt.
- Is between 18 and 34 years old. ← **younger**
- Has gone boating in the past 5 years.
- Has been invited to go hunting with a friend.
- Has gone hiking in the past 5 years.
- Rates access for hunting in state of residence as excellent or good.
- Has viewed wildlife in the past 5 years.
- Is male.
- Was first taken hunting by his or her father. ← **initiated by father**
- Lives in a small city or town or a rural area.
- Grew up in a household with firearms.
- Was younger than the median age when first went hunting. ← **initiated at a young age**

Responsive Management

Inactive hunters are more likely than are active hunters to have the following characteristics:

- Does not currently have family members who hunt. ← **no social support**
- Does not have friends who hunt.
- Has not been invited to go hunting with a friend.
- Is 35 years old or older. ← **older**
- Is female.
- Was not first taken hunting by his or her father. ← **not initiated by father**
- Lives in a large city/urban area or a suburban area. ← **urban**
- Did not grow up in a household with firearms.
- Rates access for hunting in state of residence as fair or poor.
- Started hunting when older than the median initiation age of hunters. ← **initiated at an older age**


Responsive Management



Shooting Participation

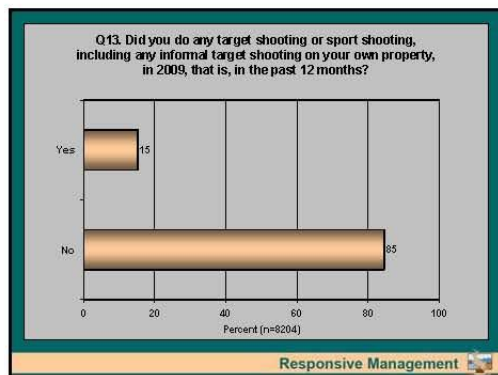
Responsive Management

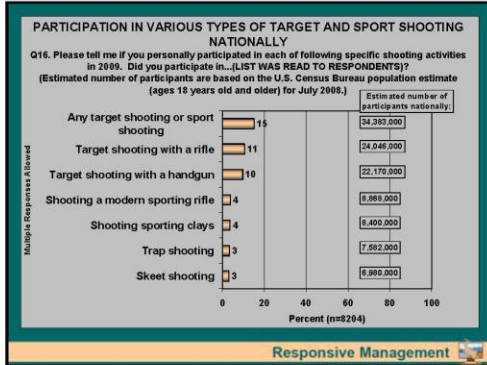
Methodology



- Telephone survey conducted Jan-Feb 2010
- RDD on a state-by-state basis (landlines and cell phones)
- n = 8,204 U.S. residents ages 18 years old and older
- Sampling error = +/- 1.03 percentage points
- Three introductory non-shooting questions
- Two nonparametric analyses
 - among general population
 - among target and sport shooters
- Results by region and by type of shooting participation

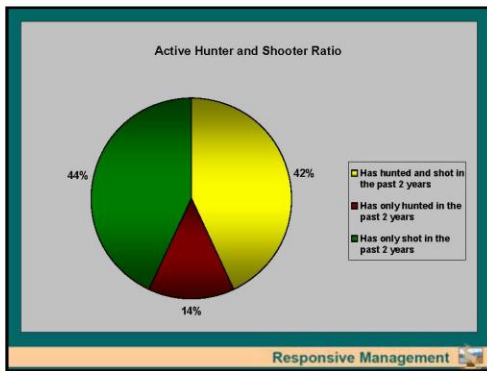
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Crossover Participation in Hunting and Shooting

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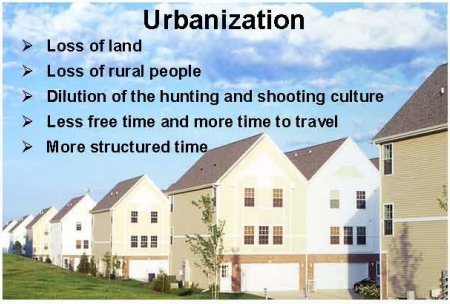
Trends in Hunting Participation

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Urbanization

- Loss of land
- Loss of rural people
- Dilution of the hunting and shooting culture
- Less free time and more time to travel
- More structured time




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Hunting Initiation

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"It takes a hunter to make a hunter."



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Youth Who Hunted in the Past Year by Hunting/Non-Hunting Families (Pie Represents All Youth Who Hunted in Previous Year)

Youth who went hunting in the past year from non-hunting families 8%



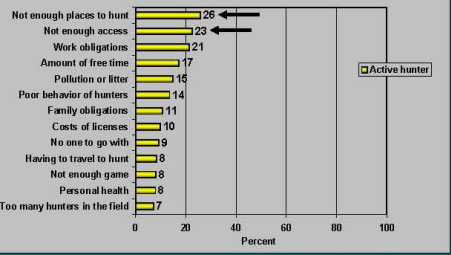
Youth who went hunting in the past year from hunting families 92%

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Dissatisfactions Among Active Hunters

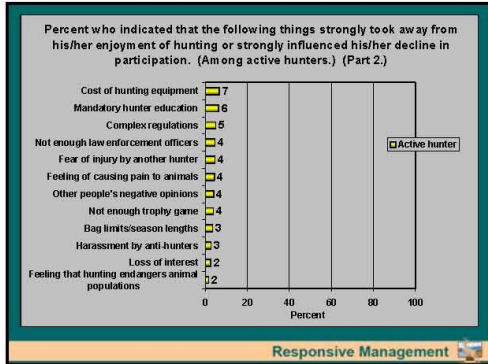
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Percent who indicated that the following things strongly took away from his/her enjoyment of hunting or strongly influenced his/her decline in participation. (Among active hunters.) (Part 1.)



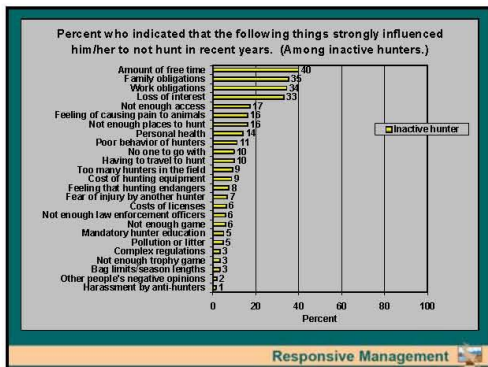
Factor	Percent
Not enough places to hunt	26
Not enough access	23
Work obligations	21
Amount of free time	17
Pollution or litter	15
Poor behavior of hunters	14
Family obligations	11
Costs of licenses	10
No one to go with	9
Having to travel to hunt	8
Not enough game	8
Personal health	8
Too many hunters in the field	7

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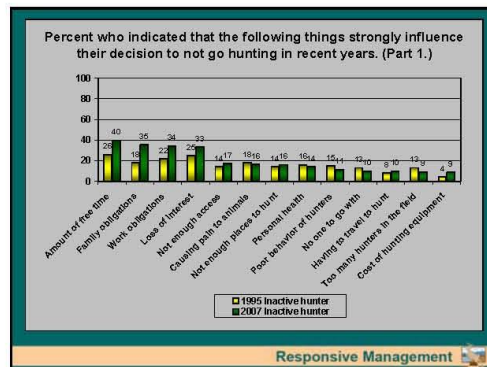
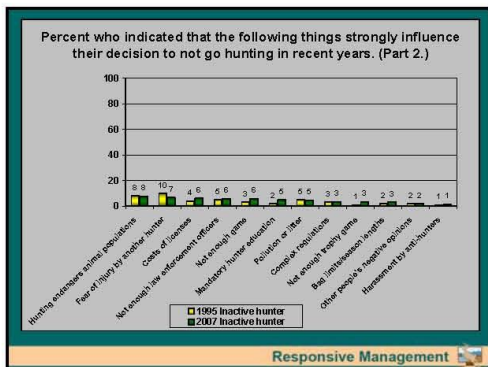
Reasons for Hunting Desertion

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Trends in Reasons Hunters Quit

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Issues Related to Hunting Access in the United States



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National Shooting Sports Foundation
Association of Fish and Wildlife Agencies
USFWS Multi-State Conservation Grant

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Effective Access Programs

- Walk-In Access Programs
- Mapping and Atlas Programs

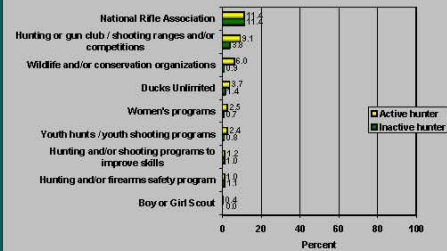


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Awareness of Recruitment and Retention Programs

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What programs are you aware of that encourage hunting or shooting? (Among all hunters.)



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An Evaluation of the Effectiveness of Hunting, Shooting, and Fishing Recruitment and Retention Programs

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Methodology

- Conducted in cooperation with the National Wild Turkey Federation under USFWS Multi-State Conservation Grant CT-M8-R administered by the Association of Fish and Wildlife Agencies
- Conducted nationwide survey of recruitment and retention program participants (adults and youth)
- Pre- and post-program participation surveys
- n = 5,000
- Final report with research-based recommendations and strategies

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Survey Topic Areas

- Participation in Hunting, Shooting, and Fishing Activities
- Likelihood of Future Participation
- Participation in Other Hunting, Shooting, and Fishing Programs
- Attitudes Toward Hunting, Shooting, and Fishing in General
- Ratings of Knowledge About Hunting, Shooting, Fishing, Their State Agency, and Related Issues
- Equipment Purchasing Behavior
- License Purchasing Behavior
- Membership in Sportsmen's and Conservation Organizations
- Opinions on the Importance of Stewardship and Conservation
- Sources of Information About the Program (pre-program only)
- Program Ratings, Characteristics, and Preferences (post-program only)

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Programs Evaluated

- International Game Fish Association's Education Outreach Fishing Clinics
- Recreational Boating and Fishing Foundation's Take Me Fishing Initiative, implemented by the National Recreation & Park Association
- Arizona Game and Fish Department and Arizona Elk Society's Wapiti Weekend
- Arizona Game and Fish Department and the Arizona Elk Society's Youth Turkey Hunt Mentored Camps
- Boone and Crockett Club's Outdoor Adventure Camps
- Boone and Crockett Club's Women Hunter Education Course
- Becoming an Outdoors Woman
- Maryland Department of Natural Resources' Beyond BOW Program
- National Wild Turkey Federation's Women in the Outdoors, JAKES, Xtreme JAKES, Wheelin' Sportsman
- Nebraska Game and Parks Commission's Outdoor Adventure Family Camps
- Pass It On Outdoors Mentors, Inc.'s Hunter Mentoring Program
- South Carolina Department of Natural Resources' Take One Make One Mentoring Program
- Vermont Fish and Wildlife Department's Green Mountain Conservation Camps
- Arizona Game and Fish Department's Sport Fish Education Clinics
- Connecticut Department of Environmental Protection's Aquatic Resources Education Program
- Florida Fish and Wildlife Commission's Ladies Let's Go Fishing Program

Responsive Management 

Programs Evaluated

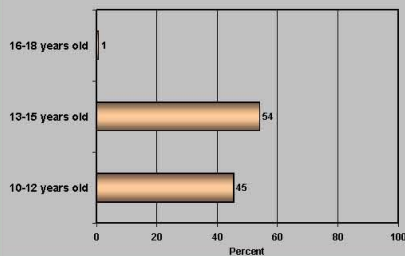
- Georgia Department of Natural Resources' Kids Fishing Events
- Allamakee Community School District's Conservation Club
- Pennsylvania Fish and Boat Commission's Family Fishing Program
- North Carolina Wildlife Resources Commission's Week in the Water Day Camps
- South Carolina Department of Natural Resources' SC REEL Kids Program
- Louisiana Department of Wildlife and Fisheries' Wish-to-Fish Program
- Alabama Department of Conservation and Natural Resources' Youth Dove Hunt Program
- Georgia, Arizona, Texas, and Iowa state hunter education programs
- Idaho Department of Fish and Game's Youth Waterfowl Hunts
- Michigan Department of Natural Resources' Managed Waterfowl Hunts and Shiawassee River State Game Area Managed Hunts
- Minnesota Department of Natural Resources' Youth Mentored Turkey Hunt Program
- Iowa Department of Natural Resources' Hunting and Conservation Camp Program
- Oregon Department of Fish and Wildlife's Mentored Youth Hunter Program
- Texas Parks and Wildlife Department's Youth Hunting Program
- Maryland Department of Natural Resources' Junior Hunter Field Days and Mentored Youth Hunts
- Arkansas Game and Fish Commission's Youth Shooting Sports Program
- National Shooting Sports Foundation's First Shots Program
- Colorado Division of Wildlife's Gone Fishing Program


Responsive Management 

Youth Hunting/Shooting/Fishing Program

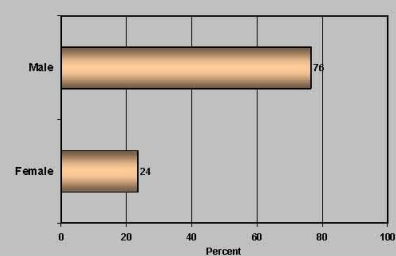
Responsive Management 


Q21. Respondent's age.

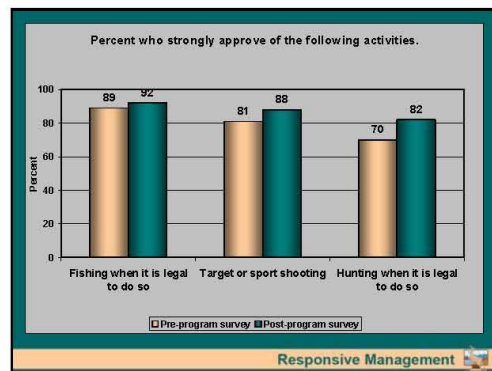
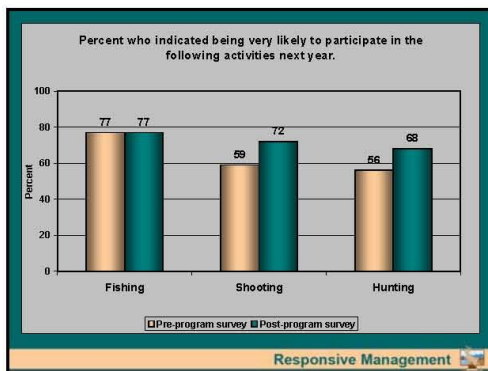
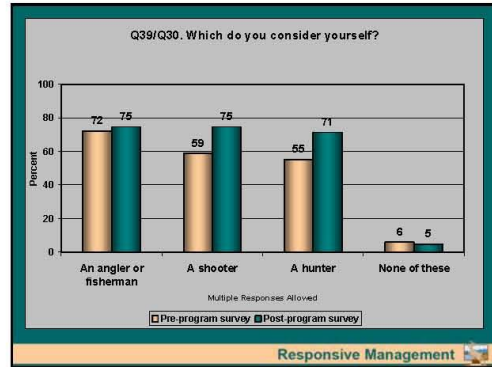
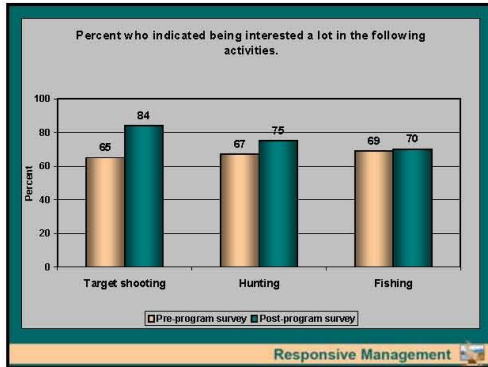


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Q134. Respondent's gender (observed, not asked, by interviewer).

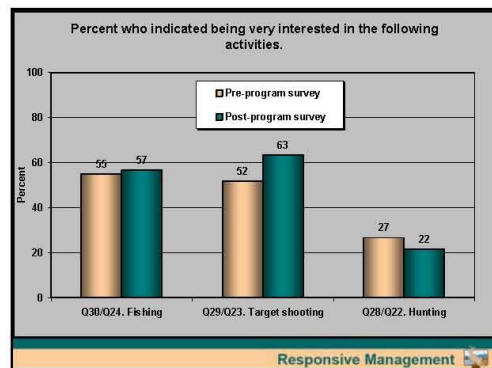


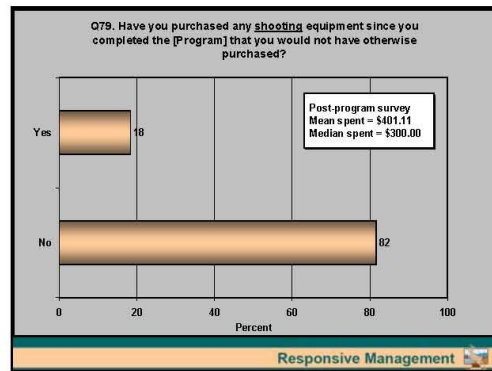
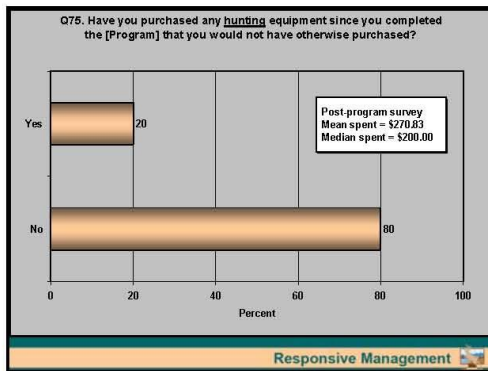
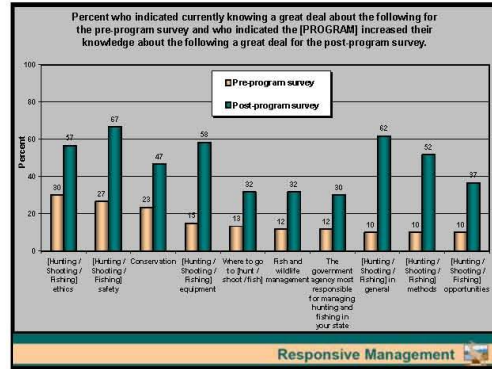
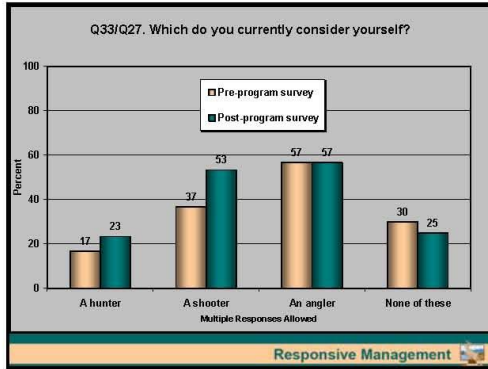
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Women's Hunting/Shooting/Fishing Program

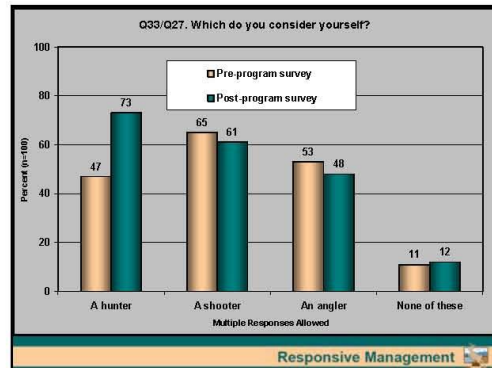
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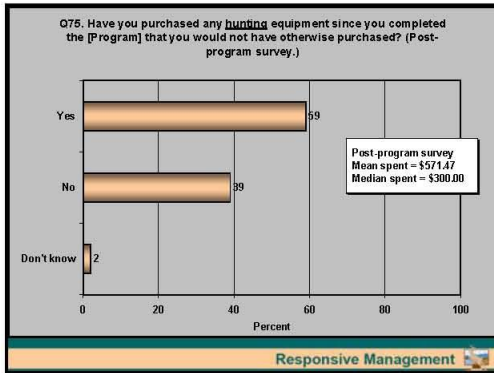




Adult Hunter Education Program

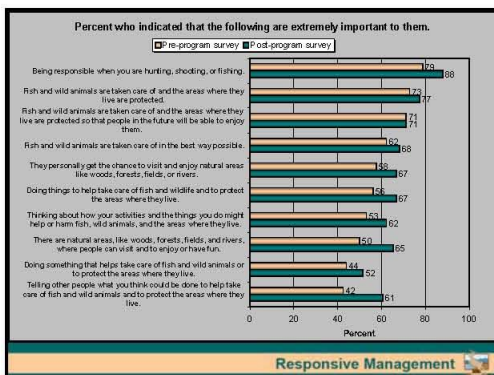
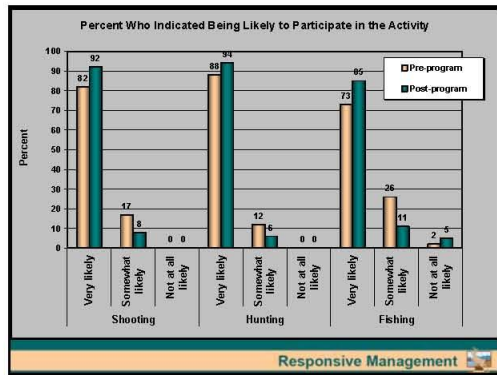
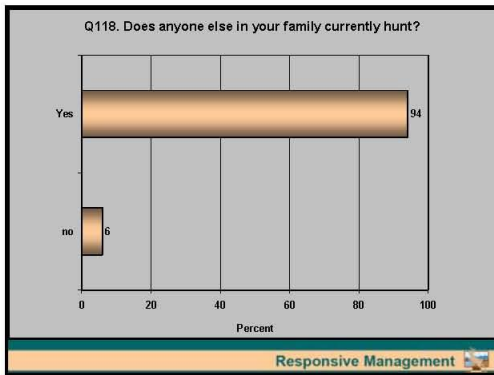
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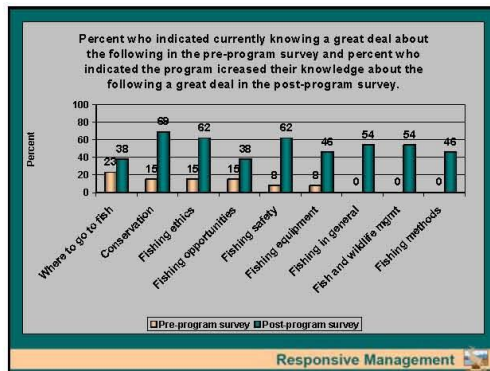
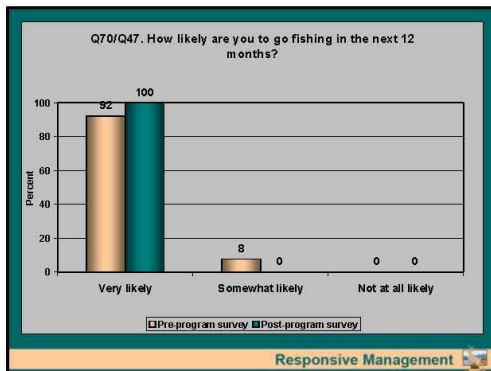
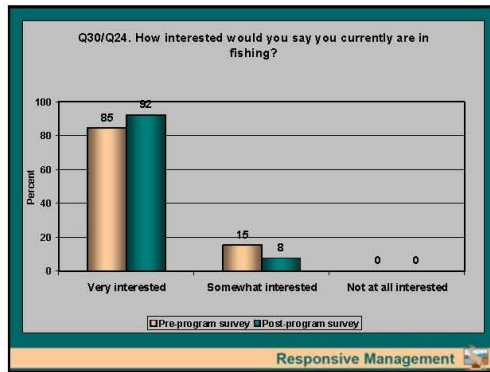
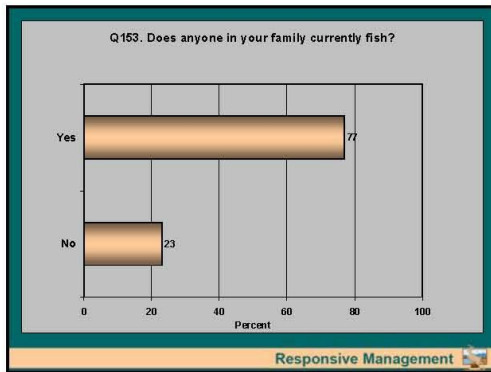
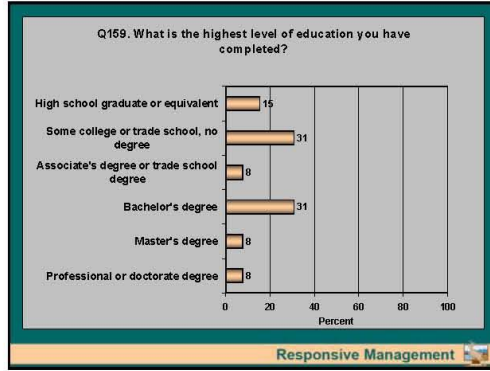
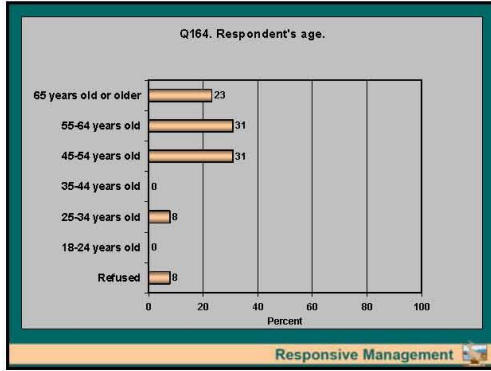
Youth Mentored Hunting Program

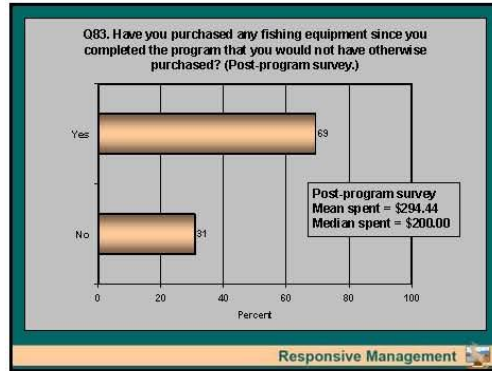
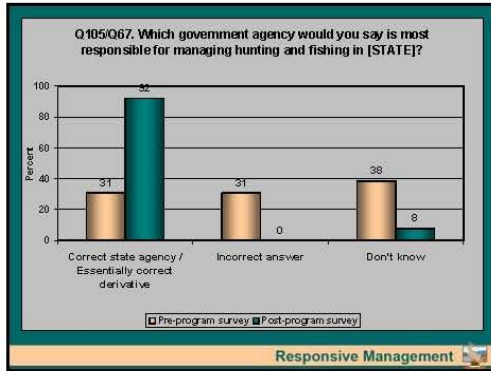
Responsive Management



Women's Fishing Program

Responsive Management





What Will the Results Tell Us?

Responsive Management

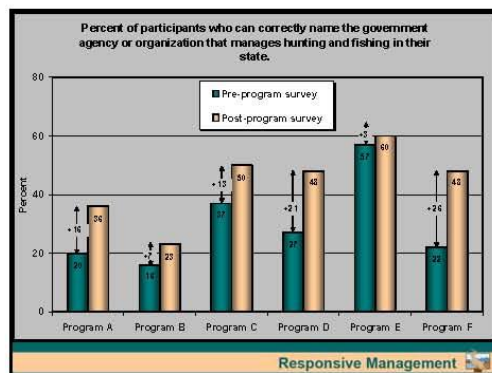


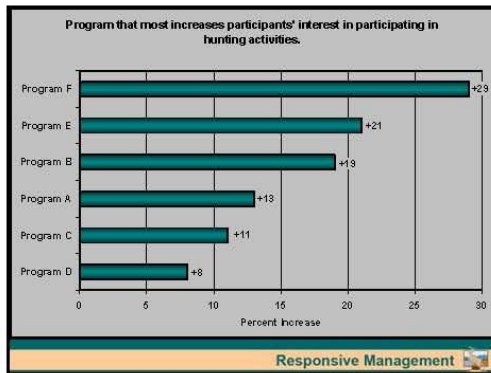
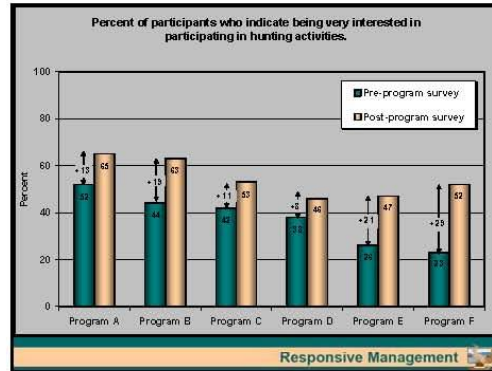
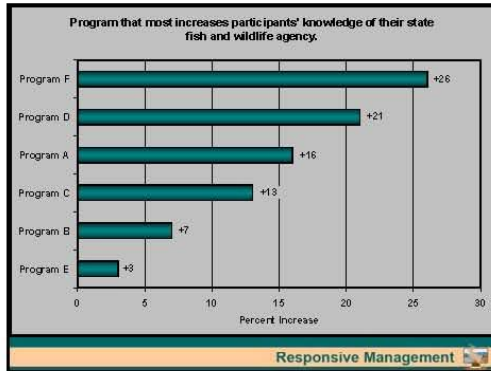
Determining Program Effectiveness

This study will compare the following factors to show changes before and after program participation, thereby determining program effectiveness in each area:

- Interest in hunting, shooting, and fishing
- Likelihood of participation
- Purchasing behaviors
- Knowledge regarding hunting, shooting, and fishing
- Knowledge of state fish and wildlife agency
- Self-reported skills in hunting, shooting, and fishing

Responsive Management





Preliminary Observations

Evaluating the Effectiveness of Hunting, Fishing, and Shooting Recruitment and Retention Programs

- The majority of participants come from hunting, fishing, and shooting backgrounds.
- The programs are increasing overall factual knowledge of hunting, fishing, and shooting.
- The programs are increasing factual knowledge about fish and wildlife agencies.
- There is a need for developing a consistent assessment system that will help categorize programs (a training wheels to Tour de France progression).

Responsive Management

- Follows the natural path of recruitment and retention
- Experiential
- Annual event
- Community event (enforces the hunting culture)
- Occurs in the open
- Starts with small game
- Can observe without participating

Alabama Youth Dove Hunt

Responsive Management

Photo: Melissa McBryen, www.huntingforlove.com

Responsive Management

Bringing Back Lapsed Hunters

Responsive Management

Words and Phrases That Were Asked About in the Survey "Does this have a positive, negative, or neutral association with hunting?"

Economical Active Conserve PEACEFUL Heritage
 Thrill Environmentally friendly Fun ENVIRONMENT Outdoor lifestyle
 Friends Family Excitement Healthy
 Natural Quality Tradition Escape The basics
 Conservation Expensive Investment Get away from it all 'Connect to nature'
 Manage Protect Wildlife management Conservation funding Inexpensive
 Roots Quality time Memories Preserve Stewardship
 Relaxing Organic

Responsive Management



Responsive Management

Arizona Mentored Hunt Program



Photo: 1997 Arizona Hunt Club

Responsive Management

Methodology

- Conducted under a grant from the NSSF's Hunting Heritage Partnership
- Five focus groups of experienced hunters in Arizona
 - Mesa
 - Phoenix
 - Pinetop
 - Tucson
- Experienced hunters
 - at least 50 years old
 - several decades of hunting experience
 - still avid hunters

Responsive Management

Major Findings

- Expand the mentoring concept beyond youth
 - include lapsed hunters and inexperienced adults
- Safety is the most critical element
 - coordinate mentoring with hunter education and firearms safety courses
- Address liability issues proactively
- Mentoring success is tied to volunteer recruitment
- Limit or eliminate incentives for mentors
- Contextualize hunting among a variety of other outdoors topics and skills
- Mentoring programs should be age-specific and audience-specific
- Small game hunting opportunities may be ideal for newcomers
- Dissemination of information on mentoring programs is critical, as are partnerships with NGOs and sportsmen's organizations

Responsive Management



APPENDIX C: STATE REPORTS

Alabama Wildlife and Freshwater Fisheries

National Archery in the Schools Program

Alabama's NASP program began in 2003 and is now in its seventh year and reaches an estimated 31,500 students annually in school through the two week archery curriculum. Approximately 210 schools are currently teaching NASP. The state NASP tournament is held in Alabama's largest indoor facility and for the past several years had in excess of 1,100 student archers. The 2010 tournament was the first in which we had regional qualifiers to trim the field of participants so we did not exceed our capacity to host and conduct the event in one day.

