

# **BROUGHT TO YOU BY**















NSSF
The Firearm Industry
Trade Association



ADDITIONAL SUPPORT PROVIDED BY

NC STATE UNIVERSITY

### **ACKNOWLEDGMENT**

#### **Authors**

Breanna Bashford (Georgia Wildlife Federation and Georgia R3 Initiative) Rich von Furstenberg (North Carolina State University) Coral Minchey (Georgia Wildlife Federation) Dr. Lincoln Larson (North Carolina State University)

#### Citation

Bashford, B., von Furstenberg, R., Minchey, C., Larson, L. (2023). R3 for College Students: A Practitioner's Guide and Academics Afield Toolkit. Georgia Wildlife Federation, Georgia R3 Initiative, and North Carolina State University. Covington, GA. www.gwf.org/r3toolkit.

#### **Funding**

This project was funded by grants from the Multistate Conservation Grant program of the Sport Fish and Wildlife Restoration Programs of the U.S. Fish and Wildlife Service, jointly managed by the Association of Fish and Wildlife Agencies (WSFR# #F21AP00678-00, #F18AP00171 and #F19AP00094). Additional funding support came from the National Shooting Sports Foundation. Projects were coordinated and supported by North Carolina State University, Georgia Wildlife Federation and the Georgia R3 Initiative (GA DNR - Wildlife Resources Division, Georgia Wildlife Federation, National Wild Turkey Federation, Georgia Chapter of Safari Club International and Ducks Unlimited).



# **TABLE OF CONTENTS**

<b>Executive Summary</b>	2.5
Why College - Focused R3	2.8
Case Studies of College - Focused R3 Getting Started Outdoors - NC State University Academics Afield - Georgia Wildlife Federation Wild Sustenance Program - UM & SUNY University Hunt Program - Delta Waterfowl Conservation Collegiate Chapters - Ducks Unlimited	2.14 2.16 2.17 2.18 2.19 2.20
Outcomes of College-Focused R3	2.22
References	2.3

To retrieve "R3 For College Students: A Practitioner's Guide & Academics Afield Toolkit" in its entirety, visit gwf.org/r3toolkit.





### **EXECUTIVE SUMMARY**

#### R3 and College Students

Over the past several decades, declining hunting participation across the United States has raised concerns about interest in outdoor recreation and the sustainability of a conservation system that relies heavily on hunting and shooting for financial support. Efforts to recruit, retain, and reactivate (R3) diverse hunters has therefore become a high priority across the wildlife management community. One population represents a particularly promising target for R3 efforts: college students.

A national study of college students across the United States from 2018-2020 revealed that 26% of students were active hunters, 22% were potential hunters (i.e., current non-hunters who were eager to try hunting) and 3% were lapsed hunters who hunted before college but stopped for various reasons. With nearly 20 million college students across the country, this equates to millions of students who could be recruited into hunting. Many of these aspiring, first-time hunters are not familiar with hunting culture or may not pursue hunting due to lack of knowledge, skills, or social support. R3 efforts can alter that dynamic and connect with students at an opportune time in their lives - a time when they are flexible, open to exploration, and eager to build social bonds. Introducing a new activity during the college years can influence a person's life-long identity. The unique characteristics of this target audience, when combined with strategic implementation of a tested curriculum, could produce quality R3 outcomes.

#### Successes

Many R3 programs focused on college students, such as Academics Afield and Getting Started Outdoors (GSO), have demonstrated success at increasing approval for hunting and recruiting new hunters from non-traditional backgrounds. For example, from 2018-2020, GSO programming was offered to diverse college students in 16 states across the country. The GSO model focused on knowledge and skill development during workshop sessions typically one day in length. The purpose of GSO programs was to teach students basics of hunting, to highlight broader benefits of hunting, and to inspire students to adopt positive hunting-related beliefs, attitudes, and behaviors. In 2019, Academics Afield was founded in Georgia to provide a reoccurring program that walked college students through the processes of learning how to shoot and hunt. Participation in an Academics Afield workshop is typically a three day commitment with institutions hosting 3-4 workshops per year. The Academics Afield model attempts to generate peer-based mentoring and help students develop the confidence necessary to self-identify as hunters and continue hunting into the future. Academics Afield has been replicated at 12 colleges across the southeast and is expanding. Both Academics Afield and GSO programs utilize partnerships with non-governmental conservation organizations (NGOs), academic institutions, and wildlife management agencies throughout the implementation process. They both emphasize the role of hunting in conservation as well as connections to local sources of game meat - key motivations that appeal to hunters from non-traditional backgrounds. Thorough evaluation and analysis has been conducted for both programs, showing that the college student-focused workshops attracted diverse populations of young adults and increased their approval of hunting, their hunting-related skills and knowledge, their intent to hunt, and their actual hunting behavior.

