

Responsive Management



Hunter Retention and Recruitment in North Carolina: Analysis and Implications from the “Maintaining the Heritage” 2005 Workshop

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by Responsive Management**

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TABLE OF CONTENTS

Introduction	1
Methodology	2
Workshop Results	3
Outreach and Education.....	3
Hunting Opportunities	10
Hunting Regulations	14
Economics.....	15
Research on Hunting Participation.....	17
Public Opinion on Hunting	17
Hunting Participation Trends.....	22
Hunting Initiation.....	26
Hunting Satisfaction and Dissatisfaction	32
Available Hunting Lands and Hunting Access	33
Hunting Cessation and Breakdown of Social Networks	36
Marketing and Communications.....	38
Outreach Messages	42
Defining Objectives and Program Evaluation	42
Implications and Recommendations	45
Plan Program Goals.....	45
A Positive Public Image and Proactive Outreach	46
Market Segmentation	47
Effectively Reach Your Audience.....	53
Evaluate the Program	55
Bibliography.....	56
About Responsive Management.....	58

INTRODUCTION

This report presents the results of a hunter recruitment and retention workshop that was conducted to develop recommendations for effective actions to increase hunter recruitment and retention in North Carolina and to preserve North Carolina's hunting heritage. The North Carolina Wildlife Resources Commission contracted Responsive Management to facilitate the "Hunter Retention and Recruitment: Maintaining the Heritage" workshop on October 11 and 12, 2005, in New Bern, North Carolina. Several sportsmen's groups, hunt clubs, traditionally underrepresented organizations, the U.S. Fish and Wildlife Service (USFWS), the North Carolina Forestry Association, and North Carolina Wildlife Resources Commissioners and staff members participated in the workshop. The primary goal of the workshop was to gather input from attendees on problems as well as solutions associated with hunter recruitment and retention in North Carolina.

All workshop attendees met for an opening session to discuss the goals of the workshop and to review the agenda and meeting goals. Attendees then broke into smaller groups, predetermined at registration and printed on each attendee's registration packet. There were five break-out groups, including the Wildlife Resources Commissioners, three different sportsmen's groups (Toms, Bucks, and Mallards), and Wildlife Resources Commission (WRC) staff members. A professional facilitator led each group. On the first day during break-out meetings, participants focused on *problem identification*, concentrating on defining what affected their level of hunter satisfaction personally, as well as identifying the barriers to hunter recruitment and retention on a statewide level. On the second day during break-out groups, participants focused on specific recommendations for *solutions* to the barriers discussed.

METHODOLOGY

The facilitators' primary role during the break-out meetings was to ensure that every participant was respected and had an equal opportunity to provide feedback, and to accurately record feedback on easel paper for later review. The groups were first asked about the factors that affected their level of hunting satisfaction and about the major obstacles or barriers facing hunters today in North Carolina. The facilitators gave participants fifteen minutes to write down a response on sheets provided to provoke thoughts before any verbal discussion took place. The facilitator then asked each participant, one at a time, to name one issue from his or her notes and recorded it on the easel paper for further discussion and clarification. After all issues were recorded on the easel paper, the facilitator asked participants to group similar statements into themes or categories. Finally, each participant had five votes to distribute among the categories of their choice; they were able to place as many votes as they wished into a category—one vote each into five categories or all five votes into a single category, or any combination in between. Based on the votes, the facilitator ranked the categories concerning barriers to hunter recruitment and retention from most votes to least. The prioritized list of barriers created a discussion guide for the second day's break-out sessions regarding solutions. The same process of brainstorming, recording, and clarifying solution statements was repeated on the second day (except that the solutions were not voted on).

In the next section, "Workshop Results," summarizes by topic areas the barriers and solutions identified during the break-out sessions. The "Research on Hunting Participation" section examines human dimensions in wildlife research as well as other literature. The "Implications and Recommendations" section offers recommendations for a hunter recruitment and retention program and ties the workshop results together with the research findings.

WORKSHOP RESULTS

OUTREACH AND EDUCATION

By far the most commonly named constraint to effective hunter recruitment and retention was a general lack of outreach and education efforts to support hunters and hunting. Participants clearly wanted a more organized hunter advocacy group to lobby for hunter interests within the local community and the state and wanted the WRC to lead the effort. Participants strongly believed that outreach and advertising efforts needed to be developed and increased. All groups expressed a concern for the negative perception of hunters among the non-hunting public, as well as the lack of public representation for hunters. The concern over negative press on hunting is compounded by cultural and societal changes, including lifestyle changes, the movement to a more technological society, changes in land ownership, and demographic changes.

The Bucks sportsmen group recommended that the WRC lead an effort to strengthen a network of the hunting community, including individual hunters, agency staff members, sportsmen's groups, and hunter-oriented conservation groups. The Mallards sportsmen group suggested strengthening the relationship between active hunters and their local Wildlife Resources Commissioner. Hunters should perceive contact with a local Commissioner as being an effective avenue of communication to the entire Board. The WRC would work with the entire hunting community to define and publicize a common mission, develop and coordinate an official outreach plan, and oversee progress of long-term goals. In this effort, the WRC would need to ensure involvement by members of the hunting community, as it has already done by launching the "Hunter Retention and Recruitment: Maintaining the Heritage" workshop in New Bern. By involving constituents and stakeholders and seeking their input in the process of developing and organizing a plan of action, the WRC will ensure that individuals will be more likely to buy into the plan and work together toward achieving the goal.

The recommended hunter recruitment and retention plan would need to be evaluated at a predetermined point in time, as the Bucks sportsmen group suggested; therefore, a measurable goal needs to be defined to measure the program's success. Whether the measurable goal is defined by number of new hunters, number of returning hunters, or by license sales, the unit of

success needs to be defined up-front. In general, people can only feel successful if they can objectively measure their success through a measurable evaluation unit.

Regarding outreach and communications, workshop participants made recommendations for content and distribution of outreach materials. Two groups said that providing very basic information about hunting and wildlife management in itself would be beneficial. The WRC would need to decide the exact information to include, the format of publications (e.g., brochures, newsletters), and the avenues of distribution. Existing literature and informational resources could be gathered and examined to generate ideas or potentially to distribute in their present form.

The Commissioners group indicated that, in general, materials should include very basic “how to” information about hunting and wildlife management. According to the Toms sportsmen group and the WRC staff group, basic information on hunting is needed and should include information on learning how to hunt, the location and time of hunter education classes, the costs associated with hunting, and the location of hunting license vendors.

Several groups noted that the purchasing of licenses should be convenient, without hassles of Website server downtimes or unavailability of store personnel. The Mallards sportsmen group suggested that tear-out cards be included in the *Regulations Digest* to disseminate information. The Commissioners group suggested using simplified materials to promote hunters’ comfort with the many hunting regulations by printing summarized hunting regulations in bullet format with a clear reference to the complete *Regulations Digest*. The Commissioners group and the Mallards sportsmen group cautioned against relying solely on the Internet for reaching the general public because, they thought, the general public is most likely not querying information on how or where to hunt and, therefore, would never find all of the posted information online. The general public, it was suggested, would need to be reached by many different means and in many different formats.

The Bucks sportsmen group suggested that the WRC appoint either several persons or one full-time person to head WRC outreach efforts and implement outreach plans, and the WRC staff

group said that outreach staff should be increased. The outreach position would serve in essence as the voice and representation of the hunting community to the general public, political leaders, the local community, other agencies and organizations, and the public school system. The outreach position would lead a proactive, positive campaign in support of hunting and work to counteract negative hunting press and the anti-hunting rhetoric that most participants believed is predominant in the general media. Outreach personnel would also be responsible for ensuring that law enforcement personnel have the information they need to deliver good public relations. The Bucks sportsmen group discussed an example of poor public relations: there was mention of bad hunter press in a local newspaper on part of a WRC employee who reported that a deer-car collision was the result of a dog hunting chase.

Outreach efforts should begin with a focus on educating the public as a whole, including political leaders, the local community, state and local agencies including the Division of Forest Resources, and the public school system on the positive aspects of hunting. Solutions that were the easiest to achieve in terms of manpower and resources were considered to be first priority in a new outreach campaign. Education would center on the role of hunting in wildlife management, habitat management, environmental health, state and local economies, family tradition, camaraderie, and physical fitness. The outreach plan could include an element, as suggested by the Commissioners group, that works directly with the North Carolina Medical Society and medical profession to encourage physicians to promote a healthy outdoor lifestyle that could include hunting and fishing. Education would also need to focus on creating a more positive image of firearm safety and hunter education's role in promoting firearms safety.

In addition to targeting youth target markets, the sportsmen and WRC staff workshop groups suggested that outreach efforts target specific other demographic groups, such as senior citizens, the disabled, inactive or ex-hunters, the non-English speaking public, single-parent households, and urban youth. The Toms and Bucks sportsmen groups mentioned a lack of general outdoor facilities for the disabled, including fishing piers and properly maintained access trails. The WRC staff group said there is a need for increased outreach efforts to the disabled. For the Spanish speaking community, WRC publications, a sportsmen group suggested, should be

translated, and the WRC should offer hunter education courses in Spanish. The WRC staff group thought WRC staff should be offered Spanish language training.

Several specific recommendations were given as ideas to fuel a positive outreach campaign for the hunting community. All of the sportsmen's groups indicated that public service announcements would be a good way to get a short, simple, effective message to the general public with quick positive facts about hunting as well as specific information regarding where people could obtain more information. Public service announcements could also give specific information on where land is open for various species and when the land is open for hunting. The Bucks sportsmen group deemed it essential for the WRC outreach personnel to make in-person contact with media outlets to enable successful advertising. The WRC could work with local businesses to distribute information, according to the Mallards group. The Toms and the Mallards sportsmen groups suggested using billboards, and the Bucks group suggested having a made-for-TV movie aired that expresses in story form the hunting heritage and the personal relationships that hunting fosters. (*The Old Man and the Boy* and *Where the Red Fern Grows* were example movies given.) Two workshop groups suggested selecting a positive, public role-model with whom kids would identify, such as a sports, television, or Hollywood personality.

Another example of an outreach effort given by the Bucks sportsmen group and the staff group was the development of relationships with currently existing non-governmental and local organizations and youth community groups and programs that are outdoor-oriented, such as 4-H clubs, Boy and Girl Scout troops, and Venturing programs. The Bucks sportsmen group said that a Website should exist that is one source for all available youth programs and all available sportsmen's and sportswomen's outdoor activity and education programs. WRC outreach staff would meet with program leaders and/or send them basic information on target shooting and hunting, emphasizing the positive aspects of hunting that have been defined in the official outreach campaign. The Commissioners suggested creating one "super program" by combining all existing NGO programs into one. Alternatively, the Toms sportsmen group suggested that brand new outdoor clubs could be created that are specifically focused on hunting, fishing, conservation, and service.

Other organizations with which the WRC could develop relationships would be conservation organizations, such as the National Wild Turkey Federation (NWTF) and the National Shooting Sports Foundation (NSSF), that have their own established recruitment and outreach programs. WRC outreach and recruitment efforts might incorporate facets from these existing programs and might be able to combine human and capital resources from these organizations to leverage outreach success. Partnerships with NWTF and NSSF could enhance promotional efforts and outcomes for all parties invested in the hunting heritage. The WRC could also work with these types of organizations to create designated youth hunts and provide instruction time and perhaps transportation for a future established mentor program. The Toms sportsmen group suggested that WRC partnerships for outreach projects could also include established hunt clubs.

As previously mentioned, there was concern among all of the workshop groups over anti-hunting sentiment that needs to be addressed. Another suggestion for an organized outreach effort that arose in all of the groups was the need for the WRC to place an emphasis on hunter ethics and acceptable hunter behavior to promote a positive public image of hunting. The Bucks sportsmen group suggested the need to educate active hunters and new recruits not only in ethical practices but also in quality public relations skills. An example of harmful public relations given by the Toms sportsmen group was the actions of active hunters who blatantly display dead game that could offend the non-hunting community. An example of unethical (and illegal) behavior was the shooting of road signs. Hunter ethics needed to emphasize safety above all else, and although hunter ethics is taught in hunter education courses, perhaps adding an official public relations-type component initiated by the WRC would increase hunter awareness to the problem of negative press.

In this additional public relations component of the hunter education course, a hunter would learn the great effect and power that one irresponsible act can have on the non-hunting community and the resulting negative effect of their actions on the entire hunting community. Hunters and the hunting community could be positioned by the WRC as being an “elite” group: a privileged group that will not tolerate certain behaviors defined in the hunter’s code of ethics. Hunters should be held to the highest of standards in this regard, and the WRC should perhaps strengthen punishments for non-compliance of the basic code. In contrast, the WRC could offer

rewards (positive reinforcement learning) for hunters who practice good ethics and standards. Some participants thought that more enforcement officers and an anti-poacher reward program are needed. A crime-stopper policy could pay tipsters for reporting wildlife violators. The code of ethics, suggested by the Mallards sportsmen group could also include what hunters can expect from the WRC in terms of public service and representation.

It was noted that gaining access into public schools may pose more of a challenge than the previously mentioned avenues for educational outreach and awareness of the hunting tradition. All groups listed public schools as a great way to reach youth while also acknowledging that outreach through schools would not be an easy strategy. Societal and cultural changes, it was thought, do not lend much support to the hunting tradition. Hunting competes for a youth's attention with a multitude of other available activities, and there are fewer adult hunters to mentor those youth who are interested. The Bucks sportsmen group mentioned that outsiders came from out-of-state and brought their own visions of community, and those visions do not include a hunting heritage or even a tolerance for the hunting heritage. The Toms sportsmen group cited local ordinances that prohibit the discharge of firearms, air rifles, or BB guns within 1,000 feet of residences. Headway would need to be made with the general public and certainly with political and other key decision makers before public school systems could be effectively cultivated for educational and outreach. Relationships with lawmakers and school officials would need to be developed before youth could be reached at public schools.

The Toms and the Mallards sportsmen groups said that a starting point for becoming established in the school system would be to introduce educational programs into the current state curriculum that are clearly focused on outdoor skills and habitat and wildlife management principles. The Toms sportsmen group said that field trips related to outdoor study could be sponsored by the WRC. The Bucks sportsmen group and the WRC staff group suggested that hunter education be introduced into public schools; a participant in the Bucks sportsmen group said that in her western area of the state, hunter education was currently offered. However, most workshop participants felt that the option of offering hunter education in public schools was still far away. Again, they noted that the relationships with school officials and the local community

will need to be developed before more direct outreach plans for recruiting new kids into hunting can be implemented.

