# Understanding Non-traditional Hunters in New York: Initial Insights and Implications for Recruitment and Retention Research

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## HUMAN DIMENSIONS RESEARCH UNIT PUBLICATION SERIES

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## EXECUTIVE SUMMARY

### Background

The future of wildlife conservation depends on people valuing wildlife and supporting conservation efforts. Appreciation of wildlife is greatly enhanced by engagement in outdoor, nature-based activities. Hunting helps produce wildlife conservationists. In addition, regulated hunting is used to manage some wildlife species (e.g., deer elk, bears, coyotes) that can cause negative impacts on people (economic, health and safety impacts). Thus, when hunter numbers decline, so does the potential for creating wildlife conservationists and implementing wildlife management.

Socio-demographic shifts such as rural outmigration, exurban growth, and increasing population of racial/ethnic minority groups are transforming the United States. Such shifts may have significant impacts on hunting, an activity that is traditionally rooted in rural American culture and predominantly practiced by white males. Anecdotal evidence suggests that proportionately more hunting participants are entering the activity through "non-traditional" pathways. Understanding these "paths," or sociocultural mechanisms that drive interest in hunting and potential hunting participation, is critical to the future of hunting and hunter recruitment and retention. This research characterizes these trends and provides insight into how and why such changes are occurring.

### Objectives

1. Characterize emerging (i.e., non-traditional) types of hunters and describe traits expressed by these hunting subpopulations and how they compare and contrast with "traditional" hunting recruits and recruitment pathways

2. Identify factors that might facilitate or impede recruitment and retention of emerging hunter subgroups.

### Methods

Telephone interviews were conducted with 42 adult non-traditional hunting recruits (e.g., women, racial-ethnic minorities, individuals from urban or suburban backgrounds) to examine attributes of emerging types of hunters and identify factors that facilitate or impede their recruitment and retention into hunting. Interviewees were selected through a systematic screening process of individuals who registered online for 2013 Hunter Education Courses across New York State. Using filters based on gender, race/ethnicity, and previous hunting-related experience (e.g., going afield with family members), we identified 176 adult-onset, non-traditional hunting recruits (17% of the total sample of online registrants). To represent a range of perspectives, we divided this sample into six categories (three for each gender) and randomly selected at least four individuals in each category for the telephone interviews (conducted from Nov 2013 to Feb 2014). Categories for non-traditional female hunters included racial/ethnic minority (n = 4); Caucasian, raised in urban/suburban areas (n = 6); and Caucasian, raised in rural areas (n = 8). Categories for non-traditional male hunters included

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racial/ethnic minority (n = 14); Caucasian, raised in urban/suburban without family support for hunting (n = 6); and Caucasian, raised in rural areas without family support for hunting (n = 4). Having the support of immediate family members, especially during childhood, significantly influences the likelihood that males will take interest in and continue hunting throughout their lives (Stedman & Heberlein 2001). Thus, including the criteria "without family support" provided a means to target new recruits who may not have entered into the hunting community through more traditional paths.

Interview questions and analysis focused on several topics including pathways into hunting, benefits (and motivations) associated with hunting, concerns about hunting, hunting norms and social support, barriers to hunting, potential opportunities for recruitment and retention into hunting, information about hunting, and hunting participation and commitment.

**Key themes and findings**

- **Factors contributing to hunting participation.** Traditional factors associated with hunting such as support from friends and family and previous outdoor experiences were mentioned most often by "non-traditional" hunting recruits. These factors appear to be the strongest contributors to hunting recruitment across all demographic groups. However, certain subgroups of new hunters described more unique paths into hunting, including a connection with cultural heritage (primarily non-whites), the influence of media, growing interest in hunting among their children, and the locavore movement (primarily Caucasian hunters in urban/suburban areas).

- **Benefits associated with hunting.** Food was the benefit most commonly associated with hunting and many new hunters cited the procurement of food as their primary motive. Food was valued by diverse demographic groups for multiple reasons, including enhanced self-sufficiency, personal health, and ecological sustainability. Connecting with nature and social camaraderie, two of the more traditional hunting motivations, were also important to many of the new hunting recruits. Many new hunters discussed civic/community (e.g., public health, safety, and economics) and conservation/ecological benefits as key positive outcomes associated with hunting as well.

- **Concerns about hunting.** Most new hunting recruits, especially those who had attended a hunter education course, expressed few reservations or concerns about hunting. If concerns persisted, most were related to safety – primarily the unpredictable conduct of other hunters. Safety concerns were voiced by interviewees from all demographic groups. A few individuals talked about the public image of hunting and the challenge of overcoming negative stigma associated with being a hunter.

- **Hunting norms and support.** Social support for hunting was important to new hunters. Though a few interviewees came from families or communities where hunting was a way of life (a common trait reported by several studies of traditional hunting recruits), most indicated that their family and peers were at least generally supportive of the activity. Those residing in urban areas were an exception. Aspiring hunters from urban backgrounds described the challenge of learning to hunt in a context where hunting was

uncommon and antipathy toward hunters (and killing animals in general) was prevalent. In some cases, interviewees described how they diligently worked to convince family and friends that hunting was a worthwhile endeavor – typically yielding mixed results.

- **Obstacles or barriers to hunting.** A lack of time due to other commitments and obligations was the primary barrier cited by new hunting recruits. Many interviewees – particularly those in suburban and urban areas - also talked about the difficulty of finding a hunter education course and/or accessing hunting opportunities. Others lamented the negative impacts of New York hunting and firearm regulations such as the SAFE Act on general hunting opportunities. Social norms and support for hunting re-emerged in conversations about barriers (particularly among urban residents and racial/ethnic minorities), with an absence of potential hunting companions and the challenges of city life representing significant obstacles. A few interviewees talked about how gender or race could be a barrier to participation (either for themselves or for others), though most of the new recruits we spoke with had managed to overcome those challenges.

- **Strategies for recruiting new hunters.** When asked to reflect on their own experiences and think about how to recruit new hunters from non-traditional backgrounds, many interviewees highlighted the value of mentoring and training opportunities. This included the development of social networks to match inexperienced hunters with veterans, fostering social support that was absent (and desired) by new hunters in many areas. Others talked about the need to reframe the way hunting is communicated to diverse audiences, shifting the focus from harvest toward broader impacts and benefits that might have more universal appeal (e.g., positive outdoor experiences, conservation). Innovative advertising strategies (e.g., online social media) were frequently mentioned, and several interviewees emphasized the need to develop messages in conjunction with key individuals working within communities of interest. Because procurement of game for food was an important motivator for new hunters, many interviewees also talked about how the benefits of local, free-range food could be leveraged to generate more support for hunting.

- **Additional information about hunting.** Most new hunters seemed to be satisfied with the amount of hunting-related information available to them. However, a few indicated it would be useful to have more information about where to hunt, what or how to hunt, hunting rules and regulations, and how to field dress game. Veteran hunters (family members, friends, etc.) were the most important information source for new recruits. Though DEC's website and publications were important to many new hunters, participants seemed to rely on personal contact with experienced hunters more than any other source.

- **Hunting participation and commitment.** About two thirds (27 of the 42) of interviewees in our exploratory sample hunted during their first season, and 6 of them harvested an animal, primarily deer. Most of those who hunted, including those who were unsuccessful, described hunting as a positive experience, and many participants expressed a strong commitment to continue hunting in future years. Those who were uncertain about their future participation, commonly cited reasons such as logistics (e.g., lack of

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time), values and beliefs (e.g., unwillingness to kill an animal), and potential lack of support from spouses or significant others.

Overall, results indicate that non-traditional hunting recruits are fueled by many of the same motivations and perceived benefits (e.g., to obtain food, connecting with nature, social camaraderie) that have driven traditional participation in hunting. However, new pathways into the activity are clearly emerging (e.g., media influence, locavore movement). For many of these new recruits, interest in hunting evolves in social and geographical contexts where support for the activity is limited or virtually non-existent. Thus, emerging types of hunters such as women, racial/ethnic minorities, and urbanites we interviewed may experience novel and significant barriers to participation. Efforts to recruit and retain new hunters directed at these populations would benefit by accounting for these barriers and considering the expectations, norms, and ethics that characterize emerging subpopulations of hunters. While this exploratory study provides some preliminary insights about factors that may influence the recruitment of non-traditional hunters, additional research[1] is needed to provide wildlife management agencies and the conservation community with more information to help shape programs and initiatives that meet the interests and needs, and therefore support the social worlds of emerging hunting subpopulations.

[1] This preliminary, exploratory study represents Phase 1 of a research project designed to characterize contemporary hunters and their social worlds in New York State. In Phase 2, the researchers will conduct a survey of a much larger and representative sample of non-traditional hunting recruits. The questionnaire will be designed based on data from this interview study.

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## INTRODUCTION

The future of wildlife conservation depends on people valuing wildlife and on their commitment to sustaining wildlife species and their habitats. It has been argued that valuing wildlife and promoting wildlife conservation, as well as pro-environmental behavior in general, are greatly enhanced by engagement in outdoor, nature-based activities. Hunting has long been identified as a powerful endeavor in development of wildlife conservationists. In addition, human tolerance of some wildlife species (e.g., deer elk, bears, coyotes) that can cause negative impacts on people (economic, health and safety impacts) requires management of those species within thresholds of tolerance. Management of several of these species relies on hunting as a regulated means of mortality for population control. Thus, when hunter numbers decline, so does the potential for creating wildlife conservationists and implementing wildlife management.