As a newcomer to UGA and the Athens area, the Academics Afield program has been an exciting way for me to meet new people with similar interests and gain knowledge and experience I'd be hard-pressed to encounter elsewhere in my busy life. Like most people, I imagine, I was not raised in a hunting or gun-owning household. Prior to getting involved in this program, I had absolutely no experience with hunting and only a basic knowledge of safe firearm handling and use due to personal interest. Through the program, I've learned so much in a very short time about responsibly hunting a variety of game and the firearms, techniques, and regulations involved. I've been able to meet people and go places I'd never know or have access to on my own. I possess skills I never thought I'd have or even need, and the program still has so much more to offer. I am grateful to Georgia Wildlife Foundation (Federation), Academics Afield and those involved and look forward to the opportunity to give back in the future.

Tristan Green-Tagalog, Academics Afield Participant, University of Georgia



#### Introduction

Over the past several decades, declining hunting participation across the United States has raised concerns about the viability of hunting as the centerpiece of the North American conservation model. R3 efforts to recruit, retain, and reactivate diverse hunters has therefore become a high priority across the wildlife management community. The Relevancy Roadmap put forth by the Association of Fish and Wildlife Agencies (2019) concluded that the future success of hunting and conservation depends on reaching broader audiences. Therefore, future hunters should include more participants from non-traditional backgrounds (e.g., women, young adults, people of color, and people from urban areas). This broader outreach is not intended to replace traditional target audiences and approaches, but add to them to create a larger and more diverse overall hunting population. Despite enthusiasm surrounding the goal of increasing relevance and inclusion in hunting, many R3 practitioners have discovered that identifying and connecting with non-traditional audiences can be a daunting task. But there is one place where all of these diverse populations can easily be found and accessed: a college campus.

Nearly 41% of young adults between the ages of 18-24 attend some type of college (e.g., 4-year, 2-year, community college), resulting in a total of over 20 million college students across the country. More than half of these students are women, roughly half are students of color (e.g., Black, Hispanic/Latino, Asian, American Indian), and the majority are from urban areas. Therefore, colleges provide access to an incredibly diverse audience all in one location. As students, most of these young people are excited to learn and try new things, including outdoor activities such as hunting. This openness to exploration is one dimension of "emerging adulthood" that is a key component of college students' development as they expand their interests and form their own sense of identity. At this point in their life, college students generally have financial freedom and time for recreation and socialization, creating capacity for adoption of new outdoor activities. They also enjoy a variety of peer support and engagement (e.g., student clubs and organizations) to support these growing interests. By engaging with students on college campuses, wildlife management agencies and non-governmental organizations can tap into this vibrant, malleable, and eager audience, potentially broadening the base of support for hunting and conservation.



The country doesn't look like it did 50 years ago, hunting doesn't look like it did 50 years ago, and our hunting recruitment efforts can't look like they did 50 years ago.

Mike Worley, CEO, Georgia Wildlife Federation

#### What do college students think about hunting?

While most college students are not hunters, research suggests that many would like to give it a try. A study of more than 17,000 U.S. college students across 22 states revealed that 50% were non-hunters, 26% were active hunters, 3% were lapsed hunters who hunted before college but stopped and 22% were potential hunters (i.e., current non-hunters who were eager to try hunting)¹ (Vayer et al. 2021). That 22% of potential hunters equates to almost six million college students nationwide, and they are far more diverse than the traditional group of active hunters, including many women and racial/ethnic minorities (Figure 1). In addition, these prospective hunters, predominantly from non-traditional hunting backgrounds, viewed hunting a bit differently than more traditional hunters. For example, while potential hunters - and even some non-hunters - approved of hunting to acquire meat and contribute to altruistic causes like supporting conservation and maintaining ecological balance, they expressed notable disapproval towards hunting for egoistic reasons such as the personal challenge of the hunt or trophies - reasons that are deemed acceptable by many active hunters (Figure 2A).

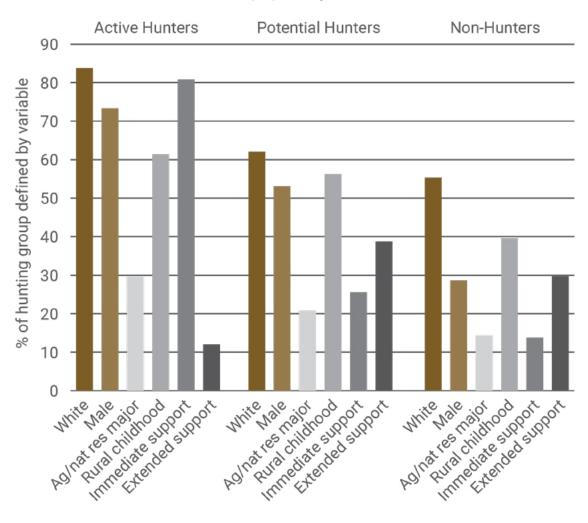
Similar patterns were observed for motivations to hunt. Rather than hunting to spend time with family or friends, or for recreation or sport, students consider hunting to help maintain ecological balance and obtain their own meat (Figure 2B). Like many non-traditional hunters, college students also face major barriers to hunting because they lack familial and social support that fosters hunting skills and knowledge. If these barriers can be addressed, the potential hunters on college campuses represent a tremendous recruitment opportunity.

