

Addressing Agency Knowledge Gaps to Determine R3 Strategies of Women Hunters in Oklahoma

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Contents

Executive Summary	2
Introduction	4
Methods.....	5
Results.....	5
Focus Groups	6
Survey Results.....	14
Demographics	15
“Active” and “Lapsed” Female Hunters.....	15
Self-Ranking of Hunting Skill Level.....	17
Hunting Activity and Species Preference.....	18
Future Species Interest	19
Hunting Community.....	20
Comparison of Hunting to other Recreation and Why Women Hunt	22
Programs Offered by the Wildlife Department	24
Controlled Hunts and Public Land Hunting	30
Conclusion/Discussion	35
Recommendations.....	35
Appendix A: Survey Instrument.....	36

Executive Summary

- This project began by conducting six focus groups to broadly understand women and their relationship to hunting.
 - Each of the six groups were characterized by different demographics of female hunters- active public land hunters, active hunters aged 50 years or older, active bowhunters, lapsed hunters aged 50 years or older, lapsed public land hunters, and lapsed hunters aged 29-50 years old.
 - Each focus group was asked questions to better understand how women perceive hunting and what factors influence women's hunting experiences. Community and communing with nature were two common themes across focus groups.
 - The focus groups informed the creation of a web survey sent to a larger group of female license holders to test the hypotheses developed during the focus groups.
- The web survey was sent to both active and lapsed (had not purchased a license in three years) female hunters. The response rate was 12% amounting to 1,491 completed surveys. We also asked similar questions on the 2021 Game Harvest Survey (GHS) to be able to compare across genders.
 - The plurality of respondents rated themselves as intermediate hunters (46.1%) followed by beginners (28.2%) and advanced (20.3%). Qualitative analysis shows that this has to do with years hunting and whether they have harvested many deer. Beginners and intermediate hunters mentioned a significant other more often than advanced hunters (although advanced hunters still mentioned their fathers).
 - When looking at what age women began hunting and how they rated themselves, those who had started hunting younger in life considered themselves at a higher experience level than those who began later in life.
 - Although most women would not rate themselves highly in terms of experience level, the majority had hunted within the last month. The survey was sent in December which would make deer season within the last month- the most popular season among both male and female hunters.
 - For those who had not hunted recently, the two factors of most influence were other priorities and nowhere to go hunting.
 - Overall, the two most often hunted species (by number of days hunters were in the field) were deer and feral hogs, while respondents were most interested in hunting elk in the future followed by deer, turkey, and bear.
 - When asked who women hunt with most often, the majority hunt with their significant others (65.09%) followed by family over the age of 18 (35.76%). Another 30.75% hunt alone most often.
 - Preferred mentorship fell in the hands of experienced male hunters. Five percent of women selected they would prefer experienced female hunters as mentors. Of those who would prefer female mentors, half do not have access to an experienced female hunter.
 - 46% of respondents said they would be likely to join a women's outdoor recreation club focused on hunting or shooting sports.
 - Women hunters are split on whether they feel that hunting is their favorite sport with 51% selecting yes.
 - Harvest oriented reasons for hunting are less important to women than intrinsic value characteristics of hunting which is similar to men.

- Seventy-five percent of women believe there would be a benefit to offering women only programming citing higher comfort levels, less intimidation, and better insight from taking classes with those familiar with their experience.
- Women would prefer a virtual self-paced learning style (28.3%) followed by the ability to read a webpage, blog, or article at their convenience (18.6%). A mixed in-person and virtual option was also selected by 18.3% of respondents.
- Most women (64.3%) are very comfortable pulling the trigger when aimed an animal. Women trended to being least comfortable hunting with people they are less familiar with and hunting on public land. Men are more comfortable taking someone new hunting (77.5%) compared to women (52.1%) when this question was posed on the 2021 GHS.
- Women felt that they are most knowledgeable about firearm safety. Respondents denoted they feel least knowledgeable about processing game. When asked which of the same topics they would be most interested in learning more about, respondents selected outdoor survival skills, animal behavior, game preparation and places to hunt most often.
- Controlled hunts may not be a significant program for recruitment. Advanced hunters and those that had applied to controlled hunts were more likely to apply for special controlled hunts offered. When asked about women only controlled hunts this result was pronounced, family-controlled hunts were seen as more of a recruitment tool at all levels.
- Younger women were more likely to have used public land and the most important factors for a successful public land hunt were safety and regulations that are easy to understand.

Introduction

The North American Model of Conservation employs a user-pay, user-benefit system in which hunters buy hunting licenses and purchase hunting equipment which directly benefits wildlife conservation in North America. This funding cycle has benefitted wildlife conservation for decades. With the decline of participation in hunting and fishing, state fish and wildlife agencies are working to recruit new hunters, while also retaining current hunters and reactivating hunters (R3) who have lapsed on their hunting activity.

The R3 strategy is popular across the conservation community. State fish and wildlife agencies nationwide have implemented various R3 strategies. Some focus on welcoming historically underrepresented and non-traditional hunters. One demographic typically underrepresented is women. The Oklahoma Department of Wildlife Conservation (ODWC) hunting license holder database shows out of those that selected a gender on their hunting license application, 88% are listed as male. The demographic breakdown of Oklahoma is 51% female showing a major discrepancy in the participation level of females in hunting.

Many studies have investigated the needs of women hunters, barriers they face and how that may differ from their male counterparts. Although the goal is for equality in hunting opportunity, equitable aid in overcoming barriers to hunting is the first step in combatting the participation gap. Together, growth trends and retention rates of female license holders suggest an increasing interest and participation in hunting among women. The National Shooting Sports Foundation determined that the number of female hunters in the United States almost doubled between 2001 and 2013. Additionally, from 2000 to 2015 women's retention rates for hunting increased nationally, while men's decreased ([Recruitment and Retention of Hunters and Anglers: 2000-2015 - Documents - USFWS National Digital Library](#)). The "retention rate" is the percent of individuals who have participated in fishing or hunting at some point and have remained active in the respective activity.

However, participation remains low among Oklahoma's female demographic compared to its male demographic. An estimated 75 percent of anglers and 88 percent of hunters are male. And while ODWC serves this passionate constituency of hunters and anglers well, it needs to better meet the needs and expectations of its underrepresented yet fastest growing demographic: females.

Undoubtedly the female demographic is important to the future of conservation and many states strive to improve hunting and fishing participation among this segment. Substantial effort and funding have been directed toward marketing specifically to women and outreach programs aimed at socializing and training new female hunters and anglers. To develop a strategy to motivate action, ODWC worked to understand the fundamental values of this public. Understanding patterns of participation, benefits and challenges among female hunters is important for the future of fish and wildlife management in Oklahoma. Through this study we used license data, focus groups and surveys to improve our understanding of female participation to develop more effective strategies for recruitment, retention, and reactivation of female sportspersons. These efforts will help to develop effective strategies for recruitment, retention, and reactivation of female sportspersons.

Methods

This study was accomplished via qualitative and quantitative methodologies. ODWC obtains contact information for all hunting license holders.

Focus Groups

Hunters who identified as female on their license application (an optional notation) were first contacted in August 2021 to participate in a focus group. A random sample of 9,253 “active” license buyers and 8,893 “lapsed” license buyers were sent an invitation to participate. The recruitment process also split those that signed up to participate into six unique groups based on their answers to a set of preliminary screener questions. The screener questionnaire asked about species hunted in the past, methods used to hunt, public land use for hunting, demographic information, and finally their ability to access a personal computer/cell phone/tablet with Wi-Fi, a camera, and microphone (for video conferencing use). We also offered an incentive of a \$100 visa gift card to those who were selected and completed the focus groups to incentivize participation.

The focus groups lasted about two hours and were comprised of between 3-7 women per focus group. Focus groups were semi-structured meaning all participants were asked about the same topics but were also given the opportunity to expand on issues they felt passionately about.

Focus group transcripts were reviewed by the facilitator as well as three researchers at ODWC to determine thematic trends. These thematic trends were then used to build a more in-depth survey of women hunters in Oklahoma. When results from the focus groups are reported as quotations, they are being reported verbatim and not editorialized by the authors. The goal of the survey was to expand on focus group themes as well as obtain feedback on more actionable items ODWC could use to recruit, retain, or reactivate women hunters in the future.

Survey

The survey was administered as an online only survey to two separate samples of female hunting license holders. These samples represented “lapsed” hunters (those who had not purchased a license in three years) and “active” hunters (anyone with an active license from January 1, 2021-December 1, 2021). We also asked a question within the survey to further determine active or lapsed status, as some hunting privileges in Oklahoma do not require the purchase of a license each year.

Screening was done to ensure that email addresses used to contact the selected participant was correct as well as to ensure only those who identify as female or non-binary could take part in the survey. If the survey was sent to the wrong individual at the provided email address or the recipient identified as male, they were disqualified from the rest of the survey questions.

An initial invitation was sent to lapsed recipients on December 6th, 2021 with 2 reminders sent on December 9th and December 14th. Similarly, active hunters were first invited on December 7th with follow-ups sent on December 10th and December 15th. The survey closed on December 31, 2021.

Results

Focus Groups

Six focus groups were conducted in the first two weeks of September 2021. This is before the major hunting seasons in Oklahoma begin. The six groups that were compiled to participate were (group 1) active hunters who use public land, (group 2) active hunters who were 50 years or older, (group 3) active hunters who bowhunt, (group 4) lapsed hunters who were 50 years or older, (group 5) lapsed hunters who use public land, and (group 6) lapsed hunters between the age of 29-50.

1. How do Women Perceive Hunting?

To determine women's perceptions of hunting, participants were asked to describe what they enjoyed about hunting, what motivates them to hunt, and if they identified themselves as a hunter. The themes associated with this research question were 1) hunting is about process and communing with nature, 2) humane and holistic harvest is of paramount importance, and 3) skill building is more important than the kill.

Hunting is About Process and Communing with Nature

When participants were asked what they enjoyed about hunting, participants in every focus group session were quick to mention that the process of hunting was very appealing. One participant said, "I just loved the whole process, it makes for a wonderful day." Another participant described themselves not as a hunter at all, "I really don't think of myself as a hunter. I just like the process itself." Another participant said "I think it's about the experience and not just the shot. It's everything. It's getting ready, going, coming back, preparing the animal. It's every step." One participant cited this as a major difference between men and women,

Men get hung up in the trophy, in the shot, in the one shot. And women, they appreciate having the experience. For instance, I don't remember just one thing about a hunt. I remember multiple things about it. Like I said, it was the whole experience from when I first plan the hunt, to when I got back home. So, I think that makes us different.

Another participant agreed saying, "I feel like to me the men are more in competition with each other and the women are just going for the pure enjoyment."

Participants were also insistent that being in nature was one of the best parts of hunting. One participant said, "I am just happy to be outside whether I actually get to kill anything or not. I am just happy being outside." Nature was the most appealing part of hunting to another participant, "I'm not going out there to not necessarily even shoot anything. It's just to be out in the atmosphere." Connecting with nature and its creatures was very appealing for one participant,

I like the fact that you can get so in tune with your surroundings and nature that you can hear a bird's wings when they fly by. I mean you can just hear a teeny tiny little mouse running from a long way away you can't even see it, but you know you can finally focus on it. And, of course, just a little bit of me time.

Communing with nature was a central component of hunting for many participants. One participant put it this way,

I agree too. Just being outdoors is essential to me. I'm outside right now. I hate being in the house. Anytime I get outdoors I love it. I agree with everyone else and what they said as far as nature. You know, we're very lucky because we get to see things that other people will only see on a TV program. I've seen deer fight. I've come across a turkey nest. I've seen so many crazy things. I've seen two Bobcats mating. Just amazing crazy things that no one else has the opportunity to see because they're not still and quiet out of the woods. It's so worth it, just to be out there just to see what God has put in front of us it's just truly amazing.

Furthermore, participants saw conservation as a key part of hunting and its process. One participant said,

You know, conservation has a really big part to it. The dedication that it takes to hunt deer, to find deer, to find ducks. You have to work a pond to get any ducks to want to roost or anything like that. So, a hunter to me is more than harvesting. It's about the prep work to that goes into like a harvest at the end.