Socio-demographic shifts such as rural outmigration, exurban growth, and increasing growth among racial/ethnic minority groups are transforming the U.S. population. Such shifts may have significant impacts on hunting, an activity that is traditionally rooted in rural American culture and predominantly practiced by white males (Bissell, Duda, & Young 1998). Anecdotal evidence suggests that proportionately more hunting participants are entering the activity through "non-traditional" pathways (Larson et al. 2013). Understanding these "paths," or sociocultural mechanisms that precipitate interest in hunting and potential hunting participation, is critical to the future of hunting and hunter recruitment and retention. Research is therefore needed to characterize these trends and document how and why such changes are occurring.

This exploratory study focused on developing an understanding of contemporary non-traditional hunting recruits, and represents a step in that process in New York State. Interviews were designed to accomplish two primary objectives. First, we wanted to characterize emerging (i.e. non-traditional) types of hunters and describe traits expressed by these hunting subpopulations and how they compare and contrast with "traditional" hunting recruits and recruitment pathways, leading to the development of practical criteria for identifying and defining these hunter subgroups. Key factors to consider included: pathways to recruitment, reasons/motivations for hunting, perceptions of hunting (benefits and concerns), social support for hunting, and types of hunting experiences anticipated or desired. Second, we attempted to identify factors that facilitate or impede recruitment and retention of emerging hunter subgroups. Three key factors to consider were: barriers or constraints, types/sources of hunting-related information, and potential opportunities for hunting recruitment and retention.

## METHODS

### Pre-interview process

We used a two-step process to screen and ultimately select potential interviewees. First, Human Dimensions Research Unit (HDRU) and Department of Environmental Conservation (DEC) staff identified criteria for screening non-traditional hunting recruits (Appendix A). Given our interest in non-traditional path hunters, the criteria allowed us to specifically target individuals who started hunting later in life, were from suburban-urban areas, and constitute

under-represented groups including women and racial/ethnic minorities. We also included an additional filter "without family support" as a means to capture Caucasian, male hunters who may not have entered into the hunting community through more "traditional" paths (e.g., support from immediate family members during childhood) (Stedman & Heberlein 2001). Screening was accomplished using information provided by students who enrolled online for Fall 2013 DEC hunter education courses. Of the 1,020 online registrants, 677 (66%) were adults. Of these adult recruits, 24% were female, 9% were non-white, 11% were from urban areas, and 40% were from non-hunting families. Our systematic screening process resulted in the identification of 176 individuals (17% of the original 1,020 registrants) who were adult-onset (age 18 or older), non-traditional hunting recruits. These 176 represented the total sample of potential interview participants. In the second step of the interviewee screening and selection process, the total sample of adult, non-traditional hunting recruits (176 individuals) was divided into six categories (three for male and three for female) to represent a range of perspectives (Table 1). Racial/ethnic minorities comprised a small subset of the sample, so all of the individuals in these groups were contacted as potential interview subjects. Caucasians were grouped as urban, suburban or rural, and samples were drawn from these different groups to ensure relatively equal representation. Ultimately, the stratified interview sampling procedure captured a demographically and geographically-diverse audience (Table 1) with the following distribution of interviewee characteristics across categories: 18 total females (4 racial/ethnic minority, 6 Caucasian urban/suburban, 8 Caucasian, rural) and 24 total males (14 racial/ethnic minorities, 6 Caucasian urban/suburban, 4 Caucasian rural).

**Table 1. Characteristics and number of interviewees**

| Characteristics | Number of interviewees by traits of interest |
|---|---|
| **Race** | |
| Caucasian | 24 |
| Hispanic/Latino | 7 |
| African American | 4 |
| Asian | 6 |
| Native American | 1 |
| **Age (years)** | |
| 18-34 | 25 |
| 35-49 | 14 |
| 50+ | 3 |
| **Type of Residence** | |
| Rural | 15 |
| Suburban | 13 |
| Urban | 14 |
| **DEC Region(s)** | |
| Long Island (1) | 8 |
| NYC (2) | 11 |
| Hudson (3 & 4) | 7 |
| North (5 & 6) | 4 |
| Central (7 & 8) | 6 |
| West (9) | 6 |

**Interview process**

Forty-two interviews were conducted by telephone (or email) with at least four randomly selected individuals in each of the six groups. An interview guide helped the research team organize critical topics and questions to address while maintaining flexibility and focus during the conversation. A series of open-ended questions was used to explore factors related to hunting recruitment and retention, including but not limited to: benefits of hunting, concerns about hunting, social norms and support, and barriers to hunting participation (Appendix B). Interviews were conducted from November 2013 through February 2014, ranged in duration from 7 to 38 minutes (mean = 18 minutes), and were digitally recorded with permission of the respondents.

## DATA ANALYSIS

After the interviews were completed and transcribed, transcripts were subjected to a content analysis using Atlas-Ti. All transcripts were coded, broken into meaningful segments, and assigned to descriptive categories based on research objectives. Key themes and findings associated with each topic (e.g., Barriers) are described in detail below.

## RESULTS

The remainder of this report is organized around six major sections. Each section represents key topics that participants were asked to discuss during the interview process (e.g., Factors Contributing to Hunting Participation). Within each of the key sections, several themes emerged during conversation. For purposes of this report, only those themes that represent a nuanced perspective are described below. Individual responses (quotations) offer support for each theme and help illustrate main points.

**Factors Contributing to Hunting Participation**

When asked *how* they became interested in hunting, the non-traditional, adult-onset hunting recruits cited a variety of factors (Figure 1). Many of the more common factors mirrored traditional pathways into hunting (e.g., friends and family, outdoor experiences as youth); others reflect emerging pathways (e.g., media influences, locavore movement). Some of these factors (e.g., media influences) appeared to be influential across demographic groups; others were closely linked to interviewees' backgrounds (e.g., cultural heritage). Most interviewees described some combination of forces that fostered their interest in hunting such as having friends who hunt and having previous experience with the outdoors. Common themes, illustrative quotes, and demographic patterns are described in more detail below.

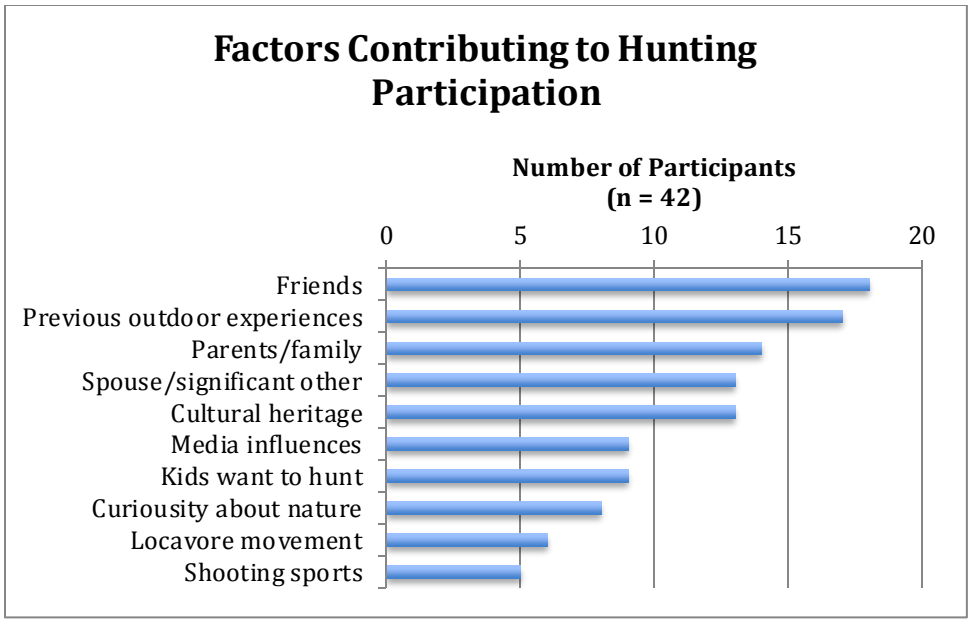


**Figure 1.** Factors contributing to interest in hunting.

**Friends**

For many adult-onset hunters, friends who hunted and/or talked about hunting provided a crucial introduction to the activity. These friends served as important inspirations and sources of information throughout the recruitment process. Many interviewees spoke about their interest in hunting as developing out of a general curiosity; others discussed a desire to participate in or contribute to conversations about hunting and related activities with friends and significant others. Though the powerful influence of friends was evident across all subgroups, it appeared to be strongest among younger hunters, males, and Asians. Two statements illustrate these points:

*"Most of my friends are hunters and, you know, I just wanted to maybe talk when they talk about it, what the excitement is and what they feel and how much fun it was."*–Female, Caucasian, rural

*"I have a few hunters in my family. I never went out with family though. Boyfriends, friends from work, some of the girls… I would go with them and like watch what they were doing 'cause I started getting interested. I got into it!"* –Female, Asian, rural

**Previous outdoor experiences**

Positive outdoor experiences in nature during childhood and adulthood were frequently mentioned as a factor that sparked interest in hunting. Most topics did not directly involve hunting and included things like camping, hiking, and other recreational activities. These experiences were more common among interviewees who grew up in rural areas, though many interviewees raised in urban and suburban areas also described time outdoors in nature as a key precursor to hunting. The following quotation illustrates the strength such previous experiences have in shaping participants' interest in hunting:

*"I always go camping…always enjoy hiking and stuff like that, always being out in the woods…so I was just like 'Oh, you know, it would be nice to be hunting and see how it is...I've always been like an outdoorsy kind of person so…"* –Male, African American, rural

**Parents and family**

Although our filtering process excluded most new hunters who came from traditional, family-supported hunting backgrounds, parents and family remained a key contributor for many non-traditional hunting recruits. In some cases, it was a family member other than parents (e.g., grandparent, uncle) who provided the stories and/or experiences that sparked that initial interest in hunting.