 $220 / _{0} \\$  of surveyed college students were potential hunters

<sup>&</sup>lt;sup>1</sup> To assess predictors of future hunting behavior, Vayer et al. (2021) used a market segmentation approach to identify 4 clusters of respondents based on a combination of past hunting experience and likelihood of future hunting. Non-hunters were individuals who had not hunted in the past and expressed no interest in future hunting. Potential hunters were individuals who had not hunted in the past but expressed interest in future hunting. Active hunters were individuals who hunted in the past and expressed strong interest in future hunting, plus those who indicated they were not sure about future hunting but said they might still hunt rarely or regularly. Lapsed hunters were individuals who hunted in the past but indicated they had no interest in hunting in the future, plus those who were not sure but said they might only try hunting once.

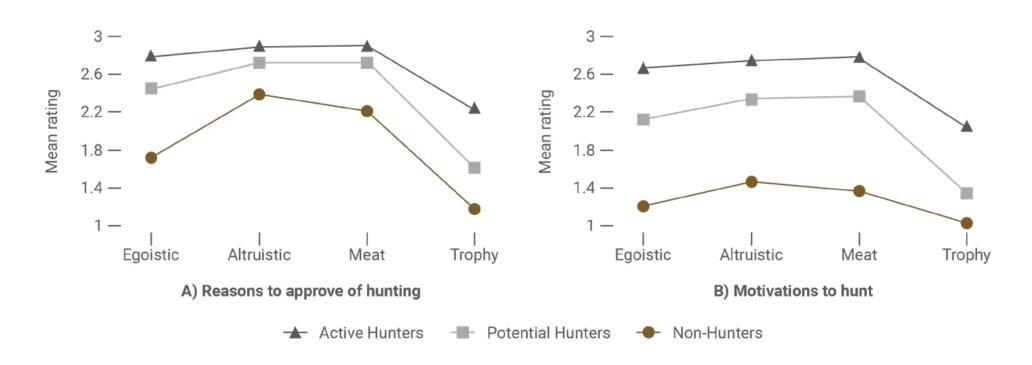
Figure 1. Demographic differences among different groups of college students across the United States (n = 17,203) based on their future likelihood of hunting. Those considering hunting in the future (i.e., potential hunters) are considerably more diverse than current (active) hunters.

#### Potential hunters are demographically different than active hunters



While hunting participation (and license purchasing) is typically the desired output of an R3 practitioner's work, broader approval of hunting is also a valuable outcome if an overall goal is to maintain the relevance of hunting to conservation in the eyes of a changing public. Roughly 60% of college students approved of legal regulated hunting, compared to the 80% approval among Americans in general. This reflects a generational shift in attitudes toward wildlife and how people feel about hunting (Vayer et al., 2021). Therefore, college campuses also offer R3 practitioners a unique opportunity to reach this younger and more skeptical generation, potentially reshaping the way they think about hunting and its connection to conservation. For all of these reasons, R3 efforts targeting college campuses could be an efficient and effective strategy for addressing declines in both hunting participation and public support for hunting across diverse populations.

Figure 2. Comparison of mean ratings among future hunting groups of college students across 22 universities in the United States, 2018–2020, based on A) reasons to approve of hunting, and B) motivations to hunt (n = 17,203). Approval items were rated on a scale from 1= disapprove to 3= approve. Motivations were rated on a scale from 1= no, I would not hunt for this purpose to 3= yes, I would hunt for this purpose.



#### **Key Takeaways - Why College Students?**

- · Diverse population of potential hunters that is present everywhere and easy to find
- Nearly 1/4th of college students across the United States who have never hunted before express interest in hunting
- Students are at development stage where they are eager to experience new things (e.g., hunting) and create new identities
- Peer networks on campuses provide social support needed for sustained participation





#### Introduction

When considering a college-focused R3 program, it is important to choose a format that aligns well with resources, partners, and desired outcomes. Effective programs should share qualities that appeal to the motivations and values of college students, such as hunting's connection to conservation and locally sourced meat, but with content and experiences delivered in different ways to meet the needs of the instructors and the target audience. Below, we briefly describe several different approaches taken by existing, college - focused R3 programs. In the next section, we discuss outcomes associated with some of the programs introduced here.