Community Archery Programs and Archery Park Development

Partnerships with 4 local governments and the Archery Trade Association have led to the development of community archery parks in Athens, Cullman, Demopolis, and Dothan. These 4 facilities feature archery ranges for youth and adults and an elevated platform for bowhunters to simulate shooting from a treestand. We are in the process of developing a 5th archery park in Ozark. Plans are being developed to construct archery parks in Tuscaloosa, Decatur, and Prattville during 2011. These facilities are developed within highly visible parks and recreation landscapes and provide bowhunters and target archers a safe environment in which to enjoy archery. The Parks and Recreation organizations provide basic instruction regarding archery and/or bowhunting to their citizens as part of their programming efforts in these communities. Several other Parks and Recreation organizations without an archery park also provide NASP style programming as part of their activities. Partnerships developed with Parks and Recreation agencies provide a means to enhance participation in wildlife recreation related activities and make these activities more visible and "mainstream" to all citizens.

Introductory Youth Shooting Events

Two retired Conservation Enforcement Officers conduct about 80-100 events annually in which they provide instruction to Scouts, churches, youth groups, schools, and various other organizations. Each officer is fully equipped to conduct basic shotgun, .22 rifle, pellet gun, muzzleloader, and archery disciplines. These events are introductory in nature and provide exposure to the shooting sports and are not intended to make a life long shooter out of participants. Our goal in conducting these types of events is to show citizens that firearms and archery equipment can be used and enjoyed in a safe, responsible manner and that shooting sports are a wholesome life skill suitable for individuals and families.

Shooting Range Development

The Division of Wildlife and Freshwater Fisheries (WFF) operates and maintains 11 firearms ranges throughout Alabama. Nine of these ranges are located on Wildlife Management Areas (WMAs). Two other ranges are located on private lands and operated in cooperation with local governments. We continue to investigate and seek out suitable sites for additional firearms ranges, especially near urban areas. Access to shooting ranges is limited and is a concern of shooting enthusiasts and agency staff. Future range development is critical for the long term stability of Alabama's hunting and shooting heritage.

Mentored Youth Hunting Programs

Alabama WFF, along with other Southeastern state game and fish agencies, offer special seasons and opportunities for youth to enjoy a day field hunting with an adult mentor. Deer, duck, and turkey youth hunts are scheduled statewide and on WMA's on days where only the youth can carry a firearm.

We also coordinate a youth dove hunt program in which we provide approximately 35-40 private fields (outside of WMAs) annually for youth and adult mentors. Approximately 20% of the youth hunters on these fields over the past decade have been first time hunters. Agency staff view this as a highly successfully program as it receives praise from participants.

Becoming an Outdoors Woman/Project WILD

These programs are coordinated at the Department level through our Information and Media Section. Two BOW events are held annually and usually have approximately 175 participants.

Project WILD is conducted for science teachers as needed by one regional coordinator for these programs. Funding for the second regional coordinator for these programs was removed from the I & E budget several years ago.

Marketing Activities

Alabama WFF has partnered with National Shooting Sports Foundation (NSSF) and Recreational Boating and Fishing Foundation (RBFF) over recent years to conduct lapsed hunter/angler mailings to encourage them to purchase a license. These efforts have resulted in minimal success in reducing the "churn rate" of license buyers. Southwick and Associates conducted a tapestry analysis of our hunting/angler license buyers in 2008 that provided critical information regarding basic demographics, income levels, and lifestyle.

The next critical step in our marketing efforts is to obtain information on why hunters/anglers do not purchase a license annually. We know that they don't, but have no information on why this occurs and what we can do to minimize the churn rate.

We are in the process of developing a request for proposals that will hopefully lead to research and information regarding hunter utilization of our WMAs.

Community Youth Fishing Events

Alabama WFF conducts community fishing events in partnership with various local entities throughout Alabama. These events are scheduled to allow youth to experience an introductory fishing activity in an environment where they should catch fish and enjoy quality time with an adult mentor. Limited data analysis of these events indicates they provide a quality experience for youth participants but may not lead to recruitment of anglers that wouldn't otherwise become an angler. Although it is a once a year experience, the quality of fishing allows anglers to be more successful and think of themselves as anglers. These events reach more participants annually than any other fishing program except the website.

Casting Classes For Kids

Courses conducted by the 3 aquatic education employees to youth primarily as part of the curriculum in school physical education classes. Cub scouts have also been targeted for this

program. These courses have been highly successful in teaching kids to cast, the first skill needed to become an angler.

Website

WFF promotes recruitment of hunters/anglers through its website (www.outdooralabama.com) by providing information on where to hunt/fish, how to hunt/fish, and other pertinent information needed to hunt/fish.

Creek Kids

This program is an aquatic resources education program conducted at Tannehill State Park that helps youth feel more comfortable in the outdoors. This reduces one barrier to them fishing. The program introduces youth to aquatic environments and provides them with hands-on experiences in which they explore aquatic habitats.

Train the Trainer Type Events

Teaching instructors is the best way to expand our efforts: 4-H, schools, religious groups, and local parks and recreation departments. We have used Hooked on Fishing – Not on Drugs and other programs to expand our influence. Currently, these are having a minor influence as 4-H programs have reduced their staff, schools and teachers have less time/effort devoted, few religious groups and parks people are oriented towards the outdoors.

Pond Owner Mentoring Youth

New program to give some youth a quality fishing experience and establish a fishing mentor.

Media

Articles, news releases, television and radio appearances all remind potential hunters/anglers of the possibility that hunting/fishing could be fun for them.

Fishing Classes for Youth and Adults

Fishing classes are conducted both with a fishing trip and in the classroom/seminar alone.

Recommended Future Efforts

Research indicates that fishing recruitment programs should target 14-16 year olds. A possible new program is to initiate high school bass tournaments throughout Alabama. Aquatic education efforts should be increased and possibly include other fisheries/enforcement section staff in addition to the aquatic education staff.

The Arkansas Game and Fish Commission

- The Arkansas Youth Shooting Sports Program was started in the fall of 2006. Since then 18,074 students have participated, over 900 volunteer Coaches have been trained, and approximately 170 schools have joined the AYSSP program. Two world championships and several national trophies have been awarded to AYSSP Students.
- AGFC started the Arkansas National Archery in the Schools Program (ANASP) three years ago. 37,000 students participated this last year from 401 schools. In Arkansas, 40% of schools compete in ANASP. The state tournament drew 2,000 participants, making it the second largest tournament in the United States. The newly crowned World Championship team in the NASP elementary division is from Arkansas.
- The Hooked on Fishing, Not on Drugs program trains and enables teachers throughout the state to start fishing clubs within their schools. In the last 5 years almost 400 teachers have been trained. Each year approximately 11,000 students around the state attend fishing events or derbies through HOFNOD.
- In 2010 there were 15,011 Graduates that completed Hunter Education (HE) in Arkansas. HE manuals have been updated to meet the frameworks set by the Arkansas Department of Education. This allows schools to incorporate HE into the different subjects that meet their frameworks. A Spanish voice over was added to the HE CD home study to better reach the Hispanic population.
- The Commission has recently renovated several ranges, adding positions for rifle, pistol, and/or trap fields. Currently the Commission operates solely or in partnership a combination of eight manned/unmanned ranges, with a ninth in the planning stages.
- Wildlife Facilities Grant Program is a unique competitive grant program administered in cooperation with the Arkansas Department of Rural Services to develop public firing ranges in rural areas. During the most recent grant cycle, range projects were approved in Independence, Lawrence, and Newton counties. Applications are now being taken for the second installment of grant allocations.
- The Family and Community Fisheries program works to enhance angling opportunities in the more densely populated areas of Arkansas. The program targets areas that have weak license sales, provides seasonal angling opportunities for trout and catfish to inner-city residents, and offers beginner fishing seminars where participants gain knowledge and obtain fishing gear.
- Mobile Aquarium Program attends 270 events annually making 1.2 million contacts promoting fishing and aquatic education issues.
- Fishing Derby Program holds 320 events annually with 45,000 participants. Participants are usually 12 and under and are introduced to fishing, many for the first time.
- Tackle Loaner Program has 105 loaner sites with 12,000 plus circulations of rods and reels.
- Classroom Aquarium Program has 190 participating teachers reaching 60,000 plus students with some form of aquatic education.
- There are 40 plus fishing seminars/clinic programs taught yearly with 1,500 plus participants on topics ranging from Fishing 101 to Fly-fishing.
- The Youth Outdoor Expo introduces over 2,000 fifth graders each year to fishing, BB shooting, archery, and more.

- AGFC now operates four Nature Centers and four Education Centers where the public has an open invitation to attend a wide range of events/seminars focused on hunting and fishing. Combined visitation for 2010 at all our centers was 157,404.
- The Becoming an Outdoors-Woman workshop in Arkansas just held its 19th annual workshop. 150 participants from eight states attended the workshop which included 39 classes to introduce women to the outdoors.

Florida Fish and Wildlife Conservation Commission

Youth Conservation Centers and Related Programs

Youth Conservation Centers provide places where young people and families can participate in outdoor activities and share experiences that strengthen connections with and support for fish and wildlife conservation. Activities at the centers include fishing, hunting, shooting sports, wildlife viewing, and exploring the natural world with pack, paddle or perhaps even on horseback. Programs offered at the centers include a variety of hands-on clinics, active classes, summer camps, special events, and other opportunities to learn about fish-and-wildlife-related recreation.

Facilities are open to youth groups, conservation organizations, and the general public. The centers also function in partnership with community-based groups and programs located in surrounding areas. These off-site partnerships offer compatible programs and opportunities such as fishing in urban ponds, archery in schools and local parks, and conservation activities by scout troops. These community connections attract youth to the centers.

The Florida Fish and Wildlife Conservation Commission (FWC) and its nonprofit citizen-support foundation, the Wildlife Foundation of Florida, Inc., are proposing to form private-public partnerships to foster Florida's youths to become the next generation of conservation stewards. These partnerships would make up the proposed Florida Youth Conservation Center Network (FYCCN). In response to studies pointing to a widening gap between youths and nature, the FYCCN effort's goals are to create destinations that provide opportunities for youths to get outside. There are several outdoor youth centers already in place in Florida (described below), and these will provide the basic foundation from which the FYCCN will grow with the goal of opening other centers around the state.

Beau Turner Youth Conservation Center

The Beau Turner Youth Conservation Center, located in Jefferson County 30 miles east of Tallahassee, was created to preserve the tradition of ethical hunting and active conservation by introducing Florida's youth to shooting sports, fishing skills, wildlife viewing, and the great outdoors. Beau Turner formed a partnership with the FWC to open the center in March 2008.

The center, the first of its kind in Florida, encompasses 160 acres that Turner has leased to the FWC. The goal for the center is to develop a stewardship ethic among youth through programs designed to develop their outdoor skills and to instill an appreciation and knowledge of the longleaf pine ecosystem and wildlife management techniques.

The center offers a stocked fishing pond, sporting clays, a .22 rifle range, 3-D and Olympic-style archery ranges, and nature trails. Events held at the center include hunter safety courses, advanced hunting and fishing classes, volunteer training workshops, youth hunting opportunities, wildlife viewing events, and summer day camps.

Ocala Conservation Center

The Ocala Conservation Center is on a 57-acre peninsula, rich in history and wildlife in Marion County in north Central Florida. It is 20 miles east of Ocala, on Lake Eaton, in the heart of the Ocala National Forest. The facilities are rustic, yet comfortable, with air-conditioned cabins and dining hall. Classrooms are fishing piers, shooting ranges, nature trails, Lake Eaton and the vast Ocala National Forest.

The summer camp at this center has offered action-packed summer adventures for more than 50 years. Every year, the camp's programs provide hundreds of campers the necessary skills and knowledge to become better sportsmen and women, while instilling an awareness of firearm safety and wildlife stewardship. Boys and girls, ages 9 to 16, attend one-week camp sessions, running from Sunday through Friday.

In addition to the summer camp, the Ocala center also provides for diverse public use, which have included frequent hunter safety courses, bow hunting courses, firearms familiarization courses, youth hunter education challenge (advanced hunter safety), boy and girl scout groups, 4H competitive shooting groups, Becoming an Outdoors Woman programs, National Wild Turkey Federation's Women in the Outdoors program, Traditional Bow Hunters of Florida annual shoots, Safari Club programs, and Marion County school programs.

Chinsegut Nature Center

Youths, families and adults explore and learn about Florida's sandhill habitat through nature center programs at the Chinsegut Wildlife and Environmental Area (WEA). The center offers three fish and wildlife-focused festivals attracting more than 3000 participants each year. In addition to festivals, Chinsegut offers a range of conservation education and recreational skills development programs. Specifically classes are offered in wildlife viewing, archery, camping, orienteering, geocaching, and hiking. An additional 7,000 youth and adults participate in these programs annually. A dedicated team of volunteers assist in teaching and supporting roles. Some of these volunteers also belong to the FWC's Brooksville Ridge Volunteer Corps. These volunteers participate in a range of citizen science and habitat restoration projects including rare invertebrate, butterfly and red-cockaded woodpecker surveys and assist in habitat management by removing exotic species and preparing for prescribed burns on the WEA and surrounding public lands.

Wildlife Viewing Program

FWC is developing a wildlife viewing curriculum that will be field-tested in spring 2011. Once completed, this curriculum will be employed at FWC youth conservation centers and by partner agencies and organizations throughout the state to introduce youth and families to wildlife viewing and improve their skills in this popular outdoor pursuit.

Get Outdoors Florida!

Coalition began with an initiative linking FWC, the Department of Environmental Protection and Big Brothers Big Sisters. Today it is chaired by an FWC employee and heavily supported on an ongoing basis by FWC commissioners and staff and boasts an array of public and private partners including federal, state, and non-profit conservation organizations, health and education groups, and businesses. Together they are engaging communities, families, and individuals in

active outdoor recreation that will connect them to nature, result in healthier lifestyles and help sustain Florida's natural resources.

Freshwater Fisheries Youth Programs

Joe Budd Aquatic Education Center

Reaching round 3,750 kids annually, most participating in local school field trips, Joe Budd provides youth programs that include wetland and aquatic plant identification, pond life identification (macroscopic and microscopic), fish identification, fish biology and management, and fish dissection.

The Center's Basic Angler/Aquatic Education Summer Camp (one week) teaches fish identification, fishing regulations, boating safety, boat fishing techniques, tackle identification, tackle use, fish biology and management, and fish cleaning/preparation for cooking. In addition to topics covered during the basic camp, the Center's Advanced Angler/Aquatic Education Summer Camp emphasizes spin casting techniques, outboard motor use, trolling motor techniques, and compass and GPS navigation. A "Friday Family Fish Fry" is a part of each camp. This Friday afternoon activity provides the adult members of the family an opportunity to see what skills their child has developed during a week at camp. This makes it easier for the child to get out fishing post-camp, since the parent/guardian has witnessed the abilities of their child.

Joe Budd's camps are among the very few programs documented via third-party research to have a long-term impact on participant behavior including future fishing participation and indicators of stewardship. As such, it is the prototype for a planned expansion of these types of camps in the near future.

Fish Camps

The fishing and basic boating skills camp is modeled on the successful pilot program conducted since 2000 at the Joe Budd Aquatic Education Center. More than 650 youngsters have attended the Joe Budd Center's camp, and the vast majority continues to enjoy recreational angling. Fishing camps aren't just for fun or for teaching children an exciting lifelong recreational sport. More importantly, children who have participated in the camp program exhibit significantly higher levels of environmental concern and stewardship. FWC hopes to partner with additional groups to continue to expand these camps. FWC provides groups with a "Fish Camp Implementation Template" that will move them along the road to success.

Sport-fishing Education Program

This program trains volunteer instructors that work throughout the state, reaching about 1,800 kids annually. These instructors conduct two levels of youth programs. The first is the fishing clinic program where instructors cover the topics of: "Who is the Florida Fish and Wildlife Conservation Commission?"; "What is Sport Fish Restoration?"; the aquatic food chain; cane pole and rod-and-reel rigging; bait selection; fish identification; casting instruction; fishing regulations; and angler ethics. The second is the long-term and mentor-based program, Hooked on Fishing – Not on Drugs® that teaches angling skills, conservation, stewardship, and aquatic

ecology. Additionally, the program emphasizes positive life skills; such as, decision-making, goal-setting, and remaining drug-free.

Kids Fishing Derbies - Urban Fisheries Program

The FWC conducts Kids Fishing Derbies at the Tampa and Ft. Myers Florida Sportsman Shows and the Outdoor Expo. Other programs are provided on an as-possible basis around the state and are often associated with the legislatively authorized free freshwater fishing weekend in April.

Aquatic Education

Angler educational programs reach a broad cross-section of Floridians with information on aquatic resource stewardship. More than 115 instructional fishing clinics or seminars delivered this message last year. Staff conducted ten sportfishing education program workshops to train volunteer fishing clinic instructors and new fish camp staff to work at locations throughout the state. Volunteer Hooked on Fishing – Not on Drugs® instructors continued conducting long-term programs in four locations. Proposed activities such as developing and updating displays, conducting fishing clinics, summer camps, aquatic education programs, distributing curriculum materials to teachers, training volunteers to be instructors and mentors, and developing and producing printed educational materials, are focused on attracting and retaining future anglers.

Fishing Events

FWC staff conducted 141 fishing events (derbies, clinics, etc.) throughout Florida during the past year. A total number of 13,250 children and adults participated. These events are tailored towards introducing families to fishing and conservation stewardship. FWC stocks these ponds with everything from catfish to largemouth bass to enhance the participants' chances of success.

Saltwater Fisheries Youth Programs

Kids' Fishing Clinics

The Kids' Fishing Clinic program began in 1996. The program targets children ages 4-16 and is designed to promote responsible marine resource stewardship by teaching the vulnerability of Florida's fragile marine ecosystems and fisheries resources, fundamental saltwater fishing skills and provide children with a positive fishing experience. Kids' Fishing Clinics are conducted in coastal cities statewide with sponsorship by local governments and/or local civic organizations, which also provide the necessary volunteer "labor" to organize and conduct the event. Since 1996, more than 46,000 children have participated in the Kids' Fishing Clinics, and an estimated 31,000 parents or guardians have participated with their children.

Headboat Kids Fishing Clinics

This program partners with headboats, large recreational fishing vessels, to provide an educational fishing experience for school groups. The captain and crew participate in a training session to insure their knowledge of the FWC conservation message and ethical angling practices and are given materials similar to the educational stations for the Kids' Fishing Clinics. School groups complete the educational stations taught by the captain and crew either at the dock or aboard the vessel as it travels to the near shore fishing spot. The educational components include catch and release techniques, the importance of marine habitats, information about saltwater recreational fishing regulations, ways to prevent pollution, knot tying, casting and general safety

while fishing. After completing the stations the students fish from the headboat and use the skills and knowledge they learned in the educational part of the event. The initial location for this program is in the Miami area with the Reward Fishing Fleet (Captain Wayne Conn) who on a yearly basis has over 2,000 students participate in this program. In addition to the crew, local Florida Sea Grant, Florida 4-H and International Game Fish Association staff assist with conducting these programs in Miami. The program will expand to other coastal areas in Florida.

Aquatic Resource Education Activities at the FWC Hatchery (Stock Enhancement Research Facility)

School groups are given tours of the FWC hatchery in Port Manatee throughout the year. Students are given the opportunity to learn about marine fisheries, fisheries stock enhancement and marine aquaculture. Students are given a presentation and then a tour of the facility, which includes visiting a brood room and egg incubators, viewing the Grand Slam fish, viewing plankton under microscopes, feeding fingerlings in ponds and viewing a necropsy in the fish health lab.

During school group tours, kids often fish in a manmade detention pond. Rods, reels and bait are provided for these events. Other organizations and groups (i.e., fishing clubs, sheriff's department, Make A Difference Foundation) also coordinate fishing events, usually for special needs children or juveniles in detention facilities, in partnership with FWC staff, volunteers from clubs and organizations. About 12 fishing events are held each year.

Boys from the Manatee County Sheriffs Youth Ranch are given the opportunity to gain community service hours by volunteering at the hatchery with teachers present. They are given an educational tour of the hatchery facility upon arrival, and then help FWC staff clean the fish ponds, feed fish, and assist in hatchery maintenance and construction project activities. At the end of their work period, a well-earned kids' fishing event is held to teach them basic ethical angling skills, catch and release techniques and the rules and regulations of those species caught.

Kids' Fishing Activity Box

The Kids' Fishing Activity Box is designed to give interested participants the ability to hold an educational fishing day, similar to the FWC-run Kid's Fishing Clinics. The box is used by various groups ranging from Boy Scout Troops to classroom teachers. These programs are tracked via sign-in sheets, and the data are retained for tracking the program. The box itself includes all the curricula and most of the objects needed to run a number of educational stations. These stations include Fish Anatomy (both external and internal), Fish Adaptations (external morphology), Casting (the proper way of casting with an emphasis on safety), Good Angler (this station is a requirement of using the Kids' Fishing Activity Box and goes over ethical angling practices), Habitat Match (teaches which kinds of animals you would find in which habitats and why habitat is important), Knot Tying (the proper ways of tying a uni- and clinch knot).

There are a number of supplementary materials found in the box as well. The Kids' Fishing Activity boxes are shipped to groups/teachers when they are requested and returned when the group is finished using it. A box may be utilized for several days or weeks in one location by a variety of groups or teachers in that area. Future plans for this program include several regional locations where several activity boxes can be stored and picked up by people in that region.

Nature Coast Fishing for Youth

The program is an inshore fishing clinic for children during the summer and is conducted at the Senator George Kirkpatrick Marine Lab in Cedar Key. This one-day program is offered throughout the summer and is open to youths between the ages of 6 and 16. Clinics are for one day and will run from June through July. Participants learn fish identification, knot tying, casting, bait types, habitat types, gear care, and more. The day ends with pier fishing with all participants practicing catch-and-release fishing.

Make-A-Difference Fishing Foundation Special Opportunity Fishing Events

Marine fisheries outreach and FWC hatchery staff work with this non-profit organization to provide fishing opportunities for kids with physical and mental disabilities. Make a Difference and Coastal Conservation Association volunteers built a Handicapped Fishing Dock at the FWC hatchery in Port Manatee so kids in wheelchairs can fish off the dock like any other child. All materials and labor were donated. These handicapped fishing events are conducted every third Saturday of the month or whenever a group can participate in the event.

Youth Hunting Programs

Youth Hunting Field Days

Efforts to introduce youth to hunting include one-day events known as Youth Hunting Field Days. In 2009, more than 5,000 youth participated in these events at four locations throughout the state.

Youth Hunting Program of Florida

The Youth Hunting Program of Florida is a program to introduce young hunters and their parent/guardian to responsible hunting. The program encourages outdoor activities through hunting trips overseen by a corps of trained volunteer hunt masters and other volunteers in cooperation with private landowners who host the weekend events. Hunt masters provide children and their parent or guardian with a safe, educational, mentored and fun hunting experience. The youth hunting model was developed with the assistance of many sportsmen's groups, landowner organizations, and state and federal agencies, and has been refined over years of outdoor experiences with youth and adult volunteers and participants. In the 2009-10 hunting season, the program provided 55 hunts influencing 614 youth and parents.

The youth hunting program indirectly benefits the adult participants through continuing adult hunting education. Frequently, the adult companions are non-hunters, so the program provides the same excellent introduction to ethical, responsible hunting to the adults that it does for the youth. The most important benefit of the accompanying guardian requirement is the bonding experience that occurs between child and parent or guardian. This aspect infuses the program with the spirit of the hunting tradition and creates a more meaningful experience for all involved. The most often received comment from parent participants is that, "this is the most time I've ever spent one-on-one with my child."

The youth hunting program works toward gaining the trust of private landowners through its safe and successful hunts on private land. Many are now opening their gates to youth hunting, thus

providing an innovative approach to the problem of land access and helping alleviate the pressure on the state to provide space for public hunting and other outdoor recreation.

National Archery in the Schools Program

The National Archery in the Schools Program is a joint venture between state department of education and the state wildlife agency. The program promotes student education and participation in the shooting sports. The program's focus is to provide Olympic-style target archery training in physical education classes for fourth through twelfth graders.

FWC's objective is to develop an interest in young people to become archers, potentially hunters, and take an interest in the outdoors.

With the assistance of professional curriculum writers, FWC developed three archery units of study for Florida's physical education programs. These cover (1) fourth and fifth grades, (2) sixth through eighth grades, and (3) ninth through twelfth grades. Each unit meets or exceeds national and state standards for physical education classes.

Currently, Florida has more than 200 schools participating in the program. Federal aid funds that were used to start this program must now be allocated to other needs. Therefore, if this program continues to grow, additional funding is needed to help purchase archery equipment for other schools and to help cover the cost of administering the program.

Florida's Hunter Safety Course

In 1991, safe hunter training was mandated for everyone who purchases a Florida hunting license, born on or after June 1, 1975. Fifteen years later, Florida's hunting related fatalities declined to an all time low, averaging less than one fatality per year.

Not only does hunter safety training decrease hunting accidents and fatalities, but it also increases compliance with hunting laws, improves ethics and enhances the image of hunters, especially with the non-hunting public. The course is so popular that 93% of non-hunters and 89% of active hunters support hunter safety education as a requirement to hunt.

FWC's hunter safety course is dedicated to continuing the heritage of hunting by developing safe, responsible and knowledgeable hunters. The course is taught by hundreds of dedicated volunteer instructors that hold classes throughout Florida. Its target is students, ages 12 to 16. The traditional course consists of 12 hours of knowledge based instruction, a test, and a three-hour field day where students get to demonstrate the skills they learned.

Youth Hunter Education Challenge

The Youth Hunter Education Challenge (Challenge) is recognized as the most comprehensive youth hunting program in North America. This program serves as a "graduate studies" course in outdoor skills and safety training for young hunters, and is open to young hunters between the ages of 12 and 18 who have successfully completed the Florida Hunter Safety training. Events are conducted under simulated hunting conditions to provide the best practical environment for reinforcing and testing a young hunter's skills.

From rifle, bow, and muzzleloader shooting at life-sized targets, to wildlife identification, to map-and compass orienteering and more, Challenge participants get hands-on training in eight skills areas, giving them expertise in all methods of take and all types of game.

Boy Scout Conservation Challenge Badge

The FWC teamed up with the National Wild Turkey Federation and the Boy Scouts of America to offer the conservation challenge badge to scouts. Now any scout who has completed their fishing and wildlife conservation, rifle, shotgun and archery merit badges can complete their hunter safety certification by attending a three hour review and passing a hunter safety exam.

Other Efforts to Increase Hunting Participation

Hunter Safety Deferral Mentoring Exemption

Anyone 16 years or older and born on or after June 1, 1975 can hunt for one season under the direct supervision of a licensed hunter, 21 or older, without having to complete the state's hunter safety certification. Individuals taking advantage of this try-before-you-buy approach must complete a hunter safety class to be eligible to purchase their next hunting license. Hunters with a deferral, who pass the hunter safety training class before their hunter safety deferral license expires, may hunt without a supervisor provided they have a copy of their hunter safety card with the deferral license.

Guest Permits for Quota Hunts on WMAs

In 2009, FWC redesigned its quota hunt program to allow more individuals, especially beginners, to participate. Many of these limited-entry hunts on public FWC-managed areas are considered high-quality hunts. Each person receiving a quota hunt permit now may bring a guest, who can hunt also. FWC encourages veteran hunters to use these guest permits to introduce someone to hunting. Further, the guest permit facilitates the social aspect of hunting on these public-land hunting experiences, potentially contributing to hunter retention. Florida's quota hunt program on state-managed areas is an important component of the public hunting opportunity. Adding a guest permit potentially doubled the opportunity on the areas.

Becoming an Outdoors Woman Workshops

These workshops are designed primarily for women; however, they are an excellent opportunity for anyone 18 years of age or older to learn the outdoor skills usually associated with hunting and fishing, and a variety of outdoor pursuits. Workshops focus on the learning of outdoor skills, offering a variety of topics balanced between hunting, shooting, fishing and non-consumptive (canoeing, camping, etc.) activities.

Georgia Wildlife Resources Division

Current Activities

Hunter Development Program

The Wildlife Resources Division (WRD) reorganized the Hunter Education Program and the Shooting Sports Program. The Hunter Development Program now includes Hunter Education, Shooting Sports and Hunter Recruitment and Retention. These programs have been combined under one Program Manager to create a nexus between recent graduates of hunter education and programs designed to increase hunting/shooting skills.

Adult/Child Hunts

WRD currently hosts more than 60 adult/child hunts statewide for various game species. Some adult/child big game hunts have included Hunter Education Skills Challenge (below) events. Youth attending many of our adult/child dove hunts have the opportunity to take part in wildlife identification, BB gun range practice, laser shot simulated hunting, and archery in addition to participation in the dove hunt.

Kids Fishing Events

WRD sponsors or co-sponsors more than 300 Kids Fishing Events annually with 26,000 kids participating. The events are held throughout the state mostly during the first week in June to coincide with National Fishing and Boating Week. The program's primary goal is to introduce youth and their families to fishing. Additionally, special ponds are set aside at many public fishing areas and hatcheries to provide a quality fishing experience for families with children.

WRD Outdoor Adventure Days (OADs)

Outdoor Adventure Day events typically coincide with National Hunting and Fishing Day and are held at venues throughout the state. Activities include shooting air-rifle, skeet, archery, angling, fly casting, fly tying and hunting dog demonstrations. Participation at some of the larger events ranges from 1,200 to 1,600. In addition numerous programs and demonstrations are conducted including live wildlife shows and the basics of camping. GADNR offers a free fishing day and free admission to State Parks on National Hunting and Fishing Day.

Hunter Education Skills Challenge

Initiated by WRD in 2008, this program is considered advanced hunter education. The program is open to any youth, age 18 or younger on or before August 1st, who have successfully completed hunter education. The program provides advanced coursework in outdoor skills and safety training for young hunters. Events are conducted under simulated hunting conditions to provide the most realistic environment for reinforcing and testing a young hunter's skills.

Program components include: Archery, Air-rifle, Safety Trail Challenge (shoot/don't shoot), Orienteering, Wildlife Identification and a Responsibility Exam. Participants with the highest scores in regional competition are invited to the state Hunter Education Skills Challenge (HESC) competition.

Georgia's Shotgun Training Program

This program offers youth in 4th-12th grades the opportunity to learn trap shooting in a safe, informative and educational manner with trained instructors. Georgia's Shotgun Training Program offers youth the opportunity to engage in an organized team sport, while learning firearms safety, hand-eye coordination and responsible firearms handling. The program promotes firearms education and seeks to instill the life-long sport of shotgunning to youth.

Youth Summer Camps

The WRD Shooting Sports Program holds youth camps around the state. Camps typically consist of: archery instruction, wildlife identification, animal tracks identification, non-game wildlife education, hunter education, and tree stand safety.