Another participant echoed the sentiments saying, "To me a hunter is somebody who really admires, the environment, really respects it, and attempt to conserve it." Furthermore, one participant even saw themselves as more of a conservationist than a hunter,

I see myself more as a conservationist engaged in wildlife management. All the properties we've bought, we work on improving the land for the animals. Partially to get bigger animals and more animals. What I do is conservation. Hunting is conservation. Conservation is hunting.

Participants also saw their time hunting as an escape. One participant said, "I like the opportunity to completely disconnect from the hectic modern world. The stress goes away. It is so peaceful. I lose track of time, you're outside of the world, the natural environment, and it's just so peaceful." Another participant agreed saying, "I've become a very serious hunters and passionate over the years. It's very peaceful to be out in the woods doesn't matter really what I'm hunting."

A sense of spiritual connection while hunting was also common among participants. One participant said she used her time hunting to commune with God, "I go out into the woods. I climb up a tree and that's where I do my best thinking and relaxing. I do a lot of praying up there also." Another participant echoed these sentiments saying, "I love being out in God's creation and seeing what is fully out there." One participant considered hunting her favorite prayer time,

I have a New Testament I keep with me. I read and the next time I go out I pick up where I left off. It's good time to commune with Him. God tells me a lot of times, if I should shoot or not shoot and he's usually right on that.

Humane and Holistic Harvest is of Paramount Importance

When participants were asked about what motivated them to hunt, participants mentioned meat, holistic harvest, and humane harvest as essential components of hunting. Participants were insistent that every part of an animal be used in order to justify the kill. One said, "With my first deer, I even had the hide tanned and I'm going to make something out of it, so that I don't want any of it to go to waste." Another participant talked about being selective while hunting, "I've gone a couple years without taking anything just because there weren't any mature deer and we wanted to let them get older."

Many participants hunted for the purpose of consuming the meat. One put it simply, "Of course, after the kill I love the taste of the meat." Many participants enjoyed cooking and experimenting with wild game saying, "For me it would be the meat. I love the meat. I love to cook, so having that fresh venison, that fresh bird quail, or whatever it might be is very motivational for me." Another echoed the sentiments saying, "Cooking is my passion, so our family brings the meat home. Then we love coming up with new ways or different meats to try. I know I've ruined the duck or two. But I've learned." Finally, another participant talked about how hunting tied into her other hobbies,

For me, loving to cook is just like kind of just next level. The flavors don't get better. For me, it just ties into my other hobbies and other parts of my life that I really enjoy and takes it all to the next level.

Several participants hunted game with the sole purpose of donating it to others. One participant said, "Actually, this last year I did shoot a doe. The whole reason I did was because I said 'I'm donating it.' I did it. I took it down there and completed my mission."

Taking a life and doing it in a respectful and purposeful way was of paramount importance to participants. One put it this way,

I am a mother, I am a nurturer. Because of that, it is hard to take that life. When I shoot a deer, I'm always worried: was it a good shot? Where did it go? Can I find it now? How long is it going to lay there and suffer?

Another participant spoke about how taking a life has affected her identity: "Hunting has become part of my identity. Part of that has to do with taking a life. Once you've done that it becomes part of your identity."

Skill Building is More Important than the Kill

Not only were participants more interested in the process than in the kill, but they were also more invested in the skills developed. Moreover, the uniqueness of hunting was also something participants found very appealing. When participants were asked what they found appealing about hunting, one participant said "At first, it was the knowing that I could do something, that I was successful at it, that I was competent. The more I relaxed about things and realized I'd already proven to

myself; I could do something.” Another participant said, “At this stage of my life the challenge is to see if I’m still physically able to hold the gun or the bow steady or tight long enough.”

When participants were asked who or what a hunter was, one participant described a hunter as “a very skilled individual with a lot of patience, who enjoy what they do.” Other participants went on to describe the type of skills necessary when hunting, “like knowing how to use a gun, knowing how to use the tools properly is something I take pride in. Because it's not like anybody can hunt.” Another participant expressed the pleasure she took in the uniqueness of hunting, “I’ve enjoyed it because it was something to get me out there, something different than most women do.” Finally, another participant said

It's actually pretty cool that you can do that. You can get in a tree, you can go out and elk hunt, which is not an easy task. Go out there and be just as good as the guys. We do just as well, if not better because you're in better shape than them. Women in hunting has come a long way. I think it's cool. I let people know I'm a hunter.

2. What Factors Influence Womens’ Hunting Experiences?

To understand what factors influence womens’ hunting experiences, participants were asked about their hunting process, how they got started hunting, and how often they went hunting. The themes associated with this research question were 1) children and family are important factors for women hunters, 2) camaraderie is central to the hunting experience, 3) changing stereotypes surrounding hunting, 4) significant others play an important role for women in hunting, and 5) women face limitations when hunting.

Children and Family are Important Factors for Women Hunters

Children and family were incredibly important influences on why and how often women hunted. When asked what they enjoyed most about hunting, some women cited bringing their children along saying, “Taking my kids is a joy. I have two kiddos that are pretty far apart in age. I’ve been the one to make sure that they got to go hunting. That's probably one of my best joys about hunting.” Another mother said, “When my son was about four, he wanted to go hunt. But he was not a sit still and be quiet kind of kid. I took him so he wouldn't mess anybody else's hunting. We learned to hunt together.” One participant put her children above all else.

So, I’m a mom first and foremost. Before we had kids, my husband and I would go and do some hunting together. Once our kids came along, that was my full devotion. I also always made sure that we were still an active part of whatever their dad was doing. Now, my kids are now in a position where I can actually go out and hunt again.

Children were a source of joy, but also limited some participant's ability to hunt, "I think women typically plan around their children. Where a male doesn't necessarily do that." Participants also thought that organizations looking to promote hunting should focus on women saying, "The women are the mothers. They get their younger kids involved, and the younger they start the better. At least let the kids have that opportunity and understand how to be safe."

Beyond children, family in general was influential in women's hunting. One woman said, "Me, my dad and one of my brothers in laws, we all hunt together. . . . if somebody gets something everybody pitches in and helps out." Others spoke about handing down the tradition of hunting to other members of their family. One participant said, "I have a granddaughter that's hunting a little bit. She always wanted to hunt when she was little. She was fascinated by my hunting. She told her parents that she wanted a Barbie doll with a gun." Another participant talked about the generational aspect of hunting, "I taught my kids to hunt. My oldest, I had him out for his first hunt. My grandson I got to be there for his first deer. I enjoy passing it on to my little ones." Furthermore, some women were exposed to hunting from older generations, "My grandpa my dad took me a lot like growing up, like for coyotes or other nuisances," said one participant.

Providing for their families was a primary motivator for many participants. One participant said, "having good quality meat for your family is it's just one of the wonderful gifts of God." Another described a hunter as, "somebody who goes out finds meat to provide for the community or their family." Moreover, another participant described hunters as "They provide for their family, provide food, in a respectful way. I never kill anything just to kill it. There's always a purpose." One participant described this as a source of power, "I put food on the table. It means a lot to me to is to knowing that I have that power."

Significant Others Play an Important Role for Women in Hunting

Family was not the only influential tie for women. Significant others were also an influence for women and were often the people who introduced them to hunting. One participant said, "My current husband is an avid outdoorsman. When we started dating I got into archery, and I actually really enjoyed it. He took me took me on my first hunt, and I have just fallen in love with it." Another participant said, "My husband loves it, he is the one that started us. He taught the kids and me."

Many participants talked about the experience of either asking their significant other to teach them or the process itself with a significant other. A participant talked about her experience learning to hunt like this, "Him teaching me to hunt went a lot better than me teaching him to play tennis." One participant described her request to learn like this,

I met my husband and he was very serious I asked him, 'Hey if I get myself a bow will teach me how to shoot?' And he said 'Sure I'd love to.' It kind of progressed from there and I've become a very serious huntress now.

Many women shared fond memories they shared with their significant others. One participant shared, "My late husband loved to have me to go to deer camp with him. All of his family had spouses with them. I always got to go, and I always loved it." Another participant said, "I usually go hunting with my husband. Just because he and I we do everything together period. It's just the way we are." Some women hunted with their husband, but not necessarily because she enjoyed it, "I don't really care to hunt. I do hunt with my husband, but I like seeing animals more than shooting them."

Camaraderie is Central to the Hunting Experience

Camaraderie, a feeling of community, or friendship was central to women's experience of hunting. For some, they were introduced to hunting by their friends, rather than family, "I got introduced to hunting by my gun shooting buddies. They've kind of taken me under their wing and mentored me in hunting stuff." Women even felt supported by friends that were not involved in hunting, on participant stated,

My friends or my coworkers they know I hunt. They kind of get excited to see my pictures, and my cam pics. They get excited with me. I mean, they're not they're not wanting to be a part of it, but they are excited with me.

Making more friends who were interested in hunting was appealing to many participants. One participant said, "I like the idea of inviting women to hunt. I think that's important." Some women found friends interested in hunting through organizations. One participant said,

Becoming an Outdoor Woman was a real confidence builder. I wish we had more of those kind of things, because it is difficult and it's very helpful to know you're not the only one that wants to do that. Plus, other ladies are much more patient teaching you than husbands are.

Socialization was a large part of hunting for some participants. One woman said, "My experience of deer camp was sitting around the fire, taking our midday break from sitting still and getting warm, getting something to eat before we go out again. It's just a lot of socialization." Another participant said, "We process deer for people, so in the evening, I mean we get the stories and we have guys that will be here until one or two o'clock in the morning just hanging out at the house."

Changing Stereotypes Surrounding Hunting

Participants were insistent about the stereotypes surrounding men, women, and hunting. Many of them spoke about being barred from hunting when they were young, one participant said "My mother wouldn't ever let me go hunting, though it was something I always wanted to do." Another

participant said, "I watched my dad, uncles, grandpas hunt ever since I was little bitty and there again little girls don't go out in the woods and things like that"

Women also talked about the influence history has on the stereotypes surrounding hunting. One woman said, "Hundreds of years ago, men were typically associated with being the providers of the family. A woman was typically supposed to stay in the home with the family, prepare the meal, but not necessarily harvest it." One participant summed up the stereotypes surrounding hunting like this,

There is a need to change the picture and the thought on people's mind. Women can do it too and it's just as important. I think that's why a lot of women are a little hesitant to hunt, because they're just scared to. They're nervous, because it is so hard and just maybe thinking they won't be good enough. That they'll be judged for it. In reality there's lots of really supportive people.

One participant was hopeful stereotypes were changing, "You go out and you see a hunter it's a 50/50 chance whether it's going to be a male or female. I think it is amazing. I don't feel like there's any type of unbalance."

Women Face Limitations When Hunting

When participants were asked about how often they hunt and what may prevent them from hunting, they mentioned children, work schedules, gear, limited land access, biological barriers, cost, and need for company or mentorship as major issues.

Children, their care, and schedules were obstacles to fitting hunting into their schedule. One participant said, "I can only go on the weekends and when my grandson's out of school. During fall break and Thanksgiving break we can hunt." One participant mentioned children's sports schedules as barriers saying, "We're big into basketball season during deer season. So, there are ball games in the evenings. I have kids really big into sports that time of the year." Another participant mentioned the uneven pressure women face in child rearing saying,

I think women try to run everything else, like the kids and the kids the schedule. I mean honestly, we keep everything going. We deer hunt when we can and where we can. I shouldn't just make that assumption for everyone, but I know that the kids and their schedule are things I work my hunting around a little more than my husband. I think that's probably the case with a lot of women.

One participant referenced hunting trips as a way women escaped their husbands, but were still responsible for childcare saying, "I used to see a lot of women look at it as a vacation from their

husbands. And if they have children at home, women are often the ones home with the kids while the husband hunts.”

Work schedules for both women and their partners was problematic when it came to scheduling time to hunt. One participant said, “I try to go out as often as I can. But I work for a school. Luckily, we get the week of Thanksgiving off.” Another participant said,

I’m a stay-at-home mom and I homeschool my daughter. My husband is a truck driver, so a lot of our schedule depends on if we have to go pick him up or take him somewhere. As far as our schedule, a lot of it depends on my husband scheduling around his work.