*"My grandmother looked over me quite a bit and she would always talk about her father hunting and…things that he learned in the woods. Because I would take long walks with her…she would tell me certain things, not just like hunting but listening to the forest and, you know, learning what different sounds were, different bird, things like that. I always tagged that as knowledge of being a hunter, so there's a bit of ancestral…interest in it."* –Male, Caucasian, suburban

*"One of my uncles and aunts had a piece of land up north and I used to just play out in the woods and stuff. They had some neighbors that went hunting and…just hearing the stories and being around them interested me as a kid."* –Male, Hispanic, urban

**Spouse or significant other**

Similar to traditional hunters, many new hunters (primarily women from rural areas) often described how a spouse or significant other was the main catalyst for hunting participation. In most cases, the spouse or significant other encouraged interviewees to hunt. Sometimes, however, individuals were simply willing to try hunting if it meant more quality time with a significant other. For example, one female participant suggested that hunting would allow her to "get out in nature with him (husband) and spend time with him doing something he loves" (Caucasian, suburban).

For other participants, hunting represented a compromise or an *"agreement"* to *"give it a shot"* (female, Caucasian, rural). For many aspiring hunters, a small number of primary enablers (e.g., spouses, friends, parents/family) seemed to provide a pivotal gateway into the hunting community, exercising a profound influence (both positive and negative) on new recruits' perceptions of hunting and hunter behavior.

**Cultural heritage**

Some interviewees described how hunting was an important part of their cultural heritage and professed a desire to get back to their roots. These sentiments were expressed by new hunters from different backgrounds, ranging from rural, Caucasian females, to Dominican-born males.

*"It's like the cultural significance of bowhunting in general…I'm an Alaskan native, so for several hundred years, hunting's been going on with the bow…. hunting and fishing in Alaska is big overall, the cultural mindset up there."* –Male, Native American, rural

*"Where I come from we used to do a lot of hunting and, you know, we lived for that, in the Dominican Republic."* –Male, Hispanic, surburban

**Influence of media**

Various media sources sparked interviewees' interest in hunting and the pursuit of hunting-related activities. It appeared that, the influence of media spanned demographics and age groups, though it seemed to be a stronger force among new hunters who grew up in urban areas. Television shows about hunting (e.g., Duck Dynasty, Outdoor Networks shows) seemed to be especially important. Some interviewees acknowledged the misperceptions and distorted

expectations propagated by media portrayals of hunting, but these individuals also noted that, for the most part, such misrepresentations did not influence their overall perception of hunting.

*"The fact that we watch the Discovery Channel, the History Channel, the hunting channel believe it or not… Those are our favorite channels because it brings you back to nature and that's really, it's really about reminding people they need to get outdoors and back in nature…It's a common bond that we can all, my husband and my children, we can all sit down at the table and talk about."* –Female, Caucasian, rural

*"Honestly, (laughing), it was the TV series Duck Dynasty…I love the outdoors and it's something I've always enjoyed, so I figured duck hunting would be awesome."* –Male, Hispanic, urban

**Kids interested in hunting**

Several new hunters (particularly Caucasian participants) said their children were the main reason they decided to try hunting. When children expressed an interest in trying the activity, adults felt compelled to follow along and provide support. One male participant succinctly captures this sentiment suggesting that *"nine times out of ten, I wind up doing things because the kids want to do it (laughing)" (Caucasian, urban).* Another interviewee stated:

*"Last Christmas, she [my daughter] came up with the idea that she wanted a pink camouflage bow…that's what she wanted…And it's just something else I can do with her together…Actually now, a few of her friends have started shooting bow too."* –Male, Caucasian, rural

**Curiosity about nature**

Some new hunters simply wanted to learn more about the natural world and how to conduct themselves appropriately when participating in outdoor recreation. Similarly, others were curious about hunting and the benefits it provides. Most new hunters who described the "curiosity" motive were racial/ethnic minorities who grew up in urban or suburban areas.

*"What gathered my interest with the hunting is being able to experience more, and explore the wild side you know? With animals what have you, I would love to learn how people hunt animals. I've been uh dealing with different experiences with parks and recreation since I was a child, going to camp, knowing that if there's animals out there we should be able to protect ourselves…so I want to be as well rounded as I possibly can be."* – Female, African American, urban

**Locavore movement**

A few interviewees indicated that their interest in hunting emerged primarily from a commitment to healthy eating and emerging interest in locavore principles (i.e., the consumption of food that is grown, raised, produced, or harvested locally). Embedded within these primary motivations was an underlying interest in self-sufficiency and a desire to understand food systems as a whole. These motives were expressed exclusively by Caucasian participants (female and male), many of whom lived in suburban or urban areas. The following quotations illustrate these interests:

*"I think it's mainly through knowing where your food comes from…and environmental issues and really knowing where your food comes from. Both [my sons] have really become very opposed to the industrial food system so we, my family as a whole, we do whatever we can to you know buy from the farmer's market. We're involved in a CSA, Roxbury Farm, which comes into town…So that's where it (the interest in hunting) comes from. It wasn't about owning guns and it wasn't about a social activity. It was really sort of a technical matter (chuckle)…it's really about food."* –Male, Caucasian, urban

*"I'm a super foodie. Like the whole locavore thing, that is me. I can all my own vegetables and fruits and I have a dehydrator. I do, although I hate labels. I hate the whole, like, stereotype. Like you're a locavore, I feel like as soon as you put a label on somebody, you have this like preconceived notion of everything they believe in… but, um, I love venison, and we always got venison from friends and I just hate relying on other people to give me something that I love so much. And it kind of goes with the self-sufficiency kind of theme. I know how to make my own bread, and I know a lot about being able to be self-sustaining in a way."* –Female, Caucasian, rural

**Benefits Associated with Hunting**

Non-traditional hunting recruits described a range of factors when asked about benefits associated with hunting (Figure 2). Many of these benefits were personal or hunter-centric in nature, reflecting traditional motivations for hunting that have been recognized for decades (e.g., social camaraderie, relaxing in nature, challenging outdoor skills). Others involved more community-centric benefits focused on mitigating impacts of overabundant wildlife on ecological and social communities. The most-commonly-cited benefit of hunting – food – was a fusion of both and shares similarities to feeling connected the natural world. Although community-centric benefits were often acknowledged, personal motivations for hunting generally centered on the more hunter-centric perspectives such as food and connecting with nature.

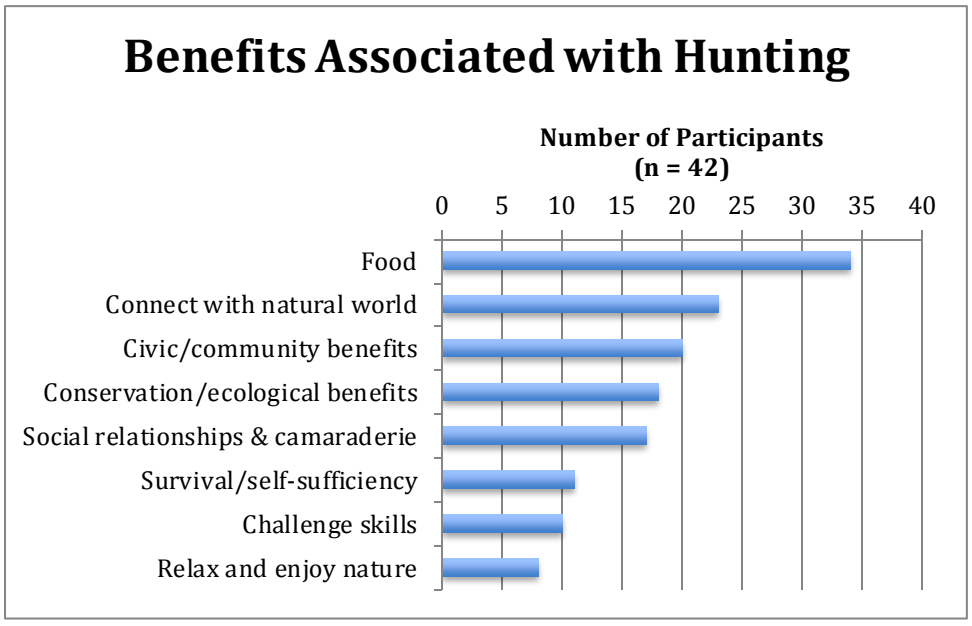


**Figure 2.** Benefits associated with hunting.

**Food**

Almost every interviewee listed food as a primary benefit associated with hunting, and most indicated that obtaining healthy, free-range food was a primary reason for pursuing the activity. Similarly, responses often mirrored the interests described in the previous section in terms of connecting with and understanding local food sources (i.e., locavore interests). In this way, participants grounded their experiences in both social and ecological systems and

discussed how obtaining food resembled an entire *process* rather than strictly providing a means to an *end*.

*"It's just a way to get better connected with the food and really understand, you know, the lifecycle of the whole process of harvesting the animal and everything else. To me I guess it's just a matter of respect for it too. It's not like I'm going to be doing trophy hunting. I'm going to be doing it more for food and things like that."* –Male, Asian, urban

*"I think knowing where your food comes from and knowing the process, the entire process, is important from a moral point of view…I think it's important for people to know what's involved and also just kind of, I don't know, being out in the woods and being part of the cycle in a more natural way I guess…"* –Female, Caucasian, rural

**Connecting with the natural world**

More than simply being outdoors, many new hunters talked about the value of connecting with the natural world, both on practical and spiritual levels. Interviewees from different demographic groups expressed this perspective. For several, the human-nature connection involved a deep respect for wildlife, wildlife habitat, and simply being outside of one's comfort zone. One interviewee captures several of these sentiments suggesting that being in nature "*teaches you…to respect nature in general…you really respect the animal you're going after…it's just a good, good way to connect with everything and just kind of self-reflect*" (Female, Asian, rural). Another interviewee (female, Caucasian, rural) described a similar respect for wildlife and nature but also articulated how hunting *"brought me to connect with my God, where I felt that I was blessed, I was thankful…I felt that I very much respected the animal."*

**Civic and community benefits**

Many interviewees talked about how hunting could benefit humans and local communities. In general, this type of discourse focused on the importance of controlling overabundant wildlife populations that threaten human health, safety, and property (e.g., gardens, vehicles). These benefits were mentioned by interviewees from all backgrounds, though slightly skewed toward new hunters who grew up in suburban and urban areas. A few also noted the economic benefits of hunting in rural areas.