National Archery in the Schools Program – GA (NASP-GA)

NASP-GA, based upon the National Archery in Schools Program (NASP) (<http://www.nasparchery.com/>), was instituted in Georgia by WRD in 2004. NASP-GA has certified 192 schools and 584 instructors to date. A NASP-GA state tournament is held annually and in 2010, over four hundred and fifty students participated with two \$1,000.00 scholarships being awarded to the highest scoring male and female archer. NASP holds a national tournament each year and, in 2010, twelve teams as well as several individual youth archers from Georgia qualified for the event.

Conservation Leaders for Tomorrow

The Conservation Leaders for Tomorrow (CLfT) program is a workshop for wildlife and natural resource students who have never held a hunting license. At a CLfT workshop, students experience a blend of classroom and field instruction designed to give them an understanding of the biological basis and traditions of hunting, and teach shooting skills and hunting safety. They also have the opportunity to experience the hunt for themselves, alongside responsible, safe hunting guides and mentors. Georgia's first CLfT workshop was held at Charlie Elliott Wildlife Center (CEWC) January 21-24, 2010. Students from the University of Georgia, Clemson University and Auburn University attended this workshop. Georgia hosted another student workshop at CEWC in November 2010 and a CLfT workshop for state wildlife agency personnel in December of 2010.

Community Fishing Program (Pilot)

In 2003, the WRD partnered with municipal recreation and parks departments in Savannah, Chatham County to initiate an experimental Community Fishing Program.

The goal of the program was to provide residents with fishing and recreational opportunities in city and county-owned lakes close to their homes. Lakes were annually stocked and managed to provide a quality fishing opportunity. The program was successful and demonstrated a strong demand for angling opportunities at community park lakes.

Tackle Loaner Program

The WRD supports the Fishing Tackle Loaner Program as a way to encourage new anglers to fish while visiting State Parks. The goal of the program is to remove the barrier of needing your own fishing tackle and to encourage fishing activities at State Parks.

Outdoor Youth Initiative

The Outdoor Youth Initiative steering committee is charged with inventorying and assessing state and national strategies for recruitment and retention of hunters and anglers and other wildlife-related recreational activities, identifying effective approaches for implementation of successful strategies, developing potential future strategies and recommending necessary actions, research or survey efforts to track and enhance effectiveness of recruitment and retention strategies.

Licensing Efforts

In order to foster new or continued participation in hunting, new incentives are now offered to hunters. A \$2.75 discount for hunters who renew their license before their current license expires is now in effect. In addition, there is special pricing for multiple-year licenses and special hunting/fishing combination licenses. Georgia also offers a 3-day apprentice license to allow the uninitiated new hunter to try hunting. The hunter education course requirement is waived for purchasers of this license.

Seven lifetime licenses are available to Georgians: under 2, ages 2-15, ages 16 and older, ages 60-64, ages 65 and older, veteran and non-resident grandchild.

To further reduce the number of licenses required by hunters, the primitive weapons license was eliminated for the 2010-2011 hunting season. This license was required for hunters using archery or muzzleloader weaponry.

Go Fish Georgia Initiative

The initiative aims to promote and enhance boating and fishing participation through a 3-tiered approach:

- 1) Improve access – development of the **Georgia Bass Trail** provides a statewide system of large boating access areas capable of supporting large tournament events as well as normal boating and fishing activities on major water bodies.
- 2) Increase participation through active promotion and marketing – **Go Fish Education Center** serves as the cornerstone of efforts to promote fishing and increase participation. The Center contains 170,000 gallons of live fish displays highlighting the diversity of fish found throughout the state, interactive exhibits that inform visitors where and how to fish, a kids casting pond, and interactive fishing and shooting sports galleries.
- 3) Improve quality of fishing - The Go Fish Hatchery is home to the Georgia Trophy Bass program. This angler participation program will accept and display donated trophy catches to be used in the production of fingerlings destined for public waters.

Shooting Sports Complex

Georgia DNR has proposed the development of a state-of-the-art shooting facility in collaboration with a University System of Georgia institution. Ideally, the facility will include archery, air rifle and small bore rifle ranges, to be available for educational, recreational and organized competitions.

The mission of the proposed complex is to promote, advance and encourage the safe use of firearms and archery equipment related specifically to programmatic and recreational use. The

goal is to assist learners in developing knowledge, skills and appreciation of shooting sports to result in safe, responsible firearms handling and promote healthy, life-long learning recreation.

The goal of the Shooting Sports Complex will be achieved through the fulfillment of the following objectives:

House academic shooting sports programs:

Physical Activity, ROTC, Justice Studies and other related curricula

House Campus Recreation Programs

Serve as a training site for collegiate shooting sports teams

Offer public shooting sports education courses

Meetings have taken place with both Georgia Southern University and University of Georgia and both universities have expressed interest in the proposed Shooting Sports Complex.

Potential or Planned Activities

Georgia Department of Education/DNR Collaboration (potential)

Collaboration with the Department of Education (DOE) to incorporate natural resources conservation messaging; including hunting and fishing, by assisting in the development of curricula to all grade levels.

Website and Social Media (planned)

A Kid's Page is being developed for the WRD website and will feature hunter education and shooting sports classes, special events and youth hunting opportunities. Social media outlets such as Twitter, YouTube, Facebook and Flickr will be used to highlight youth hunting opportunities and successes.

Top Programs

Hunter Education Program

National Archery in the Schools Program

Hunter Education Skills Challenge

Youth Summer Camp Program

Kids Fishing Events

Goals

Stop the decline in hunting and fishing license sales

Retain existing hunters, anglers and recreational shooters through outreach and marketing.

Re-engage inactive hunters, anglers and shooters through programs and mentoring opportunities.

Attract new (adult and youth) hunters, anglers and shooters through promotion, introductory programs and outreach.

Provide training and educational programs for a variety of ages and skill levels focusing on family involvement in hunting, angling and shooting sports.

Create and develop safe, ethical, knowledgeable and skillful hunters, anglers and shooters.

Monitor and evaluate the effectiveness of our recruitment and retention programs.

Challenges

- Little information on relative success of different recruitment/retention strategies
- Access to potential recruits
- Lack of efficient communication means with Hunter Education Volunteers
- Liability surrounding mentor programs
- Competition for Leisure Time
- Access to license data
- Lack of marketing expertise
- Urbanization
- Lack of and declining access to resources
- Need for “next step” program integration
- Societal dynamics
- Need for developing partners and leaders to help in effort
- Need for effective monitoring and evaluation
- Aging population
- Tracking of Hunter Ed graduates
- Bridging the gap from Hunter Ed certification to participation
- Fostering a family-friendly atmosphere
- Communicating with single-parent (especially mother-led) families

Kentucky Department of Fish & Wildlife Resources'

Current Activities

Fishing in Neighborhoods Program (FINs)

Kentucky Department of Fish and Wildlife Resources (KDFWR) began this urban pond stocking & marketing program in 2006 by stocking 5 lakes in 4 counties, and has expanded the program to 34 lakes in 21 counties that comprise about 60% of the state's population. In 2011, Fishing in Neighborhoods (FINs) will stock 124,000 rainbow trout (8-12") and 95,150 channel catfish (12-18"); trout are stocked in all lakes 3 times annually during the cool months. Catfish are stocked up to four times annually in March, April, May, and August.

Fishing Tackle Loaner Program

KDFWR provides loaner fishing tackle through a variety of venues, including 28 state parks, 4 county libraries in metro areas, at its 7 fisheries district offices, and to visitors at its lakes at Headquarters and the Salato Wildlife Education Center.

Fishing Events

KDFWR sponsors or co-sponsors numerous youth fishing events at schools annually; in 2010, 63 school events incorporated 4,962 youth participants. Community-based fishing events numbering 120 involved another 9,013 participants.

Hunter Education Program

KDFWR's Hunter Education Program certified 13,000 new hunters in 2010. Ninety-eight new hunter education instructors were trained in 2010, bringing the total to 761 certified instructors statewide.

Youth-Mentor Hunts

KDFWR currently co-sponsors numerous youth-mentor hunts statewide each year. Dozens of deer and turkey hunts held in conjunction with local sportsmen's and conservation groups typically involve a few hundred youths total. KDFWR also typically holds 10 or youth-mentor more dove hunts on WMAs or leased, private fields that generally accommodate 20-30 adults with 1-2 youths each; thus typically a few hundred youths participate in the youth-mentor dove hunts.

Youth Hunting Seasons

KDFWR provides youth-only hunting opportunities during the fall season. Weekend youth seasons for deer and turkey precede the statewide seasons for these species, and youth waterfowl hunting weekends precede or follow (depending on zone) the statewide season for waterfowl.

Conservation Camps

KDFWR operates 3 summer, resident youth camps around the state, which provide week-long experiences for 4th-6th graders. Camps include instruction on archery, shooting, hunter education, boating, and basic wildlife biology and conservation. In 2010 a total of 4,606 students attended a conservation camp; 3,642 completed hunter education while at camp (included in statewide total presented above).

National Archery in the Schools Program – KY (KYNASP)

Kentucky National Archery in the Schools Program (KYNASP) was launched statewide in 2002 (<http://www.nasparchery.com/>) and continues to grow in schools. To date, KYNASP has enrolled nearly 1000 schools and has had about 350,000 participant's grades 4-12 in-school settings. A survey of early KYNASP participants indicated that 45% wanted to own their own archery equipment, 59% wanted to become target archers and 38% wanted to try bowhunting. On the competition side, the 2011 KYNASP state tournament drew 2600 participants from around Kentucky.

Elk Hunt Permit Lottery

The Kentucky Elk Hunting Permit sales continue to grow, from about 7,000 in the 2001 season to nearly 46,000 in 2010. Many lapsed and previously unlicensed hunters are applying for this unique opportunity.

Apprentice Opportunity: Hunter Education Exemption Permit

KDFWR offers a 1-year apprenticeship opportunity via our hunter education exemption permit. Since 2007, resident and nonresident hunters have been able to purchase the \$5 permit and hunt with a licensed hunter who meets the hunter education requirements. Sales have been consistently 2600-2800 of these permits. KDFWR plans to highlight and market this opportunity more in the hunting guides and other venues in the future.

Shooting Ranges on WMAs

KDFWR has built 6 outdoor shooting ranges (for single-projectiles) on WMAs since 2000, targeting those in the vicinity of population centers. These ranges receive increasingly heavy public use, especially during weeks prior to hunting seasons. They are also used for the field portion of hunter education classes.

Hunting Heritage Partnership Studies

KDFWR is partnering in two 1-year research projects with other southeastern states and Responsive Management. These research efforts are investigating participation in Hunter Education and our apprentice opportunities and factors affecting recruitment into hunting.

Hunting Advertising Campaign

KDFWR is using matching funds from HHP to advertise fall-winter hunting opportunities primarily with electronic means (Web sites and social media). Ads provide a click-through means of viewers being connected with basic hunting information, along with licensing, public lands maps, and other services.

Explore Bowhunting (currently launching)

In partnership with the Archery Trade Association (ATA), KDFWR has hired an Explore Bowhunting coordinator to plan, develop, pilot-test, and launch statewide the Explore Bowhunting program to provide "next step" archery and outdoor skills training in after-school settings and other venues. This program will capitalize on archery interest spawned by the National Archery in the Schools Program, and directly connect archery industry, conservation groups, and sportsmen's groups across the state. As of October 2011 we have trained 70 instructors and 11 pilot programs have started or are slated to start soon.

Community Archery Program

We are also in the process of developing community archery partnerships with ATA, Wildlife & Sport Fish Restoration, local governments and other partners to develop archery ranges and shooting opportunities in 5 targeted communities across the state.

Otter Creek Outdoor Recreation Area

KDFWR has opened a new 2,200-acre property near Metro Louisville within 50 miles of >30% of the state's population. The new outdoor recreation area (opened in May) is operated under a user-pay model (entry and special use permits), and provides hunting, fishing, target shooting, target archery, and wildlife viewing opportunities, in addition to offering about 25 miles of trails for hiking, horseback riding, and mountain biking, a course for disc golf, a campground, sites suitable for picnicking, and other outdoor pursuits. This is a great location to interface new customers with opportunities to participate in shooting and wildlife-associated recreation.

Potential or Planned Activities

Mentoring Program (planned)

KDFWR is developing plans to create a youth-friendly mentoring network through which partners can provide more and better coordinated opportunities for new hunters and anglers to be matched with sportsmen who are experienced and trained in mentoring. Children will be required to bring along a parent/guardian for outings.

Multi-year Licenses (potential)

We will be evaluating the possibility of offering multi-year licensing and potentially other offerings to incentivize license buying across years to reduce churn and increase customer convenience.

Top Programs Currently

- National Archery in the Schools Program
- FiNs
- Kids Fishing Events

Goals

- Stop the decline in hunting and fishing license sales
- Reduce the churn among license buyers
- Retention of existing hunters, anglers and recreational shooters & engage them as mentors
- Attract new (adult and youth) hunters, anglers and shooters through promotion, introductory programs and outreach.
- Provide training and educational programs for a variety of ages and skill levels focusing on family involvement in hunting, angling and shooting sports.
- Monitor and evaluate the effectiveness of recruitment and retention programs
- Increase public awareness of the benefits of and opportunities in Kentucky for hunting, fishing and wildlife-associated recreation

Challenges

- Monitoring and evaluation of recruitment/retention strategies needed
- Mentor network/program needed
- Lack of and declining access to private lands and waters
- Need for “next step” program integration
- Aging population—proportionally more annually are eligible for a greatly-discounted senior or disabled (all-encompassing) licenses (\$5)
- Tracking youth program participants
- Bridging the gap from hunter ed certification to participation
- Marketing to families and young adults

Louisiana Department of Wildlife and Fisheries

Becoming an Outdoors Woman (BOW)

This program was started in Louisiana in 1994. One session is held each spring with 135 women in attendance. Response has been good due to each session being fully booked up by attendees and many women returning for additional training.

Families Understanding Nature (FUN Camp)

FUN Camp provides a weekend for youth and adult to receive training in Louisiana Department of Wildlife and Fisheries (LDWF) staff-lead outdoor activities such as (fishing, shooting, archery, ect.). Follow up evaluations have demonstrated that the training received provided the knowledge required to enable attendees to become involved in these activities on there own.

Fishing Workshops

Fishing workshops are hosted throughout the state in conjunction with different civic groups to teach people how to fish. Topics covered include tackle/equipment selection, fishing techniques, fish ID, habitat & ecology of fish.

In addition, fishing programs are also offered in the Louisiana school system. Teachers are provided with workbooks that enable them to cover the above-mentioned subjects with students in the classroom that will prepare them for a field component to compliment the classroom studies.

Louisiana Hunting Heritage Program

LDWF is currently developing a mentor program to introduce people to hunting who do not have an experienced hunter in their lives to do this for them. Plans are to launch the program in fall of 2011. Potential hunters will be paired with an experienced hunter who is willing to spend time to take someone hunting and pass on the necessary knowledge to get someone started in the sport of hunting. Our intent is to adopt this to various age classes and/or groups as we work out the kinks and develop a more robust list of mentors.

National Archery in the Schools

Louisiana is a participating state in the NASP program and has certified teachers at some 100 schools. Last year some 7,000 students experienced the flight of an arrow through NASP instructions at their schools. Studies have shown that some of these students will take up bowhunting as a challenge to further their interest in archery.

WMA Special Youth Hunts

We are currently attempting to increase the utilization of our WMA properties while recruiting young hunters by providing other special seasons for youth, such as squirrel and rabbit. Our youth dove, deer and turkey hunts on the WMAs have been very successful, but are not reaching the extent we had hoped, as we see more repeat hunters, resulting in our adapting the lotteries to provide greater opportunity for those not chosen in past years. Additionally, with the more social aspect associated with squirrel and rabbit hunts, we are pursuing development of those hunts in certain areas.

Private Lands Youth hunts

We have established special youth hunt weekends prior to the normal opening weekend in all our deer hunting areas in the state. Additionally, we allow youth to hunt during the muzzleloader seasons with shotguns using slugs only. This has been well received and provided the 'mentoring' type hunt we are seeking in a separate program.

Mississippi Department of Wildlife, Fisheries, and Parks

Youth Participation Initiative

The Youth Participation Initiative (YPI) Program was established in 2009 to provide funding for the purpose of educating children in the areas of hunting, fishing, conservation, and safety. The MDWFP encourages applicants to focus on the education, recruitment, or retention of youth in the areas listed above or in any safety issues arising from the areas of hunting, fishing, or conservation. Preference is given to those projects demonstrating focus on new ideas, new programs, or programs directed at involving youth that have little or no prior experience in the fields of hunting, fishing, or conservation. To date, \$494,374.00 has been awarded to help fund 69 projects. The MDWFP is an active partner in many of these projects such as Youth Waterfowl Hunting & Education Initiative Camp, Camp Fish, Wheelin Sportsmen Deer Hunt for Youth with Disabilities, Fall Wildlife Festival, Minority Wildlife Ecology Camp, Youth Quail Hunting Camp, and Youth Squirrel Hunting Camp.

Archery in Mississippi Schools

The Archery in Mississippi Schools Program, better known as “AIMS”, is a program designed to introduce 4th – 12th graders to the sport of archery during Physical Education class. AIMS is administered under the National Archery in the Schools Program (NASP) that began in Kentucky in 2002. Mississippi initiated AIMS in 2005 with 10 pilot schools participating. To date, over 200 schools in 45 counties have adopted the program and more than 26,000 students participate in the program annually. The first statewide archery invitational was held in 2011 with 409 student archers competing. Mississippi students have taken the sport outside of the state by participating in the national championship competition in Kentucky and the world championship competition in Florida.

Fishing Rodeos

The Catfish Rodeo Program offers fishing rodeos to youth to introduce them to fishing. These rodeos provide hands-on experience and are enjoyed by many youth annually. Organizations, schools, businesses, churches, and individuals can request to have a fishing rodeo in their area. Interest in rodeos has increased across the state. From July 1, 2010 to June 31, 2011, the MDWFP held 50 rodeos statewide. A total of 6,171 youth participated in the rodeos with a range of 10 to over 700 youth per event.

Youth Hunting Seasons

Youth hunting seasons are offered on private and authorized public lands for deer, squirrel, turkey, and waterfowl. These youth seasons allow youth to have the first hunting opportunity for the respective species during the hunting season. For deer, youth may use any caliber they can fire safely even during the primitive weapons season. For youth hunters 15 years of age and younger hunting on private land and authorized state and federal lands, all 3 of the 3 buck bag limit may be any antlered deer.

Wildlife Management Areas

The Mississippi Wildlife Management Area (WMA) system is expansive and diverse. It includes 50 areas encompassing 671,657 acres. Some WMAs are owned by the MDWFP and many are managed under memoranda of understanding with the U.S. Forest Service or private

corporations. Others are operated through long-term license agreements with the U.S. Army Corps of Engineers.

Public hunting constitutes the largest single use of WMAs. While deer hunting is the leading use, at over half of the annual total, there are many other resident and migratory game species available to pursue. Wild turkey, squirrel, rabbit, quail, raccoon, opossum, fox, and bobcat are among the resident species traditionally hunted on our WMAs. Ducks, geese, and doves are the most commonly hunted migratory species, but several other migratory game birds may be taken, too. Wild hogs are classified as nuisance animals and hunters are encouraged to kill them at any lawful opportunity. Wild hogs may be killed during any open WMA hunting season with weapons and ammunition legal for that season.

Today's WMAs serve many other roles in addition to public hunting – fishing, primitive camping, wildlife viewing, photography, wildlife research, and nature study, to name a few. The common link among all WMAs is that they provide habitat for wildlife, game and nongame species alike. In certain locations they even lend themselves to management for threatened and endangered species such as the gopher tortoise, yellow-blotched sawback turtle, and red-cockaded woodpecker. The ability to enhance habitats and regulate public use makes WMAs vitally important for maintaining species of special concern.

Marksmanship Program

The MDWFP Marksmanship Program offers intermediate and advanced shotgunning classes. The classes are hosted through the cooperation of local gun clubs and a grant from the National Shooting Sports Foundation. These "free of charge" classes are taught by four times United States International Shooting Champion, and native Mississippian, John Satterwhite. The students' shot shells, clay targets, instruction, safety glasses, hearing, and eye protection are provided. Shotguns are also available to students if needed. The classes are designed to offer shooting techniques to the hunter that would not normally be taught in our basic Hunter Education classes.

Turcotte Education and Shooting Facility

The Turcotte Education and Shooting Facility is a 250-acre public shooting facility that was opened to the public during 2006. The primary purposes of the facility are education, recruitment, and retention. Ranges offered at the facility include sporting clays, skeet, 5 stand, rifle, pistol, and archery. The facility is maintained through Hunter Education enhancement funding. Since 2006, 8,742 use permits have been issued with over 6,000 people using the facility annually. Currently, the MDWFP is in the process of developing another 190-acre public shooting facility to help address needs in the southern part of the state.

Hunter Education Requirements

All persons born on or after January 1, 1972, must satisfactorily complete a hunter education course approved by MDWFP before purchasing a Mississippi hunting license. Anyone 12 years of age and under 16 years of age must have a certificate of satisfactory completion of a hunter education course approved by the MDWFP before hunting alone. A child under 16 years of age may hunt without having the certificate of hunter education if the child is in the presence and under the direct supervision of a Mississippi licensed or exempt hunter at 21 years of age when

hunting. A resident apprentice hunting license may be issued to a resident over the age of 15 who does not have the required certificate of hunter education. An apprentice license may be issued only 1 time to a resident and the apprentice hunting licensee must be accompanied by a licensed or exempt resident hunter at least 21 years of age when hunting. Volunteer instructors and Conservation Officers certified 10,888 sportsmen in Hunter Education for the 2010 – 2011 hunting season.

License Exemptions

Residents who are blind, paraplegic, a multiple-amputee, adjudged 100% disabled by the Social Security Administration, or 100% service connected disabled by the Veterans Administration or Railroad Retirement Board are not required to purchase a hunting or fishing license. Residents age 65 and older are exempt from purchasing a hunting or freshwater fishing license. Residents under the age of 16 are exempt from purchasing a hunting or fishing license. Any resident who is a member of the U.S. Armed Forces including the Reserves and National Guard, and on active duty outside the state of Mississippi is not required to purchase or have in his/her possession a hunting or fishing license while engaged in such activities while on leave from active duty.

Missouri Department of Conservation

- National Archery in the Schools Program (NASP) has been implemented in schools throughout Missouri.
- Almost 30,000 individuals have been Hunter Education Certified within the last year.
- An on-line Hunter Education Certification course associated with a field day has been implemented to better allow individuals to allocate their time.
- The Apprentice Hunter Authorization allows a non-hunter education certified adult to hunt in the immediate presence of a hunter education certified individual. The Authorization allowed 5,482 adults, most of who had never hunted before, to experience hunting in Missouri in 2011.
- Youth hunter numbers continue to increase in Missouri. Youth hunter numbers had been declining prior to 2001 when Youth only deer and turkey seasons were initiated. In 2001, there were 42,499 hunters that purchased a permit who were under 16 years of age. In 2010, 69,598 individuals less than 16 purchased a permit to hunt in Missouri.
- Missouri Department of Conservation (MDC) personnel provided 54 outdoor skills workshops on canoeing, boating, and fishing skills reaching over 2,798 people.
- Over 221 Interpretive programs were presented by O&E and Fisheries staff throughout the state at Conservation Nature Centers and Hatcheries reaching over 65,848 visitors and participants.
- A total of 734 urban and rural fishing clinics were conducted reaching 40,041 Missourians.
- An on-going program called GO FISH! is aimed at providing angling education and experiences to underserved urban and suburban youth of St. Louis City and STL County. A total of 148 GO FISH! events were attended by 2,548 St. Louis youth residents, ages 7 to 15yrs.
- For the MDC internet site a new "Protect Your Fishing" minisite, which helps anglers identify and control the aquatic invasive species that threaten their waters, was developed. A new page on didymo and how to control it was also included. The Fishing Section of the internet site received over 999,453 visits.
- Forty-two videos were posted to the MOFishing1 YouTube channel on fish id, fishing, fish recipes, stream team, zebra mussels and other aquatic related videos. The number of views on this channel was 126,778.

North Carolina Wildlife Resources Commission

The North Carolina Wildlife Resources Commission has a number of programs, activities and opportunities that directly and indirectly address recruitment and retention of hunters, anglers and others with an interest in wildlife-associated recreation. Like many agencies we have a robust hunter education program and have been developing the National Archery in the Schools Program (NASP). We have community fishing and fish for fun events. We have disabled hunter and youth hunts. We have youth waterfowl and wild turkey days. We have BOW events. Youth under age 16 are not required to have a hunting or fishing license. We have engaged in efforts to reduce regulation complexity and promote hunting, fishing and wildlife-associated recreational opportunities. We recently finished a complete overhaul of our website (www.ncwildlife.org) designed to facilitate connecting our constituents to opportunities. We have begun engaging in the use of social media. We have one employee dedicated to hunter recruitment and retention. The above is a quick summary, though not all-inclusive, of various efforts and opportunities the agency is engaged in related to recruitment and retention.

However, our most recent effort has been an evaluation of our hunter mentoring campaign. It was built around the concept that it takes a hunter to make a hunter. We wanted to determine if there was an interest in mentoring, whether we could influence individuals to mentor someone and what barriers, if any, hampered mentors. A summary of that effort, including selected results, is below.

Mentoring Campaign Summary

Introduction

The Hunting Heritage Program of the North Carolina Wildlife Resources Commission (NCWRC) is based on the premise that “it takes a hunter to make a hunter,” and that the recruitment and retention of hunters is critical to long-term conservation and management of North Carolina’s wildlife resources. It is vital, therefore, that mentoring be recognized as an essential component toward recruitment and retention efforts. We created the Hunting Matters! “Hats On” Mentoring Campaign (Hats On) to bring awareness to the importance of hunter mentoring in maintaining our hunting heritage and as a mechanism for better understanding barriers to hunter recruitment and retention in North Carolina.

Hats On Initiation/Registration

Hats On began on March 5th 2010 at the 30th Annual Dixie Deer Classic (DDC) at the State Fairgrounds in Raleigh. Participants in the Hats On campaign pledged “to make a good faith effort” to introduce someone new to hunting (youth or adult) during the 2010 hunting season. Persons who had a valid North Carolina hunting license or had a valid North Carolina mailing address were eligible to participate. We gave eligible participants custom designed “Hats On” hats and bumper stickers to promote mentoring awareness and as an incentive to participate in Hats On. Participants could register using paper forms available at the DDC or on-line via the NCWRC website. A total of 3,543 eligible registrants signed up for the campaign, with 2,857 registering on-line and 686 completing paper registration forms. Hats On registration ended November 1, 2010.

Evaluation Methods

Beginning in January 2011 we contacted all eligible Hats On participants and asked them to complete a survey about their mentoring experiences and barriers to mentoring. Participants for whom we had a valid email address were sent up to three requests via email to complete the survey online. We then mailed a paper version of the survey to anyone who had not completed the survey online. Participants who did not provide a valid email address were mailed two requests to complete the survey online, and then received up to two mailings of the paper version of the survey. All Hats On survey respondents were entered in a drawing for a State Comprehensive Lifetime Hunting License valued at \$250.

Selected Results

A total of 2,429 Hats On participants completed the post-campaign survey with 1,948 completing on-line and 481 completing paper surveys. The overall Hats On adjusted response rate (calculated by omitting incorrect addresses and persons ineligible to respond) was 69%.

When asked on the post-campaign survey, 67% of participants indicated they had taken one or more new hunters on his or her first hunting trip in 2009 and 78% had done so in 2010, representing a 11% reported increase in participants that mentored someone in 2010 vs. 2009.

We also examined barriers to mentoring new hunters. The following percentages of Hats On participants who, according to the post-campaign survey, did not personally take one or more new hunters on his or her first hunting trip in 2010 indicated the following as being barriers to mentoring someone new in 2010:

- The person(s) I intended to mentor and I could not coordinate our schedules to hunt (54%).
- The person(s) I intended to mentor could not find time to go hunting (52%).
- I did not know anyone whom I could mentor (46%).
- The person(s) I intended to mentor could not find the time to schedule a hunter education course (41%).
- The cost of leasing land for hunting was too expensive (41%).
- I did not have enough time to mentor (33%).
- I did not have access to land for hunting (30%).
- The person(s) I intended to mentor changed their mind and decided not to go hunting (23%).
- The property I used to hunt on was no longer open to hunting (20%).
- I needed information about permitted youth/disabled hunts in my area (19%).
- Game populations were too low (19%).
- My health or age limited my hunting (19%).
- My income changed and I could not afford to go hunting any longer (17%).
- The person(s) I intended to mentor had no hunting equipment and I was unable to provide any for them to use (17%).
- I needed more information about how to mentor (13%).
- Hunting regulations were too confusing (11%).

We also were interested in participant's opinions as to whether or not the Hats On campaign contributed to their decision to mentor. Most (64%) participants indicated Hats On was very or somewhat important in their decision to mentor a new hunter in 2010.

In an effort to investigate informational barriers to hunting, we asked Hats On participants to indicate their interest in obtaining hunting information via the NCWRC. The following percentages of participants indicated interest in the following sources of hunting-related information:

- Hunting information via the NCWRC website (69%)
- Hunting information updates by email (60%)
- Skills-based hunting workshops about game species, equipment and hunting methods (57%)
- Interacting with other hunters and NCWRC staff using on-line social networking sites such as Facebook (36%)

RECOMMENDATIONS

Hats On respondents reported an 11% increase in mentoring post-campaign vs. pre-campaign with 64% indicating Hats On was very or somewhat important to their decision to mentor a new hunter in 2010. Respondents who did not take a new hunter on his/her first hunting trip identified a number of barriers to their efforts.

The majority of respondents indicated an interest in getting hunting-related information through the NCWRC website, by email and in skills-based hunting workshops. Fewer (36%) Hats On participants indicated an interest in getting hunting information using social media.

Recent research has indicated that most hunters (55%) are unaware of programs designed to recruit and retain hunters with only 11% of active hunters and 2% of inactive hunters participating in these programs. If we are to successfully maintain and or increase our hunter population in North Carolina, efforts directed at increasing awareness to the importance of hunter mentoring including the value of understanding and addressing barriers to hunter recruitment and retention is paramount.

Based on current research and Hats On evaluation results the following recommendations should be considered to address hunter recruitment and retention in North Carolina:

- Reinstate Hats On as early as 2012 with continued program evaluation.
- Continue to develop, promote and provide partner-facilitated skills-based hunting workshops.
- Promote, enhance and provide web-based hunting information, social networking opportunities and seek out additional opportunities to improve outreach efforts.
- Develop initiatives to address barriers to recruiting new hunters within the NCWRC's control beginning with the reported top five barriers indicated by respondents that did not personally take one or more new hunters on his or her first hunting trip in 2010. These may include:

- Address concerns relative to time constraints (i.e., lack of time and or other obligations) by creating website and printed information encouraging hunters to spend more time afield to: interact with and learn about nature, interact with family and friends outdoors, enjoy opportunities for fresh air and exercise and health aspects of acquiring and eating free-range protein, relieve stress and enjoy the personal value of maintaining the tradition of hunting for current and future generations. Essentially this would be an effort to get people that are interested in hunting but feel they have time constraints to potentially re-prioritize some of their activities in favor of hunting.
- Address communication barriers between potential mentors and new hunters (i.e., lack of knowledge concerning someone to mentor).
- Address potential new hunter timing constraints (i.e., could not find the time to schedule a hunter education course) through implementation of a Hunting Heritage License. This would temporarily “put-on-hold” the hunter education certification requirement in an attempt to prevent the loss of a spur-of-the-moment hunter recruitment opportunity and contribute a needed source of funding for Hunting Heritage Program initiatives.
- Alleviate some concerns relative to cost of leasing land for hunting by promoting public lands opportunities.
- Specific promotion of permit hunting opportunities on Game Lands based on the minimal use (13% or less) by post-campaign respondents when mentoring someone new to hunting in 2010.

