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EXAMINING THE PERCEPTIONS ASSOCIATED WITH SUNDAY HUNTING  
RESTRICTIONS IN SOUTH CAROLINA

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A Thesis  
Presented to  
the Graduate School of  
Clemson University

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Science  
Parks, Recreation, and Tourism Management

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by  
Elizabeth Ryan Piller  
December 2022

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Accepted by:  
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## ABSTRACT

Public land is an invitation for many to engage with the natural world through a variety of different activities. Sometimes these activities are mutually exclusive and can cause land use conflict, which natural resource managers must navigate. One example of this conflict is restrictions to Sunday hunting. In South Carolina, Sunday hunting is allowed on private land but banned on public Wildlife Management Area (WMA) land. This regulation remains from ‘blue laws,’ laws prohibiting certain activities on Sundays to honor the Christian Sabbath (Balestra, 2008). Blue laws are typically thought of as prohibiting alcohol, but eleven U.S. states currently have restrictions on Sunday hunting (Casola et al., 2020). There is little research to specifically understand the populations’ attitudes, values, and perceptions of Sunday hunting. A statewide survey was conducted to inform South Carolina Department of Natural Resources on the citizens of South Carolina’s favorability toward Sunday hunting (n = 12,463). The survey offered participants the chance to answer open-ended questions about why they were opposed or in favor of hunting on Sundays. This thesis research utilizes thematic coding and analysis of the two open-ended questions from the entire survey. Results of the thematic coding provide a framework for understanding the reasons South Carolina residents are in favor or opposed to allowing hunting on Sundays. Reasons for being in favor of Sunday hunting include 1) more opportunity, 2) limits on time, 3) economic benefit, and 4) a separation of church and state. Reasons survey participants gave for being opposed include 1) safety, 2) religion, 3) tradition, and 4) impact on wildlife. A typology was developed from the data to understand these reasons in context with each other. The

typology consisted of four categories of people engaged with SC public lands: pragmatic, ideological, adaptable, and indifferent. A continuum was created to illustrate how all of the categories might interact with one another in practice. This research can help multiple-use land managers in developing communication strategies and understanding, identifying, and predicting conflict in land use.

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## CHAPTER ONE

### INTRODUCTION

In South Carolina, Sunday hunting is legal on private lands, but prohibited on Wildlife Management Area lands managed by the state of South Carolina. This regulation remains from ‘blue laws,’ laws prohibiting certain activities on Sundays to honor the Christian Sabbath, enacted in the colonial era (Balestra, 2008). Blue laws are typically thought of as prohibiting alcohol or other retail sales, but eleven U.S. states (ME, MA, MD, WV, VA, CT, DE, PA, VA, NC, and SC) currently have restrictions on Sunday hunting as a result of blue laws (Casola et al., 2020). These laws have been debated as unconstitutionally punishing citizens for a religious purpose (Ovitt, 2018). However, little research has been done in these states to specifically understand the populations’ attitudes, values, and perceptions of Sunday hunting.

During the summer of 2021, Clemson University, in collaboration with the South Carolina Department of Natural Resources (SCDNR), conducted a web-based questionnaire throughout South Carolina to determine the perception of citizens in South Carolina related to Sunday hunting in Wildlife Management Areas (WMAs). Five listening sessions were held throughout the state and open to the public. The survey was intended to inform SCDNR and the South Carolina legislature on the overall consensus of the state before making a decision regarding the blue law prohibiting Sunday hunting on WMAs. The research survey created by Clemson researchers, and distributed through SCDNR, provided scaled and numerical data as well as four open-ended questions. A total of 15,502 surveys were completed. After reviewing the data for outliers and

eligibility, 12,463 surveys were determined to be useable. Additionally, open-ended listening sessions were facilitated by Clemson researchers and members of SCDNR. These were conducted statewide throughout the time the survey was open for use. Listening sessions were held in Pickens, Clinton, Columbia, Florence, and Moncks Corner from June-July 2021. 206 people attended these sessions, the sessions were all recorded, and a set of open-ended questions was distributed at every listening session.