GSO Workshop University of Northern Colorado



Academics Afield Workshop University of Arkansas at Pine Bluff



Wild Sustenance Program University of Montana & State University of New York

#### **Single-Day Skills Training Model**

Example Program: Getting Started Outdoors (GSO)

Primary Contact: Lincoln Larson, Ph.D. - North Carolina State University - LRLarson@ncsu.edu

Description: This is perhaps the most common model used in R3 programming as it represents a skill-development course with a manageable time commitment for both practitioners and first-time participants. These one-day clinics, which often focus on recruitment of students from non-traditional hunting backgrounds, provide students with a comprehensive overview of hunting, covering topics such as regulations, ethical shot placement, and game meat preparation. Typically, this format has both a classroom and a field component, which integrates hands-on training focused on hunting skills as well as firearm safety. In some cases, when time and resources permit, the workshop might be followed by a mentored hunt. The Getting Started Outdoors (GSO) program was led by NC State University and conducted across 17 universities in 16 states as part of a multi-state R3 project, serving a total of 327 students. GSO program curriculum can be found at gwf.org/R3Toolkit.

Advantages: Single-day R3 events are common, and many existing R3 curricula can be adjusted to suit the needs and preferences of college students. From a logistical perspective, this format - which can be replicated multiple times throughout the year - can accommodate more students than a cohort mentoring model and often requires smaller commitments and fewer resources.

Disadvantages: Students will have limited social support following the event and may not have the opportunity to reconnect, unless an additional, post-workshop mentoring model is offered. The time constraints of the single-day experience does not allow for in-depth content or field experience, and limits capacity for evaluation.

# **NC STATE UNIVERSITY**

**Mentoring Model** 

Example Program: Academics Afield

Primary Contact: Coral Minchey- Georgia Wildlife Federation -cminchey@gwf.org

Description: This model aims to engage the same individual student with the same coach for multiple meetings. Academics Afield hires a student coordinator and uses peer student coaches to recruit and engage students from non-traditional backgrounds into hunting and shooting. Using an application process, participants are accepted to the program based on experience levels. The program consists of 3-4 workshops a year, each focusing on a different species. Each workshop is composed of several unique events that deliver a manageable portion of curriculum and build upon one another. First, the students attend a classroom presentation covering conservation, species biology, hunting strategy, regulations, ethics, and safety. Following the classroom education, the participants receive hands-on firearm training on a range. Lastly, the students experience a one-on-one mentored hunt. The hunts are celebrated with a wild game culinary social that allows students mingle with their peers/coaches and forge the lasting relationships necessary to create a collegiate hunting community. Throughout the workshops, participants receive support from peer coaches and local professionals/volunteers from conservation or firearm organizations. This program has been implemented at 12 institutions across the southeast and made over 1,000 touchpoints to workshop participants since its inception in 2019. See the R3 for College Students: Academics Afield Toolkit section of this document for more details about the program including unique variations among the different approaches to program implementation.

Advantages: The highlight of this format is the formation of social bonds among participants (student to student and student to coach) through prolonged and regular engagement. Additionally, with averages of 6-8 students participating per workshop, it is easy to provide individualized support.

Disadvantages: The reach of a mentoring format is smaller compared to Skills Training models, primarily because the format focuses on quality versus quantity of engagement. Additionally, it is challenging to replace student participants who drop out for various reasons (strenuous course load, athletic commitments, etc.) because the events build on one another. It is challenging to recruit enough peer coaches to achieve true mentoring. Expenses can be significant and are program specific.



#### **Course-Based Hybrid Model**

Example Program: Wild Sustenance Program

Primary Contact: Libby Metcalf and Josh Millspaugh, University of Montana and State University of New York (elizabeth.metcalf@umontana.edu; joshua.millspaugh@mso.umt.edu)

Description: Students receive academic credits for participating in the Wild Sustenance Program. This class introduces hunting to college students from a variety of majors and is intended for students who have not yet had the opportunity to hunt. There are two components to the course: on campus class meetings and a 3-day immersive workshop at the Theodore Roosevelt Memorial Ranch owned by the Boone and Crockett Club in Dupuyer, MT. On campus, students discuss the role of hunting in wildlife management, the history of wildlife conservation, hunter ethics, and human dimensions of hunting. The 3-day field experience provides students with time in the field, on the shooting range (including conversations about firearm safety), and in the kitchen to understand the entire hunting process from field to table. Open dialogue and respectful discourse about motivations for hunting and concerns about hunting is encouraged. Food is an important part of the program as well: a deer is harvested on the ranch, a professional butcher demonstrates how to process the deer with student help, and a professional chef prepares wild game every meal and teaches students how to cook wild game. The Montana course has been operating for 4 years, serving 15-20 students each year.

Advantages: The course offers an immersive field component where students learn by doing. This helps create a social support around hunting that reinforces many of the lessons. The field component is complemented by at least a 10 week long classroom experience where students circle back to topics from the field component to go deeper based on their interests.