The Bucks sportsmen group stated that there is a disconnect between youth interest in hunting and shooting and actual levels of hunting and shooting participation. In other words, there is latent demand for hunting and shooting opportunities among youth. The Bucks sportsmen, Toms sportsmen, WRC staff, and Commissioners groups mentioned the need for mentors to take kids hunting or shooting to bridge the gap between interest and participation, between merely educating youth and having youth actually participate. Currently there is at least one hunter-friendly educational program that operates out of the public school systems: the Archery in the Schools program sponsored by the Archery Trade Association (ATA). However, even if a child finished hunter education or participated in the Archery in the Schools program, he or she might not have the means or resources available to go hunting or shooting because of the lack of an adult to accompany him or her.

The Bucks sportsmen, Toms sportsmen, WRC staff, and Commissioners groups discussed the development of a mentor program and put forth some general ideas for recruiting mentors. The groups suggested that mentors could be recruited from among state employees, hunting clubs, other various sportsmen's organizations, the senior citizen community, or inactive or ex-hunters. The WRC could begin working with the ATA, NWTF, and NSSF to develop a network of mentors who could be offered incentives of some type for taking kids hunting or shooting. The Commissioners group stated that mentors could accumulate points of recognition that may be "cashed" in on special hunts. In turn, the Bucks sportsmen group said a mentor could be a reward to a qualified child who successfully completed a hunter education course or ATA course. Mentors would be able to provide instruction, transportation, and possibly equipment. The Bucks sportsmen group advised that the WRC could designate specific areas of land on which youth and mentors could hunt and could designate special youth days.

To help keep kids who are currently hunting interested in hunting, the Mallards sportsmen group and the Commissioners group suggested encouraging official programs to recognize youth achievements. A program similar to the North Carolina Angler Recognition Program could be

implemented for hunting. The program would publicly recognize kids who have had a successful hunt. As part of the program, certificates of achievement could be issued and signed by the WRC. Photographs submitted by children could be selected for use on the WRC Website or for posters at promotional events. Levels of achievement could be established with different awards corresponding to each level of achievement.

HUNTING OPPORTUNITIES

All the workshop groups emphasized another constraint to hunter satisfaction, recruitment, and retention: lack of hunting opportunities. By far, lack of quality lands on which to hunt, lack of small game, and lack of access to hunting lands are at the top of the list for lack of hunting opportunities. Publicly held lands are crowded with other hunters and non-consumptive users, are unsafe, and are unsatisfactory for hunting, according to most workshop participants. Both the Toms sportsmen and the WRC staff groups specifically mentioned a lack of public land on which to hunt as being a problem. The Toms sportsmen, Bucks sportsmen, and WRC staff groups viewed privately held leased lands as being too expensive for the average hunter and sometimes inaccessible due to road closures. Many workshop participants perceive the current use of land and future land development as obstacles. All workshop groups consider time a barrier, as well as the current ban on Sunday hunting. Lastly, information on available opportunities seemed to be difficult to find, and more than one group mentioned that there is a lack of a centralized communication network for easily finding available hunting locations.

Some workshop participants saw the management of state game lands as an obstacle, including road closures, improperly marked signs for disabled-accessibility, and lack of habitat management. Four of the five groups brought up the need for better management of habitat on all lands. Better habitat management would provide small game the habitat they need for abundant populations. The Toms, Mallards, and Bucks sportsmen groups cited small game as a very important resource for beginning hunters; children need to harvest an animal to maintain excitement for the sport and continue hunting, and small game provides the best opportunity for harvest. The WRC staff group also mentioned declining small game and waterfowl populations as a cause for hunter dissatisfaction.

Several workshop participants stated their concern for urbanization and development and the resulting negative effect on hunting opportunities. The concern among hunters is twofold: hunters are concerned about the amount of available land and they are concerned about the access to lands currently available. First and foremost, relationship building needs to take place between the hunting community, key decision makers within local communities, and other agencies such as the National Forest Service.

Participants in the Bucks sportsmen group described the need for better cooperation between stakeholders and the National Forest Service for habitat management and for optimal land-use planning and hunting policies; for instance, timber companies operating on Forest Service land are not properly managed and cut hardwood too close to waterways, severely affecting small game habitat. The WRC could become more involved with the Forest Service and other agencies' land planning processes in the early stages to promote hunting opportunities. The same concern was mentioned for private lands: that hardwood forests and grasslands are not properly managed for small game habitat. The Toms sportsmen group also mentioned working with the National Forest Service to open gates after the deer season closed.

Several groups cited development and changing land ownership as a primary reason for the loss of hunting opportunities. The loss of hunting access on private lands leads to a loss of habitat management, and the loss of habitat then lead to a loss of small game available for hunting. Changing land ownership can affect local hunting regulations as well because land purchasers and developers may not have the same interest in hunting. Property tax laws and reassessment procedures decrease available private lands to support habitat and hunting. Several groups stated that urbanization and increasing development have decreased hunting opportunities. Some thought that better planning of land acquisition and the purchase of lands closer to urban areas is a solution to this problem. The Commissioners group recommended a 3-year license that could be sold with part of the proceeds going towards land acquisition. Land acquisition planning could also involve partnering with other hunter-oriented organizations. Holding elected and appointed officials accountable for their decisions regarding land use is important to the Toms sportsmen group.

Privately leased lands are viewed as too expensive for most hunters and especially for younger hunters, and this is seen as a constraint to hunter recruitment and retention. One sportsmen's group expressed concern regarding the relationships between landowners and hunting clubs because hunting clubs have driven up prices for accessing lands. According to the Toms sportsmen group, "Hunt for hire" outfitters increase hunting costs for the average hunter by charging too much for hunting on private lands.

The workshop groups felt that farmers and other private landowners in general need additional information on available state-sponsored land management programs. Additionally, landowners need incentives to manage for habitat and additional incentives to allow hunting on their lands. Landowners should have the option to choose participation in a variety of available land management programs that may or may not require habitat management efforts. Likewise, landowners participating in a habitat program may choose to do so for public or private use only; landowner participation in habitat conservation measures would ultimately have a positive impact on the larger landscape for hunting as a whole. Land management programs should be simplified, made easy to enroll in, and be properly advertised. Programs could perhaps have levels of increasing complexity and increasing financial incentives to encourage new enrollees to participate and current enrollees to become more knowledgeable. One group specifically named Hoke County as a North Carolina municipality that has a good land registration program template because it is widely available and easy on the landowner.

Several groups suggested that the WRC be responsible for implementing a public access to private lands program that provides money to landowners and liability protection in return for the landowners' adopting certain land management practices and/or providing hunter access. There were many other varying suggestions for the implementation of a hunter access program on private lands. Some workshop groups suggested that tax incentives similar to those used in the Conservation Reserve Program administered through the Farm Service Agency could be offered in addition to conservation easements for landowners to provide hunting lands. As an incentive, landowners could have the decision power regarding which species are hunted, the number of days per week hunting would be allowed on their property, and the timing of the season on their

property. Hunters could be required to complete a hunter ethics course to gain access to certain lands.

Suggestions for hunter access programs included an “Adopt-A-Walk-In” program on private lands that are leased by the WRC. Other groups mentioned the public access to private land programs in Washington, Montana, and Kansas as good hunter access program templates. The Washington program specifically emphasizes access to closed lands or to lands where access is significantly restricted, including to private industrial timberlands and to lands for waterfowl and pheasant hunting. Both the Kansas and the Montana programs offer monetary payments as incentives for allowing hunting on private land. In Montana, the funds come from resident and nonresident hunting access enhancement fees, nonresident upland game bird licenses, and nonresident variable-priced, outfitter-sponsored combination deer/elk licenses.

Workshop participants suggested that the WRC build an information network resource for both landowners and hunters, linking hunters and landowners together. The Bucks sportsmen group suggested that the WRC create an online database that could be searched for accessible hunting lands. Landowners could also find information about landowner incentive programs for habitat management and hunter access and about how to register their lands into a program. Detailed information regarding land tracts available for hunting, types of hunting available, days and hours open, and other appropriate regulations would be posted. The information network should include local hunting rules as well as landowner-specific hunting rules, if there are any. In general, the WRC should create a well-organized, well-maintained land management system that is easy for everyone to use, thereby encouraging its use. More importantly, the WRC should actively publicize available landowner incentives and make known the opportunities that both landowners and hunters have. One group suggested that the *Regulations Digest* and public ad campaigns could both be utilized for publicizing the programs.

All workshop groups named time as a barrier. Changes in culture and lifestyles contribute to the lack of time for hunting. Dual income earning households, heavy work schedules, and busy family schedules place time for hunting at the bottom of priorities. Hunter recruitment and programs compete with a multitude of other youth activities, including computers and video

games. It seemed to some that youth need to rediscover the outdoors. Several groups stated that removing North Carolina's ban on Sunday hunting would greatly improve the time barrier and increase the possibility that hunters will find time to go hunting.

HUNTING REGULATIONS

Besides the current ban on Sunday hunting in North Carolina, other issues related to hunting regulations were named as constraints to hunter retention and recruitment efforts. Many workshop participants noted a lack of available public shooting ranges and opportunities to target shoot as a barrier to hunter retention and recruitment. The workshop groups mentioned the complexity of hunting regulations as another barrier to hunter retention and recruitment.

The Toms sportsmen, Mallards sportsmen, and Commissioners groups indicated the need for more shooting ranges. The Toms and Mallards sportsmen groups thought that the WRC should develop public shooting ranges across the state to allow for increased target shooting practice time. Not only would this benefit current hunters, but it would provide kids who recently completed a hunter education course, Archery in the Schools program, or other outdoor skills program a place to use and enhance their newly learned knowledge and skills. Some thought that it was important to get a child out into the field to have hands-on opportunities to practice. The Mallards sportsmen group said that shooting ranges on State Game Lands would solve the problem of the prohibition of target practice on some of the State Game Lands. WRC-managed shooting ranges could be staffed, suggested the Mallards sportsmen group, with WRC biologists and wildlife enforcement officers. The Toms sportsmen group suggested working with local gun clubs to provide volunteer upkeep of ranges on both National Forest Service and state-owned lands.

Hunter education facilities could be located in conjunction with the shooting ranges. Short-term hunter education courses, such as weekend seminars, could be offered at shooting ranges for both adults and kids. Public shooting ranges developed by the WRC would provide more opportunities for hunters to spend time in the field and perhaps for mentors to spend time teaching kids. Public shooting ranges would provide a place for kids to take hunter education courses and further enhance a newly acquired skill. Additionally, if Sunday hunting were

legalized, many more kids would be able to go hunting because their parents, mentors, or other groups would have more available time to take them into the field. The Mallards sportsmen group suggested opening a youth season for small game before open season.

Many workshop participants viewed hunting regulations as being too complex for the average person to read, potentially discouraging newcomers from entering the sport. Two workshop groups specifically mentioned waterfowl regulations as being particularly daunting. While there were not any solutions offered for the waterfowl regulation complexities, one group did suggest that regulations could be summarized and put in a bullet-style format, especially for the kids. The bullet-style summary could appear on a brochure or flyer and reference the *Regulations Digest* for further and more detailed regulations.

ECONOMICS

All of the groups identified the cost of hunting as a constraint, and the Commissioners group rated it as one of the top constraints. The workshop groups agreed that hunting licenses, private land leasing costs, equipment such as clothing and firearms, and travel could get quite expensive, especially for a newcomer to the sport. The Mallards sportsmen group suggested that the WRC conduct an economic impact study to learn the exact economic impacts hunting has and examine revenues from nonresident hunters and the effects of changing license fees. An economic impact study may be useful as a benchmark for making any new changes regarding incentives aimed at increasing hunter recruitment and may be beneficial in a public relations campaign. Staff members and Commissioners stated that, for some, the cost of hunting may only be a perceived high cost, because they are misinformed about the true costs involved. This misperception could be addressed by creating outreach materials that list ballpark costs and provide potential alternative resources for financing hunting or shooting activities.

There were several different suggestions for minimizing the costs for new hunters. Several groups suggested offering reduced-cost or free licenses for first time hunters or for youth who hunt small game. Similarly, the WRC could offer a “free hunting day” for youth or new hunters, provide equipment and transportation costs, and/or waive license fees. The WRC could develop partnerships with equipment manufacturers to provide beginner kits to new hunters and publicize

this opportunity. The WRC could also develop awareness of or develop hand-me-down and second-hand markets as a source for hunting clothing and equipment that have been donated by fellow hunters. An “Estate Program” would leave hunting equipment to the WRC to be given to qualified youth in need of assistance.

The WRC could seek alternative funding and resources from non-profit conservation groups and government grant programs. Non-profit conservation groups could provide transportation and money for licenses. Youth could apply for monetary assistance from the WRC by an application process that requires the child to be an honor roll student. Monetary assistance for the rewards could come from manufacturers, and the manufacturers could receive advertising in exchange. The WRC could alternatively provide money, the Mallards sportsmen group suggested, to other local organizations (maybe through competitive grants) that support habitat improvement, and/or outdoors, hunter recruitment, or youth programs. The Commissioners group stated that a Statewide Lottery system could generate funds to help with habitat or hunting programs established by the WRC. WRC staff members expressed concern that funding for agency programs was inadequate and that additional funding and resources were needed.