Analysis of the data from the survey and the listening sessions was compiled and published in a technical report (Gagnon et al., 2021). Those strongly opposed to Sunday hunting to those who strongly agreed was a 7:13 ratio. Most of the respondents were hunters (86%). However, it is unclear what a representative sample of the WMA's would be. A representative sample would require year-round field work at a variable sample of WMA's across the state. It is also important to clarify that identity as a hunter does not predict favorability for Sunday hunting. The report analyzed a sub-set of responses (10% of each) from each open-ended question, randomly selected from information-rich answers. The primary categories developed from this subset, for why respondents were *in favor* of Sunday hunting were 1) opportunity/limits on time, 2) equity/access, 3) common sense/economic/reducing congestion, 4) separation of church and state, 5) increased participation, 6) rights perspective, and 7) sound management. The categories for why respondents were *in opposition* to Sunday hunting were 1) increased pressure on wildlife, 2) impact on other WMA recreation, 3) religion, 4) safety, 5) don't change the system, and 6) entitled hunters are going to get worse. The power of the qualitative analysis of the data allowed for a development of themes related to both large and small percentages of

the overall sample. This allows for an understanding of important factors that may represent a small number of citizens, but may be crucial for managers to understand for effective management implications to be identified.

The goal of this thesis is two-fold: First, a review of data and laws related to Sunday hunting restrictions in the eleven states with restrictions in place. This review allows for the study in South Carolina to be understood in relation to the broader context of hunting and blue laws in the United States. Secondly, in order to more fully understand the WMA user population in South Carolina represented in the survey, and the factors that contribute to respondents being in favor or opposed to Sunday hunting restrictions, this instrumental case study examined the full dataset ( $n = 12,463$ ) of responses to two of the open-ended questions about favorability or opposition to hunting on Sunday. Further data interpretation instructed the development of a typology for future use by researchers and resource managers. Specifically, this study was designed to answer the following questions:

1. What is the context of Sunday hunting restrictions?
2. What factors contribute to being in favor of Sunday hunting in South Carolina?
3. What factors contribute to being opposed to Sunday hunting in South Carolina?
4. Where might conflict take place if Sunday hunting is allowed and what might it look like in South Carolina?
5. What do these trends tell SCDNR about their user population?

This thesis presents the examination of the above research questions in two papers for publication. The first is a review article entitled *Blue Laws and Sunday Hunting Prohibition* and addresses the first research question. This article provides an understanding and context for the history of blue laws as it pertains to hunting. It also examines trends and demographics of hunting and the perceptions and attitudes towards Sunday hunting over time. The second article addresses research questions two through five above, and is entitled *Examining the Perceptions Associated with Sunday Hunting Restrictions in South Carolina*. This article highlights the analysis of the open-ended data regarding Sunday hunting in South Carolina and leads to a typology that can be instrumental to land managers and researchers interested in human interactions with nature.

This data, as well as the topic of hunting, can be deeply emotional. People have strong beliefs and opinions and view their relationship with the land in many different ways. Many verification strategies were employed to address bias that might threaten the integrity of the data interpretation and analysis. These strategies included the review article on the context of blue laws and Sunday hunting, weekly meetings with the original coder, my advisor and an experienced qualitative researcher, and reflexivity. Reflexivity, a key aspect of qualitative research, is a process grounded in skepticism and questioning. It allows the researcher to be aware of their own bias and influence towards the research. I was born and raised in South Carolina and I have a deep love for the state, its people, and its history. This allowed me to focus on the data through a lens of representing ‘my’ people with respect and dignity. The weekly meetings with my advisor, Dr. Baldwin,

allowed for a discussion of mine and other's assumptions. We focused on ways to use my established knowledge as an expert, rather than as a negative form of bias. Ultimately in the quest to fully capture the respondents' answers and "get it right," I read every single open-ended response from the survey. It was an endeavor that took months, but one that allowed me to be immersed in the views of South Carolina citizens using WMAs. It is my sincere hope that this will lead to management practices that support the people, wildlife, and land of South Carolina that I love.

## CHAPTER TWO

### BLUE LAWS AND SUNDAY HUNTING PROHIBITION

Blue laws, or Sunday laws, are laws that restrict certain activities on certain days, typically Sundays. In the western world, they were originally enacted for religious purposes and to encourage people to honor the Christian Sabbath. The first Sunday law was passed in 321 A.D. by Roman Emperor Constantine. The law stated, “on the venerable Day of the sun, let the magistrates and people residing in cities rest, and let all workshops be closed. In the country, however, persons engaged in agriculture may freely and lawfully continue their pursuits: because it often happens that another Day is not so suitable for grain sowing or for vine planting (McDonald, 2016).” Instead of observing the Christian Sabbath, this law was meant to allow a day for citizens to worship the Sun god *Sol Invictus*.