Disadvantages: This course does not replace traditional hunters education courses, but does offer an "add-on" feature of hunter education. However, this is often challenging to organize or find a certified instructor for. The course can be time intensive for students, which might discourage enrollment.



#### **Professional Development Hybrid Model**

Example program: Delta Waterfowl's University Hunting Program

Primary Contact: Joel Brice, Chief Conservation Officer, Delta Waterfowl Foundation, Email: jbrice@deltawaterfowl.org

Description: The Delta Waterfowl University Hunting Program (UHP) provides college students with a firsthand waterfowl hunting experience and equips them with a holistic view of hunting and conservation that prepares them for potential careers in wildlife conservation. Through the UHP, Delta aims to provide students who do not have a hunting background (i.e., non-hunting wildlife degree majors) with hands-on participation in the North American Model of Wildlife Conservation. The UHP consists of four fundamental components: (1) a hunter safety course with an emphasis on ethical and social issues of hunting, (2) a shooting skills day to learn about firearm skills and safety, (3) a mentored hunt at a well-managed property, and (4) a post-hunt meal that features the actual game harvested and highlights hunting camaraderie. Delta Waterfowl started this program in 2017 with five universities. During the 2022 academic year, the program was offered at 72 universities across the United States and Canada and will reach over 100 schools in 2023. Delta Waterfowl covers all costs and organizes all activities associated with this program. Their Duck and Goose Hunting 101 course can be found at todayshunter.com.

Advantages: The program offers ultimate flexibility as each UHP is custom-built by the Delta R3 team and local volunteers specific to the school, location, and participants. Multiple activities across the school semester keep students involved and excited as they build toward the "big event" of the hunt and post-hunt meal. Delta has accumulated sustainable funding sources to continue the program year after year.

Disadvantages: Delta can only guarantee one hunting opportunity for migratory birds.



#### **Mentoring Model paired with Collegiate Chapters**

Example Program: Ducks Unlimited Collegiate Chapters

Primary Contact: Justin Aycock - Ducks Unlimited - jaycock@ducks.org

Description: This program utilizes established collegiate chapters focusing on conservation to implement Academics Afield curriculum. Ducks Unlimited (DU) has 110 collegiate chapters across 27 states. Many of these chapters already consist of both experienced hunters and non-hunters who are already interested in learning how to hunt. In the 39 years that they have had collegiate chapters, DU estimates students have informally mentored 3500 other students in hunting and shooting. This programming model takes an existing social support network and offers tested college - focused R3 programming to non-traditional hunters. Although there is a designated R3 intern, the entire collegiate DU chapter takes on the responsibility of recruiting participants, educating them via established curriculum, and hosting hunts. This partnership began in 2023, so enrollment data is not yet available.

Advantages: The DU collegiate chapters are already present at colleges, providing access to an established social support network.

Disadvantages: Chapter members focus on waterfowl conservation, and this could limit a participant's exposure to other game species. The chapters are an already established community and may intimidate participants that are outside of the organization. Collegiate chapters are run by volunteers and may struggle to accurately implement complex R3 workshops.



#### **Key Takeaways - Keys to Successful Programing**

- Understand audience background, needs, and desires (which may be different from traditional hunters)
- Focus on things that motivate students such as hunting's connection to conservation and nature
- Focus on things that motivate students such as hunting's connection to a food sources and preparation of wild game meat
- Utilize demographically diverse instructors that match the student audience
- · Remove significant cost and transportation barriers wherever possible
- Embed opportunities for authentic reflection and Q&A, allowing time for processing new information and ideas (especially because hunting is an entirely new concept for many students)
- Provide ample opportunity for social interactions and support both during and after the program
- Build and cultivate relationships across multiple partners to ensure the long-term success and continuity of programs





#### **Overview**

Getting Started Outdoors (GSO) and Academics Afield represent two approaches that achieved a common goal: to engage college students in the world of hunting. GSO is considered a skills development model while Academics Afield is considered a mentoring model. Through their shared focus on college students, both of these programs contribute to the revitalization of hunting by fostering new hunters and cultivating an appreciation for conservation among a diverse cross section of individuals. Although content of each program is similar among participating institutions, formats vary based on existing infrastructure, available resources, available game species, timing/season, and other unique features of the host locations. Common themes in both programs across all institutions include a hunters' role in conservation and hunting ethics; scouting/tracking tips and hunting scenarios; proper use of hunting gear and equipment; firearm safety and shooting practice; and game recovery, processing and meat preparation. Both programs are also underpinned by robust evaluation frameworks that align with the innovative objectives of R3 efforts, offering some insights into their efficacy.