*"To control the deer population…I know for a fact there's been problems in certain counties in upstate NY where they don't have enough hunters and the deer populations have gone sort of berserk. There have been mild winters so they increased the licensing but, um, here, I'm very good at killing deer with my van! In the last 3 years I've probably wiped out about 4 deer. It's, you know, definitely the need of control. I mean, even to just be a property owner - the damage that they do, just to my garden, my plants…they would just come in and decimate me."* –Male, Caucasian, rural

**Conservation and ecological benefits**

Many interviewees mentioned the conservation value of hunting and extolled the ecological benefits of wildlife management and population control, often citing animal rights and welfare as a primary concern. Conversations about ecological benefits had a decidedly moral undertone often highlighting hunting as a mechanism to alleviate undue strain on wildlife habitat and prevent unavoidable starvation (primarily deer). Conservation-oriented perspectives were especially common in urban and suburban areas. The following quotation captures this decidedly moral sentiment:

*"I'm actually a nature lover. I like to watch animals and feed them and care for them. I wasn't a hunter. I still don't consider myself a hunter, just so you know. But now I have a better understanding of, I guess, the humane aspect of hunting…People are building and the deer have no place to be. They are in the roads, they're everywhere, and there's nothing for them to feed on so they're starving. The numbers are growing and the humane thing to do would be to thin the herd."* – Female, Caucasian, suburban

**Social relationships and camaraderie**

Many interviewees viewed hunting as a way to strengthen existing relationships with friends and family members, thereby fostering important social connections. This was a particularly common thread among women who hunted to be closer to significant others, but many men also talked about the value of relationships forged and solidified through hunting experiences. Some adult-onset hunters lamented the fact that it had taken so long for them to join the hunting community, and these individuals were particularly excited about the potential to meet new people and spend time with like-minded individuals. The following quotation illustrates the importance of and desire to develop social relationships:

*"My buddy made me realize that, 'Hey, you had a bad experience, but look at all these other people who go out there and have a great experience,' you know? And I'm in an area where I know a lot of people that hunt… I mean, they are part of sportsmen clubs up in the Adirondacks where they have the hunting camp. They can go up and spend weeks at a time, go out with all their buddies hunting and they enjoy it, from a camaraderie perspective. You know, it's a family group. I kind of missed out on that, looking back now, because I'm almost 50. I kind of wish I would have gotten a little bit more involved with my uncles, they were all hunters."* –Male, Caucasian, rural

**Relax and enjoy nature**

For some interviewees, particularly city-dwellers, hunting provides a refreshing, tranquil outdoor experience and a welcome escape from the chaos of everyday urban life. They often described being in nature as a "feeling" and used words and phrases like "enjoyable," "peaceful," and "free" to describe hunting. One captured this sentiment stating:

*"I would say you feel, you feel somewhat free, at peace almost, in a sense. Just because you're just out there in the open…I feel very at peace when I can just get away from everything and all the commotion of everyday life, of living in Troy. Just get out there and just relax, no noise, I would say that's the biggest thing really."* –Male, African American, urban

## Concerns about Hunting

A majority of interviewees did not express significant concerns or reservations about hunting (Figure 3). In fact, ten explicitly said they had absolutely no concerns about hunting. Because these individuals had made it this far in the hunting recruitment process (i.e., to the point where they had signed up for, and in most cases completed, a hunter education course), they had presumably reconciled any previous doubts or concerns. Nevertheless, a few recurring issues did emerge. Most centered around safety and the way(s) in which the public perceives hunting although two individuals expressed concern about the moral aspects related to hunting.

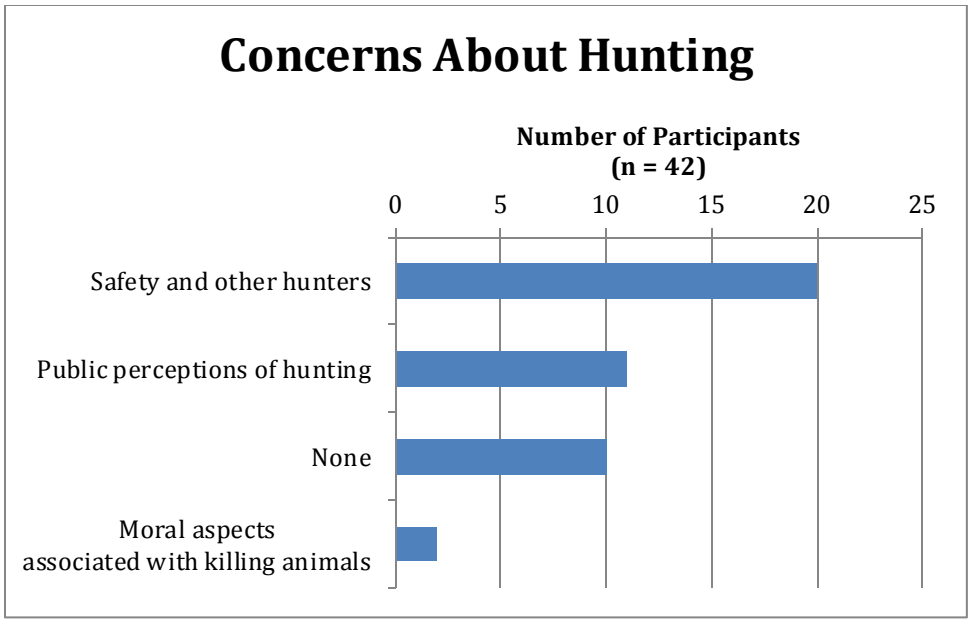


**Figure 3.** Concerns about hunting.

**Safety and other hunters**

As noted above, more than half of new hunters interviewed were not particularly concerned about safety. After the training provided by the hunter education course, interviewees generally said they felt confident handling firearms. However, many new hunters had friends or family members who believed that hunting and firearms were inherently unsafe. While fear of hunting itself was not prevalent, fear of unknown hunters who might share hunting spaces remained a concern and a potential participation barrier for people from all demographic groups. Some of these fears were directly derived from personal experiences, but most emerged from stories passed through the media, friends or family members.

*"The only thing I'm ever worried about when I was out there was just other hunters you know like how, how safe they're being… if they're going to see me and…just take the sec, the extra second to realize that hey there's someone else out there, like not to take the shot 'cause I've heard so many horror stories about people like hunters"* –Male, African American, rural

*"My personal reservations are not necessarily with me, but with the other person because of what happened to me as a younger man [he was nearly shot while playing in the forest]. You just, you never know who has the gun in the woods and what they're doing and what leads them up to the point of being in the woods…I really don't have any reservations other than that…mainly of a fear of getting shot by somebody else."* –Male, Caucasian, rural

**Public Perceptions of hunting**

Some interviewees spoke about their frustration with other more "traditional" hunters who appeared, at least in their eyes, to be hunting for the wrong reasons (e.g., trophy hunting) or were engaging in illegal activities (e.g., poaching). This undoubtedly contributes to negative portrayals and perceptions of hunters in the public spotlight. However, most were heartened to realize that many hunters "do the right thing." In fact, several new hunters expressed concern about the negative stigma associated with hunting (and guns culture in general) and considered how different stereotypes might affect future hunting participation (for themselves and others).

Some even described how they were concerned that their friends might view them differently because they were hunting.

*"I feel like there's a lot more negative stigma than there should be related to hunting, especially in terms of things like gun control and people thinking 'Oh you're just going out to shoot things, you're a violent person.' I'm concerned about it and I don't feel like that. You know, especially when we're a nation where it's pioneers and revolution and everything like that. That was a means of survival for the better part of this country's history. It was only the last 50, 60 years or so that we actually moved away from that rural type of lifestyle."* –Male, Asian, urban

*"So many people just associate a hunter with a redneck or someone who is crude and that they don't want that to be the image of a hunter. You know, a family person who just wants to provide food, or donate food to their community… something like that. I think a lot, in the past, hunters have gotten a bad image from society. I didn't look at it that way because of my husband and his family, but if I could look back to before my husband, I would probably think of hunters being people who are a little bit like hillbilly or redneck too."* –Female, Caucasian, rural

**Hunting Norms and Support**

Many non-traditional hunting recruits belong to social circles where hunting is *not* the norm. Consequently, normative pressure to support and/or participate in hunting that often exists among the family, friends, and local communities of traditional hunters is not present among these non-traditional subgroups. Overcoming this absence of support can be challenging. In many cases, new recruits talked about their effort at changing stereotypes surrounding hunting and convincing others that hunting has many benefits. Some examples of the predominant norms expressed by different groups who interact with new hunters appear below.

**Hunting norms among family**

During the interviews, 35 of the 42 new hunters discussed hunting norms that emerged from interactions with family members. When support was present, interviewees talked about how it facilitated hunting participation. When support was not present, often because family members had not been previously exposed to hunting or held misconceptions about hunting, it represented a *major* barrier to hunting. Some managed to persuade family members that hunting was a worthwhile endeavor; others managed to establish a new social norm within their family unit. This often resulted in increased tolerance of the activity. In some cases, it led other family members to support hunting and, in some cases, fostered their own interest in participating.