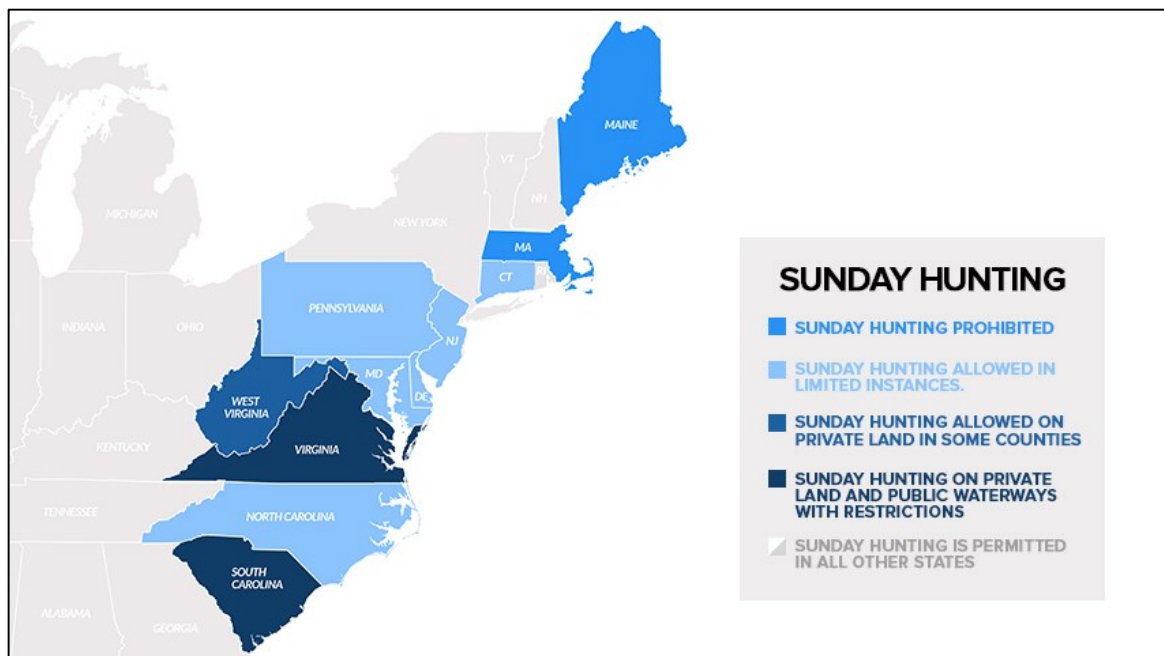
The first Sunday law in the western world was passed by Sir Thomas Dale Knight, governor of the Jamestown Colony of Virginia, in 1612. The series of laws, entitled the ‘Lawes Divine, Moral, and Martial’ (often known as Dales Code), contained several religious-focused laws. One required every colonist to attend Sunday church in the morning and the evening. Failing to do so would result in increasing punishments, the final offense being punishable by death. The law also stated that colonists must honor the Sabbath through church and prayer and may not gamble, whether at home or in public (Strachey, 1969). Similar laws were adopted throughout the colonies. In time, they picked up the name ‘blue laws.’ While the origin of this term remains unknown, most historians believe it is because religious dissenters began to use the term ‘blue’ as a synonym to

‘puritan’ in the mid-18<sup>th</sup> century. The term was used to convey the idea that religious puritans were rigid, gloomy, strict, and, overall, not fun (Mahoney, 2015). The theory that Sunday laws were written on blue paper, and hence called blue laws, has not been supported by evidence.

Today, blue laws are typically thought of as prohibiting alcohol or other retail sales. Many states have slowly repealed their blue laws, although many still remain. South Carolina state law bans the sale of alcohol on Sundays, while giving cities and counties the option to hold referendums to allow it (ABC Act, 1996). Greenville County approved Sunday alcohol sales as recently as 2016. Although less commonly thought of, several Sunday hunting restrictions remain as a result of blue laws. Figure 1 shows the eleven U.S. states (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, North Carolina, Pennsylvania, South Carolina, Virginia, West Virginia) that currently have some type of restriction on Sunday hunting (Casola et al., 2020). Restrictions can differ based on public and private land, the type of animal that is being hunted, the time of the hunting season, and the particular county (Balestra, 2008).