Collectively these college R3 programs have drawn audiences that were different from typical hunters. Potential hunters that attended programs were frequently from bigger cities, female, and/or a person of color. Both GSO and Academics Afield students shared a motivation to hunt for food, engage with nature, and maintain ecological balance. Importantly, providing these students with a tailored recruitment experience resulted in reported increases in hunting skills and knowledge, positive beliefs about hunters, overall confidence in hunting, and an increased understanding of hunting's connection to conservation. Evaluations from both programs also revealed benefits in terms of participants' likelihood to hunt, purchase a hunting license, and engage in other hunting-related behaviors both before and after the program. Ultimately, both approaches exemplify the successful realization of many R3 goals, demonstrating that college-focused R3 efforts may represent a convergence of intent and outcomes that could help to reshape the hunting landscape and foster a generation of more conservation minded hunters and hunting advocates.

#### **Getting Started Outdoors**

From 2018-2020, state wildlife agencies, NGOs, and university collaborators worked together to develop a framework for a "Getting Started Outdoors: Hunting 101" workshop designed specifically for college students without previous hunting experience. The workshop's purpose was to teach students basics of hunting, to highlight broader benefits of hunting, and to inspire students to adopt positive hunting-related beliefs, attitudes, and behaviors. Workshop content was similar, but delivery formats varied slightly by state. All workshops were typically one or two days in length - including both a classroom (regulations, safety, conservation connection, etc.) and hands-on component (target shooting, game processing, etc.).

Overall, the evaluation focused on 327 participants in 19 different hunting workshops across 16 different states. Demographic attributes of student participants in the GSO program (mostly undergraduate students) were far more diverse than those of traditional hunters: 42% were women, 27% were racial/ethnic minorities, and the vast majority (83%) were from cities or urban areas. The students' primary motivations to hunt were being close to nature, contributing to conservation and ecological balance, and obtaining local free-range meat. Wildlife agencies and NGOs hosting the workshops appealed to these interests by emphasizing conservation connections and preparation of wild game meat during the workshops.

Across the multi-state sample, the GSO workshops resulted in increased intention to hunt and growth in other hunting related variables (approval of hunting, confidence in hunting, etc.).<sup>2</sup> Following the workshops, 50% of the participants said they would definitely hunt in the future and 34% reported that they would probably hunt. The majority of participants were also very likely (51%) or likely (30%) to purchase a hunting license, which is an important consideration for many wildlife management agencies. A number of other hunting related behaviors were very likely as well following the workshops, ranging from befriending a hunter to eating wild game meat (Figure 3).

**Getting Started Outdoors (continued)** 

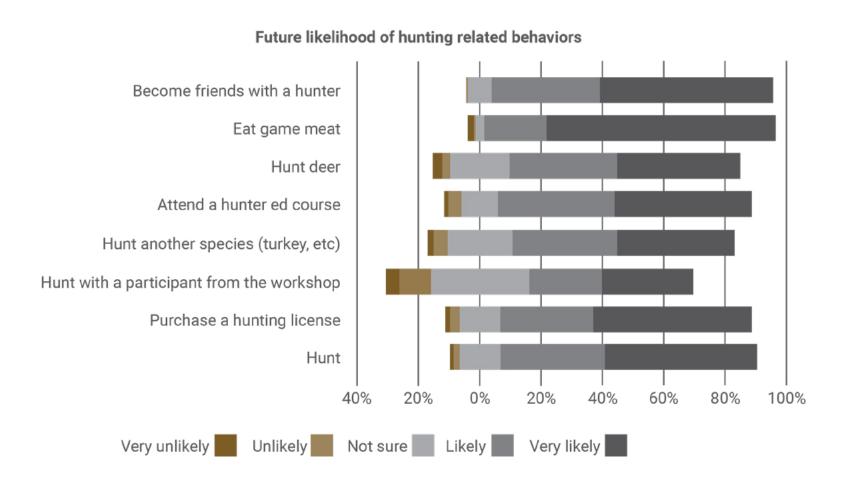


Figure. 3. College students self-reported likelihood of engaging in hunting-related behaviors after participating in a GSO workshop.

#### **Getting Started Outdoors (continued)**

Despite interest and enthusiasm surrounding hunting, college students face a number of barriers to participation. The most significant barrier reported by students was a lack of confidence in their hunting skills (only 5% of participants felt confident prior to participation). However, following the workshops 41% of students reported feeling confident in their hunting skills - a notable improvement given the short time frame of the one- or two-day workshop (Figure 4). While most participants came in with a positive view of hunting (79%) that number increased to 93% following the workshop. This suggests the program's emphasis on the connection of hunting to conservation and locally sourced food resonated with college students. Being new to hunting, the majority of incoming students reported that they did not have anyone to hunt with (71%); this was reduced to 53% of participants by the end of the workshop. The workshop experience did not effectively address all barriers, however: many students still acknowledged the high cost of hunting and the time required to engage in the activity. Providing an environment that encourages social bonding with other students and facilitators (e.g., providing a meal, comfortable Q&A sessions, etc.), both during the workshops and afterwards, was important in cultivating these social connections around hunting and encouraging sustained participation.