*"Now they [my family] couldn't believe it. In fact, when I went hunting the first time, I told them, you know, 'I'm hunting right now!'…Everybody got excited and that's the reason I'm taking everybody next year to take the (hunter education) class… I broke from, the group, you know? I just stepped out of the group and…stopped doing the old stuff and that's why they didn't believe it, you know?"* –Male, Hispanic, urban

*"My family, they think I'm crazy. Literally. I'm the one in the family that's like a 'redneck,' if you would (laughing)…they just would rather buy their food from the stores. They wouldn't want to hunt for it, but they are very supportive."* –Male, Hispanic, urban

*"They [my family] were really worried at first because I think you hear all the horror stories of people getting shot at and people shooting themselves, and all that stuff…But after letting them know I'm hunting in a safe area …controlled by the property…that helped them relax a little bit. By the end, my dad was texting me like, did you get anything today? So their opinions changed a little bit."* –Female, Caucasian, rural

**Hunting norms among friends**

Hunting norms among friends followed similar patterns to those among family. When support was present (more often in rural areas), it facilitated hunting participation. When support was not present (typically in suburban and urban areas), it could be discouraging. To this end, many new hunters discussed making a concerted effort to be an ambassador for their new activity yet most found it difficult to challenge ingrained stereotypes and perceptions. One female interviewee for example, experienced significant differences between female and male friends. After initiation into the hunting community, several new hunters began to realize that many of their current friends have *"been hunting since they were like 13! I'm not sure if I just never noticed it or it's just not something that's, uh, really put out there. But for some reason now that I was more involved, I've been seeing signs of it everywhere."* –Male, African American, rural.

**Hunting norms in local community**

Community support for hunting was not a big part of local culture in urban or suburban areas – even less so among racial/ethnic minorities. Non-traditional recruits from more urbanized backgrounds explained how being a hunter in that context can be challenging. The following quotations illustrate differences in hunting norms across communities:

*"I live up here now…and this is, you know, hunting ground up here. Everyone, all they talk about is hunting up here, so everyone feels the same out here…it's like talking normal. Like talking about going to the supermarket…Down in the city, there's no exposure at all."* –Male, Hispanic, suburban

*"I'm really in an urban environment and I don't think I know anybody who would be interested in it. I think that they would be tolerant and would try to understand but certainly wouldn't be interested in doing it. We just haven't had many conversations. I feel like nobody's ever… I don't know anybody who hunts actually except people I've met upstate."* –Male, Caucasian, urban

*"When I talk to people in Brooklyn about duck hunting or rabbit hunting like that, they'd say uh, 'that's nasty' or something, you know? It's not something people do. It's not very common. Especially in NYC."* –Male, Hispanic, urban

## Obstacles or Barriers to Hunting

A wide range of obstacles influence and will likely continue to influence hunting participation among new recruits (Figure 4). These obstacles ranged from logistical issues (e.g., finding a hunter education class and obtaining a license, accessing hunting areas) to personal constraints (e.g., cost, lack of free time, no one to go with) and cultural barriers (e.g., gender, race). Each affected individuals to different degrees and were often discussed in combination with one another (e.g., No one to go with, Access to hunting opportunities). Several are discussed below.

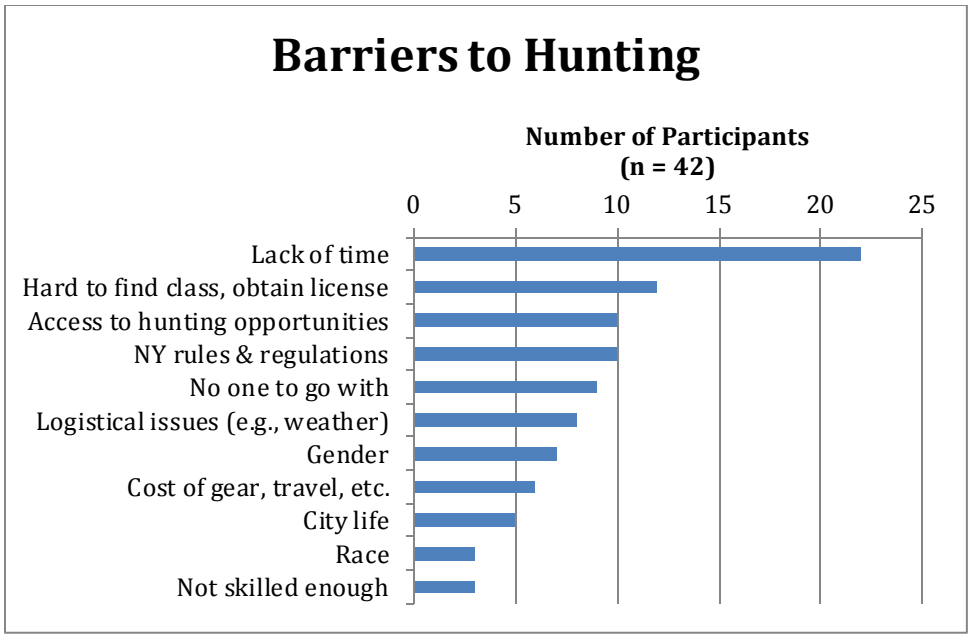


**Figure 4.** Obstacles and barriers to hunting.

**Lack of free time**

A lack of free time due to work and family obligations was the biggest obstacle to future hunting participation. The time barrier was mentioned more often by males than females, and was particularly problematic for interviewees with children. The following quotation illustrates the difficulty associated with overcoming several barriers at the same time (e.g. time, familial obligations, costs associated with hunting).

*"That's kind of the situation that a lot of these guys are in…They go to work, and then it's who's got a recital and who's got karate and who's got soccer. You know, to find a weekend to get away to renew the license, depending upon what their financial situation is too - it's not just the license. You got to get the ammunition, you got to buy a rifle, or a bow, you got to rent land or go to one of these parks, so you're talking gas,…and then if you don't have 20 things planned because of family stuff or this and that you know?... I would say it's the cost and the time. The time constraints."* –Male, Caucasian, urban

**Hard to find a class and obtain a license**

Many interviewees described how much difficulty they faced locating a hunter education course that worked with their schedule and physical location. This problem was significant for urban residents, especially those near New York City. A few of the new adult-onset hunters talked about how awkward they felt being in a class primarily composed of teenagers. The duration of hunter education courses was also discussed as a potential barrier. Because it is a necessary prerequisite to purchasing a license, access to and perceptions of the hunter education course may represent a major barrier for some non-traditional hunting recruits.

*"I've actually been trying to get into one (hunter safety class) for a couple of years…Availability is the problem… they close up very fast here, downstate."* –Male, Caucasian, urban

*"I tried to get into a hunter safety class the year before but it is really difficult …I had to actually take my hunter safety course in Olean which is a 2 hour drive from here…I had to go back and forth on a Tuesday night and*

*then a Saturday morning and most of the class was all children, you know. It was all like 11-14 year olds."* – Female, Caucasian, suburban

*"Something a little closer would be good. I mean… I literally traveled 2 hours from where I live to get to Staten Island and the class is for like 3 days!"* –Female, Hispanic, urban

**Access to hunting opportunities/No one to go with**

More often than not, having limited access to hunting opportunities and no one to accompany or mentor new recruits were discussed during the same conversation. Access to areas where hunting could occur was a major barrier, particularly among new hunters living around urban areas such as New York City and Long Island. When places to hunt were available, many interviewees didn't have an easy way to get there nor did they have anyone to go with. For some individuals from communities where support for hunting was limited or absent (e.g., urban areas, racial/ethnic minorities communities), finding a hunting partner (experienced or not) was very difficult. In some cases, the need for a companion was tied to safety concerns. More often, however, new hunters simply craved the camaraderie and expertise that a veteran hunter could provide.

*"Another question for myself and a lot of people I know is the question of just accessibility. Especially down here in the urban areas…I'm hoping a couple of friends, maybe we'll purchase some land so we can you know, have a place."* –Male, Caucasian, urban

*"I think the biggest obstacle is mentoring. After going hunting with a friend, an experienced hunter willing to share with someone new, I think the experience was much more enjoyable than going hunting alone."*–Male, Asian, urban

*"If you're a beginner...but you don't really know anybody else, there's nowhere really that you know where to go… You need someone who's known the area for a really long time, that's all I would really want out of the person. Someone who knows their stuff, is experienced and um knows the area really, really well like I'm not talking they need to know where every nook and cranny is but um has a background with the area."* –Female, Asian, rural

**New York rules and regulations**

New hunters from all demographic groups cited the stringent firearm rules and, to a lesser extent, the perceived complexity of hunting regulations of New York State as a major deterrent. In this category, the most common complaints centered on the state's new and rapidly evolving firearm regulations. Though many of the political obstacles may be based solely on interviewees' perceptions, they nonetheless create an environment that in not conducive to hunting. The following quotations speak to the general concern over restrictions on hunter behavior.

*"I got to say, in NY state there is a lot of shitty rules. There are a lot more restrictions in New York. You can't do this. You can't do that…it is difficult to hunt in NY because of the guidelines, because of all the rules and regulations they have."* –Female, Caucasian, rural

*"Maybe that's a reason, 'cause I know most people I think go to Pennsylvania more because there's a lot more places in Pennsylvania to be honest than in New York, at least for the guys like me on Long Island...I think Pennsylvania is… more hunting friendly 'cause they don't have all these firearm regulations and the new laws that have been passed to restrict certain weapons."* –Male, Asian, urban

**Gender**

Though many female interviewees identified gender stereotypes as a significant barrier to aspiring female hunters, most were not substantially affected by this potential gender-bias themselves. Some talked about how perceived gender bias and stereotyping remained an issue for their friends while others described the current state of hunting as being male dominated.

