The profession's response to declining hunter numbers.

Decades of declines in hunter numbers have resulted in conservation organizations (state, federal, and private) investing staff and resources into various outreach programs aimed at creating "new" hunters. Overtime, these efforts gained traction and greater interest and are collectively known as Recruitment, Retention, and Reactivation, or "R3". The R3 community represents an extensive network of professionals who work in state, federal, NGO, and private organizations to identify, support, and grow additional participation in hunting, angling, and the shooting sports.

Suffice it to say that R3 has been deemed critically important to agencies whose funding string continues to depend on, and benefit greatly from, funds generated from hunting, angling, and the shooting sports. The extent for which these funds support state agencies conservation missions vary, but on average 59% of any State's budget is directly tied to licenses sales and the associated federal excise taxes derived from related equipment sales. Please see the attached graphic and full report to better understand this flow of resources and gain an understanding of how most states currently operate. You will explore these ideas in more detail in the next Chapter, *Hunting in Wildlife Management & Conservation*.

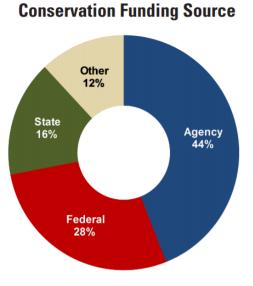


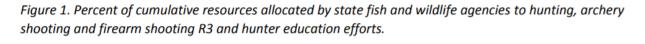
Figure 2 — Conservation is funded by diverse sources

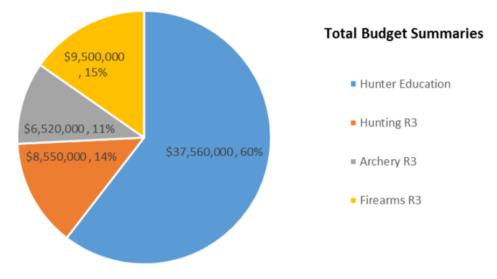
Conservation Funding Source				
State Agency	44%			
License Sales	35%			
Entry Fee	3%			
Small Grants	3%			
Watercraft	2%			
Trust	1%			
OHV	1%			
Federal	28 %			
Pittman-Robertson	15%			
Dingell-Johnson	9%			
USFWS	4%			
Coast Guard	1%			
State-Level	16 %			
General Fund	8%			
Non-General Fund	6%			
Sales Tax	3%			
Other	11%			

"An estimated 58.8 percent (\$3.3 billion) comes from hunting- and fishing-related activities, either directly through the sale of licenses, tags, and stamps, or indirectly through federal excise taxes on hunting, recreational shooting, and angling equipment. These expenditures reinforce the assertion that hunters, recreational shooters, and anglers disproportionally fund conservation. However, 41.2 percent of state wildlife agency funding comes from areas other than hunting and fishing, suggesting that agencies are diversifying their revenue sources." – The State Conservation Machine, AFWA Report 2017

Full report provided.

In recent years, R3 spending in the United States has exceeded \$25 million with even more, spent on hunter education annually, see "Figure 1 with text" and the included full report. Although R3 is synonymous with hunting, many contemporary R3 programs include angling, trapping, hiking, wildlife viewing, and other outdoor activities.





"Respondents were asked to quantify resources based on the four categories: hunter education, hunting R3 efforts, archery shooting R3 efforts, and firearm shooting R3 efforts. In FY 2013, state fish and wildlife agencies together spent more than \$24,570,000 on hunting, archery shooting and firearm shooting R3 efforts. State agencies spent an additional \$37,560,000, or 1.5 times as much, on hunter education efforts. Figure 1 reports the percent of cumulative resources allocated to the different categories."

State Agency Resource Allocation Report. 2013 – Council to Advance Hunting and Shooting Sports

Full report provided.

Let's take a closer look at the conceptual processes involved with R3 through a diagram called the *Outdoor Recreation Adoption Model* (Byrne and Dunfee, 2016) often referred to as the "Adoption Model". The Adoption Model, as seen in this flowchart below, serves as the theoretical basis for exploring the various ways an individual may, gain an awareness of and fulfill a desire to, become a hunter. The Adoption Model also attempts to show the broader influence of social support and account for the many unique barriers that an individual may face. For our purpose, this model applies specifically to hunting however, the ORAM is an established concept that can be used for a variety of outdoor activities like fishing, soccer, kayaking, and mountain biking.

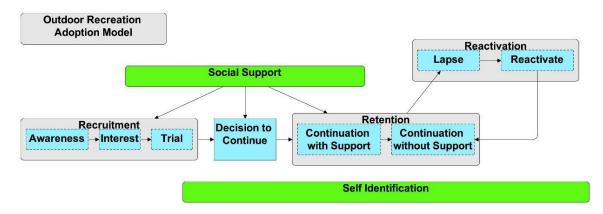


Figure 1. The Outdoor Recreation Adoption Model (ORAM) for hunting as proposed by Byrne and Dunfee, 2016.