While most participants came in with a positive view of hunting 79%

that number increased to 93% following the workshop.

#### **Getting Started Outdoors (continued)**

Participants who attended a mentored hunt opportunity following the workshops were more than twice as likely to hunt and/or purchase a license in the future. Shortly after the GSO workshop, 50% of attendees affirmed they would definitely hunt in the future, while 34% expressed they would probably hunt. Additionally, 13% remained uncertain about their prospective involvement in hunting. Follow-up surveys over one year after the workshops concluded revealed sustained benefits: 34% of workshop participants reported having hunted at least once after the program ended, and another 45% said they would probably hunt in the future.

Variable	Before Workshop (%)	After Workshop (%)
Confidence in hunting skills	5	41
Positive beliefs about hunting	79	93
Lack knowledge/skills required to hunt	80	28
Lack knowledge/skills required to prepare game meat	72	28
Don't have anyone to go hunting with	71	53
Costs associated with hunting	51	58
Lack of free time required to hunt	41	51

Figure 4. Barriers to hunting and beliefs about hunting reported by college students before and after participating in a Getting Started Outdoors workshop.

<sup>&</sup>lt;sup>2</sup>The analysis of GSO workshop outcomes by von Furstenberg et al. (2023) utilized a pre-post survey methodology to compare changes in attitudes and behaviors related to hunting before and after the learn-to-hunt experience. Participants' intended behaviors (future hunting, purchasing of a hunting license, befriending a hunter, etc.) were measured in the post-program survey.

#### **Academics Afield**

Academics Afield was founded in Georgia in 2019, after several years of research and development, to build upon current R3 programming by introducing college students from nontraditional backgrounds to hunting and shooting. The program's purpose is to create a collegiate hunting community, led by a supervised student intern, who coordinates a comprehensive introduction to a variety of game species via knowledge/skill development and peer mentoring through time. The program expanded beyond Georgia in 2021 to include North Carolina, South Carolina, Tennessee, Mississispipi, and Louisiana. This expansion process involved intensive work within each state to build partnerships between the state wildlife agencies, the academic institution, and an NGO that would facilitate the programming. Programs provided 3-4 workshops a year, with 3-4 events per workshop. Formats varied slightly between locations according to student needs and available resources. Events consisted of classroom education (hunting's role in conservation, biology, hunting strategy and regulations) and field components (target shooting, guided hunt, game processing, culinary social). Programs were implemented at five historically black colleges and universities in Georgia, Alabama and Arkansas in 2022.

Since 2019, Academics Afield has made over 1,000 touchpoints to workshop participants across the southeast. In an evaluation of participants active 2021-2023, Academics Afield has captured the perspectives of 226 students across 8 states. As with GSO programming, students participating in Academics Afield were notably more diverse compared to traditional hunters: 57% were women, 29% were racial/ethnic minorities, and the majority grew up in cities or urban areas (79%). Three quarters of the students had never been hunting and only 20% reported having an immediate family member who hunts. These college students, like those in GSO, were motivated to try hunting primarily to obtain locally sourced meat, to engage with nature, and maintain ecological balance.

Students participating in Academics Afield were notably more diverse compared to traditional hunters:

57% were women, 29% were racial/ethnic minorities

While evaluation was used to understand who was attending Academics Afield programs, it was also incorporated both formatively (students reflected on each event/hunt) and summatively (pre-post program assessment) throughout the program. Pre-program surveys were completed by all students who participated in Academics Afield, and post-program surveys were completed by students after the program concluded. The formative assessments following each event/hunt were used to improve and optimize the program while it was ongoing, with students rating elements of the experience and describing their likes and dislikes.

#### **Academics Afield (continued)**

Variable	Before Workshop (%)	After Workshop (%)
Confidence in hunting skills	7	40
Positive beliefs about hunting	96	100
Lack knowledge/skills required to hunt	87	16
Lack knowledge/skills required to prepare game meat	84	36
Don't have anyone to go hunting with	94	45
Costs associated with hunting	58	39
Lack of free time required to hunt	39	48

Figure 5. Beliefs about hunting and barriers reported by college students before and after participating in a Academics Afield workshop.

The summative assessments at the end of the program were designed to measure the impact of Academics Afield on participant's hunting-related behaviors and perceptions.<sup>3</sup> Like GSO, the results of Academics Afield were very positive (Figure 5). Barriers to hunting associated with a lack of skills and knowledge were reduced from 87% pre-program to only 16% after completion. Knowledge of hunting and firearms laws was another prominent barrier, with 71% reporting it as a constraint; this was reduced to 7% percent following Academics Afield. Furthermore, 55% of students indicated that they were likely to have a partner to hunt with after participating in the Academics Afield program, with only 6% reporting they had a hunting companion before the program. Providing an environment that encourages socializing with other students and facilitators (e.g., providing a meal, comfortable Q&A sessions, etc.) was an intentional element of this program, both during the workshops and afterwards, with the aim of cultivating these lasting relationships around hunting and encouraging sustained participation.