**Figure 1.** *Map of Hunting Restrictions*



These laws have been largely debated as unconstitutionally punishing citizens for a religious purpose (Balestra, 2008). However, in 1961, the US Supreme Court case *McGowan v. Maryland* ruled that blue laws did not violate the constitution if they created a secular, public health benefit as a day set aside to rest (*McGowan v. Maryland*, 1960). In *Lee et al. v. SCDNR* in 2000, two big-game hunters sued under the equal protection clause when they were not allowed to hunt on their private land, located in Newberry and Fairfield County, on Sundays. At the time, Sunday hunting on private land was prohibited in eighteen Upstate counties. The remaining twenty-eight counties did not have any regulations strictly prohibiting Sunday hunting on private land. The circuit court held that because hunting was not a fundamental right, all the South Carolina Department of Natural Resources needed was a rational basis for banning Sunday hunting to uphold the

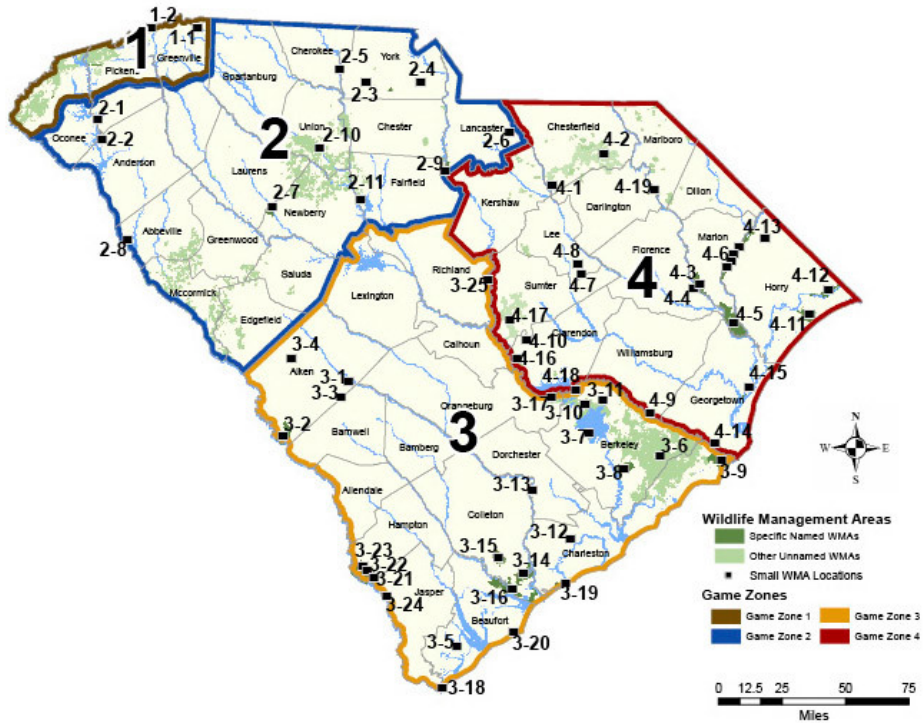
ban. SCDNR stated that the law was necessary to preserve the finite wildlife resources and to give other recreational users time to use the area. They also maintained that allowing hunting on private land would make it too difficult to enforce the statewide ban on Wildlife Management Areas (WMAs) adjacent to private lands. The court ruled in favor of SCDNR (*Lee et al. v. SCDNR*, 2000). However, in the General Election of 2010, South Carolina citizens voted to amend the South Carolina Constitution to include a right to hunt, effectively allowing Sunday hunting on private lands. (S.C. Const. art. I, § 25).

### **Hunting in South Carolina**

Wildlife Management Areas (WMAs) in South Carolina are a statewide system of leases that SCDNR holds on land throughout the state for the “enjoyment of all wildlife enthusiasts” (SCDNR, 2020). In total, the WMA system contains 140 units and 1,082,505 acres of land with a variety of landowners including Clemson University, Duke Energy, USDA Forest Service, and local families.

To hunt on a WMA requires a special hunting permit. Currently, the annual pass for WMA hunting is \$30.50 (SCDNR, 2020). This does not include the price of the state hunting license, which is currently \$12 annually for residents. Hunters must complete a hunter education course before obtaining a hunting license, unless they are already certified in another state. According to the SCDNR website, the sale of these permits enables them to “lease approximately 1.1 million acres of land for wildlife conservation and management” (SCDNR, 2020). South Carolina is divided into four game zones, as seen in Figure 2.

**Figure 2. Map of SC Game Zones**



Rules and regulations on WMA vary based on the game zone, animal being hunted, type of weapon being used, and time of year. Sunday hunting is prohibited on all WMA land. All users are asked to wear orange during most hunting seasons. Rules can also vary between WMA's in the same game zone. Gun hunting season ends on January 1<sup>st</sup> in all zones. The full list of rules and regulations for WMA hunting can be found on the SCDNR website.