Oklahoma Department of Wildlife Conservation

Current programs for hunter and angler recruitment

Oklahoma Archery in the Schools

- Began in 2004 in 8 pilot schools; 237 active schools in 2010
- Teachers Trained: 802
- Student Participants: 20,000 - 25,000 annually
- Student Participants at State Shoot 2010: 1,600 (Due to continued growth of the program, 2011 will have five regional shoots in Feb before State Shoot in March)
- Grant Money Allocated: Since 2005 Oklahoma Department of Wildlife Conservation (ODWC) has provided over \$250,000 in partial and full grant funds to new schools. Additional funds have been provided by the National Wild Turkey Federation State Chapter, Oklahoma Station Chapter of Safari Club International and Local Quality Deer Management Association chapters. Oklahoma's 237 active schools have provided over \$200,000 in matching funds. On average each school today has to come up with \$1,200- \$1,400 in matching funds to be eligible for an ODWC partial grant.

Explore Bowhunting

- An educational program designed to help instructors, program leaders and educators teach students ages 11-17 the basic skills of bowhunting. The Archery Trade Association created this program to spark an interest and passion for bowhunting in today's youth. Through these hands-on experiences students gain confidence interacting with the natural environment and strengthen their appreciation for wildlife and the woods.
- Oklahoma was chosen as a pilot state for the Explore Bowhunting Program. ODWC opted to pilot the program with ten pilot schools during the 2010/2011 school year. All are actively involved in the Archery in Schools Program and all of the teachers also went through the Hunter Education instructor workshop during the summer of 2010.

Hunter Education

- Approximately 15,000 hunters certified per year.
- Offering both a home study workbook and home study internet option.
- List approximately 90 percent of the courses for the year in the Oklahoma Hunting Guide (regulations) allowing potential hunters a better chance to fit a class into their schedule.
- Continue to work on improving course schedule by adjusting times of the year classes are offered, where they are offered and increasing the number of classes if needed.
- Scheduled extra hunter education classes the two weekends before deer gun season which is when hunter education is in most demand. Last year there were more than 4,000 students certified the two weeks before the opening of deer gun season.

- Worked with Oklahoma Station Chapter of the Safari Club International to provide a free youth deer license to 350 hunter education students in 2010-2011, thus nearly ensuring the winner's conversion to a hunter.
- Shortened the hunter education class from 10 to eight hours while focusing on safety and ethics, which gave young people a better chance to pass the class and made it more convenient for constituents.
- Certified 25 Ag teachers as hunter education instructors. This allows them to teach the class to their shooting sports students.
- New in 2010: Updating hunter education video collection to capture more up-to-date concerns and needs of hunters.
- New in 2010: Revised hunter education manual and test to better reflect Oklahoma-emphasis. Manual was developed in conjunction with the University of Central Oklahoma.
- New in 2010: Under NSSF grant, trained 100 Archery in the Schools teachers to also teach Hunter Ed in the classroom. Over 6,000 students enrolled this fall. Courses will be completed by December. Grant includes an evaluation component: pre/post course assessment of hunting interest and participation, cross-reference of license purchase in sales database. These students will participate in both Archery in Schools and hunter education this year, which should lead to an increased desire to hunt.

Apprentice-designated hunting licenses for those lacking hunter education certification

- New in 2006
- Available for both small game and large game hunters. Any age can hunt small game with a mentor, large game hunters must be 10 years of age or older.
- Under NSSF grant made special outreach effort made in 2007. Several radio spots ran on several stations in weeks leading up deer gun season publicizing the availability of the apprentice-designated license.
- Allows people to hunt without hunter education certification, while maintaining safety by requiring a "mentor" hunter to be present.
- Due to the large number of apprentice-designated licenses sold, it is clear that many people went hunting who not have had the opportunity to otherwise.
- Under NSSF grant, offering a free copy of the new WMA Atlas to the first 1,000 apprentice-designated hunters. Grant includes an evaluation component: follow-up survey with apprentices to assess participation, examine sales patterns in license sales database.
- New in 2010: Increased publicity of apprentice-designated license option through increased news releases, magazine articles and more mentions on the "Outdoor Oklahoma" television show.
- New in 2010: New slogan developed and used in outreach efforts.

Youth seasons

- Early opener for youth only (waterfowl, turkey, deer gun)

Youth controlled hunts (lottery hunts)

- On our Wildlife Management Areas, 30% of the controlled deer hunts and 27% of the spring turkey hunts are designated for youth.
- Guided youth waterfowl hunts: 12-15 year olds lacking an adult mentor.
- Private land youth controlled hunts: 12-16 year olds accompanied by non-hunting adult (on selected private properties with landowners who opt to participate in the program).

ODWC Youth Camp

- Annual week-long onsite camp for 35 kids aged 14-16 years old
- Designed to give youth an increased awareness of protecting and managing Oklahoma's wildlife resources. It also provides an excellent opportunity for youth to explore possible future careers in wildlife management.
- Instructors are game wardens, wildlife and fisheries professionals and dedicated hunters and anglers.

Shotgun Training and Education Program (STEP)

- Goals of hunter recruitment, improved wing shooting skills, promote safe gun handling, education on nontoxic shot, etc.
- 12 trailers around the state.
- Began in the 1990's.
- Over 1,000 workshops conducted with over 100,000 participants (average ~15K/year recently).
- 60% youth; 20% female.

Aquatic Resources Education (ARE)

- Approximately 20,000 participants annually in an average of 260 clinics; 350 instructors.
- Approximately 20,000 pounds of catchable sized catfish stocked annually for AREP events.
- Goal: To enhance the awareness, appreciation and understanding of Oklahoma's aquatic resources, and to promote the learning of angling skills, outdoor ethics and sport fishing opportunities available in our state.
- Moving toward Family Fishing Clinics where we can work with the whole family and show parents how easy it is to go fishing with their children and how much they enjoy it. We allow them to keep a couple of fish and show them how to clean them (take home fillets). Builds confidence for them to go fishing on their own.
- A secondary benefit of the program is the positive public relations between ODWC staff and the current and future constituents who participate in the clinics.
- Effectiveness: There are many factors that contribute to the development of an angler. Saying that this program by itself recruits or retains anglers would be hard to prove. However, ODWC clinics provide a positive experience and many of the participants catch their first fish at the clinics. In most cases simply catching a fish increases the new angler's interest in fishing. The majority of the clinics are held at publicly accessible waters, providing participants with access to a fishing spot in the

future. All stocked fish are not caught during the clinics, improving the fishing conditions in these small impoundments for the community.

Close To Home Fishing program

- Goal: To provide Oklahoma metropolitan residents quality fishing within a neighborhood-based program by focusing on angler desires, use and benefits, and by implementing management techniques on urban ponds, emphasizing increased opportunity, fishing & boating access, aquatic education, and outreach.
- 12 participating communities.
- 27 bodies of water.

Wildlife Expo

- Began in 2005
- Free event, centrally located in the state, offers hands-on experience with a wide variety of outdoor recreational activities and educational opportunities.
- Most popular activities: archery, shooting (shotgun & pellet gun), kayaking, fishing, tasting wild game samples.
- Currently a 3-day event (Fri-Sun) with one day intended for school field trips.
- 2010 attendance estimate: >52,000; exit surveys indicate 61% were first-time visitors.

Participation in grants from RBFF (state marketing campaigns) and NSSF

- Over the years, ODWC has used funds from NSSF's Hunting Heritage Partnership Program for five projects. We often seek help for innovative ideas that might not be possible under normal operation budgets (direct mail, radio ads, etc).
- We've also partnered with RBFF for direct mail marketing efforts for several years.
- Grants always include an evaluation.

Consolidation of licenses to reduce confusion, streamline

- A legislative task force in 2009 challenged ODWC to streamline licensing options to reduce confusion as a potential barrier to participation. Some licenses were consolidated, consumer-choice options were added (e.g., calendar year licensing vs. year-to-date), and a few licenses were dropped (e.g., the trout license is no longer required).

Land acquisition for public hunting/fishing

- In 2004, began assessing a Hunting and Fishing Legacy Permit fee of all license buyers, with funds set aside for land acquisition for public hunting and fishing.
- So far, four acquisitions funded at least in part by Legacy funds, 7,800 acres.

Twitter account

- A few tweets/week (approximately 15/month)
- 486 followers

Email distribution lists

- Weekly Wildlife News (29,622 recipients), Weekly Fishing Report (2,522 recipients), Seasonal Waterfowl Report (2,216 recipients), monthly nongame WildSide e-newsletter (3,595 recipients), Your Side of the Fence private landowner e-newsletter (3 times/year; 2,714 recipients), Media (429 recipients)

Website

- 1.3 million visitors in 2009; 714,605 unique visitors
- Over 1,000 pages; average visitor views 4 pages

Typical outreach to “core constituents” (TV show, magazine, regulations, etc)

- *Outdoor Oklahoma* TV show
 - 26 new shows/year (re-runs during non-peak season; shows aired every week)
 - Aired statewide on public television network as well as 4 other smaller stations
 - Estimated audience exceeds 100,000 households per week)
- *Outdoor Oklahoma* magazine
 - issues per year
 - Approximate 10,000 subscribers
- Three “guides” (magazines with regulations and lots of helpful information):
 - Hunting Guide (500,000 printed)
 - Fishing Guide (450,000 printed)
 - Waterfowl Guide (200,000 printed)

South Carolina Department of Natural Resources

RECRUITMENT AND RETENTION OF HUNTERS, ANGLERS AND SHOOTERS IN SOUTH CAROLINA

A Committee Report

Prepared for the Committee by

Derrell Shipes

December 2009

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Special thanks to the committee who met on at least 6 occasions to present and discuss information about South Carolina Department of Natural Resources (SCDNR) Programs and information from other states and regions. Jim Wagers (now retired), Billy Downer, Karen Swink and Dennetta Dawson represented the Hunter Safety Program and Lynwood Kears represented the Take One-Make One Program (TOMO), both of the Law Enforcement Division (LE). Derrell Shipes and Ross Self represented the Wildlife and Freshwater Fisheries Division (WFF), Rhett Box represented the Marine Resources Division (MRD), Monica Linnenbrink (no longer with SCDNR) represented our Marketing Program of the Outreach and Support Services Division (OSS), Emily Cope represented the Director's Office and Mike Willis represented the Public Information Office of OSS.

Much of the information cited in this document is of recent origin because the issue of declining numbers of hunters, anglers and shooters is under scrutiny by national, regional and state interests. Our research conducted on this subject made our task easier because relevant documents and information were readily available and the information is appropriately cited.

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1. INTRODUCTION

Much has been written and discussed about the changes in structure and culture of the US population. Population growth and movement to urban areas have contributed to the decline of family farms and access to woods, fields and water. The opportunity for young people to experience the social atmosphere of family or friends going afield to hunt, fish or shoot has declined greatly.

According to the *2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation* (USFWS/U.S. Census 2007), 14.1 million US residents >6 years of age hunted in 2006. This represents approximately 5% of the total US population.

License sales information from the SC Department of Natural Resources (SCDNR) and population estimates from the US Census Bureau indicate that only 5.4% of SC's residents aged 16-63 (license age) purchased a hunting license in 2007. The percent of resident license age individuals purchasing hunting licenses in SC has declined from 10.7% in 1975 to 5.4% in 2007 (-50%) (Figures 1 and 2).

The SC General Assembly created the Junior Sportsman's license for 16- and 17-year olds in 1986 at a cost of \$16; it included privileges of the State Hunting and Freshwater Fishing Licenses, Big Game and WMA permits. This new license represented a cost savings for those who hunt big game, hunt on WMA lands or who hunt and fish in freshwater. Individuals taking advantage of this new license may best be described as the more avid young sportspersons. A review of the SC license and census information noted above indicates that 5,861 or 5.4% of that age group purchased this license when it was introduced in FY 1987. In 2007, purchase of these licenses had declined to 3,640 or 2.8% of that age group (Figure 3 and 4).

A significant indicator of lagging or declining hunter recruitment and retention is the aging of hunters in SC. The SCDNR Deer and Turkey Program conducts annual random surveys of deer and turkey hunters primarily to collect harvest information. These efforts indicate that in 2005 the average age of SC deer hunters was 43.5 years, and in 2007, the average age of SC turkey hunters was 44.0 years.

Overall, age in SC is increasing, and a 2003 analysis of fishing license sales showed counties with older individuals were more likely to purchase fishing licenses (Responsive Management, 2003). Nationally, as the population's age increases, the percentage of older age cohorts declines. In SC as well, retired individuals were more likely to state their fishing participation had declined (Responsive Management, 2002). However, one trend that is negatively impacting fishing license sales in SC is increasing urbanization. Analyses show that fishing participation and license sales are more likely in rural counties (Responsive Management, 2003).

A survey of SC youth determined that 91% of those between the ages of 8 and 18 had fished at least one time in their lives (Responsive Management, 2001). Additionally, 62% of SC Recruitment of youth to fishing does not appear to be a problem in SC. Retention of those SC residents exposed to fishing at an early age requires additional attention.

In contrast to many sectors of hunting and fishing, saltwater fishing license sales have increased at a steady 3-4% for the last decade. At the same time, there has been controversy regarding harvesting and retention in some high profile fisheries such as grouper and red drum. Under a scenario of decreasing access for individuals to some fisheries, a marketing focus on recruitment and retention of fishermen could be viewed as contradictory. Moreover, the saltwater fishing license was modified in 2009 to include all fishermen who pursue marine fish, not just those who fish from a boat. The change resulted in a significant increase in the number of licenses sold. With the steady growth in license sales and controversy about overfishing red drum, red snapper, and possibly other species, it may be contradictory to urge fishing recruitment/retention while declaring that some species are experiencing overfishing and recognizing public acrimony and doubt exists about catch limits.

Data suggest that only about 15% of anglers obtain a saltwater fishing license every year. There may be some potential to retain more anglers on an annual basis. Growth in saltwater fishing continues on its own with relatively little encouragement by DNR. A 30% increase in license sales may occur over the next decade if current trends continue. A more appropriate strategy is to advocate *better* saltwater fishing, rather than *more* saltwater fishing.

The license age (16-63) resident population in SC increased by 58.2% from 1975 to 2007 while the sale of resident hunting licenses declined by 20.3% and the sale of freshwater fishing licenses increased only 20.4%. During this same period, the population of 16- and 17-year old SC residents increased by 17.0% while the sale of Junior Sportsman's Licenses declined by 37.9%. Based upon these indicators, hunting seems to be declining significantly and freshwater fishing has not kept pace with population growth.

A little different look at licensing and census information is shown in Figures 5 and 6. In these charts the percentage of each age cohort (16-63) who purchased a hunting or fishing license is demonstrated as the percentage of that cohort. Several observations are noteworthy. First, for both hunting and fishing, there seems to be a significant purchase of the first license at 16 years of age. It then declines and is relatively stable until 25-30 years of age where it increases. The most significant participation in hunting and fishing in this population among the cohorts investigated occurred between 30-45 years of age. Second, we could only generate one year of information because of Department database limitations. An analysis of 5-10 years of similar data using Change in Ratio (CIR) statistical techniques would provide extremely important temporal information relative to cohorts.

We have little, if any, information about recreational shooting (other than hunting) in SC. While the state has organized clubs and organized events, the SCDNR has not, until recently, made an effort to establish contact with the clubs or get involved in the events. If these individuals do not hunt or fish, they are not required to purchase SCDNR license. An overlap in the shooting and hunting sports occurs because, except for archers, hunters shoot firearms and contribute to excise taxes that are returned to SCDNR.

Figure 1. The number of SC residents between 16 and 63 (license population) from 1975 through 2007.

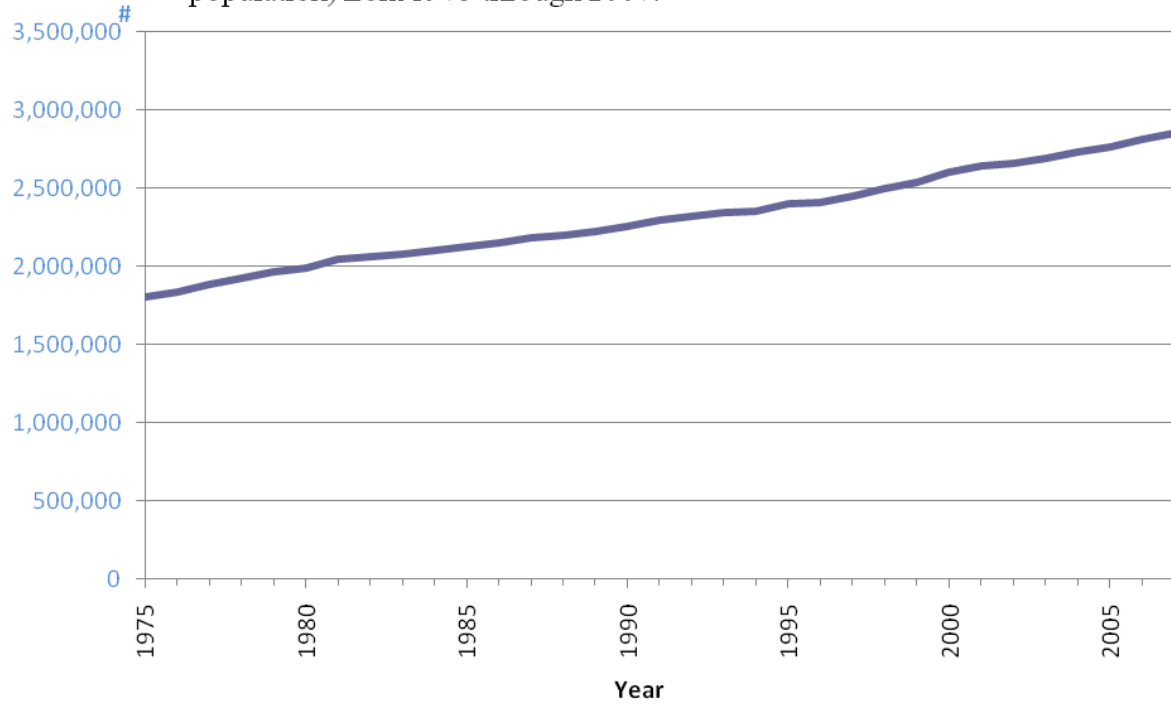


Figure 2. The number of SC resident hunting and freshwater fishing licenses sold from 1975 through 2007.

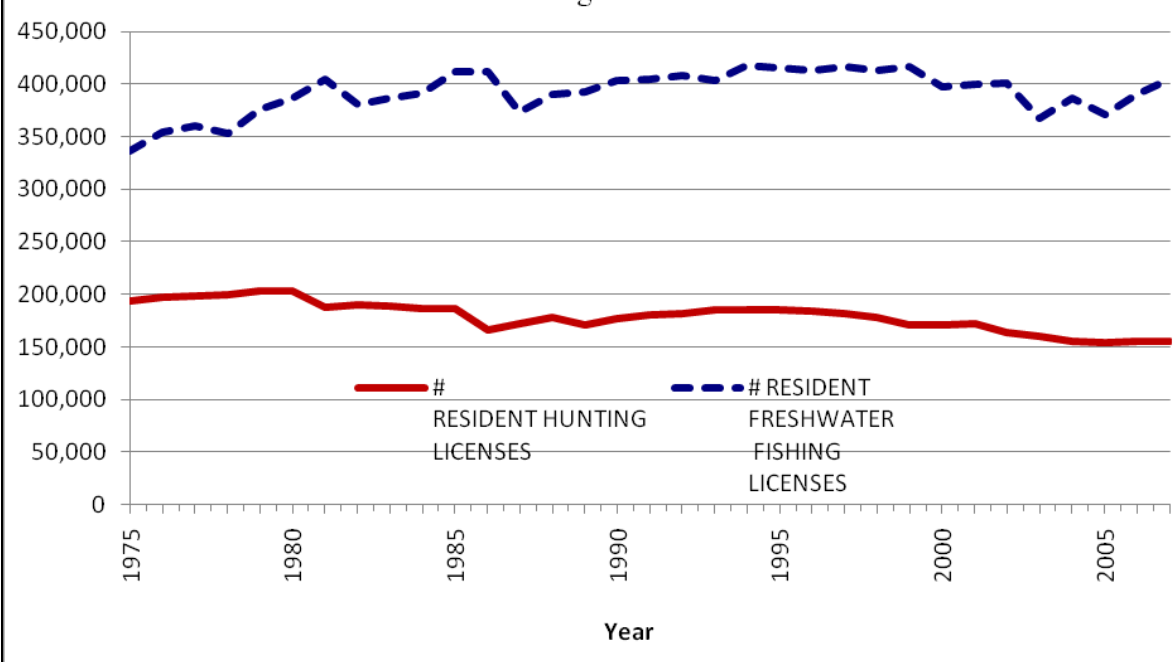


Figure 3. The number of 16 and 17 year old residents of South Carolina from 1986 through 2007.

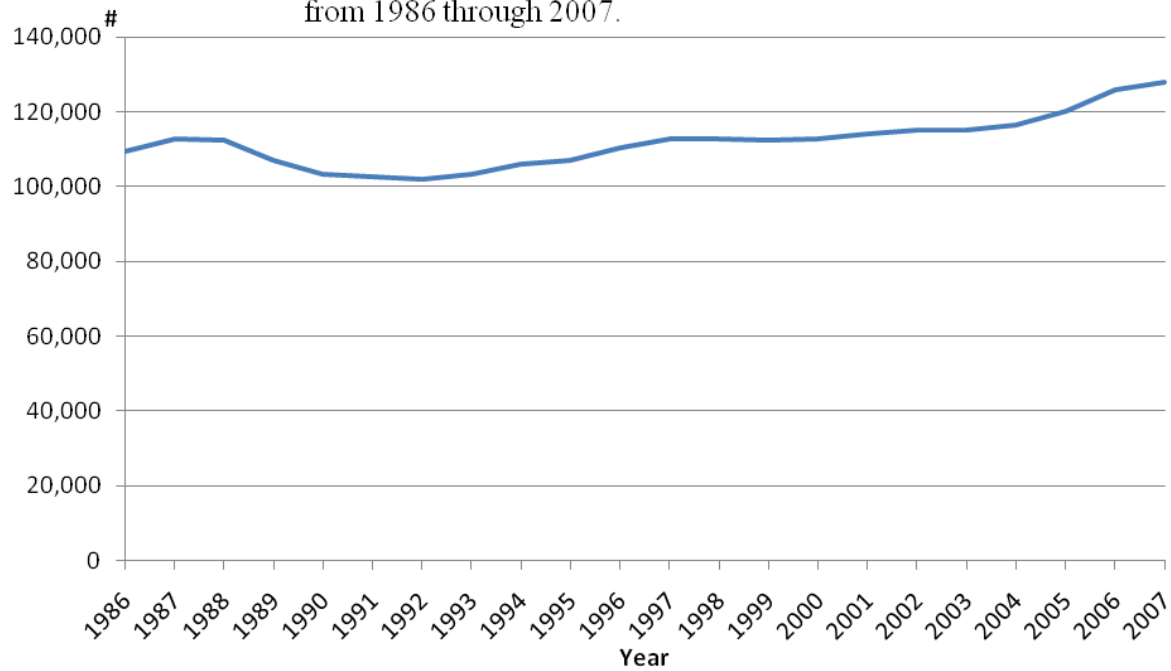


Figure 4. Sale of Junior Outdoorsman Licenses in SC from it's introduction in 1986 until 2007.

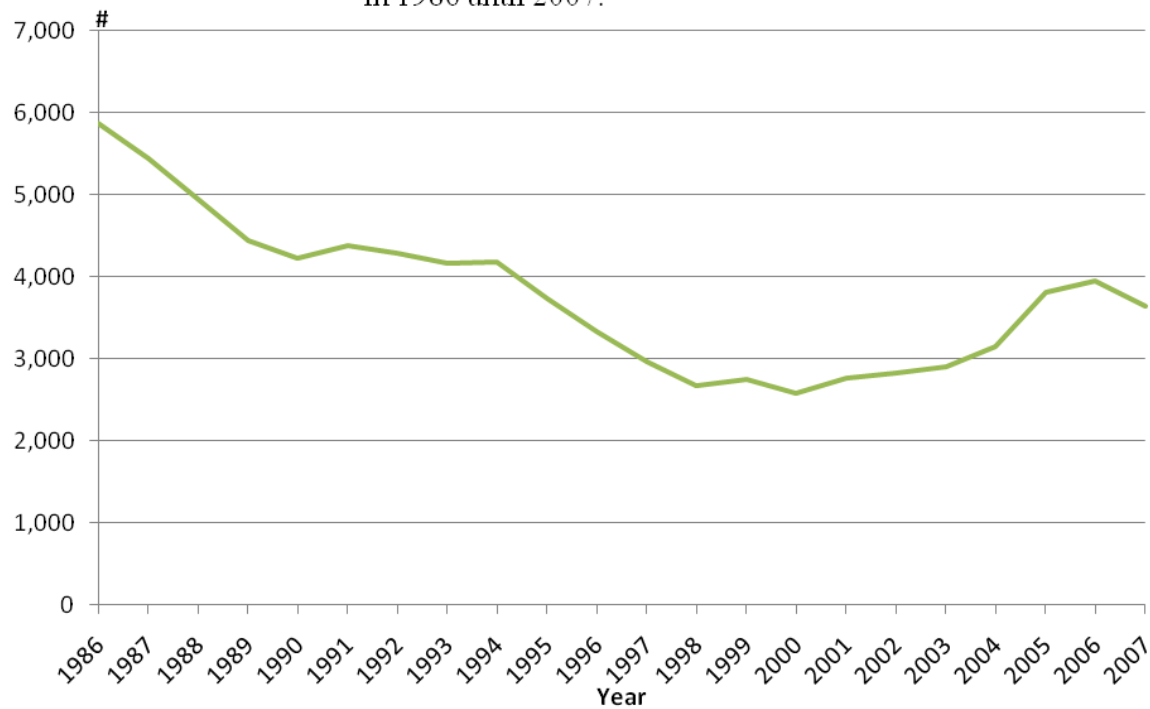
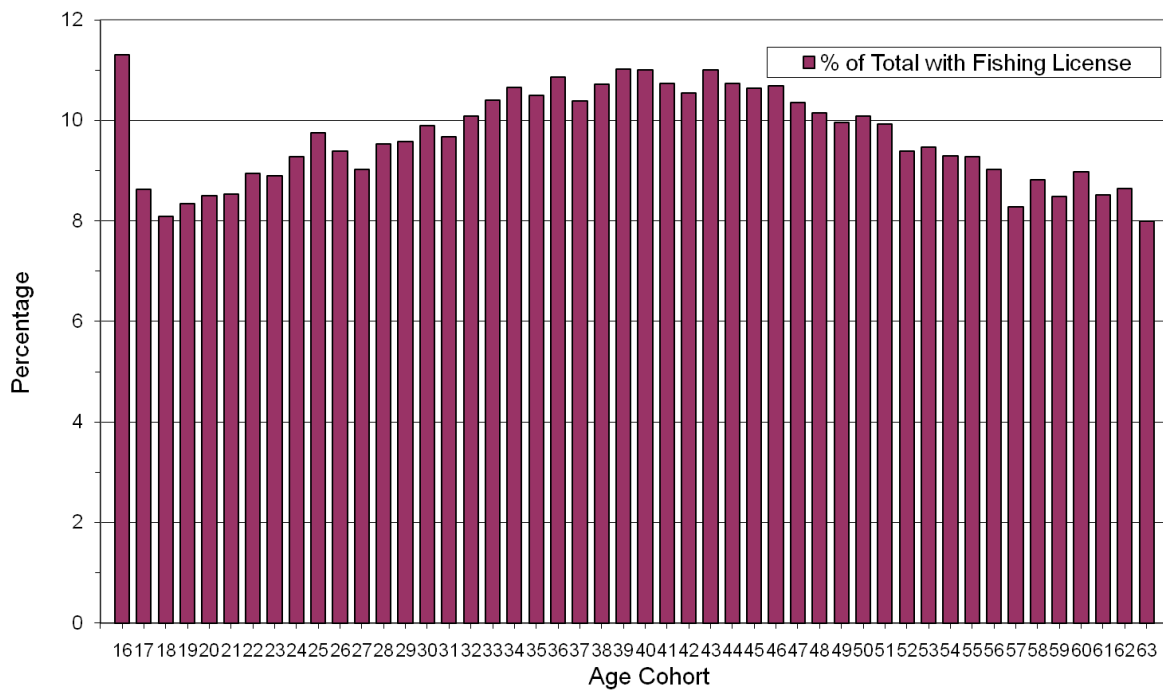


Figure 5. Percentage of SC population by age cohort who purchased a hunting license in the 2007-08 license year.



Figure 6. Percentage of SC population by age cohort who purchased a fishing license in the 2007-08 license year.



Important components of the dynamics of population and license purchase are the parameters called “churn rate” and “lapse”. A lapsed hunter or angler is one who buys a license one year but does not buy a license the following year and the “lapse rate” is the percentage of lapsed hunters or anglers in each subsequent year.

More precise definitions of “churn rate” and “lapse” are offered by Responsive Management/National Shooting Sports Foundation (2008). They define an “active hunter” as one who has hunted in the previous 2 years; a “recently lapsed hunter” is defined as one who has hunted in the past 5 years but not in the past 2; and an “ex-hunter” is defined as one who hunted at some point but has not hunted in the past 5 years. “Churn rate” is defined as one who has hunted in at least one of the past 5 years but not in every year. SCDNR license data have not been managed in such a way to apply these definitions to the SC licensee database and conduct analyses.

The national churn rate for hunters is reported to be approximately 37% (Responsive Management/National Shooting Sports Foundation, 2008). This national information is similar to reports by other researchers. The hunter lapse rate for SC from 2007 to 2008 was less at 26% but, using the given definition, this value would represent an absolute minimum value for the churn rate.

The national churn rate for anglers is approximately 56% (Southwick Associates, 2007). Only 15% of anglers nationally bought a license in five out of five years between 2001 and 2005. Based on fishing license sales data from 2006 through 2008, the lapse rate for anglers in SC is about 43%.

2. FACTORS ASSOCIATED WITH RECRUITMENT AND RETENTION

For the purposes of this effort, **recruitment** of hunters, anglers or shooters is the act of bringing a person into these sports through participation in an activity. The person should leave the activity with a positive experience and opinion toward hunting, angling and/or shooting. The ultimate goal of recruitment is the conversion of one who does not hunt, fish or shoot, or has lapsed from these activities, into one who participates regularly in at least one of these sports, purchases appropriate equipment and supplies and purchases appropriate SC hunting and/or fishing licenses.

Retention of hunters, anglers or shooters is the act of maintaining a positive economical or political involvement through participation in hunting, fishing or shooting. This includes the continuous purchase of appropriate SC hunting and fishing licenses.

The *Best Practices Workbook for Hunting and Shooting Recruitment and Retention* (Seng, et al., 2007) reports that the top impediments to hunting satisfaction among active hunters are:

- Not enough public access
- Not enough places to hunt
- Work obligations
- Poor behavior of other hunters
- Too many hunters in the field.

Responsive Management (1995) reports several top issues that strongly influenced inactive (lapsed) hunters not to hunt:

- Lack of free time
- Work obligations
- Loss of interest
- Family obligations.

Seng et al. (2007) described eight basic progressive stages of hunting/shooting participation:

- Awareness
- Interest
- Trial
- Continuation with Support (Apprentice)
- Continuation without Focused Support
- Continuation as a Hunting/Shooting Proponent
- Temporary Cessation
- Permanent Desertion

Seng et al. (2003) reports that anglers often pass through four stages:

- Awareness
- Interest
- Trial
- Adoption/Continuation

“Being in a hunting culture--such as having friends and family who hunt or at least approve of and support hunting--is vital in hunting recruitment, wherein experienced hunters help initiate new people into hunting” (Decker, et al., 1984, Decker, et al., 1992). “It is easier to recruit a person into hunting who is familiar with hunting and is part of a hunting culture than it is to recruit a person from outside the hunting culture. Indeed, it takes a hunter to make a hunter” (Responsive Management 1995, Responsive Management/National Shooting Sports Foundation, 2008).