Following participation, 64% of participants said they would definitely hunt and another 23% said they would probably hunt. After participation, student's agreement with the belief that hunters care about conserving wildlife and natural resources increased from 77% to 95%. As the Academics Afield program continues to grow, collection of additional longitudinal data will facilitate assessment of long-term program impacts on hunting participation. In Academics Afield's flagship state, Georgia, tracking of long-term outcomes for Academics Afield participants has already started. Hunting license database records show that 47% of previous Academic Afield students purchased a Georgia hunting license the following year. Of these license buyers, 63% were first time buyers.

<sup>&</sup>lt;sup>3</sup> The Academics Afield program assessed hunting-related perceptions and behaviors both before and after events, with the specific number of events varying by location. In the first year of the Academics Afield program, a pre-post program assessment was conducted by averaging measurements taken before and after event(s) at six universities across four states; these included Abraham Baldwin Agricultural College (GA), Georgia Southern University (GA), Louisiana State University (LA), North Carolina State University (NC), University of Georgia - Athens (GA), and University of Tennessee – Knoxville (TN).

#### **Summary of Evaluation**

Results of these evaluation efforts support the idea that college students are a large, untapped pool of potential hunters that may be receptive to R3 efforts. There is substantial interest in hunting among diverse college students, and results reveal positive impacts of R3 workshop participation on students' hunting-related skills, beliefs, attitudes, and behaviors - especially when sustained social support (e.g., mentored hunts) is present. Although not every college student who attends a workshop will ultimately become a hunter, evidence also shows that many will become more vocal hunting advocates with the capacity to contribute to conservation in other ways. Furthermore, the data suggests R3 programming in a variety of formats can produce positive R3 related outcomes. For all of these reasons, agencies and organizations hoping to expand and enhance R3 efforts should strongly consider programs that focus on college students. Lessons learned through this research can help managers develop more effective and culturally relevant R3 tools and strategies as they seek to reverse declines in hunting participation by targeting non-traditional hunting populations such as college students.

#### **Key Takeaways**

- Attracts diverse audiences (women, people of color, students from urban areas, etc.)
- Addresses major barriers to entry by helping student build hunting-related knowledge, skills and confidence
- Increases likelihood of participation in a hunting-related behaviors (including purchasing a hunting license)
- Enhances positive perceptions of hunting and support for hunting among young adults
- Program participation often translates into long-term hunting behavior





### REFERENCES

Association of Fish and Wildlife Agencies and The Wildlife Management Institute. 2019. Fish and Wildlife Relevancy Roadmap: Enhanced Conservation Through Broader Engagement (v1.0). M. Dunfee, A. Forstchen, E. Haubold, M. Humpert, J. Newmark, J. Sumners, and C. Smith. 2019 (eds). AFWA. Wash. D.C. 128 Pages.

Vayer, V. R.., Larson, L. R., Peterson, M. N., Lee, K. J., von Furstenberg, R., Choi, D. Y., Stevenson, K., Ahlers, A. A., Anhalt-Depies, C., Bethke, T., Bruskotter, J., Chizinki, C. J., Dayer, A. A., Ghasemi, B., Gigliotti, L., Graefe, A., Irwin, K., Keith, S., Kelly, M., Kyle, G., Metcalf, E., Morse, W., Needham, M. D., Poudyal, N., Quartuch, M., Rodriguez, S., Romulo, C., Sharp, R. L., Siemer, W., Springer, M., Stedman, R., Stein, T., van Deelen, T., Whiting, J., Winkler, R. L., & Woosnam, K. M. (2021). Diverse university students across the United States reveal promising pathways to hunter recruitment and retention. Journal of Wildlife Management, 85(5), 1017-1030. doi:10.1002/jwmg.22055

von Furstenberg, R., Vayer, V. R., Larson, L. R., Peterson, M. N., Lee, K. J., Stevenson, K., Ahlers, A. A., Anhalt-Depies, C., Bethke, T., Clark, B., Dayer, A. A., Davan, K., Fisher, T., Ghasemi, B., Gigliotti, L., Graefe, A., Irwin, K., Keith, S., Kelly, M., Kyle, G., Metcalf, E., Needham, M. D., Poudyal, N., Quartuch, M., Rodriguez, S., Romulo, C., Sharp, R. L., Siemer, W., Springer, M., Stedman, R., Stein, T., van Deelen, T., Whiting, J., Winkler, R. L., & Woosnam, K. M. (2023). Evaluating the impacts of R3 workshops for first-time hunters at universities across the United States. Wildlife Society Bulletin, 47(3), e1482. doi: 10.1002/wsb.1482