For a more complete look at the ORAM and all things R3 please take a moment to visit The Council to Advance Hunting and Shooting Sports webpage and their video addressing "What is R3" <u>https://cahss.org/what-is-r3/</u>.

Full report provided.

Conceptually, an individual that is interested in becoming a hunter "travels" through the various stages of the Adoption Model, from left to right, in a stepwise process. The first step begins an awareness for the activity and the final outcome is the adoption of the activity, having gained the ability to hunt independently and repeatedly. Once an individual is informed and aware of opportunities, they must be engaged effectively in the subject matter and be provided with an understanding of the potential pathways to programs of local trial, discovery, and mentorship. This is often a time consuming and potentially complicated process for an individual to take on and science has repeatedly emphasized the importance of mentorship and additional expertise to help inform a person's decision-making process. Later in this course you will see a document titled *Pathways to Becoming a Hunter*, which offers a seasoned perspective on the necessary steps and a list of curated resources on the subject.

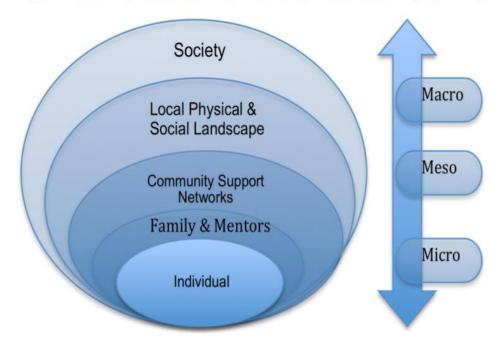


Figure 5. Visual depiction of the "nested levels of social structures" proposed by Larson et al. (2013).

The Adoption Model (as described by Byrne and Dunfee) attempts to incorporate the intricacies that various social influences have on an individual with their choice to "become" a hunter. These are experienced at both the macro and micro level, adding to the complexity of R3 program designs.

Delivering effective and professional hunter R3 programs requires a well-organized approach that educates the public and builds support for participation among individuals and their community. Of great professional importance is the need for these R3 programs to provide feedback loops and monitor outcomes in a way that informs and improves future programing. Public outreach and engagement and the idea of supporting new outdoor user groups is not a new concept. However, with recent advancements in social networking, increased resource availability, and prioritized agency initiatives, there has been rapid growth within the professional R3 community in the last decade.

There are many wildlife and hunting organizations working to assist and provide R3 opportunities to those who are interested in becoming hunters at a local and state level. In fact, some of those organizations may even be called to help deliver field exercise and learn-to-hunt opportunities that you may have access to through your participation in this course. Access to these R3 hunting and shooting programs is a way for you to gain firsthand experience and become familiar with the physical and mental aspects of hunting and shooting as they are described in this curriculum. This is not done to recruit you to become a hunter but rather help you better understand hunting through your own personal experiences of trial or observation.

For conservation professionals there are several NGO's that work specifically to assist in the national organization, delivery, and enhancement of R3 programs for hunting and the shooting sports. They include: The National Shooting Sports Foundation (NSSF), The International Hunter Education Association (IHEA), and The Council to Advance Hunting and Shooting Sports (CAHASS). Also, notable is the Recreational Boating and Fishing Foundation (RBFF) making parallel efforts for angling and boating.

Building consensus among professionals who administer R3 regarding "best practices" and how to share information effectively is important for success. Of greater critical importance is the ability to ensure that the conservation dollars used to support R3 programs are being effectively spent and that R3 programs are producing the intended outcomes at the state and national level. One such effort to organize and clarify the challenges at hand was led by CAHASS and the Wildlife Management Institute (WMI) in the creation of the *National Hunting and Shooting Sports Action Plan*. This resulted in an extensive, collaborative document from the R3 community that identified the strengths, weaknesses, and areas for improved delivery of R3. The following exert from the 2016 Action Plan's introduction provides forward looking context for the challenges faced. This is followed by a thorough review of needs and action items in the body of the document.

"Until very recently, most R3 efforts have focused heavily on programs that provide the novice with introductory trial opportunities that, at best, increase awareness of or interest in hunting and the shooting sports. Moreover, these efforts have generally only served the youth of traditional audiences (white, male, middle-aged), and have thus catered to those already likely to be mentored into hunting or recreational shooting by their families. As a result, national and state R3 efforts have done very little to recruit new participants from multiple demographics and provide them with the various learning opportunities they need to graduate from an interested observer to an active participant. The R3 programs administered by agencies, conservation and shooting sports organizations, and the outdoors industry have remained largely uncoordinated and duplicative in their efforts.