Many participants discussed gear and hunting apparel as a limiting factor for women. Many women shared their disdain for putting pink on all women’s hunting wear and a lack of quality as a major issue. One participant said, “Our clothing is twice as expensive, and it's cut to flatter not to be functional. It's usually not as quiet as the men's clothing, which is very important.” One participant echoed these sentiments saying, “Gear has not been made for women historically. Even now the selections online. It’s not accessible.”

Access to land was a problem many participants faced when hunting, “It's just access to a place to hunt. I do the Arcadia Deer Draw because it's close. We've also looked at leasing land. We live in the city, so where we can hunt is very limited.” One participant talked about her land lease as a blessing saying, “I go at least five times a week. I'm very fortunate to have a lease, so I have the opportunity to do that. Not everybody does. I know a lot of people hunt on public lands and that’s a lot different.” One participant even traded labor throughout the year for access to hunting lands, saying

We just barter instead of paying or leasing out the area. I go and help the guy move hot wire fence or I keep an eye on his cattle. There's always something all year long that we're helping the farmers do. In return they'll move the cattle off certain paddocks for us so we can go in during deer season and hunt.

Many women spoke about biological barriers such as having lower tolerance to cold and using the restroom as problems while hunting. One participant said, “One of the things that women ask, ‘So how do you pee?!’ Well, you just do it. It stinks when you’re layered, but it’s just part of it.”

The number of licenses and cost was a major barrier for some women. One participant said, “Out-of-State licensing is kind of costly, so I don't hunt much in Oklahoma.” Another participant accentuated this point saying,

The biggest pet peeve I have with Oklahoma is that they require a different license for each hunting season. That's the reason why I do mostly archery because it's a longest season. If I wanted to do rifle, which is only 10 days, I would have to pay an out-of-state fee. Then, if I wanted to do the primitive muzzleloader, that's another fee. Then there is a small game license you have to pay. It's just so many little different pieces they get you on. That's why just stick with archery because it's the longest season and just have to pay one expensive fee.

A lack of mentorship or companionship was a major concern for some women. One participant mentioned a lack of mentorship as a limitation for hunting, saying

I have found people who are willing to mentor me but they're guys. And then my husband doesn't want me going out with guys he doesn't know. Well, he doesn't know any hunters so that means I have to find a female hunter who's willing to mentor me.

Another participant agreed saying, "It's a struggle to find a female mentor. Because hunting is traditionally associated with men, finding good female mentors is hard and necessary. So, thank you for mentioning that, I think that's an important issue for women." When asked about how often she hunted, one participant said "Not often enough! I would go a lot more if I knew where to go and who to go with, because I'm pretty new to this."

Companionship was also an important consideration for female hunters, who primarily cited safety as the reason. One participation said, "I don't like to hunt by myself, I think it's safer even when if we don't sit in the same stand, at least we're on the same property. I should be more independent, but safety first." Another participant said, "Hunting isn't something I really want to do by myself, for safety reasons. I do have a gun in my hand, but if I fall my gun doesn't do a lot of a lot of good."

Survey Results

The survey was sent to 2,855 "lapsed" female hunting license buyers and 9,921 "active" female hunting license buyers. Out of 2,855 "lapsed" women, 39 opted out of receiving emails and 169 emails bounced leaving the total amount of eligible lapsed women to be 2,647. Out of the 9,921 "active" women, 104 opted out or receiving emails from Survey Monkey and 409 emails bounced leaving the total amount of eligible active women to be 9,408. The total amount of eligible participants was 12,055.

When the survey closed, we had received responses from 1,284 active license holders and 207 lapsed license holders for a total of 1,491 responses (12% effective response rate). The respondent population broke down to 45% annual licenses, 25% lifetime licenses, 21% tribal licenses, 9% senior licenses and 0.4% nonresident licenses. With large proportions of our respondent group having annual and lifetime licenses, we know from previous game harvest surveys that these tend to be the most active groups of hunters. This likely gave us a larger percentage of active license holders than there are in our population (nonresident respondents were dropped from analysis).

Demographics

We asked several questions of our respondents so that we could better describe the group of women responding to this survey. This included geographical and economic data as well as lifestyle data- i.e. do they have children, marital status, employment status and age (Table 1). The plurality of respondents selected rural for both the place in which they grew up (40%) as well as the place they currently reside (46%). This shows that women hunters are heavily born into and currently are concentrated in rural areas as most Oklahomans (over 60% both male and female) reside in metropolitan areas according to the 2020 United States Census (data available on the Oklahoma commerce website).

Table 1: Demographics of respondents

Income Level (n=1,083)		Age (n=1,169)		Marital Status (n=1,177) =	
Less than \$20,000	9.2%	18 to 24	11.7%	Married	69.1%
\$20,000 to \$34,999	11.7%	25 to 34	23.2%	Never married	15.8%
\$35,000 to \$49,999	13.3%	35 to 44	23.4%	Divorced	10.9%
\$50,000 to \$74,999	20.5%	45 to 54	16.9%	Widowed	3.2%
\$75,000 to \$99,999	16.7%	55 to 64	12.8%	Separated	1.0%
\$100,000 to \$149,999	19.0%	65 to 74	10.9%		
\$150,000 or More	9.5%	75 or older	1.0%		
Profession (n=1,182)		Children (n=1,184) =			
Full-time employment	54.2%	Yes, one or more under 18	38.4%		
Retired	13.1%	Yes, all 18 or over	34.7%		
Home-maker	9.0%	No	26.9%		
Self-employed	8.4%				
Student	6.2%				
Part-time employment	5.7%				
Unemployed	3.5%				

“Active” and “Lapsed” Female Hunters

We determined the difference in lapsed versus current hunters by asking “when was the last time you hunted in Oklahoma?” The original separation of lapsed and current by way of license purchases did not give the most accurate results as lifetime license holders would be active but may not have purchased a license in over 20 years. Ten percent of respondents selected that it had been a few years since they had hunted, and these license holders were considered lapsed. We also had eight percent of respondents who selected that they had never been hunting (Figure 1).

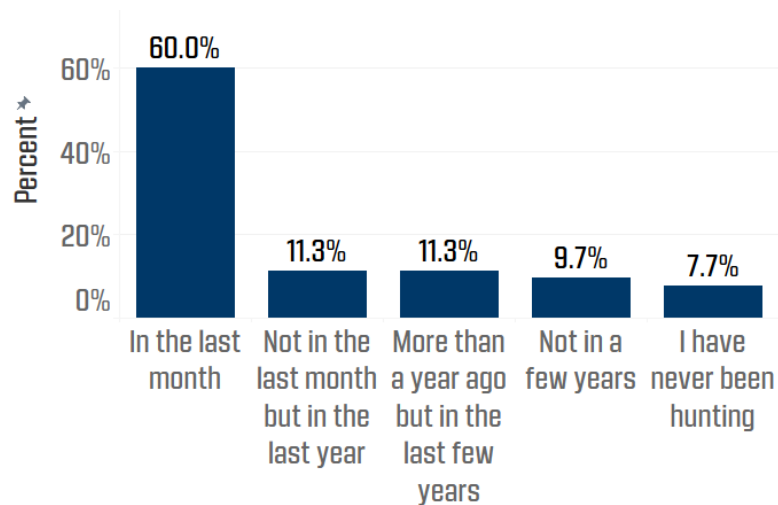


Figure 1: When was the last time you hunted in Oklahoma? (n=1,390)

We asked those that had never been hunting (n=109) if they were interested in hunting in the future. Those that had never hunted were significantly more likely to be retired (p<0.05) and in the 65-74 age range (p<0.05). Those that said they would not be interested in hunting in the future (43%) were disqualified from the survey following demographic questions. Comparing those that would be interested in hunting in the future to those that would not be, there were differences. Those who are retired were slightly more likely to not be interested in hunting in the future, but this was not a significant difference. Those that currently live in urban areas were significantly more interested in participating in the future than those that currently live in rural areas (Figure 2; p<0.05). Where respondents grew up was also different in that 59% of those that grew up in urban areas were interested in hunting in the future while only 41% of those that grew up in rural areas were interested in hunting in the future, but this was not statistically significant.

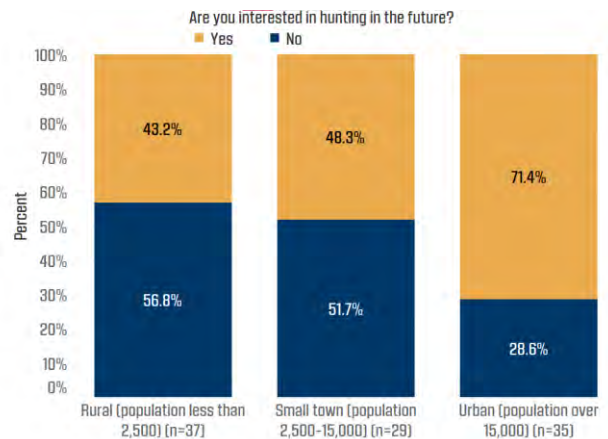


Figure 2: Are you interested in hunting in the future, subset by where they currently reside (n=101)

For those that had not hunted in a few years (n = 135), our “lapsed” hunters, we asked them why they had not hunted recently. The most influential reason presented was other priorities (39% selected that this was a very influential reason to them not hunting). The other barriers presented to respondents can be seen in table 2. When this question is posed on the GHS, respondents typically select their top two reasons for not hunting as health issues (32%) and other priorities (27%) while no place to go is only selected on average 8% of the time. Having nowhere to go could be addressed via outreach to women about public

land, Oklahoma Land Access programs lands and the controlled hunts program. If we combine very and moderately influential together, the number of women who no longer hunt often due to no access to land goes up to 35% while no one to hunt with jumps to 24%.

Table 2: Responses to the question, “Please select the extent to which each of the following reasons influenced you not continuing to hunt” (n=135)

	Not at all influential	Slightly influential	Somewhat influential	Moderately Influential	Very influential
Not sure what to do with the meat	80.0%	7.2%	4.8%	3.2%	4.8%
No need or no room for game meat	69.6%	10.4%	7.2%	6.4%	6.4%
Too expensive	55.6%	11.3%	14.5%	9.7%	8.9%
Health issues	54.0%	13.5%	11.1%	6.3%	15.1%
No longer interested	54.8%	12.1%	22.6%	4.0%	6.5%
No one to hunt with	48.8%	8.0%	19.2%	7.2%	16.8%
Nowhere to go hunting	38.6%	8.7%	18.9%	9.4%	24.4%
Other priorities	16.5%	10.2%	18.9%	15.0%	39.4%

Self-Ranking of Hunting Skill Level

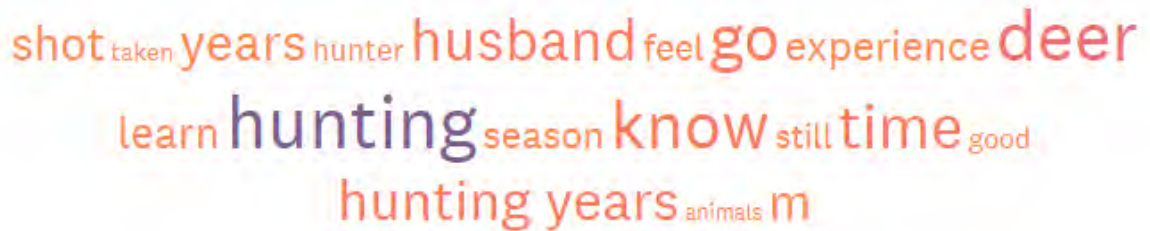
We asked women to rate themselves as a hunter and the plurality of women rated themselves as intermediate (46%), 28% selected beginner and 20% selected advanced. Later in the survey, we asked respondents to explain why they ranked themselves the way that they did. The following word clouds show respondents open-ended comments by the ranking they assigned themselves (Figure 3). All rankings mention a male of some kind. Beginner hunters and intermediate hunters mentioned husbands often while advanced hunters mention their dads often. Harvest and take are also mentioned in the advanced word cloud while it is not mentioned in beginner or intermediate. Deer is mentioned in all word clouds and years hunting deer and harvesting a deer seems to be a determinant in the ranking process. More specific types of equipment are mentioned in the advanced word cloud (bow, rifle) suggesting more advanced hunters also have experience with different hunting types.