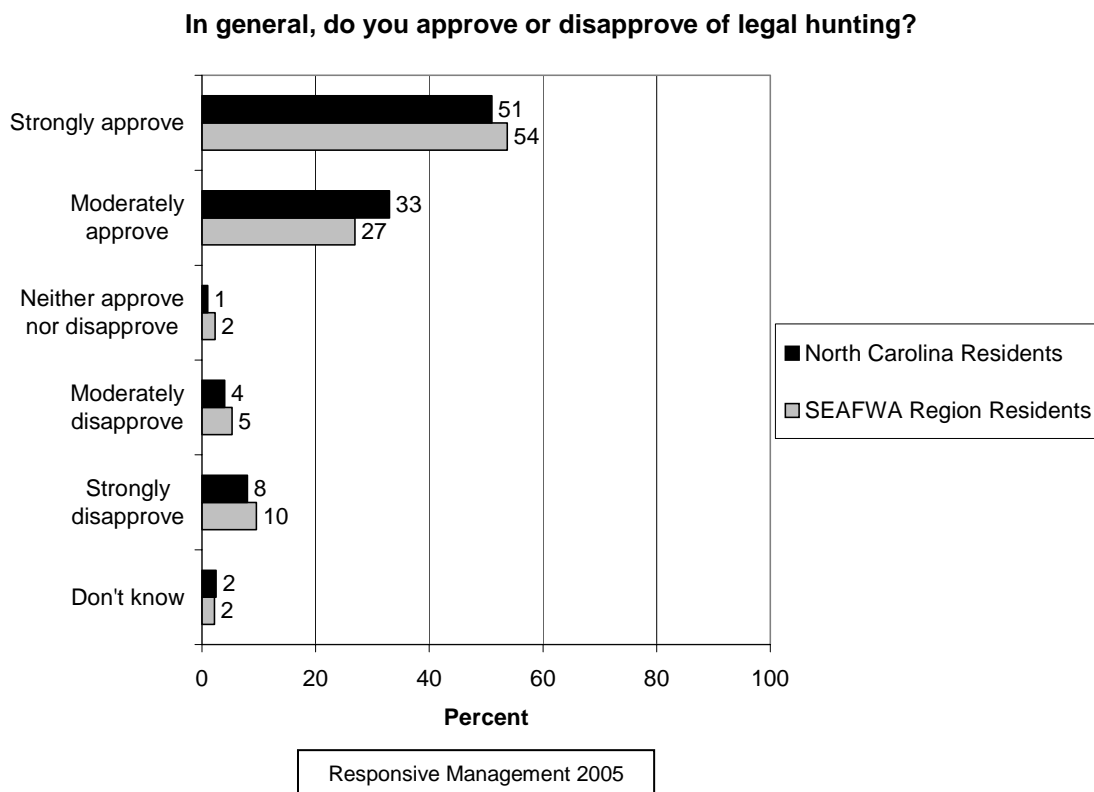
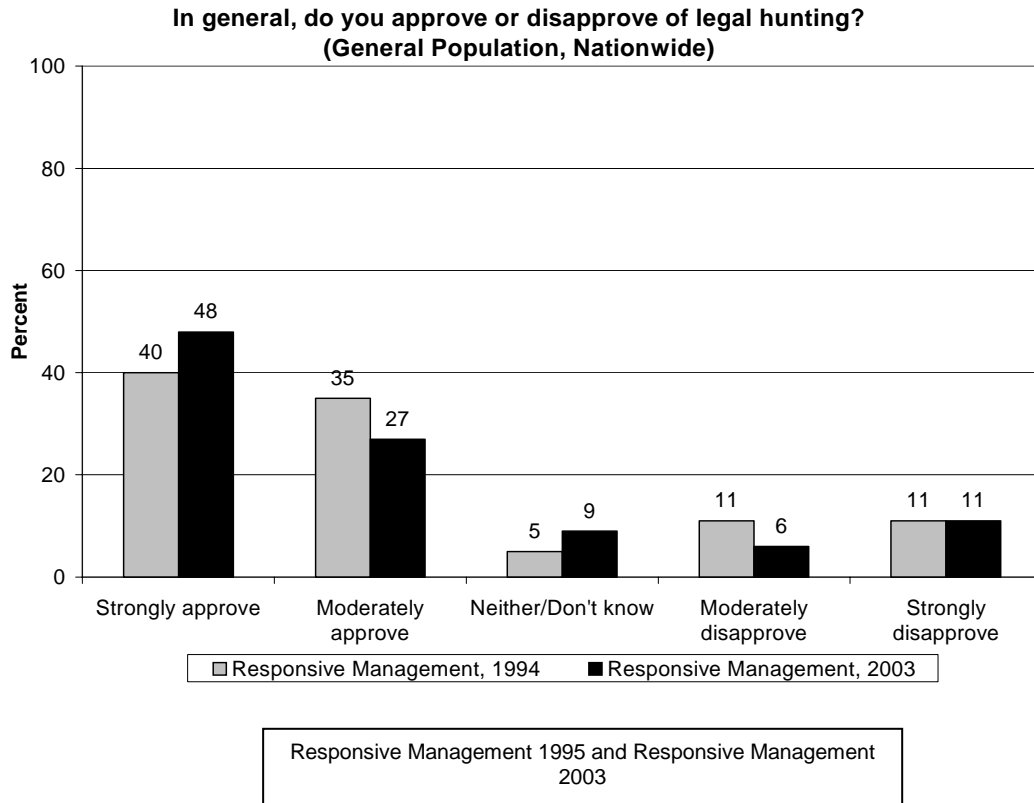
RESEARCH ON HUNTING PARTICIPATION

The WRC's wildlife management programs are based upon a solid foundation of fact. North Carolina's hunter retention and recruitment programs should also be based on a solid foundation of fact, not conjecture or speculation. The primary goal of the workshop was to gather input on problems and solutions associated with hunter recruitment and retention in North Carolina. The end result of the workshop was the development of recommendations for effective actions that will increase hunter recruitment and retention in North Carolina and preserve North Carolina's hunting heritage.

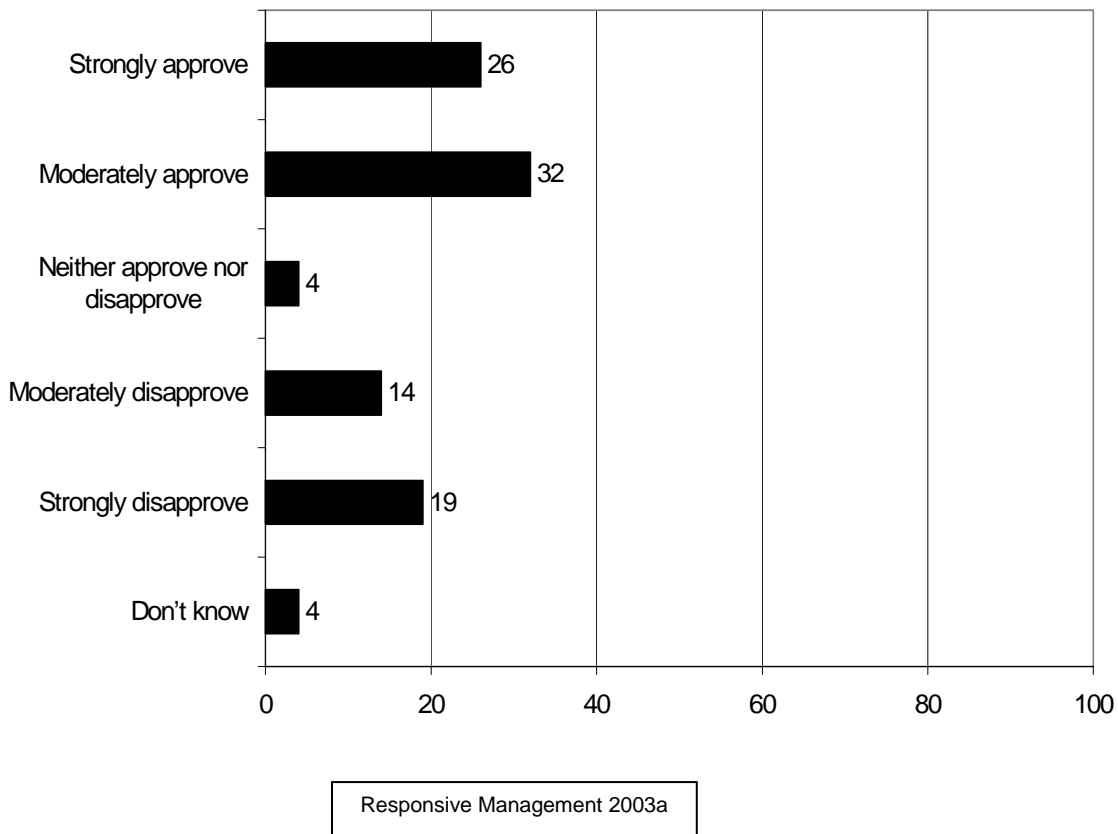
This section highlights only some of the research available pertaining to hunter retention and recruitment. There are some general conclusions to be drawn from the existing research, as each subsection will discuss. The "Implications and Recommendations" section ties together the following research findings as well as the workshop results.

PUBLIC OPINION ON HUNTING

Overall, the public supports legal hunting, and support has been stable from 1994 to 2003 as shown in the following graph. Nationwide, three quarters of the adult population approve of legal hunting, and only 17% disapprove. In the Southeastern Association of Fish and Wildlife Agencies (SEAFWA) region (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia), 81% of residents approve of legal hunting, and 15% disapprove. In North Carolina, 84% of residents approve of legal hunting, and 12% disapprove (Responsive Management, 2005). Research shows that, overall, today's youth also support hunting, although at lower rates than do adults. Nationwide, 58% of youth approve of legal hunting, while 33% disapprove.

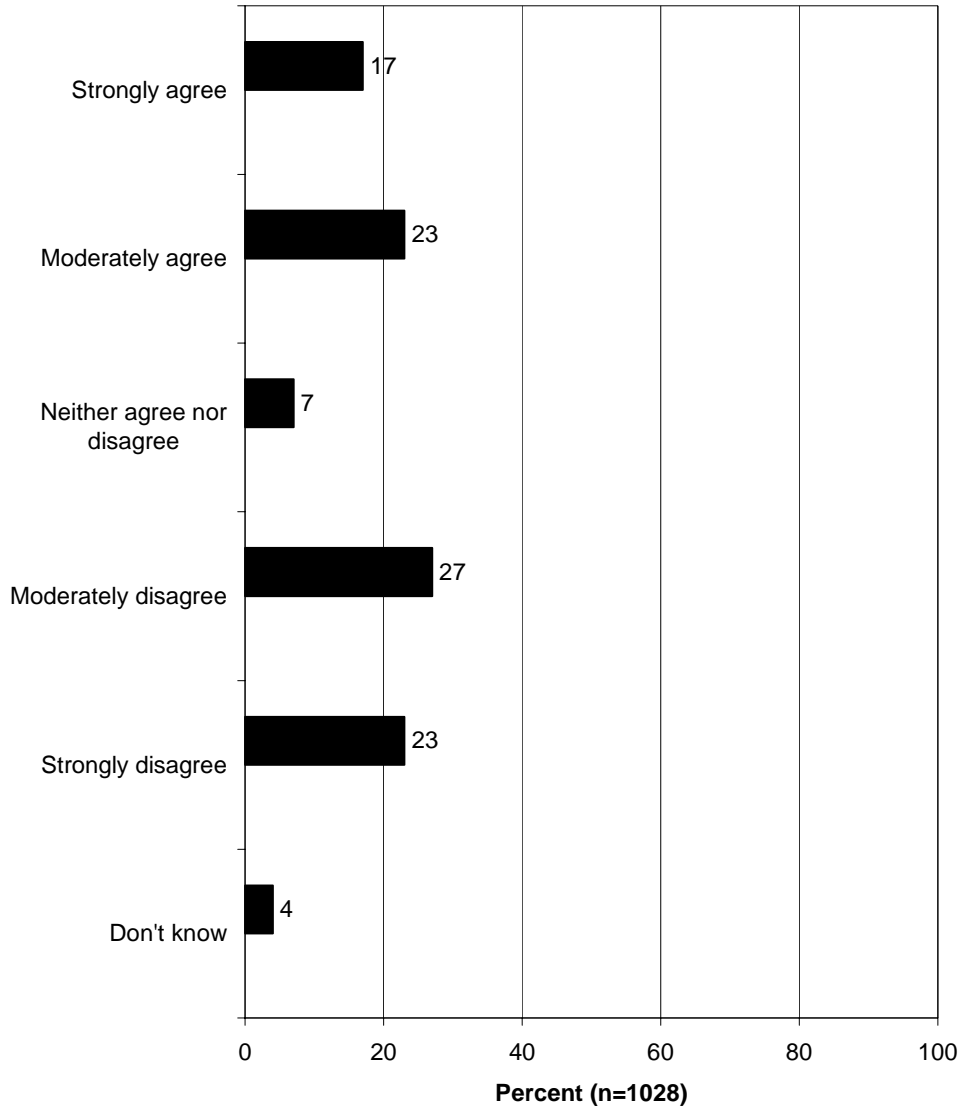


In general, do you approve or disapprove of hunting when it is legal to do so? (U.S. Youth 8 to 18 years old)



Although the American public, in general, supports legal hunting as an activity, the public has concerns over hunter behavior. In a nationwide study, a majority (64%) of Americans agreed that “a lot” of hunters violate hunting laws or practice unsafe behavior while hunting (Duda et al, 1998). And in a Responsive Management nationwide study on youth participation in hunting, more youth disagreed (50%) than agreed (40%) that hunting is a safe recreational activity, and of youth who said their parents would not let them go hunting, the number one reason their parents would not let them go hunting was that the parents did not consider hunting to be safe (Responsive Management 2003c).

Do you agree or disagree that hunting is a safe recreational activity? (U.S. Youth 8 to 18 years old)



Responsive Management 2003b

Demographic data are helpful when planning public programs and communications. The following table shows how approval of hunting varies by various demographic variables.

Percent of Americans Who Approve of Legal Hunting by Demographic Group

Group	Percent Approve	Group	Percent Approve
Hunter	99	35-44 years old	73
Angler	97	25-34 years old	73
Male	94	Small city/town resident	73
Rural resident	83	Household income of \$10,000 to \$19,999	71
Grew up in rural environment	80	Household income of \$80,000 or more	69
Highest education level is high school graduate	78	Highest education level is post graduate degree	68
Did not complete high school	77	Highest education level is some college/trade school, but no Bachelor's degree	68
Married	77	Non-hunter	67
Household income of \$20,000 to \$39,999	77	Single/divorced/widowed	67
45-54 years old	76	Suburban resident	67
White	76	Have moved residence more than 100 miles within previous 2 years	67
Household income of \$40,000 to \$59,999	76	Urban resident	65
65 years old or older	75	Female	63
55-64 years old	75	Non-angler	61
Highest education level is college graduate	74	18-24 years old	61
Household income of \$60,000 to \$79,999	74	Household income less than \$10,000	60
Disabled	74	Minority ethnic background	58
Member of wildlife organization	73		

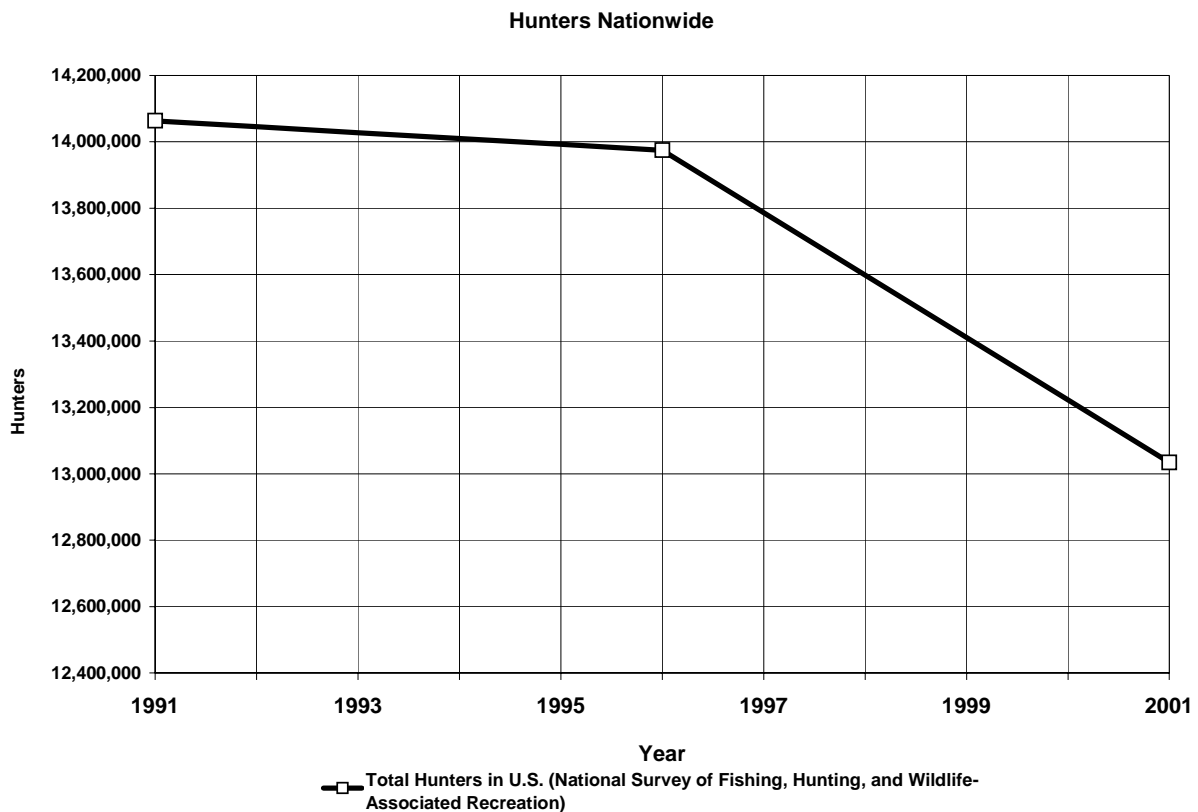
Source: Duda et al., 1998.