Partnerships within the [R3] stakeholder community, in conjunction with an integrated framework to identify needed strategies and effectiveness measures, are key to stabilizing and increasing the number of hunting and shooting sports participants. Coordination of local and national efforts under a unified plan will provide clarity regarding where R3 initiatives are needed and the resources required to support those efforts." – National Hunting and Shooting Sports Action Plan. 2016

Full Report Provided

Serving as intended, the National Hunting and Shooting Sports Action plan helped to organize state, regional, and national working groups and committees to organize and improve R3 efforts. This led to the specific creation of the National R3 Implementation Workgroup, whose charge was intended to further the implementation of the R3 action plan. Recent products of the Implementation Workgroup include the National R3 Clearinghouse, marketing best practices, and the identification of R3 implementation priorities to guide federal grants and funding (<u>www.nationalr3community.org</u>). The entirety of the R3 community continues to make improvements toward many of the items identified in the R3 Action Plan and integrate their existence within the broader conservation profession.

It is notable that the R3 effort is larger than any one plan, group, or organization and the profession continues to see rapid growth and adaptation from the R3 community. There are ever evolving challenges and a consistent need for effective feedback loops to monitor success and document improvements. A broader challenge shared by many outdoor recruitment efforts is that of participant diversity. As you saw in Demographics, hunting is an activity largely dominated by white, aging, males. You also saw that female hunters are the largest growing demographic and there are certainly local examples of positive outreach and engagement to racial, gender, and socially diverse user groups.

An effective method to better understand how we might be more successful in reaching diverse and minority audiences is the use of case studies. Case studies and focus groups allow us to better understand how individuals from various cultures have recently become hunters. One of the initial challenges faced by the R3 community was its members largely only replicated those experiences and conditions that motivated them to become hunters. This approach runs the risk of inadvertently excluding other minority groups who may have different motivations or social realities to navigate when considering why they might consider hunting (or any other outdoor recreation). To see firsthand how case studies and social science can be applied to improving outreach to more diverse user groups see the attached report, Recruitment of Hispanic Hunters, and the included references.

For this case study, 75 telephone interviews were conducted with Hispanic hunters in 5 states (Arizona, Texas, Florida, Utah, and Michigan). These states were selected because they had robust license databases that could be screened for Hispanic names, participant age, and licensing purchasing history.

	STATE'S LICENSE DATA ANALYZED					CUMULATIVE	
STEPS IN THE INTERVIEW SELECTION PROCESS	ARIZONA	FLORIDA	MICHIGAN	TEXAS	UTAH	TOTAL	AVERAGE
Individuals as identified by state's license sales	365	4,324	279	365	1,836	7,169	1,433.8
Attempted contacts to screen and interview	70	119	160	125	80	554	110.8
Resulting interviews (target was 15 per state)	15	15	15	14	15	74	14.8

While far from "big data" analytics used by corporations to research marketing algorythems, the process of organizing screening and standardizing data from 5 state agencies license sales data highlights the challenges faced by R3 research and program improvement plans. Several key challenges and conclusion were ultimately identified through this project.

Challenges

ALL NEW HUNTERS FACE A VARIETY OF CHALLENGES. For the Hispanics who participated in this case study, some of these challenges may loom larger, such as language barriers. Some participants identified the rate of acculturation, education, social background, and/or immigration status as important considerations (see full report for details). Additional obstacles that may limit participation by Hispanics are:

- Expenses associated with buying equipment, travel to hunting areas, or acquiring a lease
- Having access to hunting equipment, or knowledge to purchase the correct equipment
- Access to or knowledge of places to hunt
- Fear of additional scrutiny by law enforcement personnel if they inadvertently violate a game law

Other research has found that some segments of the Hispanic community may have a fear of, or bias against, firearms ownership.

Conclusions

THE PARTICIPANTS IN THIS STUDY SUGGEST THAT THERE ARE LIKELY TO BE MANY HISPANICS WHO MAY BE INTERESTED IN HUNTING. While Hispanic hunters appear to navigate through the adoption model much like other new hunters, facing similar challenges and motivations, some need assistance in understanding state laws and requirements, as well as steps necessary to become a hunter.

Specific marketing and awareness efforts focused on the Hispanic community would improve awareness of hunting opportunities and the agencies' role in wildlife management, and would help overcome many perceived barriers to participation.

"By conducting detailed one on one interviews with Hispanic hunters who self-identified as "having recently become hunters", we were able to better inform future Hispanic R3 programs. This was done in a context that was most helpful to other potential Hispanic users, while still using core aspects of the Adoption Model and applicable portions of existing R3 programs. This process can be replicated to better inform outreach efforts to many other minority groups."

Full Report Provided

R3 is a significant and growing part of many conservation organizations budget and workload. During your career, you will likely see the implementation of wildlife conservation funds divided into various projects which are certain to include Hunter Education and R3. These programs specifically receive an annual and notable apportionment of Wildlife and Sport Fish restoration funds in every state. There are new and evolving policy being administered through several recent congressional bills that will enhance and change how federal conservation dollars are spent in agencies. This will draw more and more professionals into the conversation about stakeholder groups, priority spending, and diversified funding.

Finally, as someone who works in the natural resource's profession, you may encounter a family member, friend, co-worker, or citizen constituent who is interested in getting started as a hunter. Knowing how to assist them, where they may find resources, and being able to identify what roles state, federal, and private organizations play in that process will be beneficial and relevant.