We believe these principles to be true for angling and shooting also. The problem with this model is that many parents may not know how to properly introduce their children to these sports and start them where the adults are in their journey - rather than starting at a simpler, less disciplined initiation or trial point. In some cases, fathers do not take time from their recreation with adult friends or family to introduce their children to these outdoor sports. Second, family structures have changed and there may be no father or mother figure who has the time or resources to feed the enthusiasm of the young person for the outdoors and these sports.

The remaining chapters of this report represent the committee’s consideration and review of SCDNR programs that have a stated objective of recruitment and/or retention of hunters, anglers and shooters. The final chapters include recommendations for new activities or programs to further these efforts. It should be noted that a considerable amount of work related to recruitment and retention of hunters, anglers and shooters is underway by social scientists funded by several federal grants. Some of the work is cited in this chapter. The critical part of any effort will be to clearly state objectives, collect information, conduct appropriate evaluations of the information and adapt the programs based upon this evaluation and the other current information available.

D.J. Case Associates (2008) lists the first of ten reasons that recruitment programs do not succeed as the “feel good factor.” Just because a young person has a good outing at a hunting, fishing or shooting event does not mean that a future licensee has been created. Such an experience is an important part of the process, but alone, it is not enough.

3. PLAN OVERVIEW

SCDNR's Recruitment and Retention Committee was created by the Executive Office and directed to develop a Hunting, Fishing and Shooting Recruitment and Retention Plan with the goal of increasing participation in these activities. Since research shows participation in these activities is declining, it is important that SCDNR take a proactive approach to attempt to reverse these trends.

The developed plan addresses the impediments to hunting, fishing and shooting participation and the awareness-interest-trial-adoption process identified in the research cited earlier in this report. This plan recommends efforts to overcome participation impediments and efforts that can progressively move potential participants through the awareness-interest-trial-adoption process (sequential programming).

This plan begins by identifying overarching goals and objectives for the R&R effort. Recommendations are provided for what SCDNR needs to do to reach the goals and objectives identified. An inventory and evaluation (where available) of existing R&R programs and recommendations to enhance these programs to better align with the goals in this R&R plan are also included.

SCDNR Recruitment and Retention Goal(s)

- Recruit new youth hunters, anglers and shooters.
- Recruit new adult hunters, anglers and shooters.
- Recruit lapsed hunters, anglers and shooters. Lapsed hunters, anglers and shooters are defined as people who do not participate every year.
- Retain existing hunters, anglers and shooters by advertising opportunities and by providing additional opportunities particularly for anglers and shooters.
- Increase the public's knowledge about who funds conservation of SC natural resources.
- Increase support for hunting and fishing as wildlife/fisheries conservation tools.

Success Measures: How do we measure success?

- Individual program enrollment and participation.
- Sale of licenses-This includes the ability to track individuals through the individual programs and licensing.
- Conduct surveys to determine current participation rates in hunting, shooting and fishing. Surveys would also ask South Carolinians if they support hunting and fishing as a wildlife/fisheries conservation tool and ask if they know who pays for conservation of SC's natural resources. Gather baseline data through the surveys, and implement actions listed in this plan. After 5 years, implement another survey to determine any changes.

Approach

- Develop Recruitment and Retention Plan.
- Identify existing SCDNR programs that have a goal of recruiting and retaining hunters, anglers and shooters.
- Determine which programs are the most effective and make recommendations to enhance programs to align with R&R effort.

- Identify other programs and strategies that can be used to reach R&R goals.
- Implement plan.
- Evaluate.

Target Audiences

- Youth with an interest in hunting, fishing & shooting.
- Women with an interest in hunting, fishing & shooting.
- Minorities with an interest in hunting, fishing & shooting.
- Existing hunters, anglers & shooters.
- Lapsed hunters, anglers & shooters.
- Media.
- Non-governmental organization partners (4-H, NWTF, QDMA, DU, SCWA, SCWF, etc.).

Strategies to reach goals

In order to address the impediments to participation identified by research and to ensure SCDNR has R&R efforts that progress potential participants through the awareness-interest-trial-adoption process, it is recommended that the following strategies be implemented to reach the goals identified in this plan. It is important to point out that these strategies must work together, not independently, to reach the goals of this plan.

- Education
 - Youth recruitment programs
 - Minority recruitment programs
 - Adult recruitment programs
- Marketing/Awareness
- Legislative
- Access
- Evaluation

Overarching Recommendations

Develop Department database that can track people who participate in SCDNR programs. The database should be linked to SCDNR's license sales and hunter education database. SCDNR staff who coordinate R&R programs need to be able to enter participant data into this database and, once entered, the participant's involvement with SCDNR programs should be updated when they participate in additional SCDNR R&R efforts. This database can also be used to promote SCDNR programs to people who have expressed an interest in hunting, fishing and shooting. It is important that this database be designed with the ability and tools to track where the person is in the awareness-interest-trial-adoption process.

- Ask all R&R program coordinators to maintain records of program participants. Program coordinators need to use the same registration form (See Appendix for recommended form). This form will be used to enter participants into the developed Department database.
- All R&R efforts and programs must have an evaluation component. Participant surveys will be completed to evaluate effectiveness. Survey questions must show how the program meets goals and objectives.
- Conduct a public opinion poll every 5-7 years to determine hunting, fishing and shooting participation rates. The poll will also determine the percentage of South Carolinians who support hunting and fishing as a fish and wildlife management tool. The results of the first year's poll will be used to establish baseline measurements that can be used in this plan's objectives.
- Update Plan

4. RECRUITMENT AND RETENTION STRATEGIES

4.1 Education and Outreach

4.1.1 Goals and Objectives

Goal 1: Increase participation in hunting, fishing and shooting sports.

Goal 2: Alter behaviors of hunters, anglers and shooters.

Goal 3: Promote ethical hunting, fishing and shooting behaviors within SCDNR education programs.

Goal 4: Tracking of education program participants over the long term

Objective 1: Create database of education participants in order to create a baseline and establish changes in participant knowledge and behavior as it relates to hunting, fishing, and shooting

4.1.2 History and Approach

Many SCDNR education programs were developed independently without program goals or evaluation. Some of these programs were developed with hunting, fishing and shooting recruitment and retention as a basic element. Department programs that have a goal or objective of hunter or angler recruitment or retention are discussed in the following sections.

4.1.2.1 Natural Resources School Partnership

Goals and Objectives

Goal 1: Build prototype schools that integrate natural and social resources as the context for teaching and learning into both the core curriculum and related courses during and beyond school hours (start with sixth grade and expand) for the 2008-09 academic year.

Goal 2: Improve teacher confidence, skills and enthusiasm for teaching.

Goal 3: Improve participating students' academic achievement and desire to learn.

Goal 4: Improve the students' knowledge, understanding, and appreciation of natural resources and how human actions impact the environment.

Goal 5: Build intellectual and resource capacity for the innovation.

History and Description

Natural Resource Schools: Education's Better Outdoors is an innovative partnership between the SCDNR and the SC Department of Education. The project was conceived through multiple meetings between the two agencies. The concept of this program is to integrate fish, wildlife, natural resources, outdoor skills and conservation education into all aspects of the classroom to improve student achievement, behavior, critical thinking skills, ability to solve problems and attitudes and behaviors towards natural resources, fish, wildlife, outdoor activities and conservation.

At participating schools, natural resources, conservation and outdoor skills are incorporated into all areas of the schools, including classroom instruction, after-school programs, field trips, service projects and end-of-year culminating experiences. The program is currently being piloted at middle schools in Anderson and Kershaw counties, an elementary school in Richland County and a junior high school in Spartanburg County.

This program has tremendous potential to expose young people to the outdoors, natural resource conservation and natural history. Some or many of these persons may come from families who lack this interest or the financial resources to provide the experience. These are the very persons we need to focus upon to recruit hunters, anglers and shooters. However, this program is extremely labor intensive and the travel expenses for SCDNR personnel is great.

Recommendations

- Fill all vacant education staff positions to ensure proper staffing for the current 3 Natural Resources Schools
- Continue to seek outside funding sources to support the hiring of more education staff and providing funding for school supplies and field trip travel.
- Create a Natural Resources School Guidebook by contracting teachers during the summer to begin and write a natural resource curriculum beginning with science and expanding to other subject areas. This guidebook would also have how to administer and plan for Natural Resource activities such as the open houses, after school programming and field trips.
- Continue to fund and conduct teacher trainings to familiarize teachers with the program and the available resources.
- Create a training program for volunteers at each school to teach the different after school program components.
- Ensure open communication between SCDNR and the schools as well as within the SCDNR to gather the needed support from SCDNR personnel for the program to be successful.

4.1.2.2 Hunter Education

Goals and Objectives

Goal 1: Reduce the number of hunting safety incidents.

Objective 1: Improve firearm handling proficiency.

Objective 2: Increase understanding of the proper use and safety measures when using ATVs and treestands.

Objective 3: Improve target acquisition and identification skills.

Goal 2: Increase student understanding of their responsibility for stewardship, conservation, habitat protection and management.

Objective 1: Increase student appreciation of wildlife.

Objective 2: Increase student understanding of the role of individuals and the DNR in habitat management.

Goal 3: Increase student understanding of their responsibilities and ethics in the field.

Objective 1: Increase hunter understanding of their responsibilities independent of the law regarding image, waste, hunter relations, fair chase and wise use of the resource.

Objective 2: Increase hunter understanding of ethical issues surrounding land use, game, property owners and other hunters.

Goal 4: Increase hunting participation.

Objective 1: Attain an involvement rate in hunting by 50% of the graduates of the hunter education course during the following year.

History and Description

This is the SCDNR's most extensive education program. With over 10,000 adult and youth students served each year, it is also the largest classroom-oriented program with DNR instructors. Because all hunters born after June 30, 1979 are required to pass the hunter education course before a hunting license can be obtained, the demand for this course should remain constant or increase slightly over time. Youth participating in the Youth Hunting and Take One-Make One (TOMO) programs are required to have completed hunter education.

There is a strong demand for the hunter education course because of the law requiring completion of the course before a hunting license can be issued to anyone born after June 1979. This is a natural feeder program for the TOMO, Youth Hunt and National Archery in the Schools (NASP) programs. The proportion of students passing the course who also purchase a hunting license is not known. Any trends data over the years would be useful as converting students into active, license-buying hunters is an important objective of the program. Trends data for hunting accidents would also be a good indicator of the benefits of the program.

Because this course and passage of a test is required by law, it is difficult to understand its function in recruitment and retention of hunters. Most (it may approach 90%) take the course as a requirement to buy their first license. These persons are already on a track to hunt and many of them have been hunting and have been trained by good mentors. There is still the possibility to influence the behaviors of these individuals and the instruction includes this material. There is some concern that requiring this participation would be an obstacle to a person buying a first license. Even though the SCDNR has made compliance as easy as technically possible, it is still reasonable to conclude that youth and young adults who decide to try hunting, or are invited afield by a friend or colleague, would determine that they could not go because they have not passed the hunter education requirement. In these cases, the requirement would be an impediment to a person at the trial phase of becoming a hunter.

At least 13 other states with mandatory hunter education requirements have identified this impediment situation and have provided a limited hunter education deferral license that is available to first-time hunting license purchasers. We support this type of license for SC as long as it is only available one time and a hunter who has complied with the hunter education requirement is within voice or sight contact of this person at all times while afield. The SCDNR data management and licensing system would need to prevent a person from purchasing this type license a second time.

We also recommend that hunter education broaden their audience to include those who are not already hunters and include range and shooting time for these prospective hunters. Finally, we recommend that some "how to" material be added to the curriculum so these prospective hunters will be able to associate some skills with the task of going hunting. If personnel are not skilled or available, we could ask conservation organizations like NWTF, QDMA, DU, etc. to provide this

instruction.

Recommendations

- Recommend a hunter education deferral license (called several things in other states but could be referred to as an apprentice license) with conditions as stated above.
- Include range time for firearms and archery, particularly for classes that include prospective hunters.
- Include detailed or more detailed “how to” information in the hunter education course.

4.1.2.3 National Archery in the Schools Program

Goals and Objectives

Goal 1: Provide training and support to schools and organizations to implement the program.

Objective 1: Train a minimum of 20 new teachers/instructors each year.

Objective 2: Add an additional 10 schools/organizations with active programs each year.

Objective 3: Provide support to organizations sponsoring the program.

Goal 2: Increase long-term participation in archery-related sports.

Objective 1: A minimum of 50% of the students in each program will continue with participation in archery-related activities after their first instructional program.

History and Description

National Archery in the Schools Program (NASP) is a nation-wide program that provides guidance and support to partners wishing to implement the program in schools within their state. The SCDNR initiated this program in 2005 and now provides the opportunity in 146 schools. SCDNR participates in the program by recruiting schools and has trained 236 teachers and instructors. Eighteen thousand students in the 146 schools are expected to participate in the program during the 2009-10 school year.

NASP is a program that has significant potential for hunter recruitment. It reaches a sizable number of students of whom many are interested in pursuing bowhunting and other shooting sports. This program would be a logical feeder to the TOMO, Hunter Education and Youth Hunting programs. The degree to which these linkages would prove fruitful is unknown. They may occur to some degree at present. Regardless, it would be useful for program staff to explore ways to identify school students who are interested in other shooting sports and hunting for involvement in other appropriate department or partner organization programs and would benefit the department’s hunter recruitment and retention activities. An assessment of the value of the NASP program as a pathway to other shooting sports and hunting should be examined to fully determine the benefits of the program.

Recommendations

- This program should be strategically expanded across the state as personnel and other resources allow.
- Initiate collection of data from participants that will allow tracking in the SCDNR license database.

- Explore methods to guide participants from this program into TOMO hunts.

4.1.2.4 Scholastic Clay Target Program

Goals and Objectives

Goal 1: Provide training and support to organizations to implement the program.

Objective 1: Train a minimum of 20 new instructors each year.

Objective 2: Add an additional 5 organizations with active programs each year.

Objective 3: Provide support to organizations sponsoring the program.

Goal 2: Increase long-term participation in shooting sports.

Objective 1: A minimum of 50% of the students in each program will continue with participation in shooting sports activities one year after their first instructional program.

History and Description

The Scholastic Clay Target Program (SCTP) is another national program that supports the shooting sports and hunting thrust of the SCDNR. Youth programs are developed through organizations and schools and supported with equipment and supplies provided by the SCDNR. In 2009, 1,246 students participated on 29 teams at 9 events.

The gun safety and shooting components of the program dovetail nicely with other SCDNR shooting and hunting programs. The number of youth involved in the program who eventually purchase a hunting license and become active hunters is not known, nor are the number of participants who become involved in other SCDNR hunting programs. If participants do not advance beyond shooting skeet, trap and sporting clays, or simple “shooting” then the objective should be for them to continue shooting. An evaluation of the program would answer many of these questions and determine if the objectives of the program are being met.

Recommendations

- This program should be expanded across the state to include a greater diversity of schools as personnel and resources allow.
- Private ranges and corporate sponsors should be encouraged to assist with this program by providing sites and resources.

4.1.2.5 Take One – Make One

Goals and Objectives

Goal 1: Recruit non-hunters for a first-time hunting experience.

Objective 1: Provide safe, quality hunting experiences for participants.

Objective 2: Develop skills, confidence, expertise and commitment to hunting among participants.

Goal 2: Provide participants with hunting opportunities over time to gain experience and commitment.

Objective 1: Provide information and support continued participation in appropriate hunting opportunities for program participants.

Objective 2: 100% of the program participants will purchase a hunting license during the year following their first program hunt.

History and Description

The Take One – Make One Program (TOMO) was established by SCDNR in January 1999. Since 2004, 286 youth have participated in this program. The TOMO program specifically targets youth and young adults who have not experienced a previous shooting or hunting activity. These youth are paired with volunteer hunting club members and private land owners who sponsor and actively participate in a year-round hunting, fishing and shooting sports mentorship program.

The TOMO program has been successful at meeting its objectives. Participants reported strong changes in their hunting interest, knowledge, skills and confidence. Less than one-fourth of the participants indicated no hunting experience prior to engagement in the TOMO program. This suggests that the recruitment of non-hunters for a first-time experience is not as successful as desired. Many of the participants may have had very limited hunting experience prior to the program. However, this question was not able to be answered using the evaluation survey data. Determining whether participants 16 years and older bought hunting licenses when they turned 16 was also beyond the scope of the study.

The objectives of the program are largely being achieved. A high percentage of participants continue to hunt during years following the program. The program increases both competence and confidence in the field which are important components in establishing a recreational activity as a part of an individual's lifestyle. Drawbacks to the program are the high cost per participant, the limited experience in the long journey to becoming a hunter and the fact that a significant number of participants have hunting experience and have hunted. If a significant number of participants have hunted, then this program may have more value in retention.

Recommendations

- Determine the appropriate time for a participant to be in the program to reach core objectives so that others can have the opportunity.
- Partner with private groups or organizations to create a “Beyond TOMO” where former participants can find further opportunities to hunt in SC.
- Incorporate and merge NASP and SCTP participants into the TOMO program.
- Coordinate better with LE Division across regions to provide assistance with TOMO hunts.

4.1.2.6 Becoming an Outdoor Woman

Goals and Objectives

Goal 1: Involve women in outdoor activities.

Objective 1: 50% of the participants in fishing or hunting components of the program will purchase hunting or fishing licenses during the following year.

Objective 2: 70% of the participants in the program will participate in an outdoor recreation activity during the following year.

Goal 2: Increase awareness of and support for the SCDNR's mission, goals and programs.

Objective 1: Increase knowledge and understanding of the role of the DNR in managing all natural resources in SC.

Goal 3: Increase knowledge, skills and confidence for successful participation in outdoor-related recreational activities.

Objective 1: Increase competence in outdoor skills presented in the program.

Objective 2: Increase confidence in participating in outdoor activities following the program.

Goal 4: Develop social involvement and networking opportunities for continued participation after the program.

Objective 1: One year after participating in the program, women will have engaged in at least one outdoor recreation activity with another BOW participant

History and Description

The Becoming an Outdoor Woman (BOW) program was initiated in ____ and approximately 250 women have participated in the annual event. Several smaller one-day events have been held in various parts of the state. These events have been very popular. Online and mail survey results indicate most women (62%) had participated in at least two or more workshops. The most popular activities were shooting (72%), canoeing and kayaking (64%), archery (50%) and fishing (48%).

Workshop participants reported strong increases in interest, knowledge, skills and confidence with regard to the activities they participated in. Ninety-three percent of the participants said they were likely and 68% said they were highly likely to participate in the activities again following the workshop. Participation in the workshops stimulated new participation in many outdoor activities. The greatest influx of new participants was in shooting (48%), archery (43%), canoeing and kayaking (35%) and orienteering (30%). Fishing gained few new recruits (14%) as 75% of the women had fishing experiences prior to attending a workshop. Hunting gained a number of new recruits as 19% of the women participated in hunting following workshop attendance who did not participate before the workshop. Most participated in outdoor activities with family (77%) and friends (77%) following their workshop, but 40% had participated with other BOW participants.

Following workshop attendance, 40% of the women bought a fishing license and 60% of these were first-time buyers. Similarly for hunting, 19% of the women bought a hunting license and 70% of these women did so for the first time. As would be expected from outdoor enthusiasts, 98% of the women supported legal and ethical fishing, while 96% supported legal and ethical hunting.

The women had a good understanding of many of the functions the SCDNR performs. They were well aware of the education, wildlife study and management, and enforcement roles of the SCDNR. However, large percentages believed the SCDNR was responsible for managing and developing state parks (65%), conserving and protecting marine mammals (89%) and requiring environmental impact statements for projects effecting the environment (71%).

The BOW Program has not been sponsored by the SCDNR since 2007. The program is designed to give women the opportunity to try outdoor recreation activities they have an interest in and achieve greater competency in activities they may have experienced in the past. The BOW Workshops have been very effective at increasing the interest, knowledge, skills and confidence

of women wishing to become more active in the outdoors. These are major objectives for the program. Likewise, the license buying objectives were accomplished as new and previous hunters and anglers renewed or bought licenses for the first time. Women continued to participate in outdoor activities following their workshops with family and friends, but a significant number increased their social group to include other BOW participants. The workshops could improve participant understanding of the roles and functions of the SCDNR. Including this information with the information provided in the workshop classes will enhance the public's understanding beyond the traditional hunting, fishing and wildlife management activities of the department.

Recommendations

- Survey results indicate that this program increases women's participation in hunting, fishing and shooting. Becoming an Outdoors Woman needs to continue in order to recruit women into these activities. However, concerns about SCDNR sponsoring an event with alcohol consumption need to be addressed. One recommendation is to not allow alcohol at the event. Another recommendation is to make BOW more of a family in the outdoors weekend.
- If SCDNR decides to continue BOW, the program must be evaluated annually against the goals and objectives identified above. Long-term evaluation of participants must also be conducted to assess the long-term attitude and behavior changes that result from their participation in the event.
- Women who participate in BOW must be entered into the future database of outreach and education program participants so that SCDNR can promote additional opportunities for them to continue to try hunting, fishing and shooting.

4.1.2.7 Aquatic Education Programs

Goal 1: Involve youth and adults in the sport of fishing.

Objective 1: One year after participation in the Fishing Tackle Loaner, Fishing 101, SC Reel Kids, or Fishing Rodeo programs, all participants aged 16 and older will have purchased a fishing license.

Objective 2: One year after participation in any of the Aquatic Ed programs, participants will have engaged in the sport of fishing at least once.

Goal 2: Increase the angling competence and confidence of program participants.

Objective 1: Following participation in an Aquatic Education program, participants will report an increase in fishing knowledge, skills, techniques and ethics.

Objective 2: Following participation in an Aquatic Education program, participants will have a greater knowledge of fishing opportunities.

Objective 3: Following participation in an Aquatic Education program, participants will have a greater understanding of the relationship between recreational fishing quality and aquatic ecosystem health.

Goal 3: Increase support and awareness for SCDNR goals, missions and programs.

Objective 1: One year after participation in an Aquatic Education program, participants, volunteers and partners will know and understand the Department's role in managing the state's natural resources.

Objective 2: One year after participation in an Aquatic Education program, participants, volunteers and partners will have an increased appreciation for natural resources.

Objective 3: One year after participation in an Aquatic Education Program, participants, volunteers and partners will increase their involvement and support for the SCDNR and its programs.

History and Description

The programs discussed in this section include SC Reel Kids, Fishing Tackle Loaner Program, Fishing 101 and Fishing Rodeos. Information was available to evaluate three individual programs within the Aquatic Education program: Fishing Rodeos, Fishing Tackle Loaner and SC Reel Kids. The first two programs were evaluated using online surveys completed by adults who were associated with youth involved in the activity. A mail survey was sent to SC Reel Kids participants to obtain information for the evaluation.

The SC Reel Kids program evaluation was conducted using a mail survey of registered program participants. Survey results showed the program had a very substantial effect on fishing participation. About 35% of the kids indicated they had gone fishing prior to becoming involved in the program. However, after becoming involved in the program 93% reported actively fishing. Most participants said that their knowledge about fishing increased substantially (9.1 on the 10-point change rating scale). Participant fishing skill proficiency overall improved moderately (6.9) as did confidence about fishing without the assistance of others (7.4). Interest in fishing overall also increased moderately with an average 7.6 rating on the 10-point change scale.

Reel Kids participants rated the overall program as a 7.3 on the 10-point quality rating scale. Only 20% of the participants rated the program as a 9 or 10.

The survey included questions about how the program changed the importance of several program outcomes for the participants on a 10-point “change” scale. All students indicated the program had a moderate to very strong change in importance of the nine outcomes: fishing to you personally (8.5), having quality fishing opportunities (8.2), high quality aquatic habitats (8.8), reducing pollution (9.2), cleaning up litter (7.4), conserving water (7.1), practicing angler ethics (8.1), practicing catch and release (7.2) and telling others about conservation (7.1).

Familiarity with the functions of the SCDNR was fairly high among respondents. A large majority of participants were knowledgeable about most functions of the SCDNR with two exceptions. First, all participants believed the SCDNR “set” fishing and hunting regulations, while this is the responsibility of the SC General Assembly. Second, two-thirds of the participants thought the SCDNR was responsible for developing and managing state parks.

The Reel Kids program had a strong impact on participant commitment to conservation. When asked if the program caused them to have a stronger commitment to conservation, 82% agreed that it did.

The Reel Kids program has 10 “goals” that participants are asked to undertake as part of the program. Respondents were asked to indicate which of these goals they had completed.

Completion rates ranged from 18% for participation in a Beach Sweep or River Sweep event to 58% for fishing at a state lake. The average participant completed about one-third of the goals. This contradicts the tracking database which shows that participants had completed less than one goal each. This may have resulted from one of two circumstances. First, participants may not have reported the completing of several goals to program staff and thus it was not recorded in the tracking database.

Second, respondents to the survey may have been more active in the program, thus completing more of the goals than non-respondents. A non-response check may have helped clarify this discrepancy.

The Fishing Rodeo survey revealed that all of the participants responding to the survey had been fishing at least once prior to the rodeo with 60% having fished six or more times. For 35% of the participants, the fishing rodeo was a new experience for them. All (100%) of the respondents indicated they would attend a similar event in the future and were very likely to go fishing again within the next 12 months. About 70% of the respondents anticipated going fishing six or more times in the next 12 months. Nearly all (99%) said they would spend money on fishing tackle during the next year.

A little less than two-thirds of the adults (64%) reported having a fishing license prior to attending the rodeo. Of the adults not possessing a fishing license, 81% said they would buy one following the fishing rodeo. Of the adult respondents to the survey who possessed a fishing license, 50% owned a Hunting and Fishing Combination or Sportsman's license. Thus, half of the adult participants attending the fishing rodeo were very likely hunters as well.

Support for hunting and fishing was extremely high among Fishing Rodeo participants as 99% supported legal and ethical fishing and 97% supported legal and ethical hunting.

Slightly more than one-half of the respondents (52%) were aware of the SC Reel Kids program and 50% of those aware of the program reported their children were participants. This amounts to about one-fourth of the youth attending the Fishing Rodeo also participating in SC Reel Kids.

An equal number of males and females responded to the 2008 Fishing Tackle Loaner (FTL) program survey. Few respondents had heard of the FTL program as 77% were unaware of it prior to encountering it. About 78% reported using the loaner program only once, while 22% reported using it multiple times. Eighty-three percent of the participants fished in 2008 and 100% indicated they would try fishing again during the next year. Forty-three percent of the respondents said they purchased their own equipment following the use of loaner equipment.

Half of the adults reported possessing a fishing license prior to borrowing the loaner equipment and 21% bought licenses following the use of the loaner equipment. Two-thirds of the borrowers fished with kids and 52% reported success at catching fish. Further, 90% said their fishing experience using loaner equipment was either "good" (38%) or "excellent" (52%).

The analysis of the SC Reel Kids evaluation surveys was not complete and could not be included in this draft of the final report. The results will be included in the final draft of the report.

The three Aquatic Education programs evaluated in this study appear to attract mostly youth with previous fishing experience. Only about one-fourth of the participants had no previous fishing experience. The programs were enjoyed by participants and reinforced their interest in fishing. A majority of FTL and Fishing Rodeo participants were successful at catching fish which further strengthens the desire to fish in the future. The programs reach a broad number of male and female participants. The programs also stimulate some additional fishing license purchases among the adult participants as significant percentages of participants not owning a license before participation in the programs bought one following the program.

Overall, the program is meeting its goals. The SC Reel Kids program is successful at increasing knowledge and interest in fishing. The program could be strengthened by adding components that improve the fishing skills of participants. Greater emphasis could be placed on mastering the selection and use of fishing tackle, casting skills, and selecting fishing locations. Importantly, participants indicated a strong change in the importance of conservation. The change in importance of protecting habitat, reducing pollution, conserving water and practicing good angler ethics was very high for a large majority of participants.

Recommendations

General

- Develop effective educational materials to support program components.
- Develop and enhance opportunities for adult education.
- Develop opportunities to encourage participation within the high school and college age groups. (ex. High school bass clubs)
- Use the activities within the Aquatic Education program to create a nexus to aquatic resource conservation and stewardship.
- Continue annual evaluations of programs and their effectiveness.

SC Reel Kids

- Develop a series of structured events to enhance interest in active participation.
- Evaluate and revise the structure of participant goals used in the program.
- Complete the development of the program data base to allow efficient, effective and continuous evaluation of the program's components.
- Enhance incentives for program participation.
- Continue to monitor recruitment (into the licensed population) effectiveness of the program.

Fishing Rodeos

- Enhance the educational component of the rodeos to improve learning opportunities.
- Reduce the focus on prizes and rewards and emphasize life style enhancement.
- Continue to seek high quality locations to host events that provide memorable experiences.
- Seek to identify and enhance partnerships and cooperative relationships within the

agency as well as with groups and organizations outside of the agency.

Fishing Tackle Loaner Program

- Seek to increase the number of loaner sites around the State.
- Increase awareness and promote the availability of the program.
- Place informational materials at each loaner site to increase awareness of SCDNR programs and educational opportunities.
- Enhance partnerships to facilitate maintenance and support for the program.

Fishing 101 Classes

- Increase the number of available Fishing 101 Classes.
- Seek partnerships to support the program and to broaden the base of available instructors.
- Develop advanced classes to facilitate skills development for anglers new to the sport.
- Develop and provide information on fishing access availability.
- Enhance the program's "How To" materials library.
- Employ an array of tools to provide informational materials to the public (i.e. web based, pod casts, video and publications).

4.1.2.8 Camp Wildwood

Goals and Objectives

Goal 1: Involve youth in outdoor activities

Objective 1: 50% of the participants in fishing or hunting components of the program will purchase a hunting or fishing license during the next year.

Objective 2: 70% of the participants in the program will participate in an outdoor recreation activity during the following year.

Goal 2: Increase awareness of and support for the SCDNR's mission, goals and programs.

Objective 1: Increase knowledge and understanding of the role of the SCDNR in managing all natural resources in SC.

Goal 3: Increase knowledge, skills and confidence for successful participation in outdoor-related recreational activities.

Objective 1: Increase competence in outdoor skills presented in the program.

Objective 2: Increase confidence in participating in outdoor activities following the program.

Goal 4: Develop social involvement and networking opportunities for continued participation after the program.

Objective 1: One year after participating in the program, youth will have engaged in at least one outdoor recreation activity with another camp participant.

Goal 5: Introduce campers to career opportunities in natural resources management.

Objective 1: Increase camper awareness and knowledge of career opportunities in natural resource management.

Objective 2: Increase interest in natural resource management careers among campers.

Objective 3: Monitor adoption of natural resource career choices among camp participants.

Goal 6: Improve youth understanding of their role in environmental stewardship.

Objective 1: Increase knowledge of individual and group stewardship practices and opportunities.

Objective 2: One year after completion of the camp experience, campers will have participated in at least one individual or community stewardship activity.

History and Description

Camp Wildwood is a cooperative effort conducted by the SCDNR with support from the Garden Clubs of SC. Begun in 1954, it has been held annually for 2 weeks each summer. Approximately 3,000 young people have participated in this opportunity since 1988.

There is both a regular and senior division program. A combination of online and mail surveys was used to collect evaluation information from past camp participants. The camp experience had a very strong impact on developing interest and competence in outdoor recreation skills among campers. Campers reported a lot of change (9 or 10 on the 10-point rating scale) for interest in outdoor activities (75%), knowledge (61%), skills (61%) and confidence in participating after camp (81%).