*"For a lot of my female friends, it's very intimidating. You know, if they're the only girl kind of going in and they know it's all dudes and, and a lot of dudes - especially in the hunting world - do kind of have this mentality towards girls like 'Well, you're not really supposed to be here.' You do feel that every once in a while, especially when you walk into like a gun or hunting store…it was a very intimidating process."* –Female, Caucasian, suburban

*"9 times out of 10 if I see other females there, I'll feel more comfortable. I don't want to be the only female there. So if there's other females there, that would clinch it. But right about now there's mostly men who hunt."* –Female, African American, urban

**City Life**

Urban life, and firearm regulations associated with urban life, were significant barriers for many new hunting recruits. In addition to the general absence of hunting and hunting-related experiences in urban culture, cities simply do not provide physical or socio-cultural environments or resources conducive to hunting. Hunting stereotypes that persist in cities can be a significant barrier to new hunting recruits.

*"The hardest part is most of us live in the city limits. It would be hard (to hunt) in terms of like the firearms, things like that."* –Male, Asian, urban

*"It's harder when you live in the city to try to get these classes out here or to try to get a shotgun out there or whatever because they won't sell it to you. So it's kind of complicated a little bit. So if you don't have your license with your address up here, you're not going to be able to get the shotgun. You can get nothing out there in the city... [If you want to hunt] you're screwed, you're done."* –Male, Hispanic, suburban.

**Race and ethnicity**

Race and ethnicity were barriers to hunting in certain contexts. A few interviewees described how hunting was not generally deemed an acceptable or normal activity within their cultures. Several people close to one individual expressed concern over his safety based on the perception that American hunters are *"rednecks"* who *"are going to shoot you!"* It is important to note, that while this stereotype appears to be present among the general population and social networks of non-traditional hunters, this particular individual was not deterred. In fact, he somewhat laughed it off stating, *"I come from a redneck family, but Dominican rednecks (laughing). I know how to handle these people…you just have to know where they're from…We have those kind back home, too"* (Hispanic, suburban).

Other interviewees emphasized the importance of their ancestral hunting heritage in other countries and described how that, if properly cultivated, might generate enthusiasm for hunting in the U.S. Language barriers were more common, particularly among members of the Hispanic and Asian communities. Several interviewees believed hunting numbers would increase if hunter education courses and materials were available in different languages. Several quotations capture these sentiments.

*"My dad, he doesn't speak English and he's looking to, he'd love to hunt. Is there any way you can take the safety course in Spanish? Actually, I have three people right now who would definitely…take the course. You know you don't need the language to be a safe hunter…"* –Male, Hispanic, urban

*"Hunting is actually really, really spreading now within this whole town community…Basically, that's all they did, the older generation, is hunt in the Philippines, and a lot of them came over you know and they got their hunter's license… it's just another cultural thing going on now that they can hunt over here. Different game but…yeah, just different stuff, but they were, I mean it was a big part of their lives it sounds like, hunting."* – Female, Asian, rural

**Strategies for Recruiting New Hunters**

All interviewees were asked to reflect on their personal experience and pathway into hunting (or at least their interest in registering for a hunter education course). Then, based on these experiences, they were asked what types of strategies, if any, could be used to recruit individuals with similar backgrounds and interests into hunting. Their answers revealed several recruiting themes that could prove to be useful mechanisms for connecting with new hunting recruits – particularly those from non-traditional backgrounds (Figure 5). Four themes in particular will be addressed below.


**Figure 5.** Strategies for recruiting new hunters.

**Create mentoring and training opportunities**

The value of having an experienced mentor to help build hunting skills and confidence and nurture new hunters through the early stages of the hunting experience was discussed by many interviewees. Some indicated that they would eagerly take part in a matching service to pair new hunters with more experienced outdoorsmen and outdoorswomen, particularly those from similar backgrounds. The need for additional information and training was nearly universal among new recruits, and most preferred to receive this information from experienced hunters. Recruiting efforts should therefore develop creative ways to integrate this key mentoring component. Doing so would help facilitate social interaction and increase the potential for

perceived benefits to be come to fruition (e.g. Social relationships and camaraderie, Survival/self-sufficiency). At the same time, this effort may help to decrease the likelihood that participants will face barriers to hunting and be forced to deal with pressing concerns (e.g., access to hunting opportunities, no one to go with, not skilled enough, and safety). Indirectly, mentoring or other types of training opportunities may also help to address issues associated with high costs (traveling together), and gender and race/ethnicity (pairing individuals based on similar attributes). The following responses illustrate interviewees' interest in hunting with an experienced person or "mentor."

*"I think the biggest obstacle is mentoring. After going hunting with a friend, an experienced hunter willing to share with someone new, I think the experience was much more enjoyable than going hunting alone. I would try to find other hunters who are interested in hunting with me. If the DEC have a system that allows hunters to reach out to each other, this will be very helpful for all involved… I would suggest DEC have a website that allows experienced hunters and new hunters to sign up and get matched. It will attract a lot more people to go hunting."* –Male, Asian, urban

*"You know, maybe a mentoring program… some kind of contact for other hunters in the area. Maybe a guy my age or a little older, who's been doing it and would feel comfortable saying, 'Hey why don't you come out here? I could show you where the good hunting spot is, you know, what the rules or customs are here?' You know what I mean?"* –Male, Caucasian, urban

"*You know sort of how like they have a big brother, big sister sort of mentor program…it is very intimidating if you don't know people to kind of bring you in. I'm waiting for my first hunting experience until I have the right friends or the right location…"* –Female, Caucasian, urban

*"That guided thing would probably be really important, if it were treated properly, you know, and not as entertainment."* –Male, Caucasian, urban

*"Have more groups! Like, when I was taking the class, I was thinking about how it would be nice if they had some kind of groups…to take the beginners hunters out there to see how it is actually… I would be like very skeptical of going by myself to hunt."* –Female, Caucasian, urban

**Shift message framing to emphasize broader benefits of hunting**

Some interviewees recommended that the discourse surrounding hunting be purposefully shifted away from firearms and game harvest, two topics often depicted in the media and popular press. An emphasis on distributing information highlighting broader impacts and benefits of hunting (e.g., healthy food, positive outdoor experiences, conservation) could help change that perception and encourage more people – particularly urban and suburban residents with fewer hunting experiences - to participate in and/or support the activity.

The need to "educate" the public about the relationship between overabundant wildlife populations and animal starvation was also discussed by both male and female interviewees. Others expressed a need to make "*the information more readily available for people who might be interested in doing it"* (Male, African American, rural). Still others pointed to public misperceptions being an artifact of mass media and the political lobby. The following quotations succinctly capture several of these themes:

*"A lot of magazines focus on the gun or the rifle, which is essentially the last thing people are going to use. But it can be framed as a hunting environment and not necessarily a NRA prospective. If NY State can take the discussion*

*away from the NRA and put it back on being a sportsman, being outdoors, I think there would be a lot more attraction from people down here."* –Male, Caucasian, urban

*"In my opinion, just getting the information out there…instead of having the only way to know about hunting is if you go to a hunting store or a sporting goods store or like watching Duck Dynasty or something like that."*–Male, African American, rural

**Innovative advertising strategies**

Many new recruits, primarily racial/ethnic minorities, cited a number of advertising strategies that managers could use to promote hunting across diverse populations including youth, women, and racial/ethnic minorities. Most new hunters who mentioned marketing talked about the value of online recruiting tools, particularly when dealing with the younger generation. For younger adults, the internet has become virtually the only source of information. One individual suggested using *"more advertisement or…more streaming of information through social media…like…Facebook, Twitter, all that stuff"* given their popularity among young people (Male, African American, rural). Urban residents also talked about the value of messages on buses, subways, and other forms of public transportation. Overall, comments suggest that development of online, print, or radio and TV advertising strategies should explicitly consider connections with particular demographic groups (e.g., women, racial/ethnic minorities).

*"…if you could post or promote this type of stuff on Dominican websites like livio.com, which is all Dominican…There we have guys actually promotes everything, American, Dominican, whatever. So it would be a great idea to throw that in there so as we all go there. And I'm pretty sure a lot of Dominicans from the city will love to come up here and hunt."* –Male, Hispanic, suburban

*"Maybe you guys could like make a YouTube channel. I mean, I'm constantly on YouTube. My friends are constantly on YouTube. If there was a YouTube channel like of girls hunting…actually seeing a girl hunt…It helps motivate a girl to actually do it 'cause she's like 'Oh, okay. I feel better now knowing that there's other girls doing it'."* –Female, Asian, rural

**Capitalize on existing community structures**

For pro-hunting messages to be effectively received, the source of the message becomes critical. Many interviewees who identified with certain subpopulations (e.g., women, racial/ethnic minorities) highlighted the value of working within existing community structures. In other words, if an "insider" (either an individual or an organization) familiar with a particular group and its norms and values was able to spread the word, people would be more likely to respond. The following two quotations offer insight into the efficacy of (and potential need for) disseminating information through trusted boundary spanners or familiar insiders.