Beginner word cloud (n= 325)



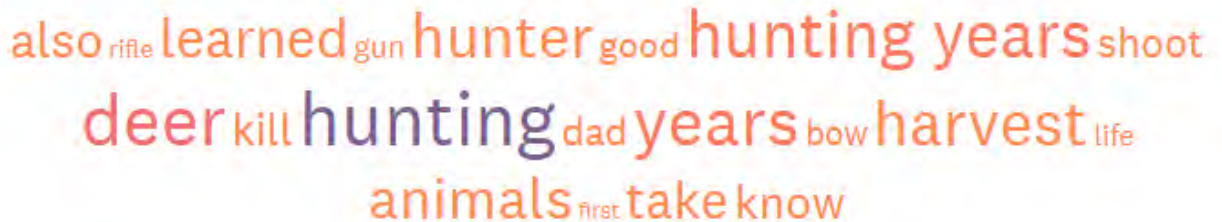
ve killed never last year times ve hunted go much
hunting now year first year husband first deer

Intermediate word cloud (n=573)



shot taken years hunter husband feel go experience deer
learn hunting season know still time good
hunting years animals m

Advanced word cloud (n=263)



also rifle learned gun hunter good hunting years shoot
deer kill hunting dad years bow harvest life
animals first take know

Figure 3: Word clouds of the three different self-rank categories.

To better understand how women are being drawn to hunting, we asked about mentorship and the start of their hunting experience. The average age of when women first started hunting was 20, with the mode being age 10. This number varied by how women had previously ranked themselves as a hunter. Those that ranked themselves as advanced had on average started hunting at age 14.8. Intermediate hunters had on average started hunting at age 19.2 and beginners had on average started at age 26.8.

Hunting Activity and Species Preference

We asked respondents what species they hunt and how many days they hunt that species. The average number of days spent hunting each of eight different species can be seen in table 4. The most popular species to hunt was deer and the most often denoted number of species targeted was one. Twenty-eight percent of respondents had only hunted one species followed by 23% who had hunted two species. Ninety-six percent of those that denoted they hunted a species had hunted deer. Thirty-eight percent had hunted a turkey season followed by 35% who hunt feral hogs. The number of days respondents targeted different species can be seen in table 4 as well. Self-assessed skill level created obvious differences in reported days afield. Feral hogs were targeted the greatest number of days which makes sense as they have no designated season and are open season similar to predator days which would include coyotes.

Table 4: Average number of days hunted by species (left) (n=1,051) average number of days hunted by species separated by self-assessed hunting skill (right)

		Advanced	Intermediate	Beginner
Avg. Deer Days	15.3			
Avg. Feralhog Days	13.1	33.5	8.7	3.4
Avg. Predator Days	3.1	23.3	14.3	10.1
Avg. Squirrel Days	3.0	9.5	1.5	0.3
Avg. Turkey Days	2.3	6.4	1.7	0.9
Avg. Waterfowl Days	1.7	4.5	2.0	1.0
Avg. Dove Days	1.5	3.1	1.3	0.7
Avg. Rabbit Days	1.3	2.8	1.2	0.7
Avg. Trapping Days	1.1	2.7	0.9	0.4
Avg. Quail Days	0.6	2.1	1.1	0.2
Avg. Pheasant Days	0.4	1.4	0.5	0.2
Avg. Elk Days	0.3	1.0	0.2	0.1
Avg. Bear Days	0.2	0.7	0.3	0.0
Avg. Pronghorn Days	0.0	0.7	0.0	0.0
		0.1	0.0	0.0

Future Species Interest

Overall, when asked to select the top three species they would be most interested in hunting in the future, respondents selected elk, deer and turkey most often, although elk was far more popular than all other species (which could have been due to promotions of elk-controlled hunts around the time that this survey was sent out) (Fig. 4).

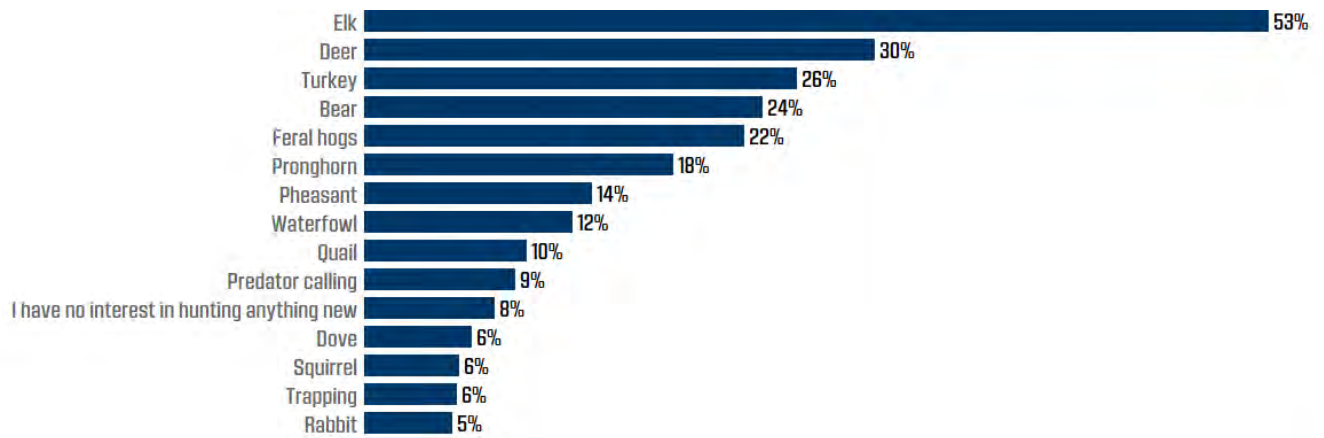


Figure 4: Species most interested in hunting in the future (n=1,034)

Species interest varied by self-assessed skill level. Advanced and intermediate hunters were significantly more interested in elk ($p < 0.05$) while beginner hunters were most interested in deer ($p < 0.05$). Beginner and intermediate hunters were significantly more interested in turkey than advanced hunters ($p < 0.05$) while bear and pronghorn were of significantly more interest to advanced hunters ($p < 0.05$). Beginners were significantly more interested in squirrel and rabbit ($p < 0.05$). Feral hogs were of significantly more interest to beginners and intermediate hunters than advanced hunters ($p < 0.05$). Only 8% of women selected that they had no interest in hunting anything new. Selecting no interest in anything new was not significant across hunter experience.

We also asked this question on the 2021 Game Harvest Survey. When filtering to only known males from this year's harvest survey, the most selected species of interest to hunt in the future was elk (27.3%) followed by no interest in hunting anything new (11.7%), feral hogs (9.3%), bear (8.7%), deer (8.7%), and turkey (7.8%). This shows that species interest is consistent across gender while feral hogs may be of slightly more interest to men. (The methodology of these questions was different in that women were asked to select their top three responses while game harvest survey participants were asked to select only one of most interest).

Hunting Community

The most selected answer for who respondents hunt with most often was a significant other, (65%) followed by family over the age of 18 (36%) and hunting alone (31%; Table 5).

Table 5: Who do you hunt with most often? (n=1,057)

Significant other	65.09
Family over the age of 18	35.76
I hunt alone most often	30.75
Family under the age of 18	18.64
Friends over the age of 18	9.84
Friends under the age of 18	1.04

We also asked respondents who, when they have a question about hunting, they would prefer to seek information from. The most selected answer was experienced male hunters they know (50%), followed by ODWC (21%), and no preference (15%). Those preferring experienced female hunters made up 5% of the respondent group. We followed this question asking if they felt that they had sufficient access to the entity that they had selected. For respondents that *did not* select they would prefer experienced female hunters as their most preferred mentor, there was sufficient access (95.3% selecting they feel they have sufficient access). When looking at those who selected they would prefer female mentors, 54% selected they do not have sufficient access to this informational source (Figure 5).

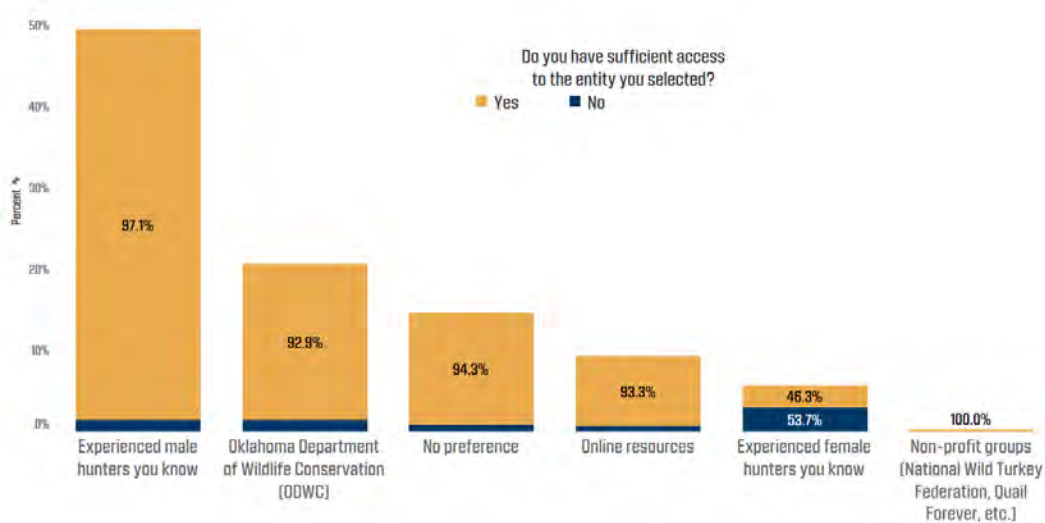


Figure 5: Who would you prefer to seek information from? This is shown by whether they feel they have sufficient access to that entity. (n=959)

Based on hunter experience level, there was a significant difference in who they would prefer as a mentor. Beginners were significantly more likely to prefer asking experienced female hunters they know (9%) compared to intermediate (3%) or advanced (2%) hunters ($p < 0.05$). Advanced hunters were also significantly more likely than beginners and intermediate hunters to prefer asking ODWC for guidance ($p < 0.05$). This could be an indication that we have not connected well with less experienced hunters.

As another way to receive information and support when hunting, we asked women how likely or unlikely they would be to join a women's outdoor recreation club focused on hunting or shooting sports. Responses trended toward a positive likelihood (Figure 6).

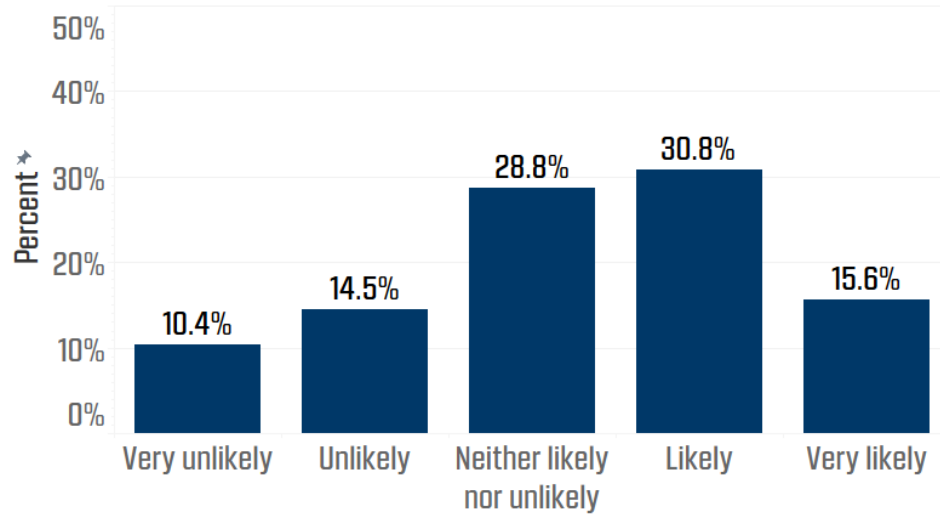


Figure 6: How likely or unlikely would you be to join a women’s outdoor recreation club focused on hunting or shooting sports? (n=1,043)

When separating by demographic variables, the area in which they currently live was not significant to their likelihood to join. Although, small town residents seemed to be slightly more likely to join. Where the respondent grew up also did not affect outcomes significantly. Those with children over the age of 18 were significantly less likely to select that they would join a women’s outdoor recreation club ($p < 0.05$).