Eighty-nine percent indicated that the likelihood of continued participation was very high (8 – 10 on the 10-point scale) as well. After camp, students continued participation with family (91%), friends (93%) and other campers (68%).

Eighty-nine percent of the campers rated their overall camping experience as a “10” on the 10-point quality rating scale. Another 10% rated it as an 8 or 9 on the scale. License purchases by campers were fairly high as about 55% bought fishing licenses and 35% bought hunting licenses following their camp experience.

Participation in camp recreational activities increased participation following camp. For example, 84% of the campers had been fishing before camp, but an additional 63% of those who had not fished previously reported fishing following camp. Likewise, large percentages of non-participants in hunting (30%), shooting (56%), archery (47%), canoeing and kayaking (90%), camping (72%), and hiking and backpacking (61%) continued the activity following camp.

Campers felt that camp experience strengthened (99%) their commitment to protect the environment. Fifty-four percent of the respondents said that the experience influenced them to consider studying in a natural resources field when they went to college. Nearly all (95%), agreed that they learned a lot about natural resource careers during camp.

Camper’s knowledge about the roles and functions of the SCDNR should be considered fair. Many thought the SCDNR set fishing and hunting regulations (98%) instead of the legislature, developed and managed state parks (62%), required environmental impact statements for development projects affecting the environment (82%), was responsible for the conservation and protection of marine mammals (92%) and monitored and enforced state water quality standards (66%). Most campers were aware of the fish and wildlife management, education and enforcement functions of the Department.

Campers at Camp Wildwood discover that they are part of nature and their actions in some way affect the natural balance. The professional staff and counselors pass on knowledge and appreciation for the protection and wise use of our natural resources. Camp Wildwood encourages self-reliance, self-discipline and independence in an outdoor setting. Self-confidence is built through cooperative relationships with adults and peers. It is also a place to learn about the diversity of our natural resources and the variety of career choices within the environmental field.

Camp Wildwood has an excellent program to achieve these objectives. The camp is successful at increasing the interest of campers in outdoor activities by giving them the knowledge and skills to feel competent enough to continue the activities once camp is over. The camp is also successful at recruiting new participants into a number of activities. Moreover, many campers who had not purchased fishing or hunting licenses before camp, did so following their camp experience.

The friendships that campers build at camp carry over into life after camp. The percentage of campers continuing activity participation with fellow campers is quite high and more than meets the objective set for this participation goal.

The fact that virtually all campers report having a stronger commitment to conservation as a result of camp participation underscores that the purpose of the camp is being achieved. The camp also does a good job of exposing campers to natural resource careers and motivates many to consider studying in a natural resource field in college.

The one area that could be improved is the presentation of information on the roles and functions of the SCDNR. Like several other programs that were evaluated, providing participants with a better understanding of what the SCDNR is and is not responsible for will provide a more accurately informed public.

Recommendations

- Continue Camp Wildwood.
- Camp Wildwood participants must be entered into the future database of SCDNR's outreach and education program participants in order to continue to inform them about different ways for campers to go hunting, fishing and shooting.
- Annually evaluate camp participants to determine if goals and objectives are being met. Use evaluation results to change the content of camp to better meet the goals and objectives.
- Conduct long-term evaluation on camp participants to determine changes in attitudes and behaviors, specifically their participation rates in hunting, fishing and shooting.

4.1.2.8 Statewide Youth Days

Goals and Objectives

Goal 1: Introduce youth to the concepts of ethical utilization and stewardship of natural resources.

Goal 2: Encourage youth and adults to experience hunting and the outdoors together.

Goal 3: Contribute to the long-term conservation of wildlife resources.

History and Description

In 2000, the SC General Assembly created a new statute (50-9-740) that authorizes the SCDNR to designate one or more youth days in addition to the regular season for a species of wild game. The youth days must be held outside of the regular season on a weekend, holiday or other non-school day and within 14 days before or after the regular open period for that species. Under this law a youth hunter is one who is less than 18 years of age. The SCDNR, under the authority of this law, has established youth days for deer, turkey, raccoon, squirrel, quail and rabbits.

In 1996-97, the US Fish and Wildlife Service (USFWS) provided the opportunity to schedule one youth waterfowl day to be held within 10 days of the open or close of a regular open period when youth less than 16 years of age can hunt waterfowl. This regulation was later modified to provide the authority to schedule two youth days. SCDNR has taken full advantage of this opportunity each year and now schedules one state and two federal youth waterfowl days.

There is pressure from the public and politicians to expand this opportunity because it is popular and even because of the possibility of inclement weather. Some evaluation of use of this opportunity and the impacts thereof should be conducted before recommending changes.

Finally, the Department should develop and deliver the message to hunters and anglers that every open day should be a youth day and hunters and anglers have the responsibility to take their children, relatives, children's friends and adult friends and colleagues hunting and fishing.

Recommendations

- The SCDNR should attempt to collect information on these youth days to determine the amount of utilization and to collect other pertinent information about the participants.
- Information about these hunts should be provided to TOMO participants so they can participate if interested.

4.1.2.9 Wildlife and Freshwater Fisheries Division Youth Hunting Events

Goals and Objectives

Goal 1: Provide exclusive quality hunting opportunities for youth.

Objective 1: Expose youth and any accompanying adults to hunting and the outdoors.

Objective 2: Five years following participation in a youth hunt, 80% of the participating youth who have reached 16 years of age and reside in SC will hold a SC hunting license.

Objective 3: At the completion of the hunt, the youth and any accompanying adults will understand and appreciate the skills, experience and responsibilities of SCDNR staff.

History and Description

The WFF Division initiated special youth hunts as early as 1996-97 and now conducts approximately 110 hunts each year with goals and objectives as stated above. These hunts fall into 5 general categories as follows:

- Youth Dove Hunts

- Youth Deer Hunts
- Youth Raccoon Hunts
- Adult/Youth Turkey Hunts
- Adult/ Youth Waterfowl Hunts
- Youth Waterfowl Hunts

In addition, WFF staff provides Adult/Youth season long opportunities for deer and small game on portions of two Wildlife Management Areas (WMAs), Adult/Youth waterfowl and Youth waterfowl hunting on selected WMAs or special days. All of these hunts require pre-registration or application and random selection. In 2008-09, approximately 1,237 youth participated in these events.

Recommendations

- WFF staff should continue to provide a diversity of youth hunting opportunities.
- WFF staff should initiate collection of data from participants including contact and identifying information which would allow collecting additional information, assessment and tracking in the SCDNR licensee database.
- Information about these hunts should be provided to TOMO participants so they can participate if interested.
- WFF should make adaptive changes to better meet the objectives of the program.

4.1.3 Recommendations

- Hire an Education Coordinator with authority over all Department education efforts.
- Education Coordinator should develop education plan in accordance with the Conservation Education Program Inventory and Evaluation plan with main objective being R&R.
- Track all participants in education programs and link program participants to other programs SCDNR offers.
- Evaluate all education programs by surveying participants.
- Develop a process to coordinate R&R education programs to ensure consistency.

4.2 Marketing

4.2.1 Goals and Objectives

Goal 1: Increase hunting license sales

Objective 1: The purchase of hunting licenses will increase during the months of August through December when comparing 2010 to 2009 numbers.

Objective 2: Hunters who have not yet purchased a license allowing them to hunt in FY 2010 will receive a postcard reminding them to go hunting. At least 5 percent of those who receive a postcard will buy some type of license allowing them to hunt in FY 2011.

Objective 3: The percentage of lapsed license purchasers who purchase a hunting license will increase.

Objective 4: Track the number of website visitors who link to the Go Hunting website.

Objective 5: Determine if the number of on-line license purchases increases.

Objective 6: Determine what strategies work to encourage hunters to go hunting every

year by sending a survey to the hunters who do not purchase licenses every year in the target area.

Goal 3: Evaluate and improve existing hunter recruitment education programs.

Goal 4: Track the overall economic impact of increasing hunting participation in SC.

Goal 5: Increase fishing license sales.

Goal 6: Increase boater education participation.

Goal 7: Evaluate and improve existing angler recruitment education programs.

Goal 8: Track the overall economic impact of increasing fishing participation in SC.

4.2.2 History and Approach

The targeted approach focuses on increasing resident license sales and participation in hunter and boater education classes. We implement an integrated *awareness* and *grassroots* campaign to increase license sales and participation in hunter and boater education. The *awareness* strategies place advertisements on selected media in treatment areas. These advertisements would trickle into smaller cities that consume media from the larger city in the area. The general awareness message would be “Go Hunting” or “Go Fishing” (depending on the season). NSSF and RBFF already have developed and tested effective campaign imagery that could be customized and used for this purpose, minimizing costs. The exact media placed will be selected based on the lapsed license purchasers tapestry types.

The grassroots portion of the campaign would allow the use of customized strategies to promote hunting, fishing and boater education based on the season. Grassroots strategies include public relations, events, working with community-based organizations such as churches, etc. Regional offices have the knowledge and connections to reach hunters, anglers and boaters at the grassroots level. Messages can be customized in weekly news releases and other mechanisms based on the area.

4.2.3 Target Audiences

- Resident lapsed hunters

- Resident lapsed anglers

- Youth with interest in hunting and fishing

4.2.4 Draft Key Messages

Messages will be customized based on the time of year.

- Get outdoors and go hunting and fishing with friends and family.
- Visit www.dnr.sc.gov to buy a license, learn how to participate safely and to find good places to hunt and fish in SC.
- Your purchase of a hunting and/or fishing license provides SCDNR with funding to conserve the state’s natural resources.

4.2.5 Strategies

- Events
- Create cross promotional opportunities with organizations that also target hunters, anglers and boaters as customers.
- Purchase selected media.
- Work with media to get earned media opportunities to promote hunting.
- Develop and place promotional materials at license point of sale. Develop and use partnerships with hunting and fishing related non-governmental organizations, clubs and associations to remind members to purchase licenses.
- Use electronic communication to remind hunters and anglers to buy a license and to make it easy for them to purchase on-line.
- Use direct mail to remind license holders to go hunting, fishing and boating .
- Coordinate and communicate with all DNR staff through conference calls and in-person meetings about the campaign.
- Social Networking sites.

4.2.6 Recommendations

1. Hire a Director of Marketing, Education and Outreach.
2. Hire a Marketing Director.
3. Work with SC Regional Tourism Boards to develop campaigns to increase non-resident's participation in hunting and fishing. Start by promoting fishing to North Carolina residents (Charlotte and Asheville markets) and hunting to Florida residents (Jacksonville and Lakeland).
4. Develop a marketing/awareness campaign encouraging existing hunters and anglers to take friends and family hunting and fishing. Need to incorporate messaging about the decline in participation and how hunters and anglers provide funding for the conservation of the state's natural resources.
5. Continue lapsed hunter and angler campaigns.
6. Develop marketing/awareness campaign to inform South Carolinians about who pays for the conservation of the state's natural resources (hunters and anglers).

4.3 Legislative

4.3.1 Goals and Objectives

- Consider recommendation of a multi-year license to SC General Assembly.
- Consider recommendation of a hunter education waiver license to SC General Assembly.
- Consider recommendation a 365 day license to SC General Assembly.
- Simplify hunting and fishing rules and regulations. SCDNR is currently trying to update Chapter 13 fishing laws. This is a good start and should be done with hunting too.

4.3.2 History and Approach

The Department is currently deliberating the issues of a multi-year, hunter education waiver and 365 day licenses. This committee believes that the hunter education waiver license, commonly called an apprentice license in other states, has merit and may allow entry of individuals into hunting who otherwise would not try. However, while the multi-year and 365 day license may be appealing to hunters and anglers and may add to the count of hunters and anglers, it may not contribute to recruitment or retention. If a hunter or angler only hunts or fishes 1 or 2 years out of 3 and purchases a multi-year license, the Department could count the individual in all years the license is valid but the behavior of the individual is not changed. His/her participation in the activity would probably be considered weak and these individuals would be more likely to abandon the activity in the future.

Another obstacle to hunting and fishing on public lands and waters is the restrictive nature of regulations and statutes for these activities, particularly on SCDNR properties and leased lands. SCDNR staff struggles to provide access to as many groups or persons as possible while still trying to provide a “quality” experience. Too often, the regulations are restrictive in nature in order to “control” the hunt, manage potential conflict between various user groups or limit impact to the resources. These regulations are often based on individual properties. The result is a matrix of complex regulations that confuses the public, leading to the belief that reasonable access is not provided or not worth the effort.

For example, a small game hunter who wanted to hunt on SCDNR properties would have to use the annual rules and regulations booklet to find the various properties to determine where he/she could hunt and when. This complexity may be a significant contributing factor to the response from the public that access to public lands is limited.

4.3.3 Recommendations

- SCDNR should carefully consider a multi-year, hunter education waiver and 365 day licenses and understand the prospective roles of these new licenses on Department programs and on recruitment and retention.
- SCDNR should standardize various types of hunting at least across regions, rather than manage the recreation on a property by property basis.
- SCDNR should provide more open access to hunting and fishing without the “guiding” now provided.

4.4 Access

4.4.1 Goals and Objectives

Goal 1: Develop online databases for shooting ranges, public lands and reservoirs within SC.

Goal 2: Develop statewide standards for informational kiosks on all SCDNR properties.

4.4.2 History and Approach

4.4.2.1 Range Expansion Program

Goals and Objectives

Goal 1: Expand the number of shooting ranges to support SCTP and provide host sites for various shooting competitions

Goal 2: Increase participation in shooting sports (archery and firearms).

History and Approach

SCDNR does not have a shooting sports program beyond the SCTP and AIS Programs and limited range time associated with the Hunter Safety Program discussed earlier in this document. Staff recognizes the opportunity that shooting sports (archery and firearms) play in recruiting hunters and also the contribution that shooters make to Pittman-Robertson Federal Funds.

SCDNR currently provides shooting opportunities at three sites within the state. These include Palachucola Wildlife Management Area (WMA), Pickens and Spartanburg. The Pickens and Spartanburg ranges have range staff and provide pistol and rifle opportunities. SCDNR is in the process of updating these ranges and plans to include shotgun and archery options. An archery range is also available at the Webb WMA.

Ranges are currently being developed at 3 additional sites. The Archery Shooters Association (ASA) has assisted the SCDNR in the design of archery ranges at Belfast WMA. This will be a comprehensive range that includes two field archery ranges, a FITA range, a children's range, bowhunting practice platform and two walk-through ranges. SCDNR is working to develop agreements with the Archery Trade Association (ATA) and Easton Foundation to acquire targets and supplies for these ranges. SCDNR is also preparing to construct pistol and rifle ranges at Belfast and Woodbury WMAs. Each of these areas received a \$25,000 grant from the National Rifle Association to serve as match for the Pittman Robertson funding which will be used to construct these ranges. Finally, SCDNR is developing a skeet/trap range for the Marsh WMA. While the pistol/rifel ranges will be unmanned and open to the general public, the shotgun range at Marsh will be more limited because of safety concerns. One of the primary purposes of this range will be to support the SCTP. Coaches of local SCTP teams will be allowed access to the range and will be able to utilize the range without SCDNR supervision. SCDNR will utilize this range for TOMO events, Natural Resource School events, and other programs targeting shooting sports recruitment and retention efforts.

GIS data of public and private ranges and SCDNR properties will be used to determine suitable sites on SCDNR properties for future range development to include, where possible, shotgun, pistols, rifles and archery. As part of identifying sites for public ranges, SCDNR will consider range requirements and the range's compatibility for ongoing SCDNR management and recreation activities. Potential range sites that are slated for the next phase currently include: Donnelley, Santee Coastal Reserve and/or Bonneau Ferry. Once sites have been identified, SCDNR will work with partners such as NRA, ASA, ATA and industry to design such areas and seek grant funding for range development.

While SCDNR owns significant acreage across the state, other public lands are available in more suitable locations for range development. For example, SCDNR does not own much land in metropolitan areas; however, due to proximity to people and ease of access, ranges are needed near these areas. In addition, sister organizations such as the SC Forestry Commission and the U.S. Forest Service own large blocks of land where no suitable SCDNR land may be available for public ranges. To meet this need, SCDNR will develop partnerships with other publically owned lands for range development and enhancement. A project is currently underway to

provide a Community Archery Park in Florence County. SCDNR will provide the archery equipment and supplies and will cover costs for the sidewalks and bowhunting platform and Florence County will provide the site and clearing of the area. Once this Memorandum of Understanding (MOU) is approved by Florence County Council and the project is underway, SCDNR will identify other partners and suitable locations for such partnerships. Such areas will provide general public use and will be used to support R&R programs and afterschool activities.

As ranges are developed throughout the state, SCDNR will evaluate opportunities to host shooting competitions. These competitions would provide opportunities for SCDNR to partner with industry, private organizations and local municipalities. These events would provide a positive economic benefit to the local counties or communities as participants may be in the area for several days and will need related accommodations. Opportunities include hosting ASA tournaments, NASP tournaments, SCTP tournaments, etc.

Recommendations

- Continue development and upgrading of shooting ranges on SCDNR properties after carefully considering the staffing requirements, staff availability, demand in that particular area and environmental conditions.
- Develop agreements with state and federal agencies that own property for locating appropriate ranges based upon the same criteria listed above.
- Evaluate opportunities to develop and/or host competitions at ranges.

4.4.2.2 Land Acquisition

Goals and Objectives

Goal 1: Continue to implement SCDNR's Habitat Protection Strategy and preserve culturally and naturally significant portions of land throughout SC for conservation and for public access.

Objective 1: Continue to work with established partners to identify portions of land that should be protected from future development.

Objective 2: Increase lands in the WMA program with a special emphasis on in-holdings that will enhance access to existing properties as well as new tracts in areas of the state where public recreation opportunities are currently limited.

Objective 3: Establish new partnerships, where appropriate, to protect land identified for future protection.

Goal 2: Ensure properties provide quality outdoor recreation opportunities that are compatible with the SCDNR mission..

Objective 1: Develop partnerships to expand opportunities for enjoyment of traditional outdoor recreation opportunities on SCDNR managed lands.

Objective 2: Ensure such opportunities are evaluated using the SCDNR Compatible Use Policy.

Objective 3: Continue to implement and update management plans for SCDNR managed lands.

History and Approach

Habitat protection has long been a top priority for SCDNR. The agency acquired its first property

in 1941 with the purchase of Belmont, now known as the Webb Wildlife Management Area. The agency currently owns over 277,000 acres throughout the state and leases an additional 1.1 million acres as part of the WMA program. In 2003, the Director established a Habitat Protection Section and a broader committee, with representatives from various divisions, to carry out land acquisition efforts for the Department. The committee developed a Habitat Protection Strategy as well as criteria to evaluate potential acquisitions. Key tasks for this section and committee include: 1) increase communication among divisions regarding acquisitions, 2) ensure all acquisitions are appropriate and fit within the established guidelines, 3) secure necessary funding and approvals, and 4) develop partnerships for such projects.

Recommendations

- Continue activities and efforts of the Habitat Protection Committee.
- Ensure the committee understands the importance of land acquisition for recruitment and retention efforts.
- Provide recommendations for acquisitions that will support recruitment and retention efforts to the Habitat Protection Committee.

4.4.2.3 SCDNR database development

Goals and Objectives

Goal 1: Create dynamic webpages on the SCDNR's website for specific reservoirs based on information provided for the reservoir specific brochures stored in the Department database.

Objective 1: Collect GIS and attribute data for each of the 16 large reservoirs across the state by 12/31/2010.

Objective 2: Gather narratives and photos for posting on the databases for all identified reservoirs by 12/31/2010

Objective 3: Complete formatting for Phase I of the Managed Lands, Reservoir and Shooting Range databases by 12/31/2010

Objective 4: Populate reservoir database with all available data by 12/31/2010

Objective 5: Maintain accurate and up-to-date data through annual update process to be conducted in November of each year

Goal 2: Create a centralized GIS database of SCDNR managed lands for use in creation of site maps and future updates of WMA maps.

Objective 1: Collect GIS and attribute data for each of the SCDNR managed lands either owned or in a long term lease by 12/31/2010.

Goal 3: Update existing information on SCDNR's website concerning managed lands based on site specific information provided for kiosks update.

Objective 1: Add public lands managed by SCDNR to SCDNR's website based on site specific information provided for kiosks update.

Objective 2: Gather narratives and photos for posting on the databases for all identified public lands by 12/31/2010.

Objective 3: Complete formatting for Phase I of the Managed Lands, Reservoir and Shooting Range databases by 12/31/2010.

Objective 4: Populate managed lands database with all available data by 12/31/2010.

Objective 5: Maintain accurate and up-to-date data through an annual update process to

be conducted in April of each year.

Goal 4: Develop and maintain a website of shooting locations to guide the public about where to shoot through the collection of attribute data for statewide shooting ranges

Objective 1: Collect GIS and attribute data for each of identified shooting ranges across the state by 6/30/2010.

Objective 2: Complete formatting for Phase I of the Managed Lands, Reservoir and Shooting Range databases by 12/31/2010

Objective 3: Populate the shooting range database with all available data by 6/30/2010.

History and Approach

Survey after survey indicates that the public believes that there are limited areas for them to hunt, fish and/or shoot. Even though millions of acres of public waters and public lands are available for these activities, the public lists access as a primary obstacle. This indicates that education and information about availability of ranges, waters and lands for these activities are extremely important and action is being taken to address this.

Working plans were created to guide collection of managed lands, reservoir and shooting range GIS data necessary to populate online GIS databases. This was completed to ensure all field staff engaged in data collection collected uniform attributes in suitable formats for the Technology Department to incorporate into the developed databases. Data for the Managed Lands database were collected through the use of an assessment form and digitized maps where attribute data were missing. All property managers were asked to submit data for all properties they manage that were either owned or in a long-term lease by SCDNR. Phase I of the Managed Lands web application went live June 2009 and continues to be populated with additional data as it is received by the field.

Data collection for the reservoir online database began in July 2009. Regional meetings were held with each of the four fisheries regional coordinators who were given printouts of each reservoir. Each map illustrated all available data collected from Engineering Section, Technology Department and the Aquatic Education project. Each regional coordinator delegated review of each reservoir to unit biologists throughout the Region. Data collection should be completed by December 31, 2009.

To collect necessary data for the shooting range online database, specific personnel throughout the Outreach and Support Services Division were assign regions of the state. For each identified shooting range, latitude and longitude data were collected. Additionally, each range was contacted via telephone to collect necessary attribute information to populate the online database. Work began in 2009 when SCDNR received a grant from the National Shooting Sports Foundation to improve accessibility to shooting ranges in SC. The grant includes three primary objectives: to create an up-to-date website of shooting opportunities in the state; to create a brochure to be distributed through hunting license and firearm vendors that will notify the public of the website; and to create an organization of public and private range operators that will serve to improve communication and work collaboratively toward recruitment and retention efforts for recreational shooters. The organization will provide a key link for obtaining and maintaining the up-to-date information for the website. The key benefits of the website are that SCDNR can better provide 'real-time' information that will be more accessible to the public. In addition,

SCDNR can overlay range information with SCDNR properties so that hunters utilizing WMAs will be able to locate the closest shooting range for that particular area.

In addition to basic attribute data, narratives and photos have been requested for each reservoir and property under the managed land program. Once collected, all narratives are reviewed by the SCDNR staff proofreader to ensure a level of consistency across the state. The edited narratives and photos are cataloged on the shared drive for upload on the newly created web application and for development of statewide kiosk signs and reservoir brochures.

Recommendations:

- Continue data collection and database development for each of the three ongoing projects to include: managed lands, reservoir and shooting ranges.
- Work with Wildlife Section staff to finalize database development plans for Phase II of the managed lands project.
- Develop working plan for expansion of the Reservoir Project to include small reservoirs and major river systems of the state based on lessons learned from the implementation of Phase I of the Reservoir Project.
- Continue to work with field staff in WFF to ensure all data submitted under the various database projects remains timely and accurate.
- Promote all access databases through marketing campaigns, SCDNR social networking sites, SCDNR website, education events and earned media.

4.4.2.4 Managed Lands, Reservoirs and Shooting Ranges Signage and Printed Materials

Goals and Objectives

Goal 1: Complete kiosk signs on a minimum of 50% of the managed lands identified for signage by 12/31/2010.

Objective 1: Create a uniform look and feel for all kiosks on SCDNR public lands.

Objective 2: Ensure all kiosks on SCDNR managed lands remain full with timely information.

Goal 2: Complete informational brochures for each of the 16 identified reservoirs 12/31/2010.

Objective 1: Create a series of uniform brochures for residents and non-residents of the major reservoirs of SC.

Objective 2: Post .pdfs of all produced brochures on SCDNR's website.

Goal 3: Complete shooting range publication to promote all identified shooting ranges by 6/30/2010.

Objective 1: Post .pdfs of shooting range publications on SCDNR's website.

Goal 4: Identify all managed lands that require additional SCDOT signs.

Objective 1: Work with local SCDOT representatives to ensure proper road signage for all SCDNR managed properties.

History and Approach

During development of the working plans for the reservoir and managed lands projects, uniform kiosk signage and reservoir brochures were designed. Part of this process included the approval of a standardized kiosk. Dimensions and shape were constructed by the Engineering Section. Through a brief review and comment period WFF and LWC field staff were able to review plans and provide vital feedback to the final kiosk plan. Once all concerns were addressed, two standard kiosks were adopted. This included a standard stain and roof shingle. It was determined that only those kiosks to be constructed in the future would be held to the newly adopted statewide spec. Additionally, mock ups of informational templates and reservoir brochures were circulated for review and comment. This resulted in the adoption of standardized templates that would be used in the development of all future kiosk panels and reservoir brochures.

An information sharing system for all data collected for the development of databases and the creation of informational kiosk/brochures was developed as part of the working plans for both the managed lands and reservoir project. This system allows members of WFF, OSS Graphics, and OSS Technology to work together reducing the burden on field staff. All data collected for each specific location are cataloged and filed in a shared drive. Once notified through a status workbook, members of both the graphics and technology staffs can pull necessary data to complete their portion of each of the printed products. Products will include items such as maps, data tables, kiosk layouts and brochure layouts. Field staff is asked to provide input through initial data submittal, approval of map products, and approval of graphic products.

Once the attribute data are collected for the shooting range database, information will be provided to the Graphics Section to begin work on the completion of the brochure. One brochure will be created to publicize all shooting ranges that are highlighted through the newly developed database. This brochure will act as a standalone informational product, as well as serve to publicize the online database.

In addition to the signage and printed products that will be created through the completion of the development of the various databases, SCDOT road signs continue to be a major issue across much of SC. To address the issue of roadside signage, each property manager will work with local SCDOT representatives to address the issue of missing or improper signage. If requested, the WFF Public Information Director will work with the State DOT office to assist in the process of determining signage needs and placement.

Recommendations

- Work within established teams to ensure flow of information continues concerning the managed lands, reservoir and shooting range projects.
- Continue to work with SCDOT, where appropriate, to ensure SCDNR properties are clearly marked from SC public roadways.

4.4.3 Recommendations

- Complete the managed lands, reservoir and shooting range databases within scheduled timelines.
- Begin planning sessions for Phase II of managed lands, reservoir and shooting range

databases based on lessons learned from Phase I.

- Promote all created databases and printed products through various marketing campaigns, new releases, social networking sites, and SCDNR's website.
- Continue to work with partners, seeking outside funding sources where appropriate, to expand number of shooting ranges and acres of managed land throughout the state.
- Continue to promote strong management of properties currently within the managed lands program.

5. TASK TIMELINE

Year One

Overall Efforts

- Conduct the initial public surveys to determine hunting, fishing and shooting participation rates. The survey will also determine the percentage of South Carolinians who support hunting and fishing as a fish and wildlife conservation tool. The results of the first year's survey will be used to establish baseline measurements that can be used in this plan's objectives.
- Hire a Director of Marketing, Education and Outreach.
 - Hire or designate someone, preferably from the marketing/education area, as the point person for recruitment and retention.
- Establish recruitment and retention of hunters, anglers and shooters as a Department priority.

Education and Outreach

- Hire an Education Coordinator with authority over all Department education efforts
 - Prioritize recommendations of recently completed *Conservation Education Evaluation* and determine how to implement changes.
- Develop a process to coordinate R&R education programs to ensure consistency.
- Develop a Department database that can be used to track people who participate in SCDNR programs. The database needs to be connected to SCDNR's license sales and hunter education database. SCDNR staff coordinating R&R programs, need to be able to enter participant data into this database. Once entered, the participant's involvement with SCDNR programs should be updated when they participate in more SCDNR R&R efforts.
- Use this data to promote DNR programs to people who have expressed an interest in hunting, fishing and shooting. It is important that this database be set up to track where the person is in the awareness-interest-trial-adoption process.
- Require all R&R program coordinators to keep track of program participants. Program coordinators need to use the same registration form (See Appendix for recommended form). This form will be used to enter participants into the developed Department database.
 - Initiate standardized data collection for all participants in Department recruitment

and retention efforts or programs.

- Develop and utilize evaluation methodologies for all R&R efforts and programs. Participant surveys will be completed to evaluate effectiveness. Survey questions must show how the program meets goals and objectives. Program surveys for each R&R program should be developed.

Marketing and Awareness

- Hire a Marketing Director.
- Work with SC Regional Tourism Boards to develop campaigns to increase non-resident participation in hunting and fishing. Start by promoting fishing to North Carolina residents (Charlotte and Asheville markets) and hunting to Florida residents (Jacksonville and Lakeland markets).

Legislative

- Evaluate multi-year, hunter education deferral and 365 day licenses and investigate the prospective roles of these new licenses on Department programs and on recruitment and retention.

Access

- Complete the managed lands, reservoir and shooting range databases and website updates within scheduled timelines.

Year Two

Education and Outreach

- Education Coordinator should develop education plan in accordance with the Conservation Education Program Inventory and Evaluation plan with main objective being R&R.
- Implementation of program evaluations through the administration of participant surveys developed in year one.

Access

- Initiate planning sessions for Phase II of managed lands, reservoir and shooting range databases based on lessons learned from Phase I.

Year Three

Overall Efforts

- Evaluate progress and adapt strategies of R&R plan.

Year Four

- Actively continue work on all multi-year goals and recommendations.

Year Five

Overall Efforts

- Conduct the second survey to determine hunting, fishing and shooting participation rates. The survey will also determine the percentage of South Carolinians who support hunting and fishing as a fish and wildlife conservation tool. The results of the poll will be used to establish if the public's opinions are being influenced by R&R efforts.
- Complete thorough R&R plan update.

Multi-Year

Overall Efforts

- Maintain a dynamic and representative R&R committee with meetings held at least semi-annually.
- Update R&R plan every other year to reflect changes in programs, staffing, funding and the state demographics based on survey and program evaluations.

Education and Outreach

- Track all participants in education programs and link program participants to other programs SCDNR offers.
- Evaluate all education programs by surveying participants.

Marketing and Awareness

- Develop a marketing/awareness campaign encouraging existing hunters and anglers to take friends and family hunting and fishing. Need to incorporate messaging about the decline in participation and how hunters and anglers provide funding for the conservation of the state's natural resources.
- Continue lapsed hunter and angler campaigns.
- Develop marketing/awareness campaign to inform South Carolinians about who pays for the conservation of the state's natural resources (hunters and anglers).

Legislation

- SCDNR should standardize various types of hunting on WMA lands at least across regions, rather than manage the recreation on a property by property basis.

Access

- Promote all created databases and printed products through various marketing campaigns, new releases, social networking sites, and SCDNR's website.
- Continue to work with partners, seeking outside funding sources where appropriate, to expand number of shooting ranges and acres of managed land throughout the state.
- Continue to promote strong management of properties currently within the managed land program.
- SCDNR should provide more open access hunting and fishing on SCDNR properties.