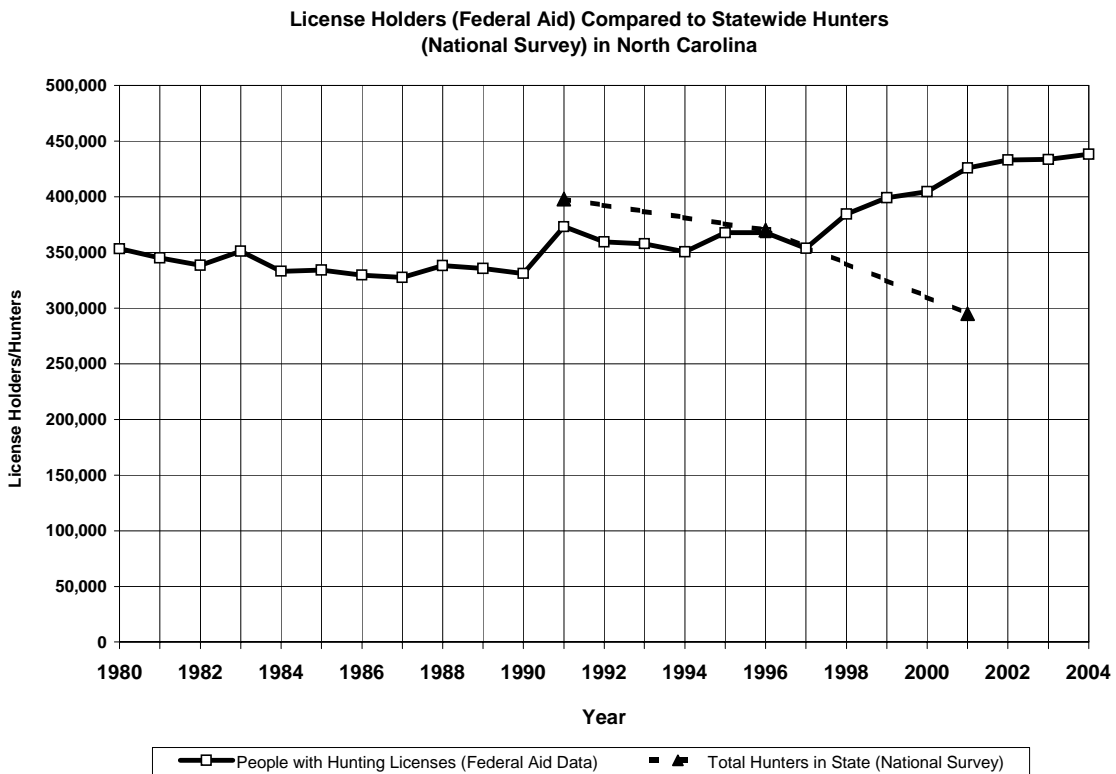
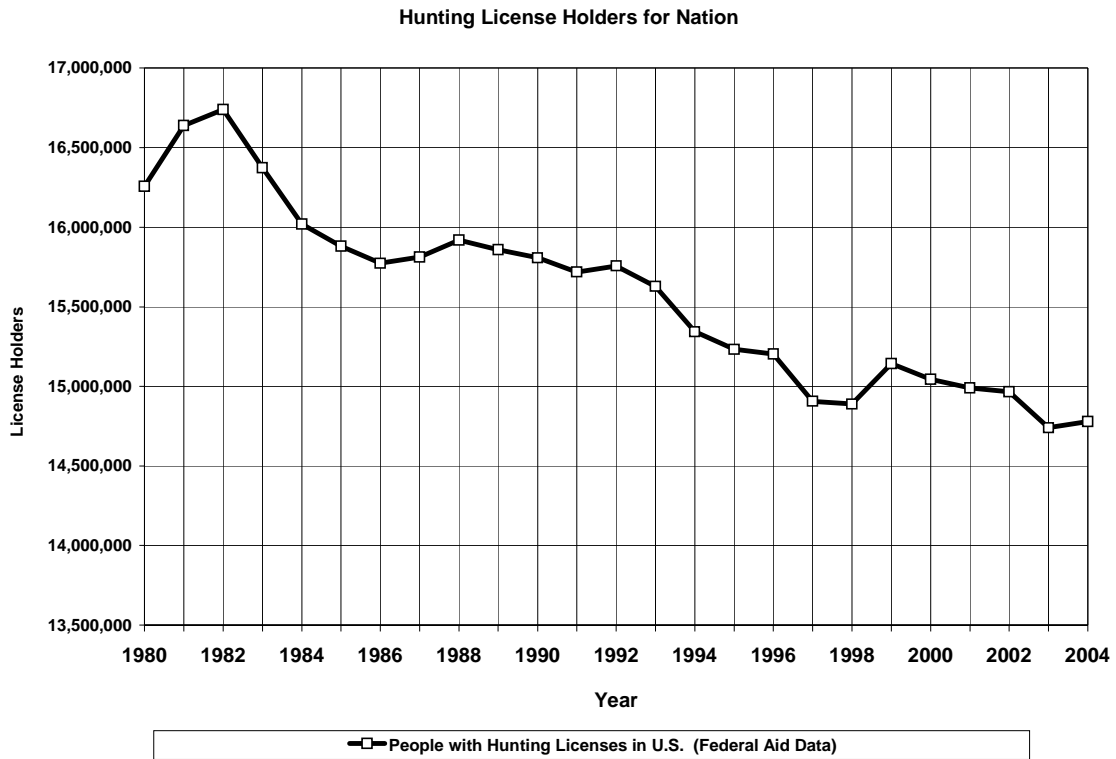
HUNTING PARTICIPATION TRENDS

According to the USFWS's *National Survey of Fishing, Hunting and Wildlife-Associated Recreation*, the number of hunters in the nation has been steadily declining since 1996 (USFWS, 2002). The Survey data are based on hunting participation recall by survey respondents, and those counted as hunters are not necessarily licensed.

According to hunting license sales data from the USFWS, Division of Federal Assistance, sales had been declining nationwide but were stable to increasing in North Carolina until 2004.

License sales data from the USFWS indicate that hunting license sales nationwide have risen by 0.3% from 2003 to 2004. Hunting License sales in North Carolina increased by 1% from 2003 to 2004. Currently, hunting license holders represent about 6% of the U.S. population.



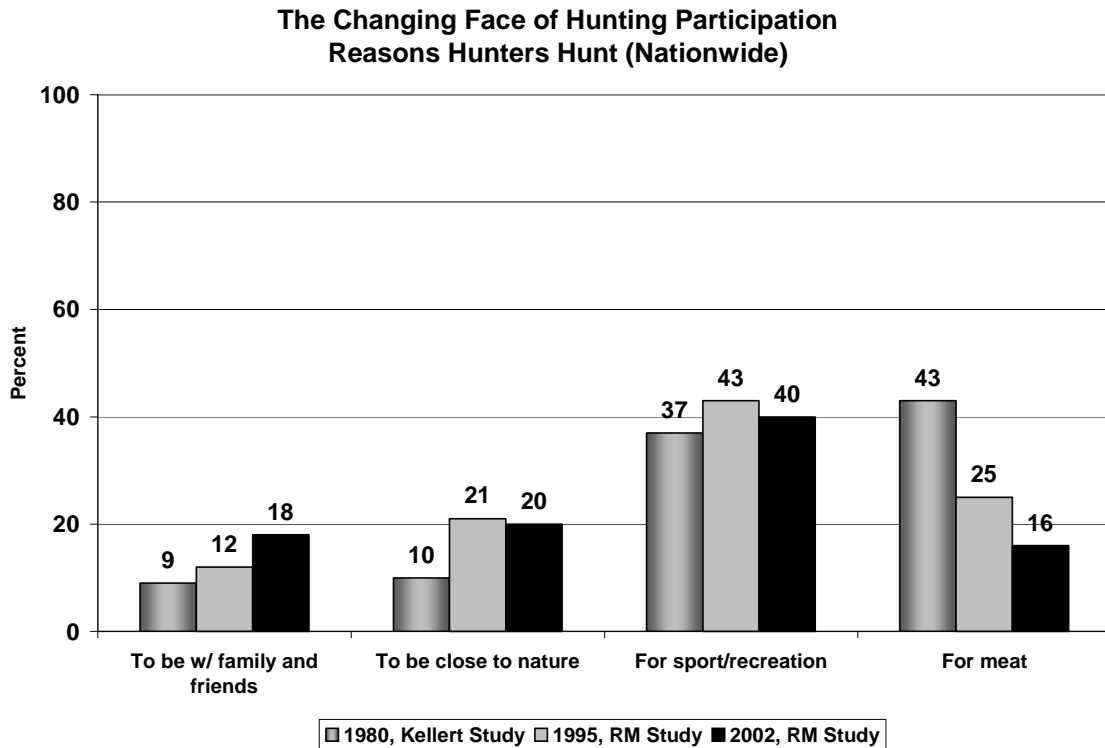


The USFWS found that the percentage of hunters within an age class increases until middle age (35 to 44 years old) and then decreases with increasing age (with the exception of hunters 16 and 17 years old). These findings emphasize the importance of instituting a program that initiates youth 17 years and younger into hunting (USFWS, 2002).

Age Cohort	Percent Age Cohort Who Hunt
16 – 17	8%
18 – 24	6%
25 – 34	7%
35 – 44	8%
45 – 54	7%
55 – 64	6%
65 +	3%

Hunters hunt for a variety of reasons. The most important are for the sport or recreation and to be close to nature. Understanding the reasons why hunters hunt enables tailored, more effective outreach materials to be developed. The primary reasons for hunting have changed over the past two decades. Familial and naturalistic reasons have increased while utilitarian reasons have decreased. This indicates that outreach materials that focus on the familial and naturalistic aspects will be more effective than materials that focus on the trophy aspects of game. Research has also shows that women may be more responsive to a campaign that emphasizes familial aspects (Duda et al., 1998).

Public opinion varies dramatically when the motivation for hunting is considered. Hunting for food, hunting to manage game populations, and hunting for animal population control are very acceptable to the public, while hunting strictly for recreation and hunting for trophies is less acceptable (Duda et al., 1998). This is an important finding when considering outreach material content for the general public.



Responsive Management research has found no data that support the hypothesis that single-parent households are a reason for hunting decline. Although many people still believe single-parent households to be a cause for a nationwide decline in hunting participation, research indicates there is no negative correlation between hunting participation and single-parent households (Duda et al., 1998).

Another study illustrates the point that to understand hunting participation, many variables need to be examined. A study of hunters conducted in 1996 and 1997 was analyzed by Stedman and Heberlein to determine what specific characteristics of rural upbringing were associated with increased hunting participation. The study showed that the effect of a rural upbringing does not have an equal influence in all cases, but depends on the presence or absence of other socialization variables. The study targeted the effects of rural upbringing, gender, and the presence of a father who participated in hunting. As predicted, results showed that there was no significant difference between those living in urban and rural settings for hunting participation among males whose father hunted. There was also no *significant* difference for females whose father hunted (although participation was slightly higher, but not statistically significant, among

those living in rural areas). There was a significant difference for rural vs. urban respondents only for males whose father did *not* hunt: 59% of those males whose father did not hunt and who grew up in rural areas participated in hunting some time in their lives, while only 34% who grew up in an urban area and whose father did not hunt participated in hunting (Stedman and Heberlein, 2001).

HUNTING INITIATION

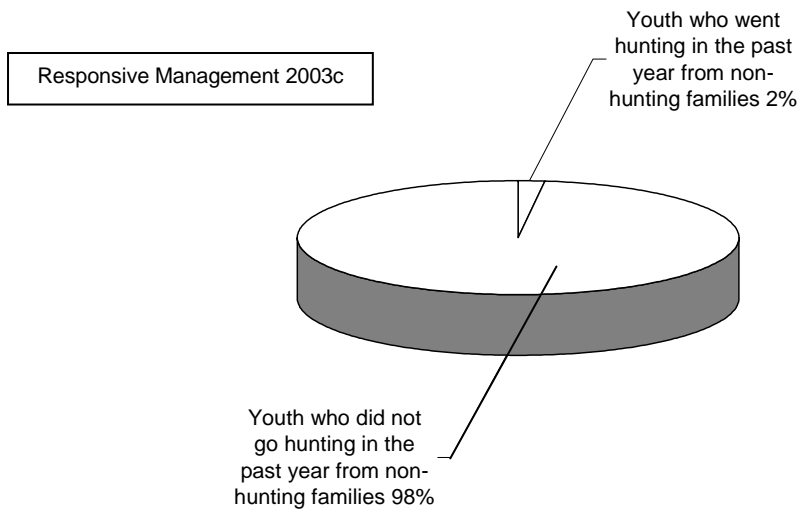
Research shows that it takes a hunter to make a hunter. Hunters come from hunting families, and hunting families produce hunters (Duda et al., 1998). The youth who are most likely to hunt and with the most interest in hunting generally come from families with strong, close ties to hunting. The strongest indicator of the likelihood that a youth will hunt is having a father or brother who hunts. In a national study, 82% of youth who hunted had a father who hunted, and 80% of youth who hunted had a brother who hunted. In addition, most youth (60%) said that they learned how to hunt from their father, and substantial percentages said that they learned how to hunt from family members, particularly male family members (26%), and peers (13%) (Responsive Management, 2003b).