Comparison of Hunting to other Recreation and Why Women Hunt

We asked women several questions about their connection to hunting- both how much they like it as well as the reasons why they participate. We asked, “Is hunting your favorite outdoor activity (compared to hiking, fishing, camping, etc.)?” Responses were split with 51% selecting yes and 49% selecting no (Figure 7). On the Game Harvest Survey, 65% of men said hunting was their favorite sport.

From focus group data, we heard that women may not identify with the term of hunter, so we wanted to test this quantitatively by asking a larger audience on this survey. We posed the question, “Do you identify more with the title of hunter, outdoorswoman, or another title?” A slight majority do prefer hunter, but 36% also prefer outdoorswoman (Figure 8). Younger audiences preferred hunter at a higher rate while older audiences preferred outdoorswoman at a higher rate than the general respondent pool. Of those that said they prefer a different title, several wrote in huntress while others wrote in specific other activities that they participate in at a higher rate (fisher, rancher, photographer, etc.).

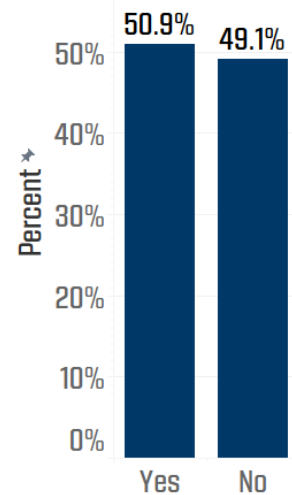


Figure 7: Is hunting your favorite outdoor activity? (n=1,037)

Sixty-five percent of those whose favorite sport is hunting prefer the title of hunter while only 38% of those that hunting is *not* their favorite sport prefer the term hunter showing a parallel relationship between avidity and preferred title.

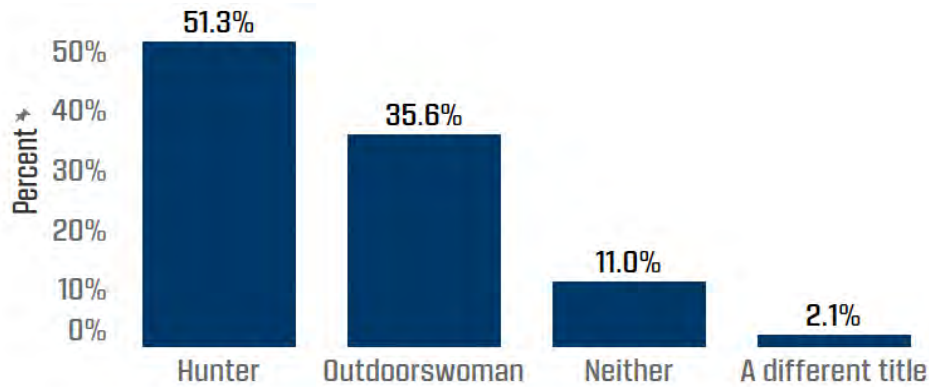


Figure 8: Do you identify more with the title of “Hunter”, “Outdoorswoman” or other? (n= 1,037)

Selected experience level also plays a role in preferred title with beginners being almost equally split on which they prefer between hunter and outdoorswoman while advanced and intermediate prefer hunter (Table 6). Discussing outdoor topics may be a way to draw less experienced hunters in without immediately labeling them as a hunter.

Table 6: Preferred title by self-assessed skill level

	Hunter	Outdoorswoman	Neither	A different title
Advanced	61.3%	30.5%	5.8%	2.5%
Intermediate	52.1%	36.2%	9.8%	1.9%
Beginner	40.5%	39.7%	18.3%	1.6%

Finally, we asked women why they like to hunt by asking them to rank five proposed aspects of hunting from most to least important. Overall, harvest-oriented ideas were lower in importance than more intrinsic aspects of hunting which is similar to what other researchers have found on surveys of men and women hunters. There were slight differences between more experienced and less

experienced hunters, with beginners being more interested in being with friends and family than seeing wildlife and advanced being more interested in alone time in nature than less experienced hunters (Table 7).

Table 7: Please rank the most important aspect of hunting to you as first (1) and the least important as last (5). Values shown are averages of each ranked choice separated by experience level of the respondent.

	Beginner	Intermediate	Advanced
Avg. Seeing any wildlife	2.6	2.6	2.4
Avg. Being with friends and or family	2.5	2.8	2.9
Avg. Alone time in nature	3.1	2.7	2.5
Avg. Obtaining meat	2.7	2.8	3.0
Avg. Taking a shot at an animal	4.0	4.1	4.0

Programs Offered by the Wildlife Department

We had several questions related to programming needs and topic interest level presented to respondents. First, we asked about programming format both in terms of gender makeup of classes and if in-person or online was preferred. We asked, “Do you see any benefit to the Wildlife Department offering women-only education programs or courses on conservation related topics?”. Seventy-five percent of respondents said that, yes, they do see a benefit to this (Figure 9). This tracked across skill level with 77% of beginners selecting yes, 75% of intermediate selected yes and 70% of advanced selected yes.

After asking if they saw a benefit to women only programs, we asked them why they answered the way they did. For those who said women only programs would be beneficial (n=858) the open-ended responses tended to focus on women feeling less intimidated in female only classes, more comfortable asking questions without judgement, not feeling like it was the best idea for their male significant others to teach them and feeling as though they would gain insight from the instructor or others in the class who have similar experiences to them. One write-in of interested stated: “It will increase confidence in women to hunt without feeling they need a male around.” Full responses to this question can be seen in the supplemental materials. Seventy percent of those that had not ever hunted

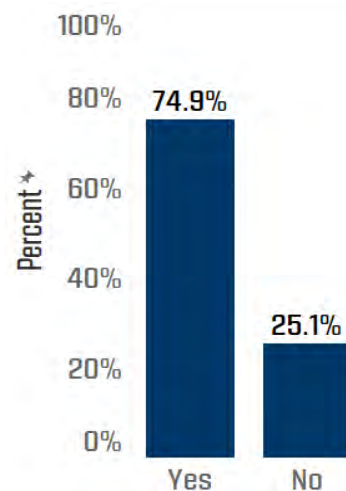


Figure 9: Do you see any benefit to the Wildlife Department offering women-only education programs or courses on conservation related topics? (n= 1,146)

but would be interested (n=62) said that they would see a benefit to ODWC offering women-only education programs. They also selected they would prefer to ask women mentors when they have a question about hunting with 18% selecting this option compared to the 5% of women who had hunted wanting to ask women mentors. These respondents were also much more likely to currently live and be from urban areas. This could imply that to recruit new hunters and to be relevant to urban hunters, women only programming and women only mentors are imperative.

In terms of how respondents would like material presented to them, we asked this question in two ways. The first was very general with the second being more specific. We first asked, “If you were to attend a Wildlife Department led education program would you prefer an in-person or online format?” Sixty percent selected they would prefer an online format. This number remained the same relative to whether the respondents had children or not. Where respondents currently reside did seem to affect the responses. Urban respondents only narrowly preferring online to in-person (54%). Small towns selected online slightly more than urban residents(58%) and rural respondents selected online in the highest percentage (64%; $p>0.05$). We asked an open-ended question of why they would prefer the method they chose, and convenience was most often cited for preferring online. Another reason often written was coronavirus so with restrictions lessening and cases on the decline this may become less of a barrier to attending in-person classes. Those that selected in-person felt it is less easy to get distracted, nice to be with other learners, and that they learn better hands-on. Full open-ended responses can be seen in the supplemental materials.

To be more specific on formatting of programs, we asked respondents to select their most preferred method out of the different formats we currently offer for a variety of other educational programs (Figure 10). The most selected was the style of our hunter education course- self-paced virtual. In-person courses of 2 hours or 8 hours were not highly selected.

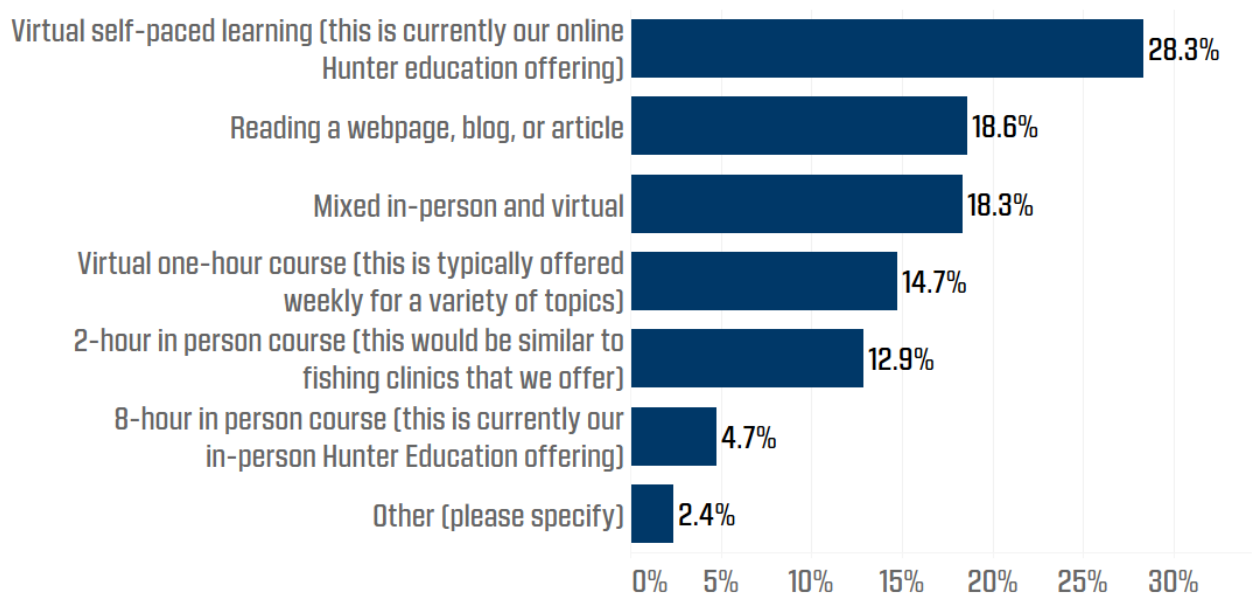


Figure 10: If you were to participate (in a Wildlife Department educational opportunity) how would you like the information to be presented? (n=1,140)

To gain insight on what topics might be most beneficial for ODWC to present, we asked about aspects of hunting that they may be either comfortable or uncomfortable with (Figure 11). Overall respondents were very comfortable with most aspects of hunting that we presented. The only topic that trended towards more uncomfortable than comfortable was hunting with people they are less familiar with. Hunting on public land was selected just slightly more as comfortable than uncomfortable.