6. SUMMARY AND GENERAL DISCUSSION

The culture of hunting, angling and shooting sports has changed. Historically, wildlife and natural resources agencies, like SCDNR, depended on stable or increasing numbers of hunters, anglers and shooters to support and fund wildlife conservation. However, they now must now develop programs and strategies to recruit and retain those individuals.

In developing new programs and modifying existing ones, the Department must use sound business principles and establish goals and objectives, develop and implement strategies, design techniques and implement measures of outcomes (evaluation) and finally, adapt the programs based upon these evaluations.

The SCDNR recognized this some years ago and worked to create new programs, like BOW, and modify existing programs to recruit and retain hunters and anglers. The Freshwater Fisheries Section conducts surveys to collect information about recruitment and retention and has structured programs like Reel Kids and fishing rodeos with goals and objectives of recruitment and retention of anglers. More recently, the Department has examined other education programs to determine their goals and objectives and to seek the outside evaluation of these programs. Some of the material and information about education programs in this document is from this external evaluation. Modification and re-structuring of these programs continue and this committee is convinced that future efforts will be designed and delivered with clear goals of recruiting and retaining hunters, anglers and shooters.

The first and major obstacle for these programs is the consolidation, storage and evaluation of data relating to participants in the various programs. There should be clear direction about what data to collect and how to assimilate and store these data. Second, the Department must develop the capability to track individuals, without duplication, through the Department licensee database. Finally, participation in the programs must be compared to the license data to determine when, and if, persons purchase licenses. For hunters and anglers, the purchase of a license will be the ultimate goal.

In 2007, the Department created a position of Marketing Director and on April 1, 2007, this position was filled. Much of the early work was designed to develop marketing campaigns to retain hunters and anglers and to “brand” and publicize the Department and the work it does. Several hunting and fishing marketing campaigns have been implemented with mixed results. A major limiting factor in evaluation of these campaigns has been the inability of the Department to properly and completely query the hunting and fishing licensee database. We understand that there is significant churn in the purchase of both hunting and fishing licenses. We also know that lapsed licensees saw the campaigns and purchased a license. We do not know if the campaigns were the motivating factor in the lapsed licensee buying the license. A better understanding of the churn of licensees over an 8-10 year period would provide for a better evaluation of these campaigns.

Recently, the Department has embarked on the AIS, SCTP and Natural Resource Schools programs. These programs have recruitment of hunters, anglers and shooters as goals. We expect modification of these programs to continue and evaluations to guide future structure. More

emphasis should now be placed upon recruitment. Filling the Marketing Director and Education Coordinator positions should help address these needs. Both of these positions need some authority or “reach” over the various SCDNR Divisions in order to maintain the focus of the efforts on recruitment and retention. The Department should designate someone, probably from the marketing or education area, to lead the Recruitment and Retention Team. This person could also lead in locating, constructing and utilizing shooting ranges. This person should also lead a dynamic and representative R&R committee that will be instrumental in evaluation of programs and efforts and review and updating of this plan.

When these positions are filled and recruitment and retention are formally recognized as a primary objective of our marketing and outreach efforts, the SCDNR should begin to find ways to tell hunters, anglers and shooters of the responsibilities and opportunities available to them and of the statistics indicating declines in hunting, angling and shooting and the uncertain future if we do not recruit and retain. We should also find ways to partner and cooperate with conservation organizations like NWTF, QDMA, DU, Delta Waterfowl, Boy Scouts of America, etc. in recruitment and retention programs. These programs and efforts must pay less attention to promoting the organizations and this Department and more attention to recruitment and retention.

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Tennessee Wildlife Resources Agency

Youth Outreach

To create further hunting opportunities, the agency has created a variety of youth mentor programs. These have included youth only dove, deer, waterfowl, squirrel, rabbit, coon, coyote and turkey hunts. The events have been located across the state and the response has been extremely positive. Thousands of kids took part in these events last year and many more are planned for the upcoming season.

Programs continue to be implemented as the need presents itself and agency personnel continue to speak to groups across the state about the diversity of Tennessee's wildlife.

To promote a greater interest in conservation education, a wide variety of educational resources are offered and being generated by Tennessee Wildlife Resources Agency (TWRA). Numerous requests for information were filled from the wildlife education office.

Young Sportsmen Deer Hunts

This will be the 15th season to offer these events and last year there were at least 12 agency sponsored deer events which attracted over 1,000 participants. These events have been held on a variety of locations, which include both public and private locations. Many of these events incorporate cookouts, camping and sponsors that donate a variety of door prizes.

One particular event held in Humphrey's County was limited to youths 10-15 that had never harvested a deer before. Well over 250 youths registered for the event from the agency's website and 30 lucky hunters were selected who harvested over 18 deer on the hunt.

Youth Dove Hunts

This is the 11th year to offer this hunt. Last year we offered over 30 youth dove events on private and public lands across the state which attracted over 1000 young hunters.

Youth Turkey Hunts

This is the 10th year to offer the youth mentor turkey hunts. We have held 6 events this season which attracted 100's of participants.

Youth Waterfowl Hunts

We conducted and assisted with two youth waterfowl hunts during the February youth-only weekend. The 4th Annual Davis P. Rice Memorial hunt was held in west Tennessee with 163 kids participating. Each hunter is affiliated with the Scholastic Clay Target Program (SCTP). We partnered with the Tennessee Wildlife Federation.

The 1st Annual Daniel Greer Memorial hunt was held on the Cheatham Lake Wildlife Management Area located in middle Tennessee. We had 35 youths participate in this event. We partnered with Delta Waterfowl.

Youth Outdoor Clinic

The agency hosted two Youth Outdoor Clinics at the John Sevier Hunter Education Facility in which a variety of topics were offered which included shotgun, rifle, archery and turkey hunting. They are held in the fall and summer. It is a free clinic for youth between the ages of 10-16.

Conservation Youth Day/Camps

TWRA sponsor numerous events with the NWTF, Quail Forever and so forth. Educational outlets also include the following: Farm Days, Career Days, Bone & Fur Box, Jakes Days, Earth Camps, Project/Aquatic Wild, Fishing Rodeos, SCTP.

Tennessee Outdoors Youth Summit (TOYS)

TWRA will be conducting the 2nd annual TOYS June 12-17 for students in high schools across Tennessee in cooperation with the Tennessee Wildlife Resources Foundation (TWRWF). The approximately 75-100 students will be introduced to many different outdoor activities including: boating, hunting, trapping, archery, photography, marksmanship, plant identification, forestry, camping, water quality, trap shooting, skeet shooting, wildlife identification, and several classes with wildlife and fisheries biology as the topic. Students will participate in hands-on classes that will teach the importance of the natural resources and their management.

Instructors will be wildlife and fisheries biologists, wildlife officers, college professors, professional shooting coaches, and experts from fields of interest. Classes will be two to four hours long and will include hands-on training in that subject.

National Archery in the Schools Program (NASP)

Five (5) Basic Archery Instructor courses were conducted across the state during the past year which resulted in certifying 30 instructors and adding 20 new schools to the NASP. We currently have 177 schools in 46 of the 95 counties across the State of Tennessee participating in NASP. Our 5th Annual Tennessee State NASP Tournament was held on April 5, 2011 with 954 students from 43 schools participating.

After School Archery Program (ASAP)

ASAP was first conceived by the National Field Archery Association (NFAA) to serve as a next-step youth activity for all the youth in the United States who wanted more than just a first-peek at this fun sport. As the program was developed, other leading archery associations joined forces to create a complete activity that helps new archers gain confidence and experience in a wide variety of archery styles.

We are targeting City and County Parks and Recreation Departments to administer this program. Currently we have two departments, City of Clarksville Parks and Recreation and City of Kingsport Parks and Recreation offering archery classes at their community centers. TWRA assists with obtaining the archery equipment in a partnership with the Archery Trade Association (ATA) and training the instructors. This is a great step for students currently in the NASP.

Community Archery Parks (CAP)

This program is a partnership with ATA, state wildlife agencies, City/County Parks and Recreation Dept. and schools. It promotes the NASP and ASAP by constructing these CAPs which include: beginner, target and field ranges. These are constructed within parks, ball field facilities, school grounds, etc... so they are very visible to the public and open to the public in order to promote the sport of archery for all ages. We are just now in talks with the Kingsport Parks and Recreation Dept to develop our first CAP.

Hunter Education

Despite significant decreases in the number of hunter education graduates in surrounding states, certification of Tennessee hunter education students has been relatively stable. There were four hundred and seventy-nine (479) classes conducted during FY 2009-10. Approximately 17,501 students were registered in the hunter education program with 16,175 certified as graduates.

Scholastic Clay Target Program

There are now 89 teams registered in the state which reflects a decrease from last fiscal year by 5 teams. However, the program experienced approximately a 15% increase from last year in the total number of individual athletes participating in the three (3) different disciplines: trap, skeet and sporting clays. A total of 1,073 youths participated in the 2010 TNSCTP Championships. The breakdown on number of participants was: Trap = 795, Skeet = 127, Sporting Clays = 151. TNSCTP awarded 8 scholarships for higher education totaling \$9,500.

Envirothons

Thousands of high school students from over 80 counties have been competing in the Envirothons since 1993. The Envirothon is a national environmental competition that encourages stewardship of natural resources through group interaction and brings students to the outdoor classroom. The students are challenged in 5 subjects including wildlife, water quality, forestry, soils and a current environmental topic. In addition to providing study guides, regional and state exams, the agency has also provided 12 bone and fur boxes to the regional districts. Agency personnel also administer the wildlife exam for the regional and state competition.

Adult Outreach

Becoming an Outdoors Woman (BOW)

The 14th annual workshop will take place on June 10-12, 2011 in Crossville at the Clyde York 4-H Center and host approximately 125 women for the weekend and offering over twenty different topics. The BOW program is primarily aimed at reaching women 18 years or older that are interested in learning an outdoor skill usually associated with hunting and fishing. The agency has now offered the Beyond BOW program which focuses on single topic workshops.

Beyond BOW

The Beyond BOW events are single topic workshops designed to help women become more active in the outdoors. Many of the participants are graduates of the BOW workshops and are looking for the next step. The agency is creating a variety of Beyond BOW events across the state. Examples of these workshops are as follows:

Beyond BOW Fishing Workshop
Beyond BOW Muzzleloader Workshop
Becoming an Outdoors Woman Field Day
Beyond BOW Bird Watching
Beyond BOW Canoe Trip
Beyond BOW ATV Ride

Project WILD

Purchased and distributed 492 Project WILD books, 312 Project WILD Aquatic books, 130 Growing Up WILD, 96 Flying WILD, and 5 PW Science and Civics, all part of the Project WILD nationally acclaimed K-12 wildlife-related curriculum guides. This book series is used for in-service teacher training workshops, educators with resource-related organizations, and goes to several colleges for use as class curriculum for pre-service teachers.

Nature @ Noontime

The monthly free public lecture series, Nature @ Noontime, began its twelfth year in March, 2011. Presentations are offered by agency staff and guest speakers with natural resource-related topics ranging from research areas to travelogues. Averaging 35 in attendance, this series offers a public platform for presenting TWRA's management programs, gives the public opportunities to interact with natural resource professionals, and provides exposure to many interesting and exciting aspects of the natural world.

Tennessee Outdoor Classroom Symposium

The TWRA partnered with the Tennessee Environmental Education Association and Wilson County Fair to host the third annual Tennessee Outdoor Classroom Symposium (TOCS) at the Wilson County Fairgrounds in Lebanon. Over 20 other organizations were sponsors. The successful one-day event had over 150 participants including teachers, school administrators, and conservation educators along with presenters, exhibitors and volunteers.

The focus of the Symposium was to encourage educators to utilize their school grounds or nearby areas as outdoor classrooms and to provide the necessary tools to develop these projects. This theme was expanded on during the 20 breakout groups, keynote speech and the field trip to a nearby school outdoor classroom. Opportunities to learn techniques and strategies for integrating outdoor learning with every subject were offered. Networking and collaboration were highly encouraged. A variety of exhibitors showcased their EE programs and materials.

Every Child Outdoors-TN Coalition

The TWRA was represented as a member of the Every Child Outdoors-TN Coalition (ECO-TN) that was created in 2008 to promote and support opportunities that encourage the children of Tennessee to engage with and experience the outdoors. One of ECO-TN's primary accomplishments has been the development of a Children's Outdoor Bill of Rights (TCOBR) which was passed as a Resolution by the state General Assembly and signed by Tennessee's Governor in March 2010. TCOBR states that among other recommended activities, by the time a child reaches high school, he should have had the opportunity to learn how to fish.

Another accomplishment of ECO-TN is to host the second Tennessee Governor's Summit on Every Child Outdoors in May 2011 which provides an opportunity for decision makers and community leaders to better understand and discuss the connection between youth detachment from the outdoors, lack of physical exercise and increased health risks. It will be attended by over 150 stakeholders, the Summit offers a chance to develop specific recommendations for policy and program initiatives that address each of the ECO-TN Coalition's goals and objectives.

Tennessee Naturalist Program

The goal of the Tennessee Naturalist Program is to develop a corps of volunteers to provide education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within their communities. An equally important goal is to raise the environmental literacy of Tennessee's citizens. TWRA is participating on the planning committee for this program which will begin as a pilot program FY10/11.

Hunters for the Hungry

Tennessee Wildlife Federation in cooperation with the TWRA operates the Hunters for the Hungry program. Through this program, sportsmen, meat processors and volunteers fight hunger by providing properly prepared venison to food banks and soup kitchens to feed hungry families in their community.

The 2010-2011 seasons ended with an overall increase of 9% with a total of 111, 223 lbs which equals out to 445,000 meals. The number of whole deer donated saw an increase of 12.6% which translates to 1,962 deer.

Wounded Warrior

This program provides opportunities for wounded warriors to participate in hunting deer, duck, turkey, and participate in a bass tournament with a guide. Our close proximity to the 101st Airborne Division at Fort Campbell allows us to work with wounded soldiers belonging to the Warrior Transition Battalion. We began working with the Wounded Warriors' program in 2008 and it continues to offer us some very good and positive results. We have just recently partnered with Not Alone (www.notalone.com) who is based out of Nashville who provides programs, resources and services to warriors and families all across the country who are impacted by combat stress and PTSD through a confidential and anonymous community. Donations and volunteers continue to make this possible with almost no cost to the agency.

Firing Ranges

The Tennessee Wildlife Resources Agency Hunter Education and Range Facility located in Bartlett (West Tennessee) regularly hosts hunter education classes at the facility and live fire at the range. Approximately 300 students from other Shelby County courses live fired at the range. During FY09-10, 1,512 public shooters used the range. The range has also hosted Boater Education classes, handgun carry permit classes, fishing clinics, SCTP training and law enforcement training.

Stones River Hunter Education Center (Middle Tennessee) increased in public use. During FY09-10, 13,104 public shooters used the range. The walk through archery range and field

archery range witnessed improvements during FY09-10. Hunter education classes are conducted at a regular basis in the new hunter education facility. Many various firearm training courses are taught at the range throughout the year, including handgun carry permit classes, law enforcement qualifications and military training.

John Sevier Range (East Tennessee) 5,339 public shooters used the facility during FY09-10. Hunter education classes are offered on a regular basis at the hunter education classroom. Additional activities occurring at the range include; handgun safety classes, National Guard Training, SCTP training, TWRA law enforcement training, NRA schools, BOW workshop, numerous shooting tournaments and provided classroom facilities to different groups.

Cheatham WMA firing range served 3,726 public shooters during FY09-10.

Yanahli Firing Range was completed during FY09-10 and has experienced 169 public shooters using the new facilities.

Aquatic Education

This program develops statewide sport fishing and aquatic resources education program that focuses on encouraging more people to become anglers and informing citizens of the state of their responsibilities in managing aquatic resources. Another aspect of this program is teaching about aquatic ecology, the importance of fisheries management, and outdoor ethics.

Free Fishing Day Events

This is the agency's biggest single outreach effort and more than 15,000 kids took part in nearly 70 fishing events across the state. Events were registered on the agency's web site for easy public access to information about the events. Free Fishing Day promotional supplies and fishing rodeo materials were purchased and distributed to Regional Information and Education Coordinators, Wildlife Officers and private groups. These items included fish ID booklets, wildlife activity booklets, and plastic bags. These events are a great opportunity to expose children to fishing, to develop community goodwill and visibility for the agency, and to partner with many other organizations and groups.

Catfish Fishing Rodeo and Water Festival

The ninth annual Free Fishing Day event held at Shelby Lake, a 9-acre lake in Shelby Park, Nashville is scheduled for June 11, 2011. The agency partners with the Cumberland River Compact, the Shelby Bottoms Nature Center, and Metro Parks. The event includes a Water Festival, hosted by the adjacent Shelby Bottoms Nature Center. The purposes of the combined events were to raise awareness about the Cumberland River, how people and wildlife are affected by the quality of water in Middle Tennessee, and the water and land management tools that can be used to protect and enhance this natural resource. Another important purpose, of course, was to introduce kids to the joys of fishing. The Agency will stock approximately 1,700 pounds of catfish in the lake for this event.

Represented at the Water Festival are about 15 organizations with educational booths that are related to the theme of water resources with hands-on activities for children. Region II's Wildlife

Trailer will be present for visitors to view. The event reaches primarily inner-city families. This year more than 400 children, ages 5-16 years will participate in the Rodeo.

State Parks Rod Program

The goal of the State Parks Rod Program is to provide every state park that has fishing access a basic number of rods along with rod racks and fishing-related written materials. The rods are used as loaner rods for state park visitors who wish to fish at the state park and for how-to-fish workshops. Twenty-two of 53 state parks now have at least 16 fishing rods provided by TWRA. Several parks included in the 53 total do not have access to fishing areas and will not receive rods.

The fishing rod loaner program also fills requests for fishing rods from other groups for fishing events such as Boy Scouts, school teachers, etc...

National Fishing in the Schools Program (NFSP)

The National Fishing in Schools Program is a nationwide, in school program, that teaches the positive lifetime activity of fishing to students in grades 6-12. NFSP teaches students how to cast a fly or spincast rod in the school gym while they also learn about fish, insects, aquatic resources, resource stewardship and conservation. The foundation courses are designed to be taught over 10 days and meet 4 standards: Language Arts, Physical Education, Science and Technology.

NFSP works in cooperation with state education and fish and wildlife agencies and a network of groups interested in teaching our youth how to fish in schools. In November of 2010, we certified our first class of twenty-one instructors which included; agency personnel, school teachers and volunteers. We just received our NFSP kits in March so we are just beginning to get this program implemented across the state to all schools.

Broadcasts

Tennessee Wild Side

Our Agency television show, *Tennessee's Wild Side*, continued production in its eleventh season. It airs state wide in Tennessee and Kentucky on Public TV. *Tennessee's Wild Side* is a half-hour magazine format program that focuses on "people stories" about the outdoors. It is produced by the Renaissance Center in Dickson. It features TWRA events, hunting, fishing, non-game stories, news and information. A recent survey conducted by the University of Tennessee reports that more than 4 out of 10 Tennesseans surveyed have watched TWS within the past year. Of those viewers, the average number of episodes watched within the year was 8. It has won a total of 8 Emmy awards in the past ten years.

Re-runs of Tennessee's Wild Side are broadcast on thirty-five local community and government channels across Tennessee as well as on MyOutdoorTV.com.

Wild Side Weekly

Launched last year, *Wild Side Weekly* continued to air on Comcast and Charter cable networks in the middle Tennessee area four times per week on channel 250. It is also available to anyone with digital antenna. It continued to be hosted by Joey Monteleone and Chris Nishchan, who also

appear frequently on Tennessee's Wild Side as Wild Side Guides. This program features interviews with agency staff, outdoor experts and segments from Tennessee's Wild Side. Topics include equipment, techniques and tips regarding fishing and hunting in Tennessee. Just recently our agency's foundation, Tennessee Wildlife Resources Foundation took over this show from the Renaissance Center.

Tennessee Wildcast

Our podcast, *Tennessee Wildcast*, supported by its own web site, is a place where users can stream the video podcasts or "Wildcasts", or subscribe to the RSS feed and automatically receive new podcasts as they are uploaded to the Web site. *Tennessee Wildcast* gives the agency the opportunity to generate public interest and awareness of the newest happenings by offering an easy way for the public to get the information that would normally take longer to disseminate. Web presence continues on FaceBook, YouTube, TruVevo, MyOutdoorTV.com and iTunes. As well as being able to watch each podcast on these popular sites, visitors can follow the chain of links, first to Tennessee Wildcast's own unique site, then to the Wildcast Trophy Room, TN Wildlife Network Calendar - a calendar of agency related events, the Tennessee Deer Registry, and/or any of the links to website of associated programs, groups, and causes that the agency is involved with. Our Wildcast continues to spotlight high quality, unique, individually styled content. To date there have been 47 podcasts uploaded to the site. There were 7 original shows produced and uploaded this year for Tennessee Wildcast all running between 4 and almost 17 minutes. And there are 19 programs in the can and ready for post production. Tennessee's Wild Side continues to play a pivotal role in the production of Tennessee Wildcast by supplying world-class B-Roll, archival interviews, and master clips of beauty shots.

Public Service Announcement

Radio Public Service Announcements are produced and distributed to over 200 radio stations across the state four times a year. We receive quite a bit of play in the smaller communities.

Public Meetings

2010 was the first year to hold a positive informational public meeting called The TWRA Road Show. These meetings are set up in cooperation with local sportsman's clubs for local buy-in. Based on the location and time of year, topics of presentations have run the gamut from Muskie fishing to elk hunting. Agency staff fields questions at the end of the evening.

Website, Twitter, FaceBook, YouTube, QR Codes

The Tennessee Wildlife Resources Agency (TWRA) Web staff is responsible for publishing and maintaining the Agency website. The TWRA website contains Agency information pertaining to hunting and fishing regulations & seasons, boating regulations, Agency services, geographical data, educational programs, contact information, online publications & forms, and general information electronically over the Internet. In addition, the Web staff is also responsible for additional promotional Web projects for the Agency, the Agency's online newsletters, and managing the Agency's social media applications (Twitter, FaceBook, You-Tube) over the Internet as well.

We are also playing with QR codes which can be scanned by smart phones/cell phones and all types of information can be relayed to the public. It may be a website link, video, text or website.

We will have QR codes on signs with; specific fish regulations for that particular lake or river, access area rules, WMA rules, information pertaining to a specific wildlife viewing area, etc...

We have just begun a new digital version of our agency magazine, "Tennessee Wildlife" on its own website. We will offer approximately 4 of the 7 articles on this site from each issue. It will be sort of a teaser and marketing plan to try and increase our subscription numbers.

Our latest technology move is the development of an agency App for iphones and Droid. We hope to have it available by Christmas of 2011.

Virginia Department of Game and Inland Fisheries

Current Hunting Activities

Hunter Education

Since Hunter Education became mandatory for 12-15 year old and first-time hunters in 1988, there has been a 25% reduction in the rate of hunting-related shooting incidents. While hunting is safe in comparison to other common sports, each injury can cause extreme physical and emotional pain for the victim, the shooter, and their families. Hunter Education courses are designed to teach hunting safety, principles of conservation, and sportsmanship. A dedicated cadre of 750 trained volunteer instructors, work with 160 Conservation Police Officers to teach 14,000 students each year. A program milestone was reached in 2007 when Hunter Education in Virginia exceeded half-a-million graduates of the course.

Adult/Child/Disabled Hunts

Virginia Department of Game and Inland Fisheries (VDGIF), Virginia State Parks and National Wildlife Refuge systems currently hosts more than 50 adult/child special lottery, quota, reservation and managed hunts in addition to workshops statewide for various game species. Hunting opportunities range from open hunting in designated areas to managed deer hunts where individuals participate through a reservation or lottery system. Specific sites that offer hunting may change from year to year. Participating hunters support efforts by following each hunt's harvest guidelines.

Adult/Youth Hunting Workshops

VDGIF currently hosts adult/youth educational hunting workshops statewide for various game species. Youth attending many of our adult/youth educational hunting workshops have the opportunity to take part in wildlife identification, wildlife habitat, and live fire range practice. Some of the educational workshops have hunting opportunities as well. There have been 8 scheduled educational hunting workshops this past year covering rabbit, deer, waterfowl and turkey.

National Archery in the Schools Program – VA NASP

NASP, based upon the National Archery in Schools Program (NASP) (<http://www.nasparchery.com/>), was instituted in Virginia by VDGIF in 2006. VA NASP has certified 398 schools and 904 instructors to date. Data from schools indicate that over 155,000 youth receive archery instruction during the school year. A Virginia NASP state tournament is held annually and in 2010, over three hundred and fifty students participated with three \$1,700.00 scholarships being awarded to the highest scoring teams in each Division. NASP holds a national tournament each year and, in 2010, seven teams as well as several individual youth archers from Virginia participated in this event. Three Virginia schools were represented at the World NASP Tournament.

Explore Bowhunting Program

VDGIF is launching the Explore Bowhunting Program as the next step after the introduction of archery through NASP.

Outdoor Skills Training

VDGIF is currently offering outdoor skills programming in cooperation with Parks and Recreation Departments, Boy Scouts and other community conservation groups to provide educational opportunities for angling and the shooting sports. Programs such as Ladies Shooting Clinics target novice women who desire to learn how to shoot. Classes are offered in handgun, rifle and shotgun.

Hunter Education Skills Challenge

The Virginia Hunter Education Association, in cooperation with the Virginia Department of Game and Inland Fisheries and Holiday Lake 4-H Educational Center, annually sponsors a series of Hunter Skills Weekends. They are designed to help the beginning hunter develop skills beyond the basic Hunter Education course. The program offers instruction in shooting rifle, shotgun, muzzleloader, bow hunting, woodsmanship, and hunting techniques and tools including treestand safety, wild game cooking, trapping, game processing, waterfowl hunting skills, orienteering and habitat management.

Becoming an Outdoors Woman®

This program is designed primarily for women whose outdoor exposure has been limited. The three-day event (Friday through Sunday) offers a variety of 4-hour classes geared towards beginners. Participants can choose from shooting sports, angling, boating and non-consumptive educational courses. The courses offered may include, but are not limited to, intro to shotgun, rifle, archery, hunting techniques for game species, fly-fishing, bass fishing, boating, camping, wilderness survival, wildlife viewing and outdoor cooking. Weekends are held in rustic yet comfortable settings. Participants in the Becoming an Outdoors Woman® programs must be at least 18 years of age. The first BOW in Virginia was held in 1995 by VDGIF and was called "Virginia Women in the Outdoors." It was scheduled as an educational weekend event targeting turkey hunting sessions. Since then, VA BOW has grown to offer more than 30 skills based educational sessions to women ages 18 and above. Events are held 1 to 2 times per year with 60 to 120 attendees at each event.

Virginia Outdoors Weekend

This program is designed to give the entire family a chance to add to their outdoor experience. The Virginia Outdoors Weekend is a three-day event (Friday through Sunday) taught at various locations across the state. The focus is on learning outdoor skills through hands-on courses such as, but not limited to, intro to skeet shooting, rifle, archery; hunting techniques for game species, fly-fishing, basic fishing, boating, camping, wilderness survival, outdoor cooking, wildlife viewing and many others. Events are held once every other year with 50 to 75 attendees at each event.

Mother & Daughter Outdoors

The Mother & Daughter Outdoors program is designed primarily for women. It provides an excellent opportunity for anyone 9 years of age and above to learn outdoor skills usually associated with hunting and fishing, but useful in a variety of outdoor pursuits. The courses offered at this 2-3 day event are similar in content to the BOW and the Virginia Outdoors Weekend events. Children under 16 must be accompanied by an adult. Mother & Daughter Outdoors was established in 2001 to include females 9 years of age and above. Educational

sessions are consistent with BOW and include a youth emphasis with increased hands-on skills and curriculum. Events are held once every other year with 100 to 150 attendees at each event.

Women in the Outdoors

Co-sponsored with the National Wild Turkey Federation, this day program is designed primarily for women 14 and over. Participants can enjoy learning new skills, meeting people with similar interests, and getting involved in outdoor activities. These events offer classes that range from fly fishing, shooting sports, and turkey hunting to mountain biking, canoeing, and bird watching. Events are held throughout the state. Events are held 1 to 6 times every year with 6 to 25 attendees at each event.

Educational Hunting Workshops

An educational experience focused on knowledge and skill development for specific species. Educational workshops may cover squirrel, dove, upland bird, waterfowl, turkey or deer. Workshops are designed in partnership with hunting organizations and community groups. They are designed for youth, novice and disabled hunters. Educational Hunting Workshops including classes on safety, habitat, biological information on game animal, live fire range skills training and an opportunity to hunt were organized beginning in 1994. Events are held 4 to 12 times every year with 10 to 20 attendees at each event.

Outdoor Youth Initiative

Virginia offers special youth deer, and waterfowl hunting days each year. In addition, VDGIF hosts or sponsors numerous special youth hunts each year for deer, turkey, waterfowl, squirrel and rabbits.

Licensing Efforts

Apprentice Hunting License

Virginians interested in learning how to hunt, and Virginia hunters eager to share their sport with friends and family, now have a program that will make it easier for people new to hunting to give the sport a "test drive." On July 1, 2008, the Virginia General Assembly established an apprentice hunting license. This new license benefits people, regardless of age, who have not hunted before, but are interested in learning about hunting.

The license is issued in lieu of the current state resident or nonresident basic hunting license. Individuals who have previously held a hunting license will not be eligible to purchase the apprentice license. The fee for the license will be \$10 for residents and \$20 for nonresidents; the one-time, nonrenewable license will be valid for two years from the date of purchase, thus affording the apprentice hunter two full years of opportunity to go afield with a mentor hunter to learn about the sport before having to complete the requirement for hunter education.

An important safety feature of the new license is that the apprentice hunter must be accompanied and directly supervised by a hunter possessing a valid Virginia hunting license who is an adult over age 18 (the mentor hunter). "Directly supervised" is defined in the new legislation as "when a person over 18 maintains close visual and verbal contact with, provides adequate direction to, and can immediately assume control of the firearm from the apprentice hunter." This "direct

supervision" requirement is in place because the apprentice hunter will not have had to meet the hunter education requirement as a condition of purchasing the apprentice license.

While the apprentice license can be purchased by a new hunter without having to successfully complete the Department of Game and Inland Fisheries' hunter education course, apprentice hunters are reminded that they will still have to comply with the hunter education requirement before they can legally purchase a state resident or nonresident basic hunting license. Completion of that requirement can be done at any time so that once the apprentice hunter has finished their hunting "test drive" and decided that hunting is something they will continue to participate in, they will be able to provide the necessary proof of passing the course in order to purchase the basic resident or nonresident hunting license.

Since the apprentice license serves only in lieu of a basic hunting license, apprentice hunters will still need to purchase the special licenses to hunt deer, bear and turkeys or to use muzzleloader firearms, archery equipment and crossbows or to trap.

Legacy License

On July 1, 2010 the Virginia General Assembly established the Legacy Hunting and/or Fishing License. This new license is issued only to an individual who is younger than two years of age. It is valid for the lifetime of the license holder, regardless of any change in that person's status as a resident or non-resident.

The Legacy Hunting License is valid until the individual's twelfth birthday. Upon proof of completion of a hunter education course or equivalent, this license is transferable to a lifetime hunting license at no additional charge. The cost is \$125 for resident children and \$250 for nonresident children.

Virginia Department of Education/VDGIF Collaboration

VDGIF works in collaboration with DOE to incorporate natural resources conservation education, including hunting and fishing, into school programs by assisting in the development of curriculum for all grade levels. Virginia currently offers archery curriculum correlated to the Virginia SOL's and is working on other curriculum to include angling, GPS, map & compass, tracking and survival.

Hunting License Promotion/Marketing Efforts

The VDGIF has worked on many fronts to create and inform hunters about opportunities in Virginia and make hunting and fishing licenses readily available. License availability is promoted through annual regulation booklets, the VDGIF website and the customer service phone bank.