*"Use someone who actually lives here [in the Bronx]. Everyone has like a social network… people like myself who's already in, you know, I can post stuff like hey guys, as you know I do hunting. If interested, there's a class going on so and so. I mean, I have a pretty large following because I'm an actress (laughing), like I have a 1000 people on one page and 500 on my personal page…Once they see people they know actually doing it, then they may want to do it to. They may never have known they wanted to try hunting and then once they see someone else doing that say oh that looks interesting, let me go to a safety course and let me try it out."* –Female, Hispanic, rural

*"…in my locavore circle, especially in the city of Rochester, we have a lot of locavore people. Having social media like Facebook and having someone like me do an intro talk of like, 'Hey everyone, are you thinking, or did it even cross your mind to hunt?' You know… this is how I got into it… come and ask questions about how to do it and where you go and how to get started. I think that might be a big barrier for a lot of people…You know, really if you*

*want to bring in new hunters that are like me, you've got to do it in, like, a lot of sessions. Here's a gun, gun safety, how to shoot a gun, how to unload a gun, how to load a gun. All of that stuff and then you move into finding your right area, you know woods versus someone's backyard versus farmer's field, you know…You really have to build up the knowledge base behind it."* –Female, Caucasian, rural

## Additional Information Needs

### Information sought by new hunters

Most interviewees seemed to be satisfied with the amount of hunting-related information available to them. However, a few new hunters continued to seek information about the following topics: where to hunt, what to hunt, how to field dress game, hunting rules and regulations, and shooting skills and techniques. Several individuals provided potential solutions to increase the amount (or quality) of information they would like to obtain.

*"I would like to get more information…where to go hunt. I do search the internet but it's not like, it's very little information..they give you maps…but then if I want to get there I have to go to another website to find how to get there...that would be easier, just having all that in one place."* –Female, Caucasian, urban.

*"I had no idea how to dress a deer at all. And I asked and he [the course instructor] was like, 'Oh the best thing you can do is go on YouTube and watch some videos.' And I was like 'Really? Can't we just have a dummy deer that you can show us how to do this?'…Where you would learn the parts that need to come out and when and how. That would be huge because I was clueless."* –Female, Caucasian, rural

### Information Sources for New Hunters

When new hunting recruits we interviewed were asked what sources they used to obtain additional information about hunting (if any was sought), most reported turning to veteran hunters and/or the Department of Environmental Conservation. All other sources (e.g., hunting blogs, local hunting clubs) were only discussed by a few participants. Quotes depicting each of the primary sources are provided below:

*"My husband…was surrounded by hunters growing up so he's got, you know… if I have any real questions, he's there and he answers them for me."* –Female, Caucasian, suburban

*"…Because I know Barry for a really long time, basically my whole life, I usually just ask him all my questions because he's like a veteran hunter…He hunts like every season…I usually ask him because I know him personally and he's been doing it a long time. I trust his information."* –Female, Hispanic, urban

*"I think uh anything that I do have questions about it, I would be able to find online fairly easy either off the DEC site or, or anything else."* –Male, Asian, urban

*"I don't remember if it was in a blog or something, or if it was like when I went to one of these hunting shops in Brooklyn. They sell firearms and some hunting gear. Uh, I forget where it's at. It's maybe a 10 minute drive from where I live. I don't remember exactly where I heard about places to hunt, but it was just kind of hearsay. It wasn't anything specific."* –Male, Hispanic, urban

### Hunting Participation

At the time of the interview (most occurred near the end of or after hunting season), 27 of the 42 new hunting recruits we interviewed had gone hunting—most hunted deer; few hunted small game, upland birds or waterfowl. Six of those 27 had successfully harvested an animal. As the testimonials suggest (see below), even those individuals who were not successful on their first hunts generally had a positive experience. When asked about their overall experience, most

participants cited similar outcomes to what was described in terms of the "Benefits Associated With hunting" (Figure 4). For example, many interviewees suggested that simply spending time in and learning about nature was a highlight in and of itself. Others enjoyed the "silence" and solitude often describing their experience as "serene." Several interviewees' satisfaction was tied directly to spending time with friends and family. The following response captures the sentiments many first time hunters described:

*"It was actually above what I expected. I mean…You know, like when you sit so still and the deer come up and they are like within 6 feet of you, you know that's something people don't get to experience all the time. So that was really, that blew my mind how amazing that was."* –Female, Caucasian, rural

For some, their first experience with hunting generated more of a lukewarm response. For the following individual the satisfaction he derived from hunting was directly tied to not harvesting an animal.

*"Yeah, I went 2 times…It's too cold for me out there…once was 34 degrees, fine. Then it went down to 20 and…So we finish hunting – 6 hours out there - and came back, wind up eating Chinese. And the guy walks in and say 'Oh, you're settling for Chinese today?' I'm like, 'Yeah, we ain't have much luck man."* –Male, Hispanic, suburban

Interviewees who had not yet hunted described several reasons why this was the case. Most of the reasons mirror the most commonly stated barriers to hunting (e.g., lack of time, cost, logistical issues,). Two examples are provided below:

*"… just the course was the only thing and we don't own any weapons so it hasn't happened yet. You know, I think that even when it does if, if my son is able to go up, I think I'll take him but I don't think I'll be going along. And not because it's repugnant, but just because…to be out in the cold doing nothing kind of. I'd rather be helping at the farm or something."* –Male, Caucasian, urban

*"I'm pretty motivated to go all in on it. Yeah I mean I know my boy is. He's a little more committed than I am right at the moment but he has the time and I haven't. For me, this particular year, I didn't even bother getting a license because it just wasn't, I knew that my work schedule was for the hunting season, what I have to do, it wasn't real convenient for me… For myself, it won't be until next year. I have the equipment, you know I have the gun and am equipped to go, and hang out in the woods but right now wasn't conducive to my schedule you know?"* –Male, Caucasian, rural

**Commitment to Hunting**

Most of the new hunting recruits indicated moderate or strong commitment to hunting in the future. Thirty-one of the 42 participants spoke directly about hunting commitment: 17 indicated they would definitely continue hunting in the future, 12 said they would likely continue, and 2 individual said they would not continue hunting. Those most likely to commit to hunting tended to come from rural backgrounds, whereas those less committed typically lived in urban or suburban areas. Quotes (grouped by commitment level) help to illustrate the various reasons why certain individuals were strongly committed to hunting and others were not:

Strong commitment (17)

*"At this point I would say 100% 'cause I literally went from like not knowing anything and once I took the course and like I learned everything I learned there I, I was completely emerged in it, research and everything and like how I should do this, how I should do that and like the gear, the camo, the gun, it, it was pretty much like a uh avalanche of things just happened (chuckle). It was a snowball effect."* –Male, African American, rural

*"I'm really committed to hunting but I'm just so… I don't know, I really want to do it. I really, really want to be able to go out there and get my first deer. I don't know, I'm just, I'm excited for it. I'm not like creepy excited, I'm not ready to go kill something, but I know that's the fact of it. But you know, I'm just going to have to buy some better clothes because that was not okay. My feet were numb! And it was snowing hard that day too (chuckle)!"* –Female, Asian, rural

Some degree of commitment (12)

*"Yes, definitely something I definitely want to keep trying to do. Like I said, as you know, it's something you know my father did and all his friends, all his brothers and I'm like trying to do a legacy with my family right now, like really get into something we can all share, that we can all look back on in pictures and things that we did all together you know?"* –Male, African American, urban

*"Hmm… I'm taking it step by step (chuckle). I would say I'm just a beginner (chuckle). I'm going to go watch for now as my husband does all the work and then we'll go from there (chuckle)."* –Female, Caucasian, urban

*"I guess I like it. I would like to explore it a little more, but you know the obstacles, if I ran into an obstacle that's not, it's not like the most important thing. But it's definitely something I want to explore a little more. I mean especially since I like game meat. I like venison, I tasted wild turkey. Eh, I like the duck. I've had a couple wild ducks. Geese. You know, if I got time and I can, then I would."* –Male, Caucasian, suburban

No commitment (2)

*"I still love Bambi! That hasn't changed. I still put birdseed in the bird feeders and I'm watching the birds. And I love it. I'm still an animal lover. My dog is here and well fed and cared for. Um, I wouldn't just run around and randomly shoot a deer. I…don't even know if I would go on a hunt to be honest with you. I have gone on a duck hunt before on my very first time and I shot two ducks and I handed the rifle over and said I was done. So, is it something I'm going to pursue? Probably not."* –Female, Caucasian, surburban

## DISCUSSION

This study sought to identify new or "emerging" pathways by which non-traditional hunters enter and become socialized into the hunting community. Our primary purpose is to inform the next phase of research, using the qualitative, exploratory study reported here to develop that subsequent study. The preliminary nature of the current study noted, we nevertheless feel it revealed information about potential mechanisms to increase hunting recruitment and retention among this segment of the population. Similar to more "traditional" hunters, previous outdoor experience and having the support of family are important factors that facilitate interest in hunting among non-traditional recruits. Adult-onset hunters also perceive similar benefits and barriers to hunting as traditional hunters, including: food, social relationships (or camaraderie), connecting with nature; lack of "free" time, inadequate access to hunting areas, and expense associated with hunting. However, findings also illustrate several key differences between the two groups, most of which directly (or indirectly) involve a lack of and desire for social support. Differences which focus on influential factors, benefits, and barriers associated with hunting are described.

Most traditional hunters are introduced to the activity through immediate family members, typically the father or another male figure (Clark et al. 2004). Several interviewees discussed the influence of parents while others spoke about being introduced to hunting through extended family members including aunts, uncles, and grandparents. The latter corroborates

previous research, highlighting the influence extended family and other socializing agents have on hunting behavior (Stedman & Heberlein 2001). However, among this sample of non-traditional recruits, friends appear to exert more influence on hunting interests than family members, a noticeable difference between the two groups.

These types of social support facilitate identity development (Enck 1996) and in turn, increase the likelihood hunters will be retained over time. What remains to be seen, is the extent to which the influence of socializing agents is similar across subsets of non-traditional hunters. For example, many interviewees from suburban-urban areas and from racial/ethnic minorities often lack the social support of friends and suggested having "no one to go with" is a barrier to their future hunting participation. It appears as though providing some form of social support for non-traditional hunters may have far-reaching consequences on long-term recruitment and retention of these individuals. This idea is explored in more detail below.