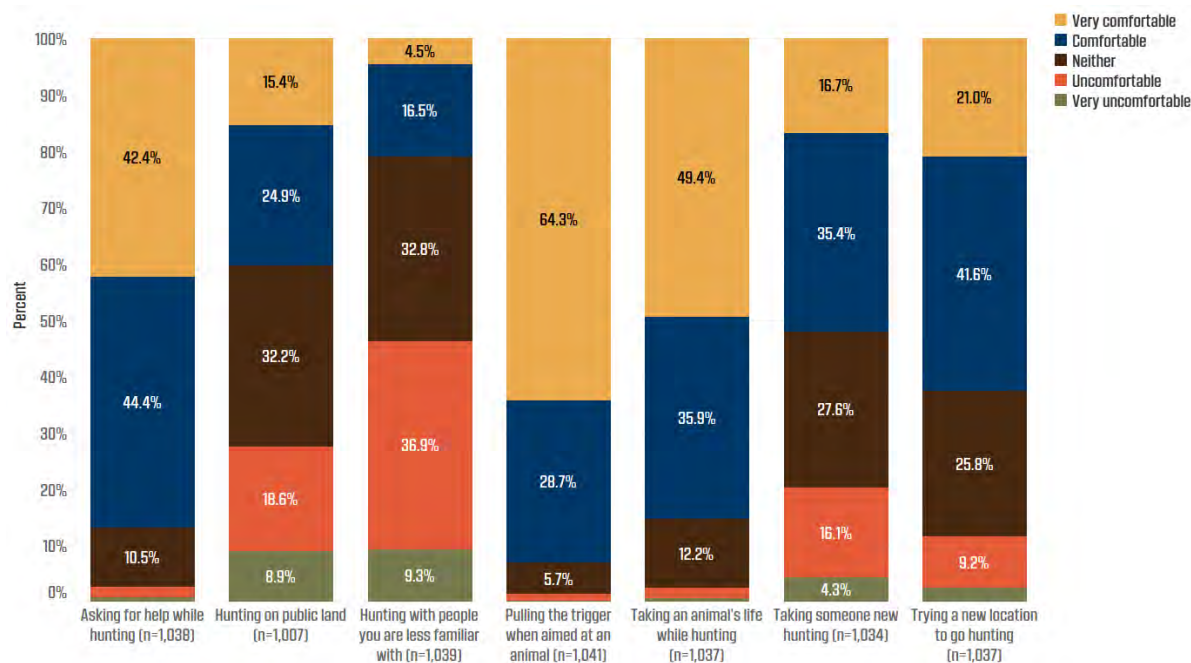


Figure 11: To what extent do you feel comfortable with the following aspects of a hunt?

We also asked this question on the 2021 Game Harvest Survey. When looking at only those that denoted themselves as male, there were differences in comfort level on some topics. A combined 83% of male respondents said they would be either very comfortable or comfortable taking someone new hunting. Only 52% of women felt very comfortable or comfortable with this. Differences between males and females can be seen in table 8.

Table 8: How comfortable are you with the following topics related to hunting? Comparing this survey and the 2021 Game Harvest Survey male hunters

Topic	Sex (combined comfortable and very comfortable percentage)	
	Male	Female
Hunting on public land	50.0%	40.3%
Hunting with people you are less familiar with	25.6%	21.0%
Pulling the trigger when aimed at an animal	89.6%	93.0%
Taking an animal's life while hunting	88.4%	85.3%
Taking someone new hunting	77.5%	52.1%
Asking for help while hunting	70.4%	86.8%

Related to programming we wanted to determine where our hunters are in terms of how knowledgeable they are on topics we would typically present programs on (Figure 12). We followed this by asking what topics they would be most interested in taking a course on (Figure 13).

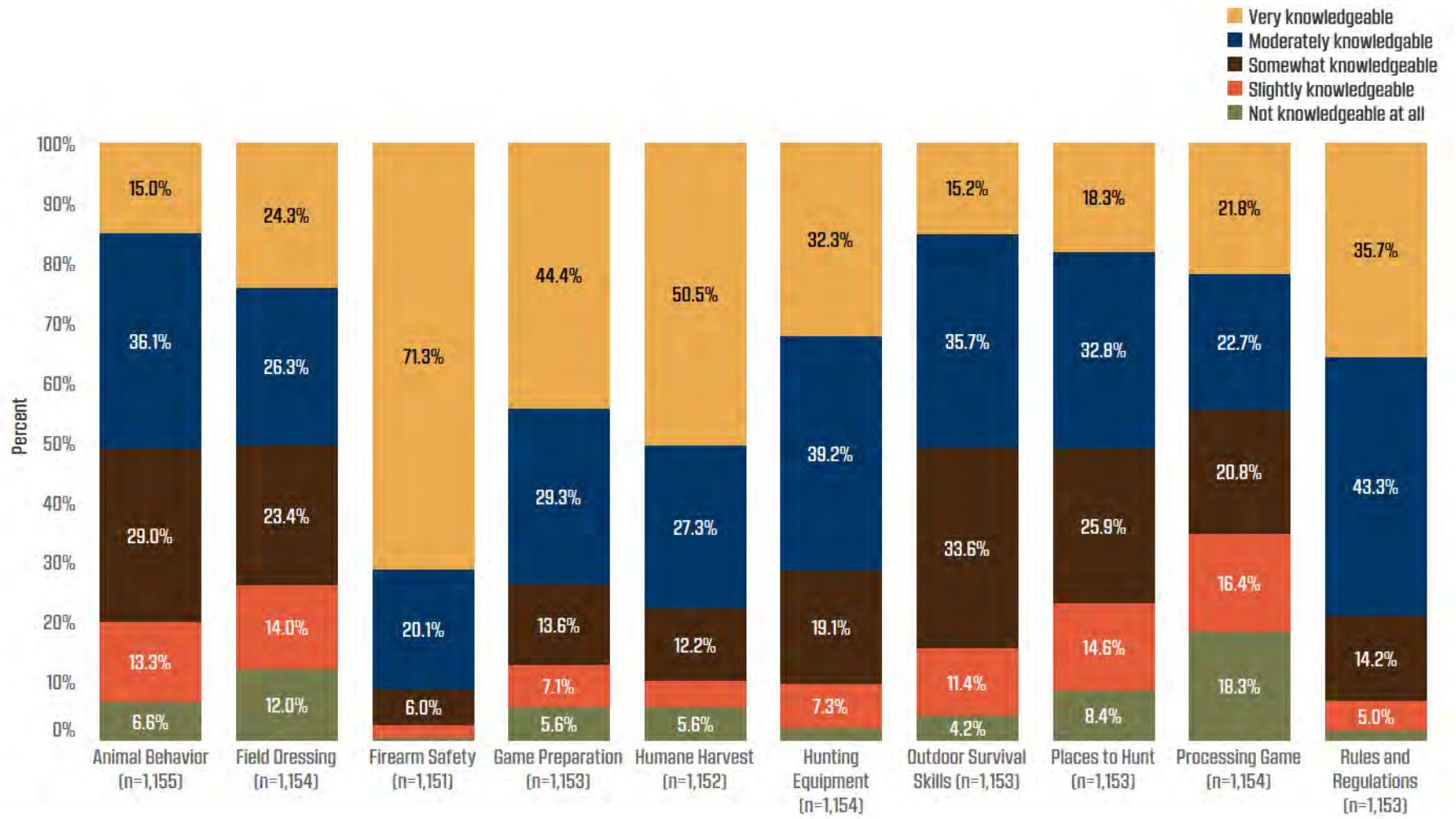


Figure 12: Please denote your level of knowledge on the following topics.

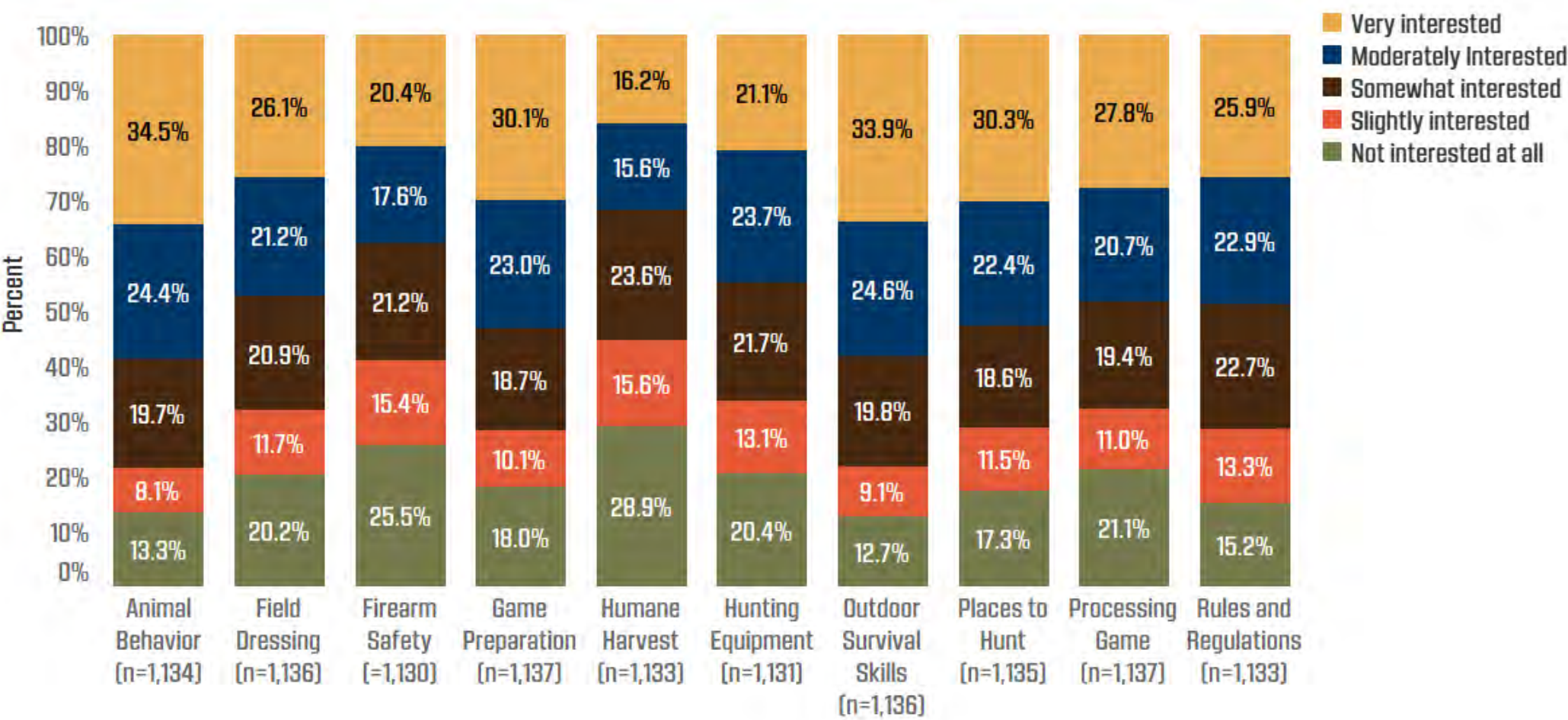


Figure 13 : What is your interest level for attending Wildlife Department-led programs on the following topics?

These two figures show that women feel they are most knowledgeable on firearm safety, humane harvest, and game preparation. Of most interest to women would be courses on animal behavior, outdoor survival skills and game preparation.

We also asked about interest in various topics on the 2021 Game Harvest Survey. When separating this and looking at only male responses to compare to women on this survey, there were noticeable differences. First, the option of “not interested at all” was selected across all categories by men an average of 13.3% more often than women. Other than this stark difference, women tended to have comparably more interest than men in field dressing, firearm safety, humane harvest, and processing. Men were most interested in learning more about places to go hunting, animal behavior and rules and regulations (Figure 14).