Licenses can be purchased via toll free customer service number (1-866-721-6911), Web site www.HuntFishVA.com, bi-weekly newsletter (25,000 subscribers), monthly four-color wildlife magazine, more than 650 VDGIF license agents (Bass Pro, Wal-Mart's, Mom and Pop retailers) located statewide, VDGIF headquarters, and various trade shows (2009 Virginia Sportsmen Show over \$34,000 in hunting license sales), fairs, county and state tourism centers, educational and outdoor events.

- VDGIF introduced a new license purchasing method in 2006 when they went to a fully automated licensing method that allows for control of data gathering and record keeping.
- VDGIF also has created specialized licenses, such as youth, lifetime, combo and bonus licenses.
- VDGIF reaches out to various trade shows when attendance numbers support the effort. For example, at the 2010 Virginia Sportsmen Show there were 25,000 in attendance with over \$34,000 in hunting license sales.
- Virginia supports youth hunting through special Youth Hunting Licenses (under age 12 and ages 12-15).
- The sale of resident and nonresident licenses are promoted in more than 500,000 annual hunting booklets that are printed and distributed beginning in July of each year, as well as, the outlets where they are sold.
- VDGIF promotes hunting and fishing opportunities and license sales through a good working relationship with traditional media outlets (newspapers, television, radio and outdoor writers) and targets them with information concerning hunting opportunities. The Department's Web site also receives over 1.5 million direct hits each year and utilizes streaming video and special features weekly to attract interest to hunting. A bi-weekly newsletter goes out to 25,000 subscribers and the Department's flagship publication Virginia Wildlife magazine reaches more than 40,000 paid subscribers each month.

Find Game

Find Game helps you find the best places to hunt in Virginia! *Find Game* is an interactive Web-based map viewer designed by the Virginia Department of Game and Inland Fisheries (VDGIF) to provide better and more current information about hunting land location and access. Funded by a grant from the National Shooting Sports Foundation, the objective of *Find Game* is to get hunters in the field. *Find Game* allows users to map hunting areas by location and/or by game species. The following statewide public hunting lands are included:

- VDGIF Wildlife Management Areas (WMA) and leased lands,
- State Parks,
- State Forests,
- military installations,
- National Forests,
- U.S. Army Corp of Engineers lands,
- National Wildlife Refuges,
- and other special hunting opportunities.

Virginia Lapsed Hunter Campaign

Virginia is one of the participating states in a direct-mail marketing program funded by a National Shooting Sports Grant. Now in its second year, the program is designed to increase Hunting license sales and to promote awareness of local conservation efforts funded by those sales.

Shooting Ranges

The Department of Game and Inland Fisheries has public sighting-in ranges available at the [Amelia](#), Chickahominy, [C.F. Phelps](#), [Gathright](#), and [White Oak Mountain](#) Wildlife Management Areas. These ranges are built with safety and accuracy in mind and have posted restrictions. The

VDGIF shooting ranges are intended primarily to provide hunters with a place to align sights on hunting firearms, which is entirely compatible with the WMA objective of enhanced wildlife habitats and populations.

Current Fishing Activities

Kids Fishing Events

VDGIF sponsors or co-sponsors over 100 Kids Fishing Days Events statewide each year. Fishing Days take place from March through October with the majority taking place in the spring and coinciding with the Free Fishing Days the first weekend of June. The purpose is to provide an opportunity for children to fish in a safe, fun, family environment.

Tackle Loaner Program

VDGIF sponsors a Tackle Loaner Program to provide opportunities for groups, families or individuals to borrow rods, reels and basic tackle. Tackle is available at most VDGIF offices throughout the Commonwealth and in some park facilities. The Tackle Loaner Program is utilized primarily by groups conducting Kids Fishing Events, Scouts and clubs.

Angling Education Workshops

VDGIF Angling Education conducts educational fishing workshops throughout the Commonwealth. The events include basic fishing workshops and species or technique-specific workshops. The events include a pre-registration and payment to cover basic costs. The purpose is to make opportunities available to the public to learn how to fish or introduce or improve skills for a particular species or technique.

Materials Request Program

VDGIF sponsors the Materials Request Program providing education fishing materials to be used at exhibits, workshops, classes and events. Over 20,000 adults and children receive educational fishing materials annually from VDGIF.

Fishing Education in the Schools Program

VDGIF provides the Fishing Education in the Schools Program for VA schools to teach fishing as part of their Physical Education curriculum. The VDGIF Angling Education staff conducts the training and provides the curriculum and equipment to implement the program.

Kids 'n Fishing Photo Contest

VDGIF has an annual photo contest for children up to age 10 who can submit photos to win prizes and have their pictures posted on the Agency's website and be included in VDGIF publications.

Angling Education Training

VDGIF provides training to organizations and park staff to conduct fishing programs.

Fish Virginia First Initiative

The initiative is currently targeting southside and southwest Virginia and has garnered many cooperators representing localities and state agencies throughout the region. In 2010, the initiative finalized a web based vacation planning tool, collateral materials, and plans for a television show highlighting two Virginia fisheries, and by providing assistance with bringing fishing tournaments to the area. Visitors are encouraged to visit the site and begin exploring the fisheries resources that are awaiting you whether you are planning a day trip on your next day off or a two week family vacation of a lifetime!

Virginia Lapsed Angler Campaign

Virginia is one of 33 states participating in the direct-mail marketing program coordinated by the Recreational Boating and Fishing Foundation. Now in its third year, the program is designed to increase fishing license sales and to promote awareness of local conservation efforts funded by those sales.

Free Fishing Days

Each year on the first Friday, Saturday, and Sunday in June, Virginia offers Free Fishing Days. No fishing license is required in freshwater or saltwater, with the exception of designated stocked trout waters.

Fishing License Promotion/Marketing Efforts

The VDGIF has worked on many fronts to create and inform hunters about opportunities in Virginia and make hunting and fishing licenses readily available. License availability is promoted through annual regulation booklets, VDGIF website and the customer service phone bank.

- Licenses can be purchased via toll-free customer service number (1-866-721-6911), Web site www.HuntFishVA.com, bi-weekly newsletter (25,000 subscribers), monthly four-color wildlife magazine, more than 650 VDGIF license agents (Bass Pro, Wal-Marts, Mom and Pop retailers) located statewide, VDGIF headquarters, and various trade shows.
- VDGIF introduced a new license purchasing method in 2006 when they went to a fully automated licensing method that allows for control of data gathering and record keeping.
- VDGIF also has created specialized licenses, such as youth, lifetime, combo and bonus licenses.
- VDGIF reaches out to various trade shows when attendance numbers support the effort. For example the Virginia Fishing Expo and Virginia Fly Fishing Festival.
- The sale of resident and nonresident licenses are promoted in more than 500,000 annual fishing booklets that are printed and distributed beginning in December of each year as well as the outlets where they are sold.
- VDGIF promotes hunting and fishing opportunities and license sales through a good working relationship with traditional media outlets (newspapers, television, radio and outdoor writers) and targets them with information concerning hunting opportunities. The Department's Web site also receives over 1.5 million direct hits each year and utilizes streaming video and special features weekly to attract interest to fishing. A bi-weekly newsletter goes out to 25,000 subscribers and the Department's flagship publication Virginia Wildlife magazine reaches more than 40,000 paid subscribers each month.

Creating Fishing Opportunities

Creating fishing opportunity is a critical function for the Virginia Department of Game and Inland Fisheries. The Department is responding to angler needs through lake and dam construction, renovation, and maintenance; fish habitat improvements; shoreline and fishing pier developments; and fish hatchery improvements and fish stockings. The Department owns 39 man-made lakes and ponds, totaling 3,445 acres, that will continue to be an important part of Virginia's fisheries management program to help meet the increasing demand for close-to-home, family fishing and outdoor recreational opportunities. All of these lakes have been purchased, constructed, renovated, and/or maintained using license dollars and Sport Fish Restoration Program funds.

Aquatic Habitat Improvement

Fish habitat improvements, fertilization and liming are very effective practices to help concentrate fish, increase fish population carrying capacity, increase fishing opportunity, and increase angler use. Between 1992 and 2000, fish attracting structures have been added or maintained on 39 different lakes; improvements have been planned, coordinated, or constructed on 20 streams; vegetation control in the form of grass carp stockings, partial drawdowns, and herbicide treatments were implemented at 17 lakes; 6 lakes were managed under an annual fertilization program; and major liming projects were completed or continued on Laurel Bed Lake, Passage Creek, and St. Mary's River.

Accessible Fishing Areas

VDGIF has also found it essential to expand shoreline and handicap accessible fishing areas. Significant developments in recent years have included shoreline/angler access acquisitions and developments at Crooked Creek, Stewarts Creek, and the Leesylvania tailwater area, and handicap accessible fishing piers at such areas as Middle Fork Holston River, Whitetop Laurel Creek, Leesylvania State Park (Potomac River); and Cook, Keokee, Locust Shade, Biggins, Claytor, Amelia, Smith Mountain, Burke, Kerr, Frederick, Anna, Orange, Bark Camp, and Briery Creek lakes.

Fishing Stocking

Fish stocking is a management tool to establish sportfish in new, reclaimed, or renovated waters open to public fishing; supplement natural stocks where reproduction is inadequate; introduce new species as predators and/or to provide a trophy fishery; and provide immediate fishing by introducing catchable size fish. VDGIF operates four warmwater hatcheries (King & Queen, Front Royal, Buller, and Vic Thomas), rearing and stocking a wide variety of species including largemouth bass, bluegill, redear sunfish, walleye, musky, northern pike, American shad, channel catfish, hybrid striped bass, and striped bass. Over the last eight years, VDGIF stocked over 14,864,000 freshwater fish in Virginia waters. Anglers should realize that some of the major sport fisheries in Virginia today would not exist without annual stockings from hatcheries and most others are/were started by hatchery fish and then sustained by natural reproduction.

Trout Stocking

VDGIF annually stocks over 1.2 million catchable-size trout in some 180 waters (stream sections and lakes) from October-June. Trout are raised at Marion, Paint Bank, Wytheville, Coursey Springs, and Montebello hatcheries. This catchable (put-n-take) trout program draws a tremendous amount of attention and is funded through the sale of trout licenses. A much smaller

fingerling/sub-catchable stocking program is designed to take advantage of the natural potential of high-elevation lakes, deep reservoirs, cold tailwaters below dams, and spring-feed streams to produce quality trout fishing opportunities where wild fisheries are not possible, due to lack of natural reproduction.

Virginia Angler Recognition Program

On the average, Virginia anglers measure up over 6,000 trophy-size freshwater fish annually. Their accomplishments are recognized by the Virginia Department of Game and Inland Fisheries through the Virginia Angler Recognition Program (VARP). Since 1963, when the program began, over 250,000 trophy fish awards have been issued.

Additional Wildlife-Recreational Activities

Project WILD

Project Wild is one of the most widely-used conservation and environmental education programs among educators of students in kindergarten through high school. The program emphasizes wildlife because of their intrinsic, ecological value, as well as their role in teaching how ecosystems function. In the face of competing needs and pressures affecting the quality and sustainability of life on earth. Project WILD addresses the need for human beings to develop as responsible citizens of our planet. It is based on the premise that young people and educators have a vital interest in learning about our natural world. Each Project WILD activity contains all the information needed to conduct that activity including objectives, methods, background information, a list of materials needed, procedures, evaluation suggestions, recommended grade levels, subject areas, duration, group size, setting, and key terms. A glossary is provided, as well as a cross-reference by topics and skills. Project WILD teacher in-service workshops are offered free of charge across the Commonwealth. Project WILD workshop activities are also suitable for use in youth programs such as Scouts and 4-H. Workshops specifically designed for youth group leaders are available.

- K-12 Curriculum and Activity Guide is the original guide featuring 122 activities emphasizing terrestrial species and their habitats. A wide range of ecological concepts are covered including: food webs or energy flow, adaptations, interdependence, carrying capacity and habitats. Available in a six hour workshop.
- Aquatic K-12 Curriculum and Activity Guide provides a look at aquatic wildlife and their ecosystems. This guide with 49 activities, supports the watershed and Chesapeake Bay related SOLs as well as the wildlife concepts mentioned above. Available in a four hour workshop.
- Science and Civics - Sustaining Wildlife (9-12) contains both government and civics activities along with science activities. It is designed to serve as a guide for involving students in environmental action projects aimed at benefiting the local wildlife found in a community. It involves young people in decisions affecting people, wildlife, and their shared habitat in the community. The structure of Science & Civics makes it a suitable curriculum guide for teachers providing a Meaningful Watershed Educational Experience (MWEE) for their students. Available in a five hour workshop.
- Flying WILD, a new conservation education guide featuring interdisciplinary hands-on classroom activities along with information for engaging students in a school wide bird festival. Key concepts include migration, adaptation, the importance of habitat, and bird

conservation efforts. Designed originally for middle school teachers and students, the guide contains activities suitable for anyone who wants to teach about birds. Available in a four hour workshop.

- Growing Up WILD - Exploring Nature with Young Children A curriculum guide for educators of 3-7 year olds that builds on children's sense of wonder about nature and invites them to explore wildlife and the world around them. Through a wide range of activities and experiences, *Growing Up WILD* provides an early foundation for developing positive impressions about nature and lifelong social and academic skills. Available in a three hour workshop.

Virginia Habitat Partners

The purpose of the Virginia Habitat Partners© Corporate Certification Program is to encourage habitat improvement projects on corporate lands that make a substantial contribution to the welfare of wildlife communities. The Program is designed to promote sound stewardship of our natural resources and the lands and habitats on which wildlife are dependent. In addition, projects that participate in the Program will be registered as WildlifeMapping monitoring sites in order to facilitate data collection that will become part of VDGIF's Fish and Wildlife Information System.

The goals of the program are to:

- Promote species diversity and enhancement of game and non-game wildlife populations;
- Encourage companies to establish or improve wildlife conservation practices on corporate lands;
- Provide guidelines for the development and implementation of wildlife habitat plans;
- Provide a framework for recognition of these corporate conservation projects; and
- Provide a focal point for wildlife education opportunities among a company's employees and the citizens of the local community.

Habitat at Home©

The Habitat at Home© certificate is intended to recognize the efforts that people make around their home to alter the existing landscape in such a way that wildlife habitat is improved. The certification process is intended to identify specific, direct changes that participants made to their landscape designs, such as adding native plants, installing water features, or providing other new habitat elements. The program recognizes improvements that participants make to their landscapes in the yard immediately around their homes.

Virginia Master Naturalist Program

The Virginia Master Naturalist Program is a statewide corps of volunteers providing education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within their communities. Interested Virginians become Master Naturalists through training and volunteer service. The process for becoming a certified Virginia Master Naturalist typically takes 6 to 12 months. One starts by completing a 40-hour basic training course offered by a local chapter of the program. An additional 8 hours of advanced training is also required. An important part of the certification process is the required 40 hours of volunteer service annually. All service projects must be approved by the chapter, meet the mission of the program, and be of public benefit rather than personal gain. Volunteer opportunities range from education-related

outreach to data collection and citizen-science projects to more labor-intensive stewardship efforts. The current status of the MasterNaturalist Program in Virginia is:

- There are currently 27 chapters across the state,
- Over 1000 volunteers trained,
- As of February, 2010 Master Naturalist volunteers had reached over 18,800 people through education and outreach programs, and
- From 2006-2008 they contributed 49,877 hours to natural resources in Virginia including building 222 miles of trails, 6155 hours of citizen-science, and 415 presentations to groups.

Virginia Birding and Wildlife Trail

The Virginia Birding and Wildlife Trail is a statewide driving trail that directs people to the 680 best places to watch wildlife across the Commonwealth. The Trail was developed in 65 loops, each loop requiring 2-4 days to complete. Many of the sites have hiking trails, unique wildlife resources, and interpretive facilities/staff to enhance the visitor's experience. The trail provides a means to connect people to nature and increases their awareness of Virginia's wildlife resources. Staff has installed wildlife viewing structures and educational kiosks at several sites to enhance the visitor's experience and provide a "teachable moment" wherever possible. All of these enhancements have been done with partners, increasing community involvement in wildlife conservation and with the Department. As part of the Trail development process, Agency staff met with over 400 new partner groups across the state to highlight the Trail and discuss the importance of wildlife and habitat to local communities. A 2007 study by the Conservation Management Institute at Virginia Tech on the socio-economic impacts of the Trail to local communities showed that over 640,000 visitors travel the Trail each year and provide over \$8.6 million to local economies across the state.

Wildlife Viewing Programs

The Department's Watchable Wildlife Program has a strong wildlife conservation mission *to promote habitat and wildlife conservation by connecting people with nature for improved quality of life for local communities and all Virginians*. To this end the program provides technical assistance to landowners, communities and other agencies to enhance habitat for wildlife viewing, advises partners, communities and other agencies on trail and signage enhancements, and provides workshops for businesses on how to best serve wildlife viewing visitors. Program staff also works through a large network of partners to hold wildlife festivals, conduct citizen-science projects (see WildlifeMapping below), and participate in interagency groups to incorporate wildlife viewing and wildlife conservation messages into ongoing projects. In addition, the two webcams supported by the Department have been very successful in getting people involved in wildlife viewing. The Norfolk Botanical EagleCam had over 3 million hits during the eagle nesting season last year and developed into a money-making calendar marketed by The Wildlife Center of Virginia that is now generating revenue for the Virginia Nongame Fund and two other partners. The Richmond FalconCam has a large group of FalconWatch volunteers that monitor downtown streets and venues, in coordination with Agency staff, for a week each summer to assure that the young falcons fledge successfully on their first flights in downtown Richmond.

WildlifeMapping

The *WildlifeMapping* Program enables volunteers to contribute wildlife observations to the state's biological database while promoting stewardship of our fish and wildlife resources. This information assists wildlife managers in maintaining current information about species distributions in Virginia. Interested citizens participate in the program by attending a *WildlifeMapping* Workshop, offered at various locations in Virginia throughout the year, where they will learn mapping skills, habitat and species identification skills, and data collection and reporting protocols. Since 2006, the majority of workshops have been given to Virginia Master Naturalist chapters. A number of chapters have undertaken specific citizen-science monitoring projects using WildlifeMapping protocols to compile biodiversity data on sites of interest to their local areas. To date this year, 8 workshops have provided training for 105 new WildlifeMappers. WildlifeMappers submit approximately 6,600 wildlife observations annually, with a total of over 75,000 observations submitted since the program's inception in 1997.

Outreach Partnership Events

Outreach Partnership Events engage cities and counties, conservation organizations, community groups, and local sporting goods businesses in one day partnership events to reach sportsmen on a local level. Partnership events include offerings with Virginia State Parks, County and City Parks and Recreation Programs, NWTf's WITO, Jakes, and Wheelin' Sportsmen programs, DU's Greenwing Program, VAWFA's Outreach programs, Izaak Walton League of America, Trout Unlimited, Trout in the Classroom as well as Private Hunting Preserves, Shooting Sports Organizations, Churches, Wounded Warriors, and other non-profit organizations. Outreach Partnership Events are diverse in nature; however VDGIF's focus is the propagation of hunting, fishing, boating, and wildlife in Virginia.

Top 5 Programs

- Hunter Education Program
- National Archery in the Schools Program
- Lapsed Angler and Hunter Campaign
- Project WILD
- Virginia Birding and Wildlife Trail

Goals

- Stop the decline in hunting and fishing license sales.
- Retain existing hunters, anglers, recreational shooters, and wildlife watchers through outreach and marketing.
- Re-engage inactive hunters, anglers and shooters through programs and mentoring opportunities.
- Attract new (adult and youth) hunters, anglers, shooters and wildlife watchers through promotion, introductory programs and outreach.
- Provide training and educational programs for a variety of ages and skill levels focusing on family involvement in hunting, angling, shooting sports and wildlife watching.
- Create and develop safe, ethical, knowledgeable and skillful hunters, anglers, shooters and wildlife watchers.

- Monitor and evaluate the effectiveness of our recruitment and retention programs.

Challenges

- Little information on relative success of different recruitment/retention strategies
- Access to potential recruits
- Lack of efficient communication means with Hunter Education Volunteers
- Liability surrounding mentor programs
- Competition for Leisure Time
- Access to license data
- Lack of marketing expertise
- Urbanization
- Lack of and declining access to resources
- Need for “next step” program integration
- Societal dynamics
- Need for developing partners and leaders to help in effort
- Need for effective monitoring and evaluation
- Aging population
- Tracking of Hunter Ed graduates
- Bridging the gap from hunter ed certification to participation
- Fostering a family-friendly atmosphere
- Communicating with single-parent (especially mother-led) families
- Finding new funding mechanisms that are all-inclusive and provide equity among all wildlife recreation participants

West Virginia Division of Natural Resources, Wildlife Resources Section

West Virginia's National Archery in the Schools Program (NASP)

When the school year begins in the fall of 2010, students from 230 schools around the state will be participating in the Division of Natural Resources (DNR) West Virginia National Archery in the Schools Program. Since implementing the program in 2004, the popularity of this program has allowed the DNR to host trainings in every region of the state reaching 423 physical education teachers. In just 6 years, 50,000 students have been introduced to archery through their school's physical education class making it by far the DNR's largest and fastest growing educational program. Because of the Program's success, the DNR hosted the Fifth Annual State Archery Tournament this past spring at the Charleston Civic Center where 550 students from 51 schools were in attendance making it by far the largest indoor youth archery event held in West Virginia. In fact, 6 schools went on to represent West Virginia at the National Archery Tournament held in Louisville KY.

National Hunting and Fishing Days – Stonewall Resort State Center

West Virginia's Celebration of National Hunting and Fishing Days is like no other event held in West Virginia, with hands-on learning opportunities for youngsters and families in the area of wildlife and outdoor recreation. The objective of the event is to educate the non-hunting/fishing public on the benefits of these recreational activities and how they support the DNR's efforts in wildlife conservation. The DNR teams with the West Virginia Wildlife Federation to promote this important event. Nearly 20,000 wildlife enthusiasts are in attendance to try their hand at everything from archery, shooting, fly-fishing, and kids fishing derby, to list only a few. In addition, attendees also have the opportunities to sit in on several wildlife demonstrations or visit one of the hundred-plus vendors on hand.

West Virginia's 2010 Celebration of National Hunting and Fishing Days were held September 25th and 26th at Stonewall Resort State Park. Stonewall Resort State Park is located in Roanoke (near Weston) in Lewis County, West Virginia, and is easily accessible via Interstate 79 (Exit 91). For more information on this event and for a schedule of activities visit the webpage at: www.wvdnr.gov/hunting/nathuntfish.shtm.

Outdoor Youth Challenge

The Outdoor Youth Challenge (OYC) is one of, and arguably the most important, event held annually at West Virginia's Celebration of National Hunting and Fishing Days (NH&FD). The OYC is both a youth expo and competition. Young people are exposed to a multitude of activities and displays with real hands-on learning and instructional opportunities that encourage them to gain important knowledge and experience about wildlife, hunting, fishing, firearms safety and outdoor recreation. Young folks can choose only to participate or they can compete. For some youngsters, this may be the only opportunity they will have to be exposed to these fun and exciting outdoor activities.

Any youth between 6 and 18 years can participate in the OYC by simply showing up at National Hunting and Fishing Days (NH&FD) and quickly registering at the OYC tent. All children participating in the event will be eligible to win prizes – including 4 lifetime hunting and fishing licenses! In addition, many other quality prizes dealing with hunting, fishing and other outdoor

recreation activities will also be given away each day. Also, those youths 11-18 years of age who would like to compete will be able to do so, with five scored competitive events including casting for accuracy, archery, .22 rifle, muzzleloader and shotgun (skeet) shooting. Youths winning the junior group (ages 11-14) or senior group (ages 15-18) will win conservation camp scholarships each day and be recognized at the Sunday afternoon awards ceremony. More information can be found at the OYC webpage at: www.wvdnr.gov/Hunting/Youth.shtm.

Trailblazer Adventure Days – Boy Scouts of America

The Division of Natural Resources (DNR) has partnered with several West Virginia Boy Scouts of America (BSA) jurisdictional councils and the U. S. Sportsmen's Alliance Foundation (USSAF) to promote Trailblazer Adventure Days. Trailblazer Adventure Days is a type of group camp, or Camporee, where BSA campers are exposed to numerous outdoor activities – mostly focusing on hunting, fishing, fish and wildlife identification, and other skills. Over the last 5 years, DNR Fish and Wildlife Biologists have provided over 5,000 campers with expertise in various areas such as: fish identification, furs/skulls/track identification, bird & plant walks, turkey trapping, etc., as well as, introducing scouts to a hunting simulator – a high-tech computer device showing proper shot placement and hunting techniques – to the delight of all participants. The DNR believes their involvement with Trailblazer Adventure Days is an effective way to showcase the importance of hunting and fishing in West Virginia to these young campers and future resource users.

Youth Hunting (Special Seasons / reduced license fees)

The WV Division of Natural Resources provides significant opportunity for youth hunting. Resident youth under the age of 15 may participate in all regular hunting seasons (except firearms antlerless deer) without any license or hunter education requirements as long as they are accompanied by a licensed adult. Resident youth ages 15 through 17 and non-resident youth ages 8 through 17, upon successful completion of a hunter education class, may purchase Junior Sportsman licenses at a discounted rate.

Four youth hunting seasons are also available. Youth waterfowl season is open on a Saturday prior to the regular duck and goose season for youth age 15 and younger. They must be accompanied by a licensed adult age 21 or older who cannot hunt. No license or hunter education is required for youth age 14 and under. Youth age 15 must have hunter education and a junior sportsman license. Youth small game season for ages 17 and under is held on a Saturday in early October prior to most regular small game seasons. Youth age 14 and under must be supervised by a licensed adult 21 years old or older, but do not need a license or hunter education. Youth age 15 through 17 must have hunter education and junior sportsman license. Youth spring gobbler and youth antlerless deer seasons are limited to youth age 8 through 17 and have the same licensing, hunter education, and/or supervision requirements as the youth small game seasons. Youth spring gobbler is held on the Saturday prior to the regular season opener and the youth antlerless deer season is held on the last Saturday of October and the first two hunting days after Christmas. The youth antlerless deer season is limited to private land and designated public lands. The other three youth seasons are open statewide.

Wildlife Center

The Wildlife Center is a modern zoological facility displaying native and introduced state wildlife. Operated by the Wildlife Resources Section of the West Virginia Division of Natural Resources, the Wildlife Center is dedicated to presenting visitors a realistic and factual understanding of our state's wildlife. Woodland wildlife can be viewed along a wheelchair-accessible interpretative trail 1.25 mile through a mature hardwood forest.

The spacious enclosures allow the animals to interact with their environment and they therefore exhibit more natural behavior patterns. Interpretive signs help the visitor to learn more about each animal's life history, biology and its relationship with humans and the importance the species plays in terms of game management.

WV WILDLIFE (TV Show)

In a cooperative effort with two of the largest media outlets in the State of West Virginia (WCHS-ABC/WVAH-FOX), the DNR produces a weekly series called "WV WILDLIFE" which airs several times throughout the week during the regularly scheduled news broadcast. Focus of the 2-minute show is to promote wildlife recreational opportunities while educating the general public on wildlife management programs. This weekly series reaches nearly 350,000 households, making it by far the DNR's largest outreach program. The success of this program has gone well beyond the viewing area, with shows being picked up and broadcasted nationally on Good Morning America, FOX NEWS, CNN, and the Outdoor Channel. In fact, the series received an EMMY in 2008 for best documentary series, along with numerous national and local media awards.

Youth Angler Outreach Summary

The West Virginia Division of Natural Resources Wildlife Resources Section (WRS) does not have a formal fishing or aquatic education program. There is no budget or dedicated staff to develop and implement an education program. Staffing for youth fishing programs is provided by district and hatchery personnel. The lack of a program does not reduce the need or requests for such programs. In order to meet these needs, WRS, as staffing and time permits, coordinates or assists in a number of youth fishing opportunities with a variety of organizations. There are unmet needs for youth fishing and aquatic education in West Virginia.

West Virginia Wildlife (Magazine)

West Virginia Wildlife magazine is a quarterly, 28-page publication which focuses on the state's wildlife resources, management methods we use to manage them and wildlife-oriented recreation opportunities which are available. Topics include hunting, fishing and other wildlife-associated recreation, management techniques, and natural history information of wildlife. It is provided free to subscribers.

Master Naturalist Program

The mission of the West Virginia Master Naturalist Program is to train interested people in the fundamentals of natural history, nature interpretation and teaching, and to instill in them an appreciation of the importance of responsible environmental stewardship. The program provides a group of highly qualified volunteers assisting government agencies, schools, and non-

government organizations with research, outdoor recreation development, and environmental education and protection. The program was started in 2003 and continues today.

To become a Certified West Virginia Master Naturalist, the program requires completing 64 hours of classroom and field training (48 hours of core classes and 16 hours of electives), plus 30 hours of volunteer work. To maintain status as a Master Naturalist, 8 additional hours of training and 16 additional hours of volunteer work are needed each year after initial certification. Currently, there are nine chapters located throughout the state with approximately 500 students.

Wildlife Educational Trunks Program

The WVDNR, Wildlife Resources Section Wildlife Diversity Program has three educational loaner trunks full of teaching materials, including books, videos, puppets, posters, transparencies, audiotapes, stamps, puzzles, skulls, pelts, tracks and games. A comprehensive lesson plan is included in the trunk full of exercises that school children will enjoy. These trunks are geared for classes in the K-6 range and each trunk is dedicated to information about bats, birds, or West Virginia mammals. The trunks provide hours of interactive learning, and foster awareness of birds, bats and mammals and their places in the state and world.

Trunks are available for loan to educators statewide with a \$25 refundable deposit. Return postage is the responsibility of the school (approximately \$10-\$15) and the trunks are loaned for a 3-week period. Teachers will receive the manual two weeks in advance of the trunk delivery. More trunks are being developed on a variety of natural history themes including, wetlands, reptiles and amphibians, plants and insects.

Wild Yards Program

The Wildlife Diversity Program has developed the West Virginia Wild Yards Program. This program, similar to the National Wildlife Federation's Certified Wildlife Habitat Program, recognizes the efforts of backyard wildlife landscapers. Approved properties will be entered into the West Virginia Wild Yards Registry maintained by the Wildlife Diversity Program. The property owner receives a certificate and a sign that can be placed within the backyard habitat to let everyone know that the area is part of a statewide network of West Virginia Wild Yards. There is no charge for this program and currently the program has over 175 participants located throughout the state.

OWLS Program

The OWLS Program (Outdoor Wildlife Learning Sites) provides grants of up to \$2,000 to any public or private school for the creation of outdoor learning sites at or near school grounds. Currently, approximately 100 schools participate in this program. The purpose of the program is to bring children into a learning environment that includes wildlife species as part of their own ecosystem. OWLS projects are varied and include creating nature trails, butterfly and hummingbird gardens, the creation of wetlands or ponds, planting warm season grasses, as well as creating nest boxes and other habitats for wildlife. The planning of each project is based on the idea of creating habitat for non-game wildlife.

Fostering stewardship and awareness, OWLS have the capability of teaching ecology and conservation to children, assisting them in their future roles in an ecologically aware society.

The multidisciplinary approach of the project provides hands-on experiences that children may not get elsewhere, enhancing creative learning, as well as community involvement that nurture ecological literacy.

WV WILDLIFE Calendar

Since 1985, the West Virginia Division of Natural Resources, Wildlife Resources Section has published an annual calendar available for purchase. This award winning calendar is 11 by 14 inches featuring full color original paintings of native wildlife and wildlife related scenes. It also contains monthly hunting and fishing information and wildlife related facts of interest. Currently 22,000 calendars are published and proceeds from the \$10 cost benefit the West Virginia Division of Natural Resources, Wildlife Resources Section's Wildlife Diversity Program.