Because it is easier to foster hunting participation among those who have been exposed to a hunting culture and have already had some experience with hunting, successful *retention* programs may have a more substantial positive effect on the absolute number of hunters than *recruitment* programs (Responsive Management; 2003c). Other research has drawn the same conclusion; Applegate et al. (1984) recommended that:

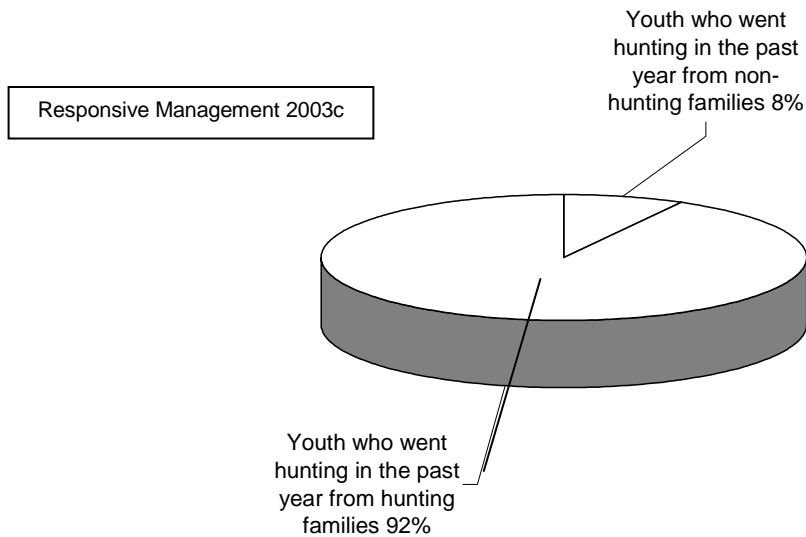
Efforts to reduce juvenile mortality, that is, the number of newly recruited hunters who drop out, would be more profitable than efforts to recruit new hunters to sustain a state's hunter population. As hunter retention increases, the number of new recruits should show a corresponding increase, since recruitment is a relatively constant percentage of the active hunter population.

The first graph below shows that 92% of all youth who hunted in the previous year came from hunting families, and the second graph below shows that only 2% of youth from non-hunting families hunted in the previous year.

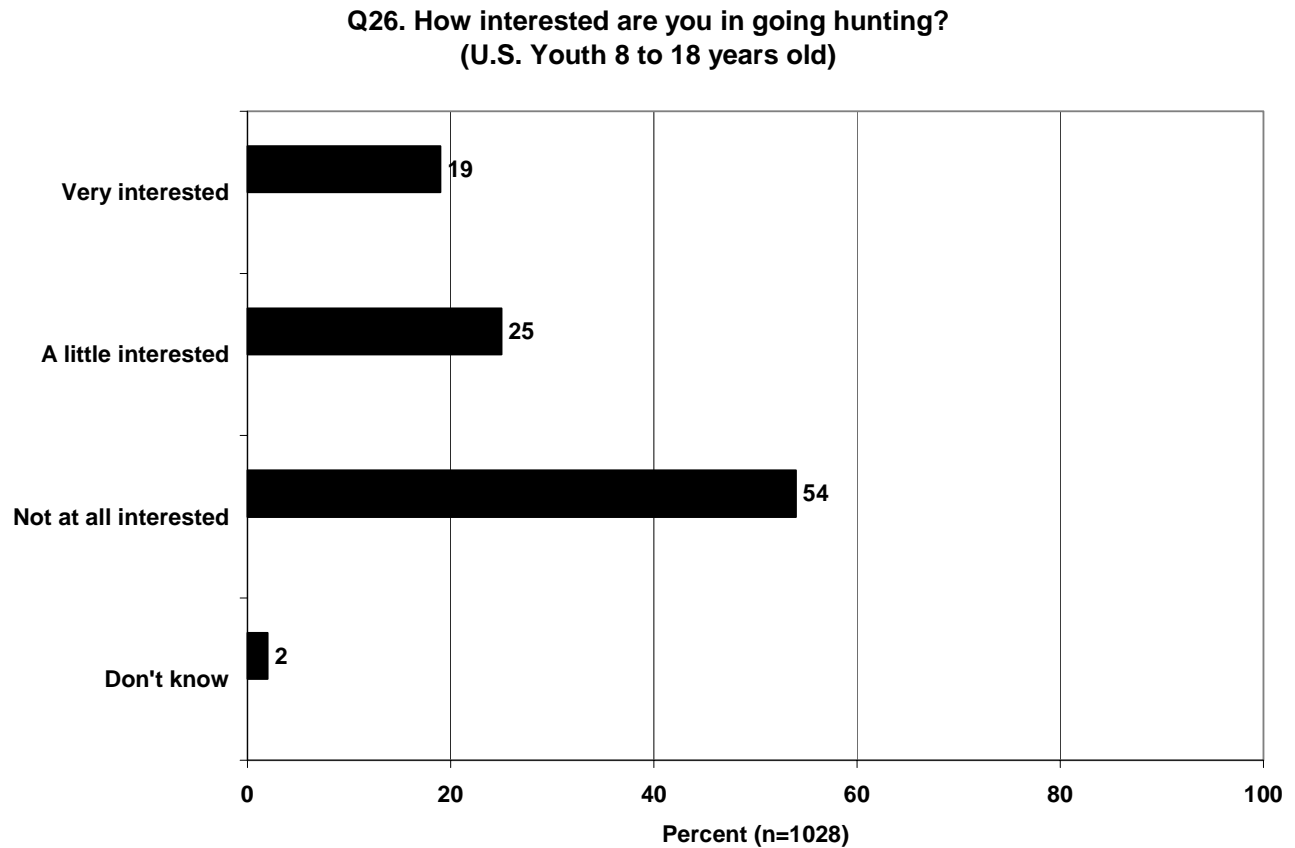
**Youth From Non-Hunting Families and Their Participation in Hunting
(Pie Represents All Youth From Non-Hunting Families).**



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



A national study of youth ages 8 to 18 conducted by Responsive Management found that 44% of today's youth are interested in hunting. Youth who were very interested in hunting were more likely to have a family member who hunts, more likely to live in a rural area, and more likely to have gone fishing in the previous year. Of youth hunters, over half would like to hunt more than they currently do (Responsive Management, 2003c).



Responsive Management 2003c

Research clearly indicates that active participation in hunting as an adult is directly related to active participation as a youth. More than 90% of today's adult hunters were initiated into hunting before the age of 20. In fact, if an individual has not learned to hunt by the age of 20, there is a very low likelihood that he or she will participate after that age. Research also shows that not only is active participation by an adult positively correlated to level of exposure to hunting as a child, but also the level of adult *avidity* is positively correlated to the level of exposure as a child. Youth who participate frequently as a child are more likely to avidly participate as an adult. Conversely, those who start hunting later in life hunt less often as an adult and are more likely to cease hunting altogether than are those who start hunting early in life. Clearly, exposure to hunting as a child is critical to participation as an adult. In addition, participation by adults is critical to the youth of the next generation, continuing the cycle of hunting recruitment and retention within the U.S. population (Responsive Management, 2003a).

O'Leary et al. (1987) examined the Nationwide Recreation Survey to determine the relationship between the age of a first hunting experience and adult level of participation and found that over 83% of those who hunt began their involvement by 18 years of age; 69% by the time they were 15 years old, and 54% by the time they were 12 years old. O'Leary et al. (1987) also reported a significant correlation between days hunting and the age of the initial experience: overall, the younger the person was when he or she began hunting, the more participation was reported in a given year. The authors note, "It would appear from the Nationwide Recreation Survey data that persons who are not already hunting by the time they are 18 years of age are unlikely to pursue this sport during their adult life...." The authors concluded:

The importance of age at first exposure to an activity may lie in being able to assign an individual to a developmental category of outdoor recreation socialization. Whatever primary social group has the greatest impact on an individual's activity choices at a particular time of life becomes an independent variable that influences participation (Field and O'Leary 1972:5). For example, an early age of introduction to certain outdoor activities suggests the likely presence of a family group accompanying the young child in the outdoors.

Hunting, however, is not a conventional family activity in which children accompany both parents, but rather...primarily a peer group activity participated in by males (Field and O'Leary 1972). Introduction to hunting also involves introduction to firearms. Due to the nature of the equipment used and the makeup of the social group typically engaged, we may speculate briefly about the hunting party that includes a young beginner. A child is not usually brought on a hunt to fill idle hours, but rather when a parent, close relative,

or other responsible adult is willing to act in the role of teacher and, not incidentally, transmitter of the hunting culture. It is perhaps not only this intimate interaction with an older hunting companion that causes hunting to persist into adult life, but also the unique implied rite of passage. As compared to those individuals recruited as teenagers or young adults by friends their own age, those individuals recruited within a 'window of initiation' (i.e., a range of impressionable early ages) by a parent or older relative appear to have a head start toward achieving higher levels of adult participation.

Decker et al. (1984) also identified the importance of childhood initiation, or apprenticeship stage, and noted:

...what is important to the development of a youngster's interest in hunting is that the youngster be taken afield, not necessarily that s/he carry a firearm.... Perhaps in hunting, vicarious learning takes on another dimension: it may be necessary to ease the initiation into hunting of a youngster sensitive to the death of an animal.... By allowing a child to observe a parent enjoy all the elements of the hunt—the companionship, the autumn colors, the skill, the chase, the meal (and all the psychological rewards therein)—and to participate in most, the killing of game does not take place in a vacuum; a role model shows the way. The conflicts which the youngster may have concerning hunting are slowly resolved as he/she assimilates the attitudes, beliefs, and values of the hunting guardian without being psychologically burdened with responsibility for the kill.

Matthews (1996) adapted an innovation-trial-adoption model (Purdy et al., 1985) and the four stages of the recruitment-training-retention intervention model (awareness, interest, trial, and adoption/continuation) (Decker and Mattfield, 1988) to include types of interventions that could be used to facilitate progression through the stages by natural resource professionals.

Awareness

The first phase, awareness, relies on public relations interventions through the media. Many natural resource agencies maintain their own information and education sections and promote programs such as Free Fishing Days. Yet, promoting an awareness of hunting and fishing has value beyond that gained by management agencies. Tourism interests may be served, as well as community and youth development. In some cases, the fishing and hunting industry and advocacy groups support recruitment efforts such as National Hunting and Fishing Day, National Fishing Week, 1-800-ASK-FISH, etc., as well as promotional campaigns advocating involvement in hunting and fishing, good outdoor behavior and so on.... While there is likely plenty of room for additional promotional efforts directed at increasing awareness—particularly those efforts developed cooperatively among industry, advocacy organization and resource agencies—the danger is that efforts will go no further than reliance on marketing and promotion. The model seems pretty clear about why this is not a high-percentage bet.

Initiate Interest

The second intervention strategy focuses on developing and supporting interest primarily through short-term, one-shot events. Conducted by natural resources agencies, advocacy groups, Cooperative Extension, service organizations, and, occasionally, schools, these events enable youth and others to participate in threshold experiences which then may, with proper social support, lead to the trial phase.

Again, the danger lies in assuming that interventions leading to the simple development of interest go far enough. In conducting events such as the Conservation Field Days, Free Fishing Days Clinics or Fishing Derbies, great effort often is expended and large numbers are reached in many cases. Short-term evaluations generally reflect positive outcomes, and event organizers are proud of their accomplishments. As a result, there is a great temptation to fall into a Field Days Feel-Good trap. A glance at the model shows that, without efforts focused on moving participants further along the continuum toward trial and adoption, simply generating interest may do little more than make event organizers feel good.

Trial

Intervention strategies for the trial phase focus on training and education efforts, preferably involving opportunities for repeated participation. Broad-based approaches that address the need for skills and knowledge development, and to enable participants to access the resource, equipment and expertise are needed. These can be provided to some extent by natural resource agencies through camp programs, aquatic education, clinics, hunter education, youth hunts and other efforts. The development of apprentice/mentor programs and school curriculums, as well as other longer-term efforts, clearly indicates opportunities for other partners in the process, which may include cooperative programs with advocacy groups such as state trappers' associations, 4-H and other youth organizations, schools, community service groups, and others. Given the magnitude of need in this area as well as the potential for partnering, it seems clear that a comprehensive cooperative effort on behalf of all interested parties is indicated.

Adoption/Continuation

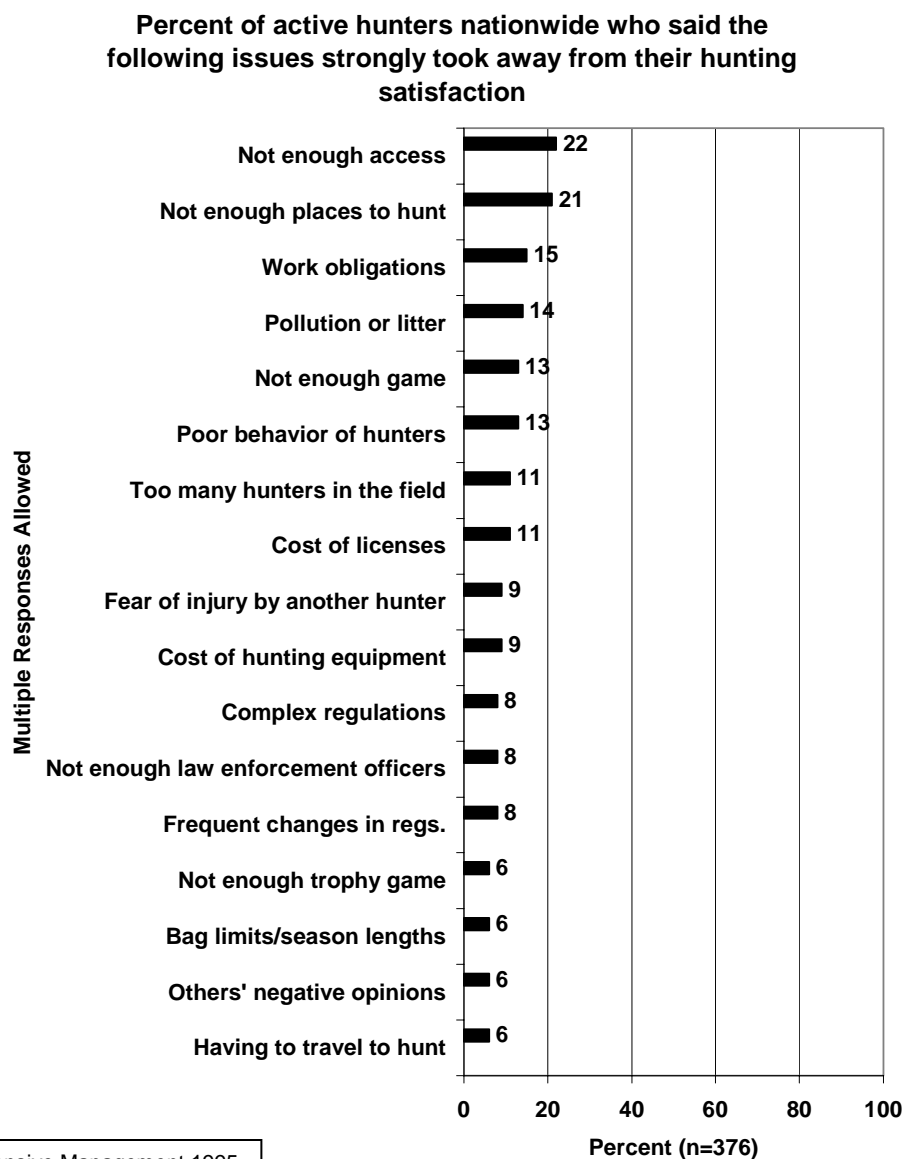
The fourth phase, adoption/continuation, is supported through intervention strategies designed to retain hunters and anglers. The most promising of these programs are those that emphasize building a long-term apprentice/mentor relationship which, as Enck et al. (1996) point out, is not easily achieved unilaterally by natural resource agencies. This does not mean that agencies should not concern themselves in this area; rather, it suggests, perhaps even dictates, that they seek out partnerships enabling them to support retention.