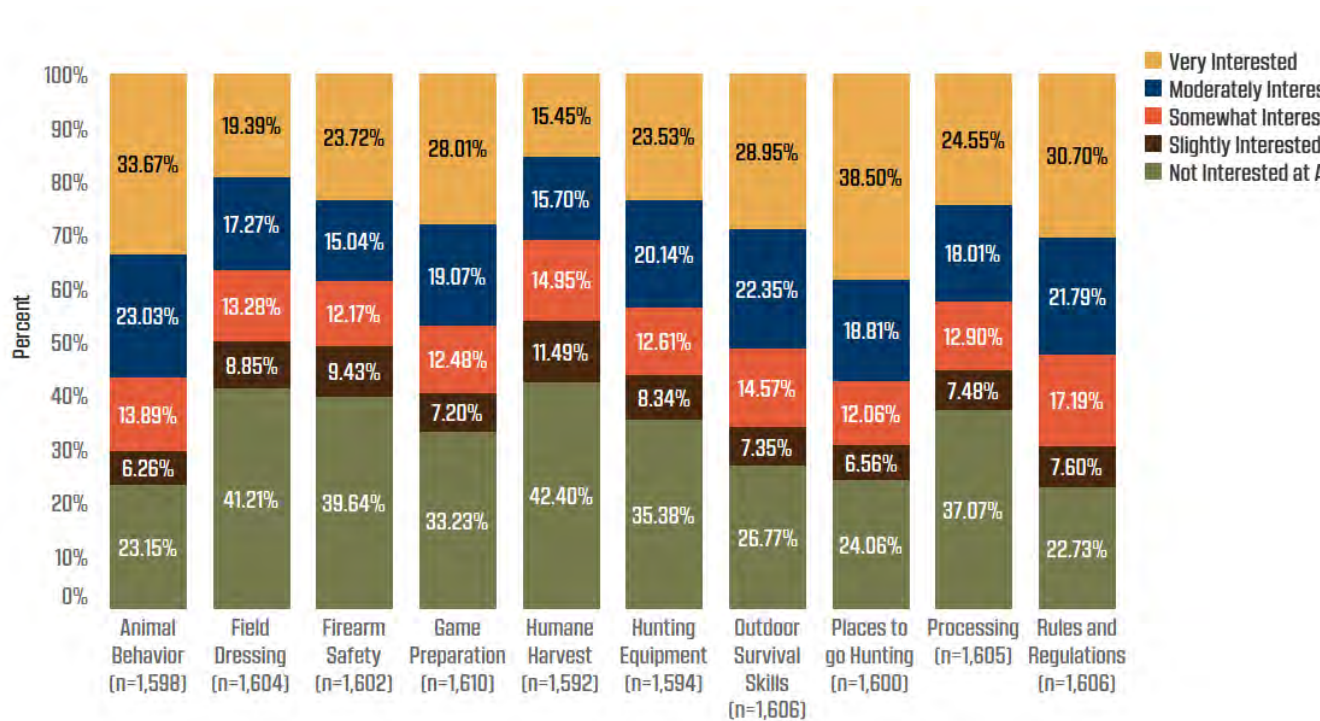


Figure 14: Data from GHS 2021 comparable question separated to show only male responses

Controlled Hunts and Public Land Hunting

We asked respondents about their participation in programs provided by the Wildlife Department. First, we asked about their participation in our controlled hunts program and if they had ever applied for a controlled hunt. Twenty-six percent of respondents had applied for a controlled hunt. Only twelve percent of beginners had applied for a controlled hunt while 47% of advanced hunters had applied in the past ($p < 0.05$). The location where respondents currently live and age of respondent did not significantly influence their application rate.

Next, we asked women how likely or unlikely they would be to apply to a women-only controlled hunt. Thirty four percent selected they would be very likely followed by 22% selecting that they would be likely to apply (Figure 15).

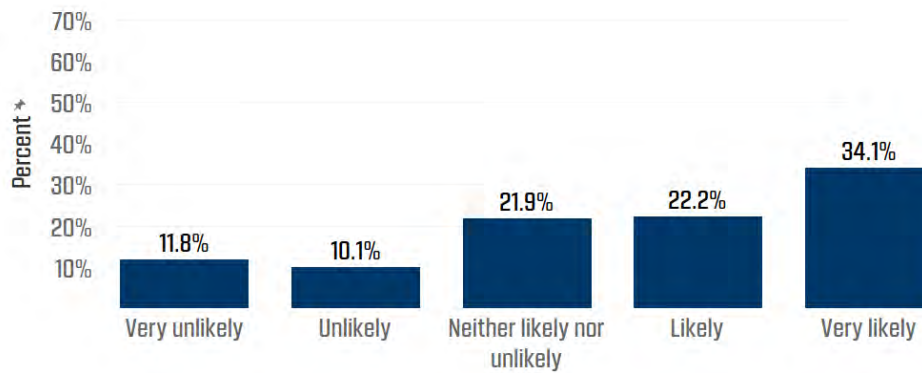


Figure 15: How likely would you be to apply for a women’s only controlled hunt? (n=1,144)

If we split this out by previous participation in controlled hunts, those that had, in the past, participated in controlled hunts were significantly more likely to apply for women only hunts than those that had not applied in the past (Figure 16; $p < 0.05$). This shows that controlled hunts may be a better retainment tool than a recruitment tool for female hunters.

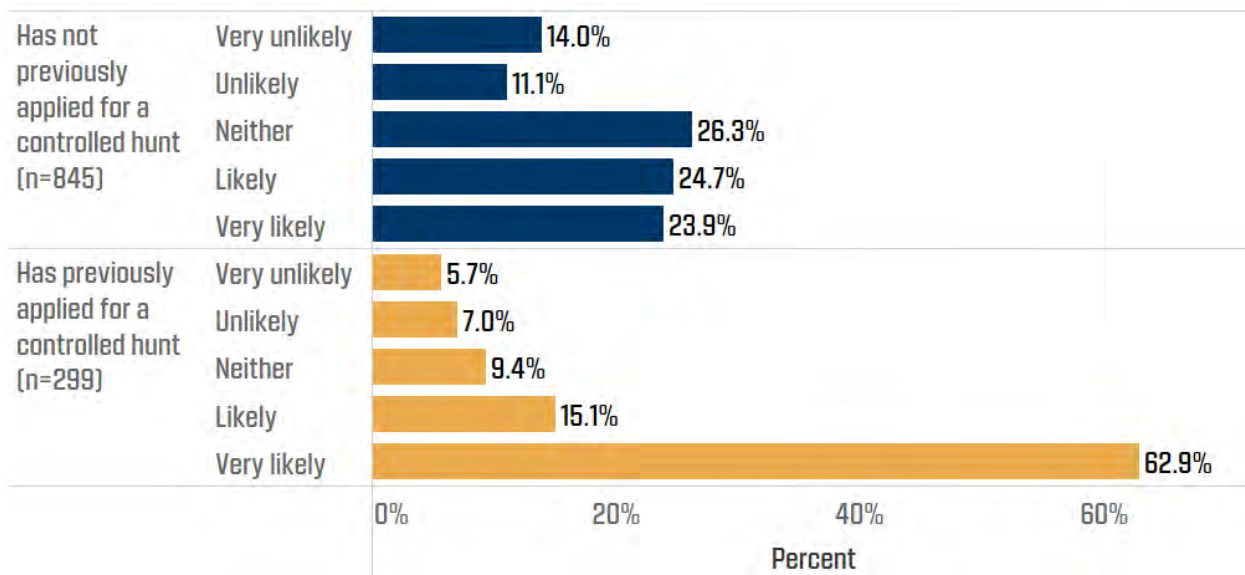


Figure 16: How likely would you be to apply for a women’s only controlled hunt by if they had previously ever applied for a controlled hunt

As another way to look at this, advanced hunters are most likely to apply for women-only controlled hunts while beginners are least likely (Figure 17; $p < 0.05$). Controlled hunts may not be an R3 tool for hunters who are inexperienced.

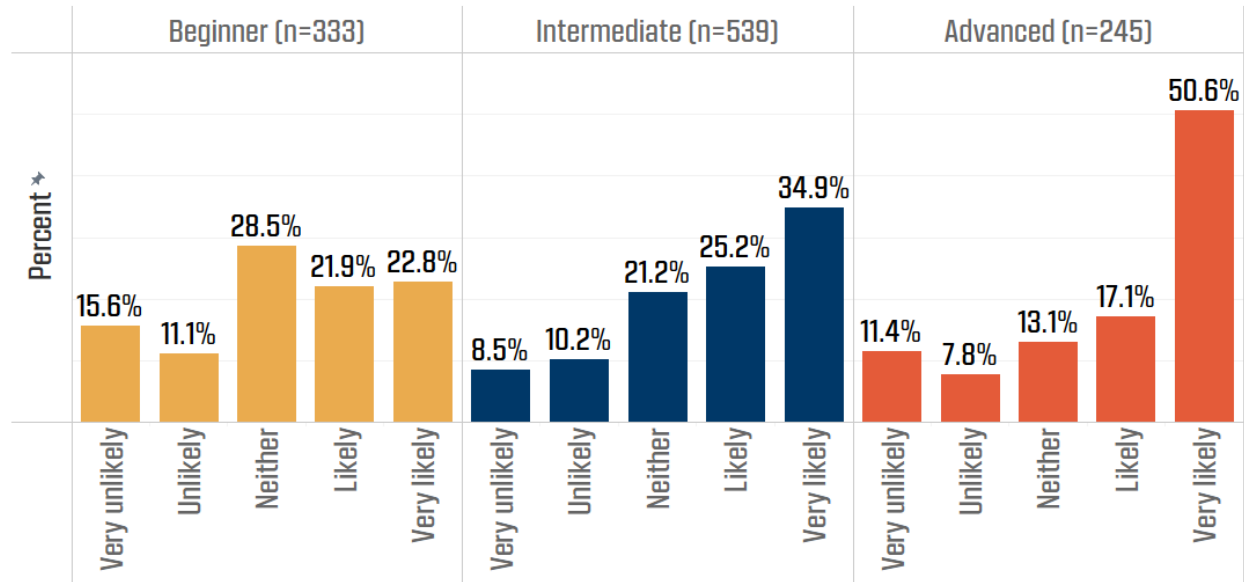


Figure 17: How likely would you be to apply for a women-only controlled hunt by experience level of respondent

A different controlled hunts option asked about likelihood to apply for family controlled hunts (this would be for families with children under the age of 14). We excluded from analysis those that selected that they do not have children under the age of 14. Forty-three percent of respondents selected that they would be very likely to apply for a family-controlled hunt and 24% said they would be likely to apply. Looking at this by experience level of the hunter, this may be a better recruitment tool than having the respondents participate as an individual. Beginners, intermediate and advanced hunters all selected they would be very likely to apply for family-controlled hunts most often (Figure 18). For lapsed or those interested in hunting but had never hunted before, there was more of a likelihood of them applying to family-controlled hunts (52%) rather than women only controlled hunts (34%).

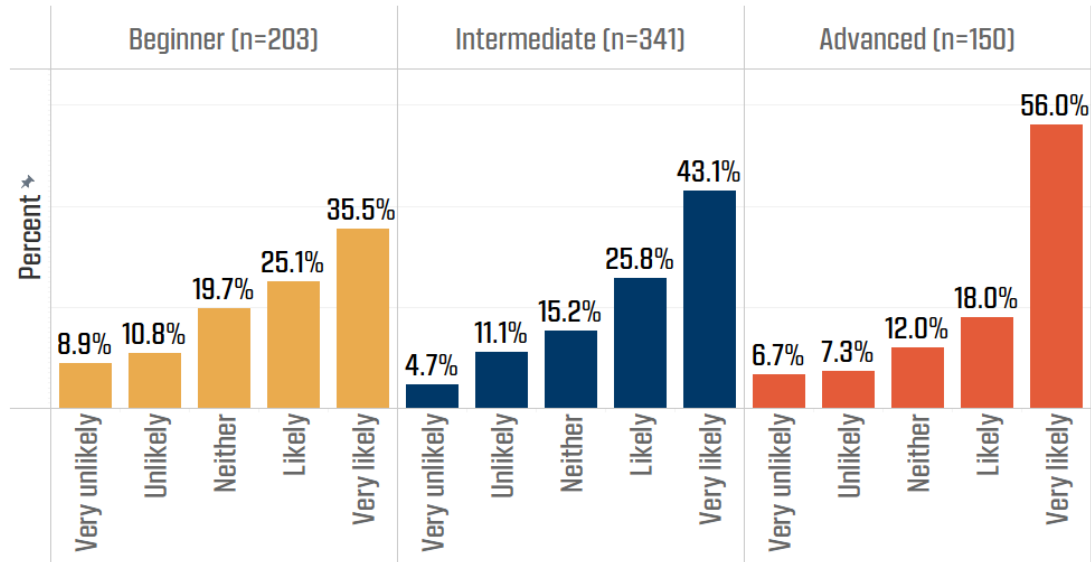


Figure 18: How likely would you be to apply for family-controlled hunt by experience level of respondent

Finally, we asked about use of public land for hunting. Forty three percent of respondents had hunted on public land in the past. This is a higher percentage than estimates we receive from our annual game harvest survey which is typically around 30% of all hunters. This could imply that women are more likely to choose to use or need to use public land to hunt. Interestingly, advanced hunters had used public land at the highest rate and small-town hunters had used public land at the highest rate. These two groups typically are assumed to have the most access to private land but also may just be more exposed to public land available to hunters. Age also led to a higher rate of public land use with younger hunters more likely to have used public land in their lives (Table 9).