The power of mass media (e.g., television, newspapers, magazines, internet) to disseminate information about hunting was discussed by several interviewees. While various forms of media have existed for years, many individuals described the way(s) in which specific television shows such as Duck Dynasty and the History Channel piqued their interest in hunting. Most interviewees acknowledged the frequent misrepresentation of hunters (and hunting) portrayed in such shows, yet the entertainment value was nonetheless apparent. Thus, using mass media appears to present both opportunities and challenges to resource managers interested in hunting recruitment (Agee & Miller 2009). On one hand, using this form of communication may help with recruiting efforts so long as the message is one that resonates with non-traditional hunters (e.g., benefits to the environment; obtaining healthy, locally sourced food; positive societal outcomes resulting from reduced automobile accidents/property damage, etc.). On the other hand, the potential exists for current media to reinforce existing poor stereotypes associated with hunters and hunting (Agee & Miller 2009; Kalof & Fitzgerald 2003). The latter may be particularly problematic among non-traditional hunters in light of their expressed interest in shifting perceptions associated with hunting and limited experience with realistic hunting outcomes.

Hunting also provided a suite of benefits including civic/community-centric and conservation/ecologically-oriented outcomes to many non-traditional recruits. At a broad level, participants discussed environmental and social benefits similarly, citing moral outcomes associated with harvesting wildlife. However, the beneficiary and justification behind this action varied by topic. For example, harvesting wildlife for conservation and ecological purposes was often framed as an ethical action, sparing wildlife of inevitable starvation. In other instances, interviewees discussed the positive benefits of hunting in terms of sustaining wildlife habitat and maintaining ecosystem health. Civic-minded benefits on the other hand, had a decidedly anthropocentric motivation citing advantageous outcomes to human health and property. The latter were also framed as ethical or moral decisions helping to prevent life-ending automobile accidents and financial loss (to individuals and society) caused by wildlife. Interestingly, Rinella (2007) provides empirical support for each argument discussed by interviewees yet hunting is rarely framed as a moral or civic act (Cahoone 2009). If non-traditional hunters are to be recruited and retained over time, it is increasingly important to consider innovative ways to promote both ecological and social benefits derived from hunting.

When new recruits were asked about potential barriers to hunting, responses aligned closely with many of the obstacles identified by traditional hunters. Similarities include: lack of free time, costs associated with purchasing equipment, not knowing where to hunt, and unreasonable hunting rules or regulations (Brunke & Hunt 2008; Decker & Brown 1979; Duda et al. 2010; Larson et al. 2013). Yet, findings from this study also provide a more nuanced perspective and suggest potential differences in *how* the two groups perceive such obstacles. For example, "access" as a barrier to hunting is often described by traditional hunters in terms of availability. To traditional hunters, limited availability of hunting lands or having fewer places to hunt as a result of increased posting of private property, represent the number one reason for decreased hunting participation among this group (Responsive Management/National Shooting Sports Foundation 2008). However, many suburban-urban interviewees often discussed access to land for hunting as the direct result of having limited resources and to a limited social support system. For example, many new recruits described not having the means to travel outside the city. In the same breath, interviewees would express a deep desire to be mentored by a "veteran" hunter or another individual who could teach them not only where to go but could help them get there, accompany them into the field, and show them what to do when they arrive. Future research is needed to explore whether and to what degree issues of access, costs, social support and other barriers to hunting are interconnected across a larger sample of non-traditional recruits.

## CONCLUSION

Overall, results indicate that non-traditional hunting recruits are fueled by many of the same motivations and perceived benefits (e.g., to obtain food, connecting with nature, social camaraderie) that have driven traditional participation in hunting. However, novel sociocultural mechanisms in contemporary society (e.g., media influence) have also created new paths into hunting. For some new hunting recruits from non-traditional backgrounds, interest in hunting evolves in social and geographical contexts where support for the activity is limited or virtually non-existent. Thus, emerging types of hunters such as women, racial/ethnic minorities, and urbanites may experience novel and significant barriers to participation. While this study provides some preliminary insights about factors that may influence the recruitment of non-traditional hunters, additional research is needed to provide wildlife management agencies and the hunting community with more information to help identify and shape programs and initiatives that target the interests, needs, and social worlds of emerging hunting subpopulations.

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## APPENDIX A

**Screening Questions for Selection of Interviewees**

NOTE: These questions were asked of all 2013 online hunter education course registrants to identify potential non-traditional hunters for interview follow-up.

**1. How would you best describe the area where you grew up?** *(Check ONE.)*

- Rural
- Suburban
- Urban

**2. Did you grow up in a household with one or more family members who hunt?**

- Yes
- No

**3. Have you ever hunted before?**

- Yes
- No

**4. Have you ever participated in the following hunting-related activities?** *(Check ALL that apply.)*

a) **Gone afield with someone who was hunting even though you were not carrying a firearm**
b) **Helped process or prepare wild game meat to eat (field dress game, cut and package game meat, cook game, etc.)**
c) **Regularly eaten game meat obtained through hunting**

**Decision Rules for Screening for Non-traditional Hunting Recruits**

1. If AGE <18, exclude from interview pool.
If AGE ≥18, progress to next question.

2. If FEMALE, move directly to interview pool.
IF MALE, progress to next question.

3. If racial/ethnic MINORITY, move directly to interview pool.
If WHITE, progress to next question.

4. If from a HUNTING FAMILY or if HUNTED BEFORE, exclude from interview pool.
If NOT from a HUNTING FAMILY and NOT HUNTED BEFORE, progress to next question.

5. If from a SUBURBAN or URBAN background, move directly to interview pool.
If from a RURAL background, progress to next question.

6. If PARTICIPATED in 1 or more hunting-related activities (4a-c), exclude from interview pool.
If DID NOT PARTICIPATE in any hunting-related activities (except potentially 4c, depending on sample numbers), move to interview pool.

**With these rules, our potential sample of adult, non-traditional recruits will include:**

- Females
- Racial/ethnic minorities
- Individuals from non-hunting backgrounds raised in a suburban/urban area
- Individuals from non-hunting backgrounds raised in a rural area who have not participated in hunting-related activities (with the possible exception of regularly eating game meat obtained through hunting).

## APPENDIX B

Interview Guide

Hunter Recruitment & Retention:
Characterization of Contemporary Hunters and their Social Worlds in New York State

We contacted you for this interview because you enrolled in a hunter education course in New York State during 2013. Today, we'd like to learn a bit more about why you chose to enroll in this course. Before we discuss that, however…

1. Tell me a little about yourself.
a. Where do you live? How long have you been living there?

2. What led you participate in a hunter education course this year?
a. How/why did you choose the specific course you signed up for?

b. Have you been hunting in the past?
Describe your pathway into hunting. What led you to start hunting?
Tell me about your hunting experiences (type of game, frequency, location, implement, with whom did you hunt?, etc.).
How long has it been since you hunted?
[For those with a major lapse in hunting participation…] Why did you stop hunting? Why did you decide to start hunting again?

3. Describe your pathway into hunting. How did you become interested in hunting?
a. When did you become interested in hunting?
b. Why did you decide to begin hunting?
c. Who or what influenced your decision to begin hunting? How did you first get involved?

Next, we'd like to learn more about your general views of hunting and the perceptions of hunting among other people in your local area.

4. Do you think of yourself as a "hunter"?
a. What traits or characteristics define what it means to be a hunter?
b. What do you think will need to happen for you to consider yourself a hunter?

5. In your eyes, what are the benefits of hunting…
a. For you, personally?
b. For your local community?
c. For society or the environment in general?

6. What personal reservations or concerns do you have about hunting… (Are there any negative aspects or issues associated with hunting…)
a. For you, personally?
b. For your local community?
c. For society or the environment in general?

7. Think about people you know and their perceptions of hunting…

a. What does your family think about you getting involved in hunting? (How do they support or impede your hunting experience?)
b. What do your friends think about you being involved in hunting? (How do they support or impeded your hunting experience?
c. How is hunting generally viewed by people in your local area? Why?
d. Are there any hunting groups or other organizations that got you interested in trying out hunting? To what extent do other groups and organizations affect your hunting experiences?

Now that you've taken a hunter education course, tell us a little more about your current or anticipated hunting activities.

8. Did you go hunting (or have you gone hunting yet) this season (Fall 2013)?

a. Tell me about this experience…
   What was your hunting experience like? (type of game, location, implement, harvest success, etc.).
   With whom did you go hunting?
   Did your hunting experience meet your expectations? Why or why not?
b. Why haven't you hunted yet this season?

9. What type of hunting do you think you will do in the future?

a. What types of hunting experiences are you looking for (type of game, type of implement, etc.)?
b. With whom will you go hunting?
c. Where do you plan to hunt? How will you choose a hunting location? [How important is public land access near your home?]

10. Describe how committed you feel you are to hunting at this point?

a. Are you simply interested in trying the activity out (i.e., "testing the waters"), or are you highly motivated to become an avid hunter (i.e., "all in")?
   What will determine whether you make the transition from a novice to an avid hunter?
b. We realize you don't know what the future holds, but if you had to speculate: what experiences or circumstance might change your commitment to hunting?

Just a few more questions about factors that affect the overall hunting experience for you and other people like you.

11. Are you looking for any additional information or advice related to hunting?

a. If so, what types of hunting-related information/advice are you looking for?
b. In what form might this information be provided?
   Where (or from whom) do you expect this information/advice to come from?

12. What might decrease your likelihood of hunting in the future? What are the biggest obstacles or barriers that you anticipate will affect your hunting participation?

a. How might these barriers be addressed, by you or others? [e.g., mentors – what type of mentors might be needed?]

13. If someone wanted to attract other hunters like you (people with similar backgrounds and interests) into hunting, how would you suggest they do it?

a. What strategies are likely to work well?

b. What could be done differently (than what's currently being done)?

Anything else you'd like to add?