Providing opportunities for youth to take a hunter education course is important, as the study of youth between 8 and 18 years of age found that 44% were interested in going hunting but only 13% of youth had taken a hunter education course. Of those who *had* taken a hunter education course, most liked it a lot (42%) or a little (46%). Most youth (87%) had *not* taken a hunter education course. Of those who *had not* taken a course, 65% were not interested in taking one, while 31% expressed interest (11% were very interested; 20 were a little interested).

Furthermore, younger youth expressed more interest in taking hunter education than did older youth, suggesting that early hunter education opportunities may be effective in fostering interest in hunting (Responsive Management, 2003a).

HUNTING SATISFACTION AND DISSATISFACTION

Research has shown that the most important issues to hunters are Second Amendment issues, access, loss of habitat, and hunters' rights. The most important reasons for dissatisfaction among active hunters are not enough access and not enough places to hunt (Duda et al., 1998).



Available Hunting Lands and Hunting Access

Research has suggested that, on a macro-level, the most important reason for hunting decline is urbanization (Duda et al., 1998). As a state increases in urbanization, hunting decline follows. The correlation is direct and strong. A national study conducted for the Conservation Fund by Responsive Management (2003d) analyzed over 500 variables and found that housing units per square mile and overall geographic distribution of all Federal hunting land were significantly related to the percent change in total hunters.

In the data collected for this study, North Carolina ranked 38th out of the 50 states for the total number of acres of state-controlled hunting lands and ranked 37th for the percent of the state available for hunting. Using data from the USFWS *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*, North Carolina ranked 29th for the ratio of acres of hunting land per hunter.

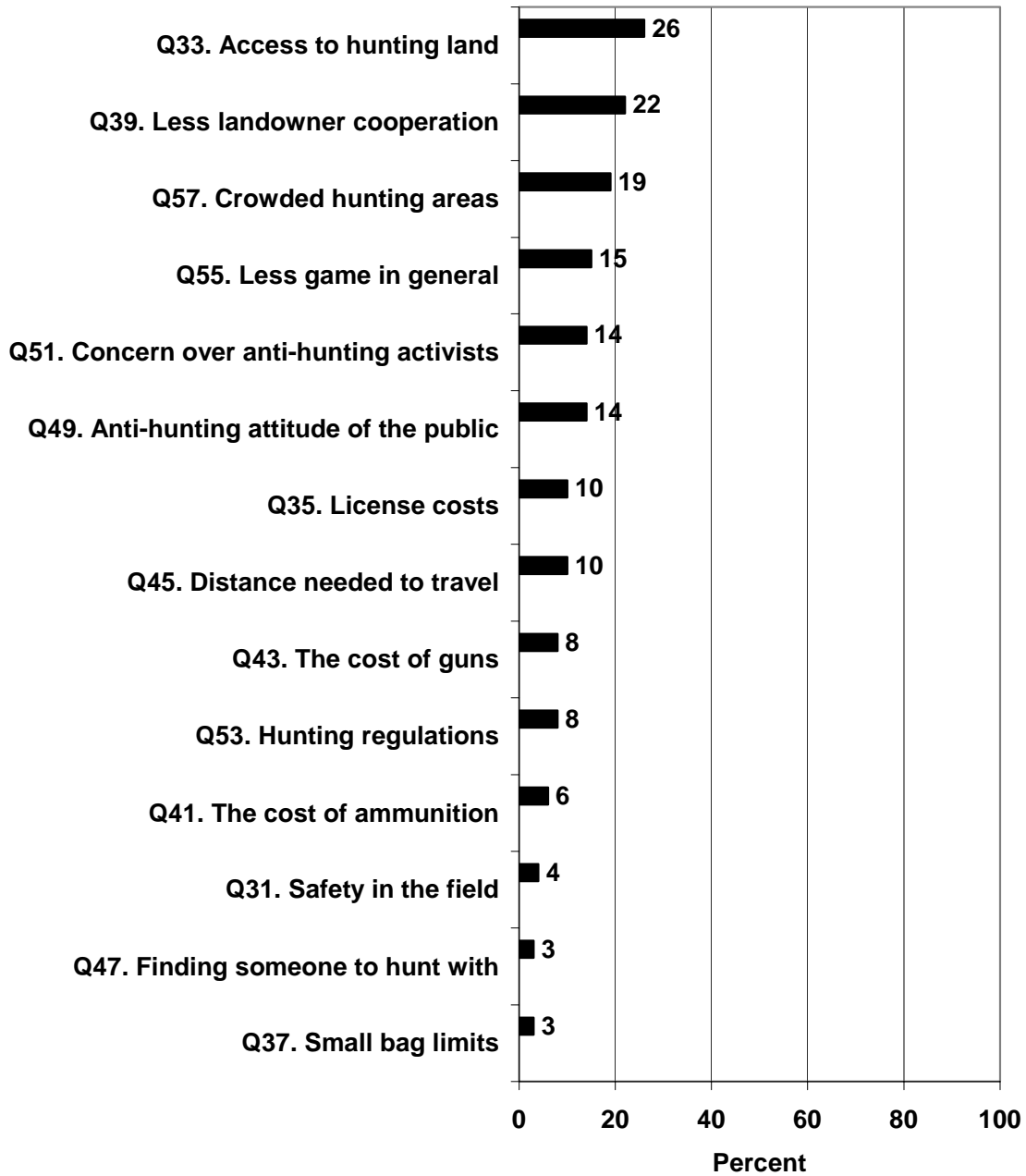
North Carolina rated higher in perceptual factors associated with hunting lands (percent of land anticipated to be available for hunting 5 years from the date of the study, rating of the geographic distribution of hunting acres throughout the state, accessibility of hunting acres throughout the state, quality of hunting acres throughout the state, and the importance of expanding of hunting acres throughout the state—as rated by state agency staff) than it did in physical factors (available fee-simple funding for the 2001 season, available lease funding for the 2001 season, ratio of acres/hunter, percent of state available for hunting, percent of lands available for hunting that are leased, and the ratio non-resident hunters to resident hunters) (Responsive Management, 2003c).

Access is identified as a top reason for dissatisfaction among hunters and for hunting less or leaving the sport altogether. Of even more concern than access being a source of hunter dissatisfaction is the fact that hunters view access as becoming a greater problem. Access problems negatively affect hunters by taking away from their enjoyment of hunting and/or causing them to hunt less often. Previous studies have shown that access is a leading reason for hunter dissatisfaction, and that not enough available hunting access is a significant factor that influences hunters' decision to stop hunting (Duda et al., 1998).

A national trends study conducted for the National Shooting Sports Foundation in 2000 and 2005 asked about 14 factors that may or may not have been constraints to respondents' hunting participation. The 2005 survey first asked how much of a problem the factor was 5 years ago and then asked whether the factor had become a greater or lesser problem in hunting participation now. Hunting access and access-related issues were problems 5 years ago and remain problems now, with indications that the problems related to access may be worsening.

Among those who said the factor was *not* a problem in the 2000 trends study, relatively high percentages say the factor has become a greater problem for three of the factors: access to hunting land, less landowner cooperation, and less game in general (Responsive Management, 2005b).

Percent who said the following had become a much greater problem in hunting (Nationwide Hunters 2005)



Responsive Management 2005b

Hunting Cessation and Breakdown of Social Networks

Research has shown that the top five issues that strongly influenced inactive hunters not to hunt were amount of free time, loss of interest, work obligations, family obligations, and the perception of causing pain to animals (Duda et al., 1998).

Percent of inactive hunters nationwide who said the following issues strongly influenced their decision not to hunt.



Mangun et al. analyzed 1991 Federal Hunting and Wildlife-Associated Recreation survey screener data for demographic characteristics of active and inactive hunters and found the ratio of active-to-inactive hunters in the U.S. (age 6 years and older) was 1.00:1.45 (1996). As age increased, the percentage of inactive hunters also increased. The 16 to 20 years old age group had the highest participation rates, with 13.5% hunting in 1990 or 1991. The authors recommended programs to persuade inactive hunters to become active again; if inactive hunters would take up hunting again, the authors posited that participation would double (Mangun et al., 1996).

Research has shown that, on a micro-level, one of the most important reasons hunters quit hunting is a breakdown in the social support system among hunters. It is not surprising that a breakdown in social networks would lead to hunter desertion, as successful hunter initiation depends on socialization into the hunting culture. In an overview of extensive work conducted at Cornell University on factors affecting the recruitment and retention of hunters, Decker and Mattfeld (1988) noted that two key factors are the opportunity for apprenticeship experiences and the existence of strong social support, especially from family members.

Most people are initiated to hunting through two primary mechanisms—family and friends (Brown et al. 1981, Applegate and Otto 1982, Decker et al. 1984, Purdy and Decker 1986). Few hunters begin on their own, i.e., without one or both of these social initiators. Those who are introduced to hunting by family usually begin as children and tend to remain active because they have strong and consistent familial support, usually including hunting apprenticeship experiences of several types except personally killing game. These persons can be thought of as traditional hunters for whom participation is a significant element of their cultural heritage (Decker et al. 1984, Decker and Mattfield 1988). Often these people have a rural background and have peer as well as familial reinforcement for hunting; as adults they are most likely to influence youngsters to adopt the activity and carry on the tradition (Purdy et al. 1989). Those who are introduced to hunting by friends usually try out or ‘experiment’ with hunting as young adults, lack strong familial support, and are more likely to quit hunting after a few years, particularly if their peer group changes and individuals who introduced them to hunting are no longer regular social contacts. These persons tend to be more transient in their hunting participation because they lack the learned, strongly held personal identity with the activity and tend to have fewer, less consistent and weaker sources of social reinforcement for participation.

Hunters hunt with other hunters. As hunting partners move away, pass away, or become involved with other activities, participation by others in the group declines as well. This also

happens when an avid hunters moves to a new area. Hunting activity does not resume because the hunter does not have the social support system he or she formerly had.

I hunted because the guys I ran with hunted, and I just went with them. When they moved or got divorced, I didn't have anyone to go with, so I stopped. (Ex-Hunter, AZ)

I've hunted with my brothers all my life. They're all gone, except the littlest one—things change. (Ex-Hunter, PA)

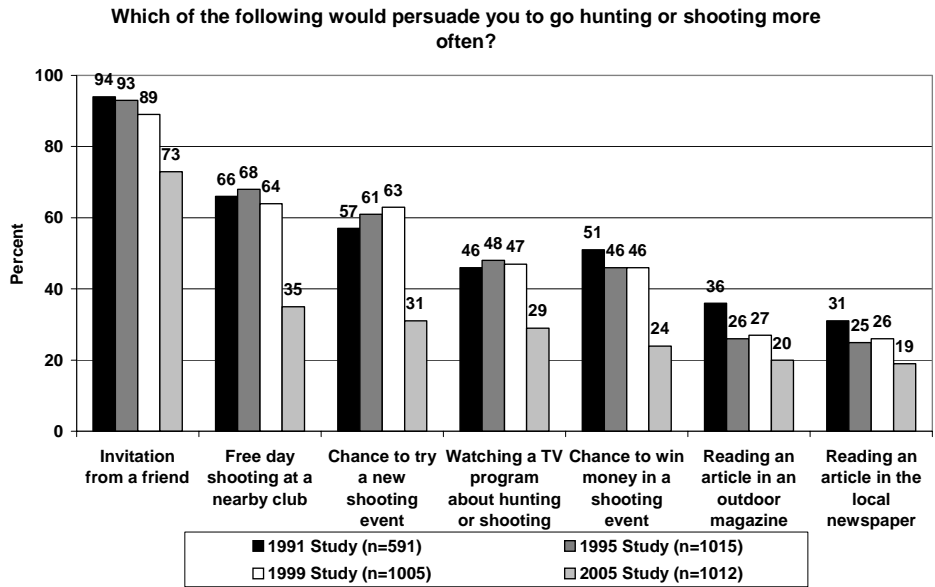
I knew what everybody I was hunting with would do. I moved and I haven't wanted to learn that over again. (Ex-Hunter, PA)

(Responsive Management, 1995)

MARKETING AND COMMUNICATIONS

Having scientific data for North Carolina and North Carolina's target market segments will prove to be of the highest value in terms of implementing a successful retention and recruitment program. What groups should be targeted with what messages? There are many variables to consider when identifying an audience for outreach materials. Not only are there demographic variables such as age, race, gender, and residence, there are attitudinal, participatory, cultural, and social factors to consider, as well as many other factors. On a very basic level, there are those who approve of hunting and those who do not. Defining market segments and setting measurable goals for increased participation within those segments are key components of a good program.

In a study conducted for the NSSF in 2005, Responsive Management found that when hunters were asked what would persuade them to go hunting or shooting more often, the top reason selected was an invitation from a friend (Responsive Management, 2005b). NSSF's Step Outside events are encouraging participation in hunting and shooting based on friends asking friends to go hunting or shooting (see the advertisement that follows).