Table 9: Have you ever hunted on public land in Oklahoma separated by age of respondent (n=476)

	18 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74	75 or older
Percent that has used public land	44.0%	48.5%	46.2%	41.5%	34.7%	30.0%	27.3%

We also asked what factors of a public land hunt are most important to a successful experience. Regulations that are easy to understand and safety were the two most important things to a successful public land hunt. Access to bathrooms and good roads were less important (Table 10).

Table 10: (Those who had hunted on public land) To what extent are the following factors important to a successful public land hunt experience?

	Very unimportant	Unimportant	Not important or unimportant	Important	Very important
A feeling of solitude (n=485)	1.0%	3.5%	26.6%	45.4%	23.5%
Access to bathrooms (n=486)	14.6%	18.3%	40.7%	16.7%	9.7%
Close to home (n=488)	1.8%	8.6%	40.4%	37.5%	11.7%
Diversity of game (n=485)	0.4%	2.9%	24.3%	49.7%	22.7%
Good roads (n=485)	3.9%	14.2%	39.2%	34.8%	7.8%
Regulations that are easy to understand (n=486)	0.4%	0.2%	2.5%	28.4%	68.5%
Safety (n=488)	0.2%	0.2%	2.3%	22.5%	74.8%
Signage (n=487)	1.0%	5.7%	18.7%	46.2%	28.3%

Conclusion/Discussion

Every year, the Oklahoma Department of Wildlife Conservation surveys hunters as part of our annual game harvest survey. This effort collects data on harvest and participation trends and selected human dimensions topics that our biologists would like hunter input on to incorporate into management decisions. We select a random sample of license holders across different license types to take part in the survey in hopes of receiving a representative sample that can gauge the overall population of hunters. Our response pool typically consists of around 10% female hunters. This closely matches the overall population, but it does not give us a good usable sample of women to be able to determine if there are significant differences between male and female hunters both in their participation and their feelings on management topics.

We want to increase our relevancy to all populations of hunters by ensuring there are equitable opportunities for all. To increase our population of women hunters, we focused on obtaining data that would recruit new female hunters, retain current female hunters, and reactivate lapsed female hunters. The goal of this effort was to simply receive usable data from women hunters. We wanted to determine if there are differences that we need to be aware of when it comes to our relevancy in serving this constituency of hunters. Specific instances that we found that were different than our typical hunting sample included reasons why license holders (or previous license holders) have not hunted in a while and what barriers exist to them hunting, species most interested in hunting in the future, overall passion for hunting as an activity, and comfort level with taking someone new hunting. Interest levels in attending ODWC programs were also different with overall more interest present in female license holders. Men were much more likely to select that they had no interest in topics related to hunting.

With these differences, there are understandably different things that ODWC needs to do to recruit, retain and reactivate female hunters. Specific recommendations will be provided in an accompanying text, but overall, female-only programming, family-controlled hunts, and education on where and how to hunt on public land will be of most use when targeting current and potential female hunters.

Recommendations

Four specific recommendations were created through the data within this report.

1. Develop a communication plan that addresses where and how to hunt WMAs and OLAP. Information should be female-forward and use messaging supported by findings in this study and addresses regulations and safety.
2. Based on findings from this study, it is recommended ODWC initiate a pilot project to assess the potential benefits of family controlled hunts.
3. Offer women-only ODWC education/outreach programs that feature the following topics:
 - a. Where to Hunt
 - b. Animal behavior
 - c. Processing game: field dressing and game preparation
 - d. Outdoor Survival
4. Use A/B testing strategies for 2022 hunt season email marketing, push and text.

Appendix A: Survey Instrument

Women and Hunting

This survey is meant to better understand the needs of women hunters. As such, we would like to receive feedback from only those that identify as female.

1. Please select one of the following options:

- This email is addressed to me and I would like to continue with the survey
- This email is not addressed to me and/or I would not like to take the survey

Women and Hunting

2. What is your gender?

- Man
- Woman
- Prefer to self describe, below

Self describe:

Women and Hunting

Thank you for taking the time to answer some questions about your experience as a hunter in Oklahoma.

First, we would like to know a little bit about your history with hunting.

3. How would you describe yourself as a hunter?

- Beginner
- Intermediate
- Advanced
- I do not hunt

4. When was the last time you hunted in Oklahoma?

- In the last month
- Not in the last month but in the last year
- More than a year ago but in the last few years
- Not in a few years
- I have never been hunting

Women and Hunting

5. Are you interested in hunting in the future?

- Yes
 No

Women and Hunting

6. Please select the extent to which each of the following reasons influenced you not continuing to hunt:

	Very influential	Moderately Influential	Somewhat influential	Slightly influential	Not at all influential
No longer interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other priorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
No need or no room for game meat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not sure what to do with the meat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
No one to hunt with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Too expensive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nowhere to go hunting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

Women and Hunting

7. At what age was your first hunting experience?

If you have never hunted please enter N/A.

8. Previously, you ranked yourself as a hunter and you selected **Q3**, please explain the reason you ranked yourself this way.

Women and Hunting

Next, we would like to know more about your current hunting activity.

9. In a typical year, how many days do you hunt each of the following species?

If you do not hunt that species please enter a "0".

Deer	<input type="text"/>
Turkey	<input type="text"/>
Elk	<input type="text"/>
Pronghorn	<input type="text"/>
Bear	<input type="text"/>
Waterfowl	<input type="text"/>
Squirrel	<input type="text"/>
Rabbit	<input type="text"/>
Pheasant	<input type="text"/>
Quail	<input type="text"/>
Dove	<input type="text"/>
Feral hogs	<input type="text"/>
Trapping	<input type="text"/>
Predator calling	<input type="text"/>

10. What species are you most interested in attempting to hunt that you have little or no experience hunting? ***Please select up to three.***

- | | |
|---|---|
| <input type="checkbox"/> Deer | <input type="checkbox"/> Pheasant |
| <input type="checkbox"/> Elk | <input type="checkbox"/> Quail |
| <input type="checkbox"/> Pronghorn | <input type="checkbox"/> Dove |
| <input type="checkbox"/> Turkey | <input type="checkbox"/> Feral hogs |
| <input type="checkbox"/> Bear | <input type="checkbox"/> Trapping |
| <input type="checkbox"/> Waterfowl | <input type="checkbox"/> Predator calling |
| <input type="checkbox"/> Squirrel | <input type="checkbox"/> I have no interest in hunting anything new |
| <input type="checkbox"/> Rabbit | |
| <input type="checkbox"/> Other (please specify) | |

11. Who do you/did you typically hunt with most often?

Check all that apply.

- I hunt alone most often
- Significant other
- Family over the age of 18
- Friends over the age of 18
- Family under the age of 18
- Friends under the age of 18
- Other (please specify)

12. How likely or unlikely would you be to join a women's outdoor recreation club focused on hunting or shooting sports?

- Very likely Likely Neither likely nor unlikely Unlikely Very unlikely

13. Do you identify more with the title of "Hunter", "Outdoorswoman" or other?

- Hunter
- Outdoorswoman
- Neither
- A different title

If there is another title you prefer, please explain:

14. Is hunting your favorite outdoor activity (compared to hiking, fishing, camping, etc.)?

- Yes
- No

Please explain why or why not:

15. To what extent do you feel comfortable with the following aspects of a hunt?

This is not asking about your skill level on the following topics.

	Very comfortable	Comfortable	Neither comfortable nor uncomfortable	Uncomfortable	Very uncomfortable
Pulling the trigger when aimed at an animal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hunting on public land	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taking an animal's life while hunting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trying a new location to go hunting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taking someone new hunting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hunting with people you are less familiar with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asking for help while hunting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Women and Hunting

For the next set of questions, we would like you to rank the following aspects of hunting in order of importance to you.

16. Please rank the most important aspect of hunting to you as first (1) and the least important as last (5).

- Being with friends and/or family
- Obtaining meat
- Taking a shot at an animal
- Alone time in nature
- Seeing any wildlife

Women and Hunting

We would now like to ask you about special programs and educational opportunities related to hunting.

17. Do you see any benefit to the Wildlife Department offering women-only education programs or courses on conservation related topics? Participants would be women-only, instructors may be male or female.

Yes

No

Why?

18. If you have a question about hunting, who/where would you most prefer to seek information?

Experienced female hunters you know

Experienced male hunters you know

Oklahoma Department of Wildlife Conservation (ODWC)

Non profit groups (National Wild Turkey Federation, Quail Forever, etc.)

Online resources

No preference

Other (please specify)

19. Do you feel you have sufficient access to the person or entity you selected above?

Yes

No

20. The Wildlife Department offers several learning opportunities on the topic of hunting. If you were to participate, how would you like the information to be presented.

Virtual one-hour course (this is typically offered weekly for a variety of topics)

Virtual self-paced learning (this is currently our online Hunter education offering)

8-hour in person course (this is currently our in person Hunter Education offering)

Mixed in-person and virtual

2-hour in person course (this would be similar to fishing clinics that we offer)

Reading a webpage, blog, or article

Other (please specify)

21. Please denote your level of knowledge on the following topics:

	Very knowledgeable	Moderately knowledgeable	Somewhat knowledgeable	Slightly knowledgeable	Not knowledgeable at all
Humane harvest (shot placement)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Firearm safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rules and regulations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outdoor survival skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Animal behavior/scouting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Places to go hunting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hunting equipment (firearms, bows, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Field dressing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Processing (butchering)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Game preparation (cooking)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. The Wildlife Department offers guidance on several hunting topics. What is your interest level for attending Wildlife Department-led programs on the following topics?

	Very interested	Moderately interested	Somewhat interested	Slightly interested	Not interested at all
Humane harvest (shot placement)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Firearm safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rules and regulations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outdoor survival skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Animal behavior/scouting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Places to go hunting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hunting equipment (firearms, bows, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Field dressing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Processing (butchering)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Game preparation (cooking)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. If you were to attend a Wildlife Department-led education program, would you prefer an in-person or online format?

- In person
 Online

Why?

Women and Hunting

These questions are about controlled hunts and other public land hunting.

24. Have you ever applied for a controlled hunt?

A controlled hunt is a special hunt that is put on by the Wildlife Department where only a certain amount of people are given permits to hunt on specific public land areas.

- Yes
 No

25. How likely would you be to apply for a women-only controlled hunt?

- Very likely Likely Neither likely nor unlikely Unlikely Very unlikely

26. How likely would you be to apply for a family controlled hunt (this would be for families with children under the age of 14)?

- Very likely Likely Neither likely nor unlikely Unlikely Very unlikely
 I do not have children under the age of 14

27. Have you ever hunted on public land in Oklahoma?

- Yes
 No

Women and Hunting

28. To what extent are the following factors important to a successful public land hunt experience?

	Very important	Important	Not important or unimportant	Unimportant	Very unimportant
Access to bathrooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good roads	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Signage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diversity of game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Close to home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A feeling of solitude	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regulations that are easy to understand	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Women and Hunting

Thank you for your time in taking this survey, these are the final few questions. These questions are optional but would be of great benefit to the Wildlife Department so that programs may be tailored to your lifestyle. Please submit your survey at the bottom of this page.

29. How would you describe the area in which you currently live?

- Urban (population over 15,000)
- Small town (population 2,500-15,000)
- Rural (population less than 2,500)

30. How would you describe the area in which you grew up?

- Urban (population over 15,000)
- Small town (population 2,500-15,000)
- Rural (population less than 2,500)

31. Do you have any children?

- Yes, all 18 or over
- Yes, one or more under 18
- No

32. Are you now married, widowed, divorced, separated, or have you never been married?

- Married
- Widowed
- Divorced
- Separated
- Never married

33. What is your current employment status?

- Full-time employment
- Part-time employment
- Unemployed
- Self-employed
- Home-maker
- Student
- Retired

34. What is your total household income?

- Less than \$20,000
- \$20,000 to \$34,999
- \$35,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 to \$149,999
- \$150,000 or More

35. What is your age?

- 18 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 to 74
- 75 or older