Source: Responsive Management, 2005

Multiple Responses Allowed

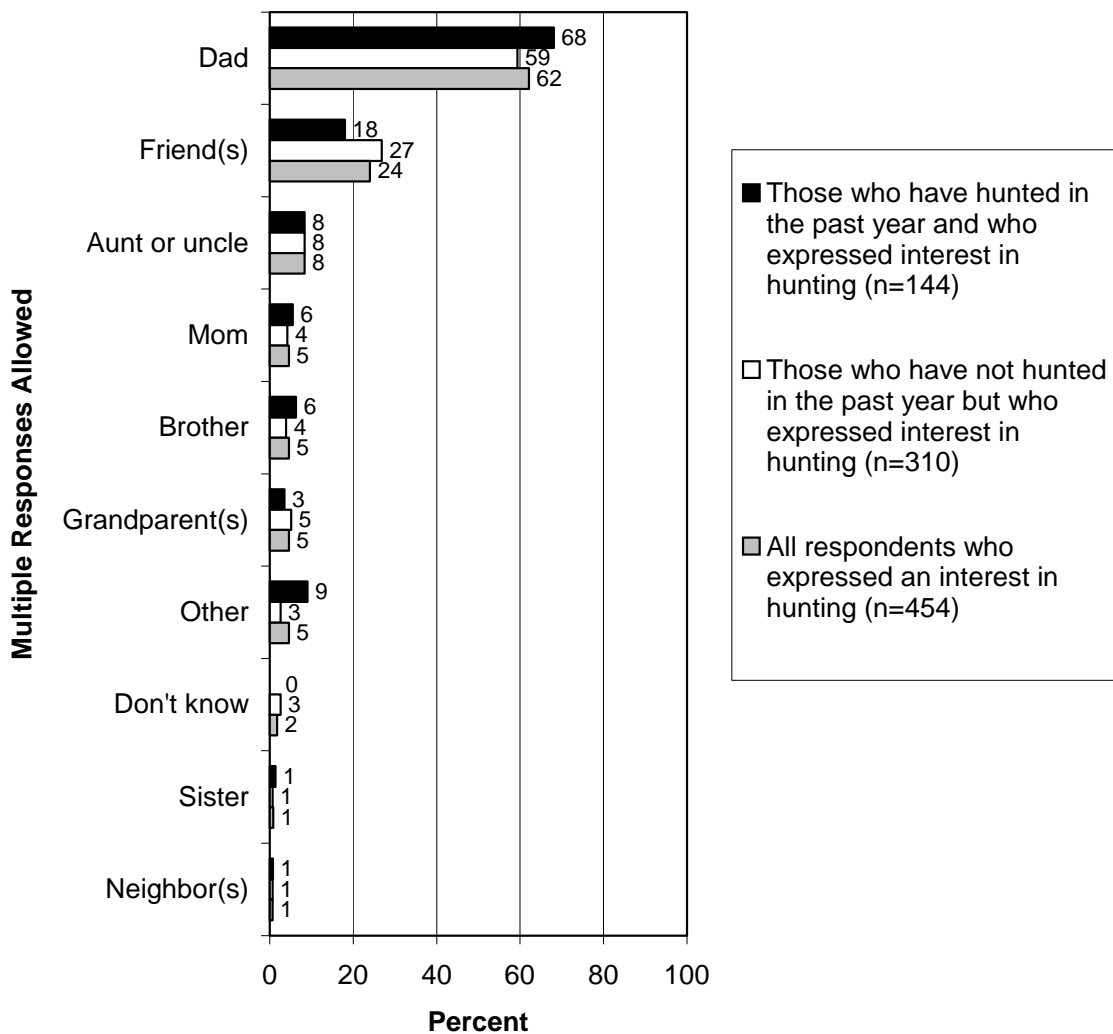


Wisconsin youth aged 16-17 years old who have an interest in going hunting in the next five years most commonly (38%) felt most comfortable being taught about hunting by a parent. The answers that followed parents were people who know about hunting (19%), teachers (11%), other family members (7%), friends of their family or neighbors (7%), and an organizational person like a scout leader (6%) (Duda et al., 1998).

In a recent nationwide study on youth attitudes toward hunting, results were consistent whether the child had hunted or not in the past year. As shown in the following graph, “dad” topped the list of all people the youth could hunt with, followed by a friend.

Of all the people you could hunt with, who would you most like to go hunting with? (Among those who have hunted in the past year and who expressed interest in hunting, those who have not hunted in the past year but who expressed interest in hunting, and all respondents who expressed an interest in hunting.)

(Nationwide Youth 8 - 18 years old)



OUTREACH MESSAGES

While a plethora of information on hunting participation, satisfaction, dissatisfaction, and motivations already exists, a successful hunter retention and recruitment program must reach many diverse groups with messages that will resonate and be effective at reaching each group. Having scientific data for North Carolina and North Carolina's target market segments will prove to be of the highest value in terms of implementing a successful program because data gathered are specific and reliable.

In a study recently completed by Responsive Management for the Southeastern Association of Fish and Wildlife Agencies, cross-tabulated results for North Carolina show that there is strong correlations with being a North Carolina resident and feeling that overhunting, overtrapping, and overfishing are major factors contributing to species becoming threatened or endangered in the state (Responsive Management, 2005).

In a study completed for the NSSF's Step Outside Program, the following statements were found to resonate most strongly in encouraging hunters to ask someone else to go hunting (Responsive Management, 2002).

1. Making time to be with family and friends is important to you.
2. Being outdoors hunting with family and friends is a great way to spend quality time with them.

DEFINING OBJECTIVES AND PROGRAM EVALUATION

Before a hunter retention and recruitment program is implemented, the WRC needs to define objectives and set measurable goals that will be used to evaluate the success of the program. Defining a unit of measure and measuring the program's success using this unit is important for constituents and stakeholders to rate their success and determine potential shortcomings. There are many different possible units of measure for a retention and recruitment program, including hunting license sales, hunter days afield, the number of returning hunters, the number of new hunting licenses sold, etc.

The following excerpt demonstrates that one way hunter recruitment program success can be measured is as a percent of active hunters in the state's total general population. Applegate et al.

(1984) investigated hunter recruitment based on the results of the *National Survey of Fishing, Hunting and Wildlife-Associated Recreation*:

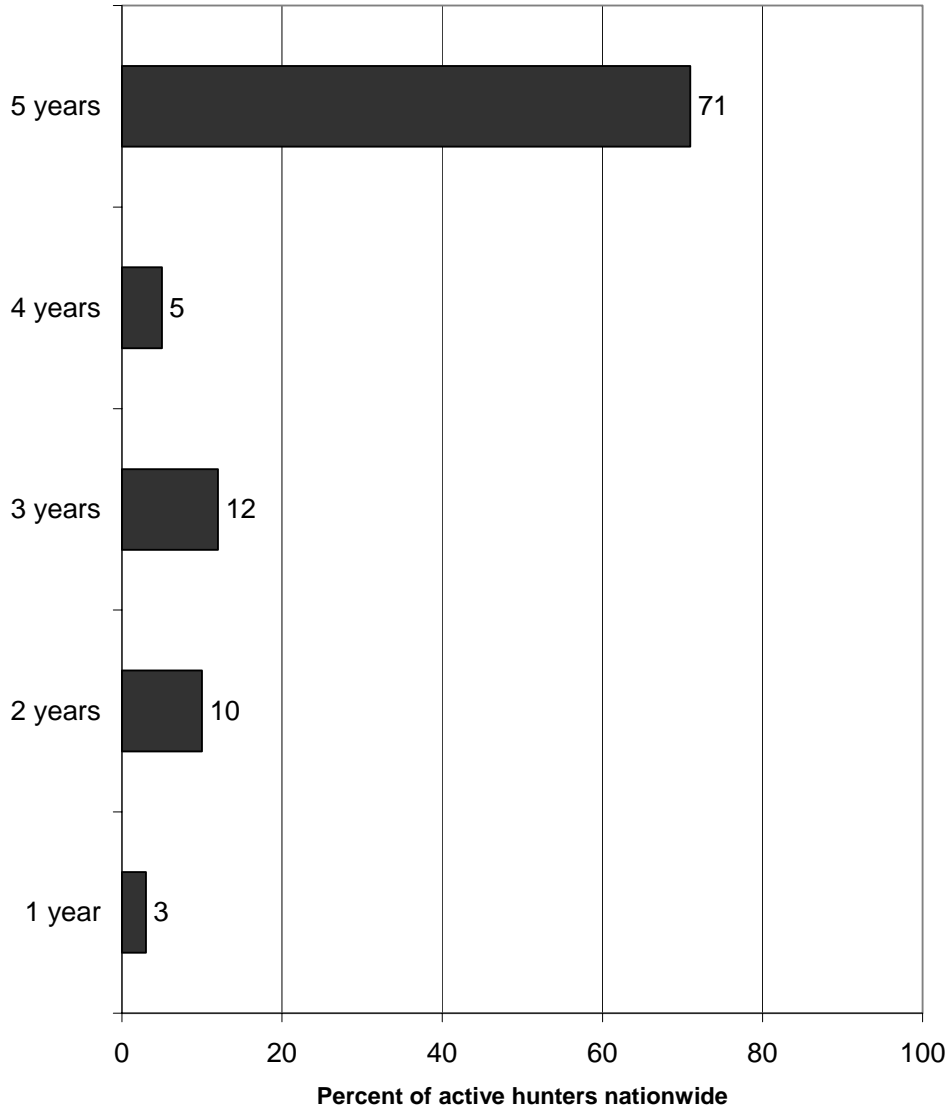
Recruitment was evaluated in two ways. First, there was little difference in rates of recruitment between the states when computed as a percentage of the active hunter population. Apparently recruitment measured in this form is relatively stable, which indicates that a very important determinant of the number of new hunters in any state is the number of active hunters in that state. However, when recruitment was measured as a percentage of the population of a given state, the differences between states were dramatic. Recruitment, in this sense, was found to be a function of the percent of active hunters in the state. Variables that were negatively correlated with recruitment were primarily related to the urban character of a state. The percent of the state living in [Standard Metropolitan Statistical Areas] SMSAs, total state population, and state population density were all negatively correlated with recruitment. A model of hunter recruitment containing three variables—percent of population in SMSAs (negatively correlated); percent of farm or forestland (positive); and cost of a license (negative)—accounted for about 81% of the variation in the dependent variable....

Management variables such as monies spent by the state on wildlife management, the number of game birds stocked, and hunter success rates, had little relationship to hunter recruitment or desertion rates. The relationship between hunting license costs and recruitment was not strong. As a percent of active hunters, there was little variation in hunter recruitment rates between states. The percent of active hunters in a given state was highly correlated with recruitment expressed as a percentage of the general population

Another fact to consider when defining a unit for determining program success is that not all hunters hunt every year. Many people who have not bought a hunting license or did not go hunting in the past year still consider themselves hunters, and many others who do not participate in hunting are still closely associated with the hunting culture. In light of this, Enck et al. (2000) suggest that socio-psychological indicators of hunters should be examined as well as traditional participation indicators. They also recommend implementing standardized definitions of “hunters” and “hunting” that include more than participation indicators, and to focus more on what causes people to consider themselves a hunter as well as to begin and continue hunting rather than trying to influence participation directly. “Hunter associates” in their study are defined as persons who participated in hunting-related activities like eating game, helping to scout for game, or visiting a hunting camp during hunting season (Enck et al., 2000).

The following graph shows hunting participation over the past 5 years among active hunters nationwide. An important goal of a retention program would be to increase the percentage of hunters who hunt every year.

Of the past 5 years, how many years did you hunt?



Responsive Management 1993b

IMPLICATIONS AND RECOMMENDATIONS

This section presents recommendations for establishing a hunter retention and recruitment program in North Carolina. The recommendations are based on the input from the workshop as well as the research on hunter retention and recruitment. Program planning and implementation should be based around a few basic guidelines: promoting a positive hunting image, segmenting the general public into markets, reaching those markets through distribution, and evaluating the program.

PLAN PROGRAM GOALS

- Program implementation should be systematic and organized. A plan should be developed involving stakeholders and constituents, including hunters, hunting organizations, and businesses that depend on hunting.
- The plan should include written goals, objectives, timeframes, and accountability.
- Specific objectives should be committed in writing. For example:
 - 1. Increase hunting license sales.
 - 2. Keep current hunters hunting.
 - 3. Encourage active hunters to hunt more often.
 - 4. Encourage drop-outs to return to the sport.
 - 5. Encourage those who hunt sporadically to hunt more often.
 - 6. Encourage hunting participation among market segments that have never hunted.
 - 7. Maintain high satisfaction levels among active hunters.
 - 8. Increase public acceptance of hunting.
- Program success depends on the level of ownership that stakeholders and constituents feel they have in creating program goals and objectives.
- A successful hunter retention and recruitment program is based on a solid foundation of fact.
 - Inventorying existing information, resources, databases, and market research and conducting current research will yield optimal results.

A POSITIVE PUBLIC IMAGE AND PROACTIVE OUTREACH

- Although different strategies will be required for different target audiences, a major umbrella effort to improve and maintain a positive public image of hunting is necessary.
- WRC outreach staff must be designated and dedicated to this effort. Hunting is part of North Carolina's heritage and must be protected for future generations to enjoy.
- Both youth and adults alike have concerns about the safety of hunting.
- A hunter retention and recruitment program must emphasize hunter ethics and institute strict enforcement of ethics guidelines not only for safety, but for good, strong public relations.
- A crime stopper policy could pay tipsters for reporting wildlife violators.
- WRC law enforcement personnel should have proper training in public relations.
- Relationships with the community leaders, decision makers, school board staff, the media, and local organizations should be invested in to protect the hunting image and heritage.
- Relationships with established sportsmen's organizations can provide funding and resources for a hunter retention and recruitment program.
- Relationships with equipment manufacturers can provide a beginners kit for new, eligible hunters and/or monetary assistance through an application process.
- In-person meetings with community leaders, decision makers, school board staff, the media, and local organizations are probably necessary.

Positive news concerning hunters and hunting must reach the North Carolina non-hunting public through short radio or television public service announcements, newspaper articles, and local community or club newsletters. North Carolina may consider a \$1 increase in its hunting licenses to fund public service announcements as was done in Colorado. News should focus on the positive effects hunting has on wildlife management, habitat, conservation, and the economy. Hunting needs a proactive public image, and the WRC should lead this effort.

Maintaining a positive public image is a continuous role, and although led by the WRC, the effort must be followed by hunters. The workshop and research reveal the importance of hunter ethics not only for hunting's public credibility, but to protect relationships with the landowners

who have become increasingly important to hunters' future hunting opportunities and access. The WRC must greatly enforce the hunter code of ethics and make known throughout the hunting community the penalties that have been and will be imposed on lawbreakers.

- Outreach materials for the general public should focus on the role of hunting in wildlife management, habitat management, environment health, the state and local economies, family tradition, camaraderie, physical fitness, and a healthy lifestyle.
- Outreach materials to hunters and those with an interest in hunting should include basic “how to” information on hunting, likely costs, and alternative resources for financing hunting or shooting activities.
- Information on hunting should include information on how to get started learning to hunt, information on hunter education classes offered, costs associated with hunting, and where to purchase hunting licenses.
- Licenses should be convenient to purchase, without server downtimes or unavailable storefront personnel.
- Regulations should be summarized in bullet-style format, referencing the *Regulations Digest*.

MARKET SEGMENTATION

- A program that promotes hunting to the “general public” will not work. There is no such thing as a “general public,” nor is there such a thing as a “general hunter.” Markets must be segmented for effective communications.
- Agency time and effort can be more wisely spent if staff understand the market segments.
- The WRC should consider having a number of larger, broader market segments to target, including those who have never hunted, those who currently hunt (retention), those who have expressed an interest in hunting (recruitment), and those who no longer hunt. Within each of these broader segments there should be programs designed to reach different age groups, and perhaps groups from urban versus rural areas. After program implementation and evaluation, the program could be further refined in a couple of years to target even smaller segments such as by ethnicity and gender.

Perhaps outreach materials could consist of handouts and brochures that fall into various tiers of “hunter exposure” levels, with the bottom level containing the most basic information about wildlife and habitat management. The next tier might contain materials that cover information on the role of hunting in wildlife and habitat management, including information on past management successes. The next tier might have information about outdoor skills and outdoors programs offered for kids in the geographical area. The final tier might contain outreach materials that consist of information on hunter education courses and other related programs offered.

The following discusses specific market segments.

Non-Hunters Without an Expressed Interest in Hunting

- Positive and proactive hunting communications efforts will aid in preventing negative perceptions.
- Non-hunters could become familiar with hunting by first learning about wildlife and habitat management in school classes.

Active Hunters

- Because of the intrinsic recruitment of hunters within the familial context, a successful hunter retention and recruitment program will first focus on hunter retention.
- Ensuring that currently active hunters are satisfied with their hunting experiences will lay the foundation for encouraging active hunters to continue the sport and bring others into the sport.
 - The WRC should focus on providing plenty of hunting opportunities by evaluating current available hunting land, private land lease programs, and current access issues.
 - The WRC should evaluate game harvest information to determine the need for habitat management programs.

A hunter retention and recruitment program for North Carolina would be most successful by first focusing on retaining current hunters. This can be achieved by ensuring that hunters are satisfied

with their hunting experiences. Workshop participants were concerned with habitat and small game populations in the state, and a recent 2005 telephone survey show that North Carolina residents were more likely to say that low game populations and habitat loss is an important wildlife issue facing the state (Responsive Management, 2005).

- Improving access to hunting lands and game habitat by working with private landowners and agencies such as the National Forest Service is the place to start.
- Access and habitat issues could be addressed by establishing and advertising a cooperative program for landowners that offers incentives such as monetary incentives, tax incentives similar to the Conservation Reserve Program, or technical assistance to open their land for hunting and/or to improve habitat.
- A hunter access program needs to also offer liability coverage for landowners.
- Programs should be simplified, easy to enroll in, and well-advertised.
- Hoke County's landowner program was mentioned as a good program to follow as an example.
- The "Adopt-A-Walk-In" program is a good example of a program working in other states.
- Landowners should have the option to enroll in a variety of programs that offer hunters access for hunting and/or that encourage habitat management.
- Landowners could have the authority to set additional limits to those that the WRC establishes.
- An information network online could provide both hunters and landowners the information they need to participate in private lands programs.
- Hunters could be required to complete a hunter ethics course to gain access to certain lands.

Adopting a private lands access program and widely advertising its benefits to landowners and hunters can help to both improve habitat as well as improve hunter access. Examples in Montana, Kansas, and Washington were mentioned during the workshops as good places to start for drafting a private lands program. Establishing relationships with National Forest Service decision makers could improve access to existing National Forest Service roads and help shape

future Forest Service policies that affect hunting on Forest Service land. An established relationship with the National Forest Service could promote improved management of habitat on Forest Service land.

- It takes a hunter to make a hunter. Recruitment programs should focus on having active hunters recruit others into the sport, especially youth 17 years and younger.
- Recruitment of hunters by hunters is important because of the socialization required to cause a hunter to keep hunting.
- Research shows that the most powerful factor persuading a hunter to go hunting or shooting more often is to be asked by a friend, followed by a free day of shooting at a nearby club.
- Messages that emphasize making time to be with family and friends are more likely to encourage a hunter to invite someone to go hunting with them.
- Messages that emphasize being outdoors with family and friends as a great way to spend quality time with them are more likely to encourage a hunter to invite someone to go hunting with him or her.
- Active participation as an adult is directly related to active participation as a youth. (Youth who participate frequently are most likely to continue hunting into adulthood.)
- Hunting involvement during the teen years is one of the strongest predictors of long-term hunting involvement.
- Youth hunting programs should emphasize fun and family aspects first and not traditional management programs such as “harvest,” “wildlife management,” and “trophy hunting.”
- Increasing and advertising opportunities for youth to take a hunter education course is important.
- Programs that create the pre-hunting, apprenticeship stage may go a long way toward increasing initiation and ensuring continuation; such programs would have to provide considerable ‘pre-hunt youth/role model’ contact—contact that should be frequent and over a period of time.
- A mentor program could assist with providing kids opportunities to get into the field.
- Increasing the availability of public shooting ranges and ranges on State Game Lands can enhance opportunities for mentors to teach youth needed skills.

- Mentors could be recruited from state employees, hunting clubs, sportsmen's organizations, the senior community, and from inactive or ex-hunters.
- Mentors should be marketed as hunting experts.
- Hunter training programs should emphasize the program's depth of knowledge and education quality; safety, of course, should also be emphasized.
- Mentors could accumulate points of recognition that may be "cashed in" on special hunts.
- A mentor could be a reward to children who successfully complete a hunter education or ATA course.
- Designated youth hunts and/or seasons and designated areas of land could provide needed instruction time.
- The WRC could offer a "free hunting day" for youth or new hunters, providing equipment, transportation, and licenses.
- An official program to recognize youth achievements like the Angler Recognition Program could be implemented with levels of achievement and rewards.
- Youth could apply for monetary assistance from the WRC that requires the child to be on the honor roll.
- An "Estate Program" could leave hunting equipment to the WRC to be given to qualified youth.
- Partnerships with the NWTF and NSSF could enhance promotional efforts and outcomes.
- Resources such as land access, hunter education, reduced first-time purchaser license fees, and free equipment rental should be plentiful and convenient for hunters to obtain, especially for hunters willing and wanting to take a potential hunter under their wing.

One of the greatest challenges for the WRC is to provide a social system to cultivate current interest in hunting. As the research has shown, hunters who were initiated before 18 years of age are more likely to have spent more days hunting and more likely to continue the sport into adulthood. Those who learn the sport at a later stage in life are more likely to drop out of the sport and are more in need of a social support system to continue participating.

- Youth satisfaction with hunting is related to social and other factors such as being with friends and family or having fun.

Non-Hunters with an Interest in Hunting

- Although a long-term goal should be to offer hunter education in public schools, a place to start would be advertising through currently existing outdoor skill and educational youth groups, other non-governmental organizations, and fishing clinics.
- Relationships should be developed with currently existing non-governmental (NWTF and NSSF) and local organizations and outdoor-oriented youth community groups and programs such as 4-H clubs, Boy and Girl Scout troops, and Venturing programs.
- Relationships with lawmakers and school officials need to be developed before an outreach impact at the school level can be made.
- Brand new outdoor clubs focusing on hunting, fishing, conservation, and service could be created.
- A program could be developed in conjunction with existing outdoor programs and organizations.

As mentioned in the “Results” section of this report, youth who have either completed a hunter education course, Archery in the Schools program, or have an interest in hunting need a way to continue or to have “hands-on” experience.

- Youth who have completed a hunter education or Archery in the Schools course need to be provided with repeated hunting or outdoor experiences by a family member, friend, or mentor.

The research has shown that frequent outings instill a commitment to the sport of hunting later in life, after the teen years. However, both the workshops and research have shown one of the greatest challenges for an agency is to have the ability to supply repeated outdoor or hunting experiences.

- Inviting children who have taken a hunter education course or have an interest in the outdoors into the field to develop skills and knowledge is critical to developing a lifetime hunter.

Inactive Hunters

- One of the main reasons hunters cease hunting is a breakdown in their social support network.
- Other reasons for hunter dropout are related to lack of time and lack of interest.
- Further investigation into the Sunday ban on hunting may assist with returning inactive hunters to the sport.
- Programs that encourage active hunters to invite inactive hunters to go hunting may be effective. The NSSF's Step Outside program would assist with such an effort.

EFFECTIVELY REACH YOUR AUDIENCE

- A critical aspect of a successful hunter recruitment and retention program is the specific language used in each and every promotional and correspondence piece.

Research has shown that there is no doubt that what you say counts. People are motivated by specific concepts and words that are symbolic of those concepts.

- Messages to the market of existing hunters should focus on encouraging hunters to invite others to come along with them on a hunt, or for target shooting or archery practice.
- Messages targeted to active and inactive hunters should focus on the familial and naturalistic aspects of hunting such as spending time with family and being close to nature.
- Messages targeted to active hunters should focus on sporting skills and the familial and naturalistic aspects of hunting.
- Messages to youth should be tailored according to their cognitive development and their exposure to hunting. Offer widespread availability of hunter education or available outdoor skill courses, and advertise the courses according to cognitive development levels.
- Messages to youth who have not been previously exposed to hunting should be tailored by age cohorts to match cognitive development, emphasizing “hands-on” experiences for elementary school children, facts about the natural world (statistics and wildlife

identification) and skill development for 5th to 8th graders, and social aspects of hunting for 9th to 12th graders.

- Promoting hunting through existing social structures like school, church, or other groups could be an effective way to keep teens interested in hunting.
- Hunting can be introduced into the school system as a wildlife management tool in the biology curriculum. Lessons could also include information on hunting's role in conservation and North Carolina's economy.
- Messages to youth groups should emphasize the acquiring of skills, skill development, educational development, benefits associated with outdoor and physical activity, and hunting's role in wildlife and habitat management.
- Youth who participated in fishing in the past year are more likely to be interested in hunting. Advertising at fishing clinics could be effective.
- Messages to the general public that communicate that wildlife populations are scientifically managed may be effective at improving hunting approval ratings in North Carolina.
- Messages that consider the positive impacts hunting and being outdoors have on personal health may prove to be successful at reaching market segments concerned with health.
- Research has shown that women may be more responsive to messages that emphasize the familial and naturalistic reasons for hunting.
- Single-parent households do not negatively impact hunting participation. Messages should not be planned to target single-parent households.
- Messages should be distributed based on who the target audience is—where they live, as well as when and how often the WRC wants to reach them.
- The WRC could work with local businesses to distribute information.
- A made-for-TV movie could be aired that expresses, in story form, the hunting heritage and the camaraderie that hunting fosters.
- Billboards could be used to reach market segments. Billboards were successfully used by the Wyoming Game and Fish Department in its effort to promote "Wyoming's Wildlife: Worth the Watching" campaign.
- The *Regulations Digest* can be used to distribute information to hunters.

- Materials advertising hunter education opportunities should be regularly developed and distributed.
- A positive, public role-model with whom kids could identify such as a sports, television or Hollywood personality could be employed for outreach purposes.

One of the biggest mistakes that agencies and organizations make with outreach campaigns is that they do not budget enough money for distribution of the message, the most important part of the plan. Avoid spending too much money on fancy layout or printing costs if it will impair the ability to send the message out. Advertising costs should be carefully considered and calculated on a “per-person reached” basis. Television and radio ads may be cheaper on a per-person basis than a brochure mailing.

- An inventory in the form of a database of current outdoor education and skill programs and a central calendar of events should be developed and posted online so that information can be easily found.
- The to-be-established private lands program and land database should be heavily advertised with a simple 2-page newsletter and post card follow-up mailing.

The online tools can be very powerful because people can be directed to the site links in many ways: by e-mail (an opt-in mail list), postcard, newsletter, newspaper, etc. A central person should be available to distribute and/or develop advertising materials directing youth and adults to current events.

EVALUATE THE PROGRAM

- A unit of measure should be established to evaluate the program’s success at a future point in time to determine the program’s success or shortcomings.
- The evaluation date should be established and the appropriate amount of time allocated to reviewing program progress.

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ABOUT RESPONSIVE MANAGEMENT

Responsive Management is a nationally recognized public opinion and attitude survey research firm specializing in natural resource and outdoor recreation issues. Its mission is to help natural resource and outdoor recreation agencies and organizations better understand and work with their constituents, customers, and the public.

Utilizing its in-house, full-service, computer-assisted telephone and mail survey center with 65 professional interviewers, Responsive Management has conducted more than 1,000 telephone surveys, mail surveys, personal interviews, and focus groups, as well as numerous marketing and communications plans, need assessments, and program evaluations on natural resource and outdoor recreation issues.

Clients include most of the federal and state natural resource, outdoor recreation, and environmental agencies, and most of the top conservation organizations. Responsive Management also collects attitude and opinion data for many of the nation's top universities, including the University of Southern California, Virginia Tech, Colorado State University, Auburn, Texas Tech, the University of California—Davis, Michigan State University, the University of Florida, North Carolina State University, Penn State, West Virginia University, and others.

Among the wide range of work Responsive Management has completed during the past 15 years are studies on how the general population values natural resources and outdoor recreation, and their opinions on and attitudes toward an array of natural resource-related issues. Responsive Management has conducted dozens of studies of selected groups of outdoor recreationists, including anglers, boaters, hunters, wildlife watchers, birdwatchers, park visitors, historic site visitors, hikers, and campers, as well as selected groups within the general population, such as landowners, farmers, urban and rural residents, women, senior citizens, children, Hispanics, Asians, and African-Americans. Responsive Management has conducted studies on environmental education, endangered species, waterfowl, wetlands, water quality, and the reintroduction of numerous species such as wolves, grizzly bears, the California condor, and the Florida panther.

Responsive Management has conducted research on numerous natural resource ballot initiatives and referenda and helped agencies and organizations find alternative funding and increase their memberships and donations. Responsive Management has conducted major agency and organizational program needs assessments and helped develop more effective programs based upon a solid foundation of fact. Responsive Management has developed Web sites for natural resource organizations, conducted training workshops on the human dimensions of natural resources, and presented numerous studies each year in presentations and as keynote speakers at major natural resource, outdoor recreation, conservation, and environmental conferences and meetings.

Responsive Management has conducted research on public attitudes toward natural resources and outdoor recreation in almost every state in the United States, as well as in Canada, Australia, the United Kingdom, France, Germany, and Japan. Responsive Management routinely conducts surveys in Spanish and has also conducted surveys and focus groups in Chinese, Korean, Japanese, and Vietnamese.

Responsive Management's research has been featured in most of the nation's major media, including CNN's *Crossfire*, ESPN, *The Washington Post*, *The Washington Times*, *The New York Times*, *Newsweek*, *The Wall Street Journal*, and on the front page of *USA Today*.

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