## **Economic Impact**

Several studies have examined the economic impact of blue laws. In their paper analyzing Sunday hunting restrictions, Ovitt (2018) proposed that repealing blue law restrictions would lead to more hunter recruitment and retention, which would lead to increased sales of hunting licenses and greater potential resources for supporting state agencies. Phrased differently, blue laws restricting Sunday hunting lead to less hunter recruitment and retention and therefore less funds. According to the 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation survey, in collaboration with the U.S. Census Bureau, yearly expenditures of hunting were reported at \$26.2 billion. Trip-related expenditures accounted for \$9.2 billion, equipment expenditures accounted for \$12.8 billion, land leasing and ownership accounted for \$2.9 billion, and licenses, stamps, tags, and permits accounted for \$0.8 billion (U.S. Fish & Wildlife Service, 2016). According to Southwick Associates in cooperation with the U.S. Fish and Wildlife Service, in 2001, deer hunting in South Carolina resulted in \$370,844,792 in retail sales. 6,981 jobs were related to hunting retail and activities. Hunting activities accounted for \$6,302,890 in state income taxes and \$25,197,657 in federal income taxes (Southwick Associates, 2002). In 2018, Southwick Associates, in accordance with the National Shooting Sports Foundation, reported that the multiplier effect of hunting (ammunition, licenses, gas, meals, hotels, etc.) contributed \$36 million to the GDP. Jobs in the industry total nearly 525,000, leading to \$21.5 billion in salaries and wages (Southwick Associates, 2018). Cabela's, a leading hunting retail company, employs 19,100 individuals, and its 2017 reported revenue was \$4.1 million (Noyan, 2017).

During the economic recession of 2008, hunting equipment sales increased by 16 percent, while the overall sales of sporting equipment fell (National Sporting Goods Association, 2009).

An economic impact report on Sunday hunting was created by Southwick Associates for the Pennsylvania Legislative Budget and Finance Committee of the General Assembly. The report determined that the economic contribution of Sunday hunting could be as high as \$804 million, with \$460 million being in retail sales. Without including travel and hunting equipment, Sunday hunting would generate \$496 million per year. Just adding two Sundays of hunting would generate \$317 million in economic impact, support 3,301 jobs, and generate \$23.3 million in state and local taxes (Southwick Associates, 2011).

Hunting also contributes to wildlife conservation through the Federal Aid in Wildlife Restoration Act, also known as the Pittman-Robertson Act. This act provides funding for states for wildlife restoration, hunter education, and conservation and is administered by the U.S. Fish and Wildlife Service (Wildlife Restoration, 2011). Funds come from an 11 percent tax on firearms and ammunition, 10 percent tax on pistols and revolvers, and 11 percent tax on archery equipment. The money is deposited into the Federal Aid to Wildlife Restoration Fund in the Treasury and is then distributed out to several programs and grants. These include wildlife restoration, basic hunter education and safety programs, enhanced hunter education and safety grants, multistate conservation grants, and program administration. State distribution is based on the land and inland water area of the state as well as the number of hunting licenses sold. In the

2019 fiscal year, South Carolina was apportioned \$8,941,843 (Crafton, 2019). Although the act contributes to programs for hunters, a report done by Southwick Associates showed that only 22.5 percent of firearm and ammunition sales were purchased for hunting-related purposes (“Breaking Down Excise Taxes,” 2019).

### **Impact on the Resource**

Not only do blue laws have social and economic consequences, but they also affect the resource itself. Repealing Sunday hunting restrictions could alleviate some issues related to white-tailed deer overpopulation. White-tailed deer typically eat the forest understory which leads to a ‘ghost forest’ – a forest lacking ground coverings and therefore unable to provide a suitable habitat for many species (Ovitt, 2018). Population control, through hunting or culling, has also been used to reduce chronic wasting disease in white-tail deer populations (Uehlinger et al., 2016). With the increase in deer population as well as human population, car collisions with deer are likely to continue to increase. Yearly, there are approximately 1.5 million deer-vehicle collisions in the United States. These accidents result in over 200 human fatalities, 1.3 million deer fatalities, and over \$1 billion in property damages (Mastro et al., 2008).

### **Growth and Decline of Hunting as a Sport**

The U.S. Fish and Wildlife Service produces a national hunting license holder report each year. In 1982, over 16 million Americans ages 16 and older were licensed hunters, the highest number since the records began in 1958. Since 1982, the number has dropped almost every year (U.S. Fish and Wildlife Service, 1958-2020). In the most recent National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, only

11.5 million Americans had hunting licenses (U.S. Fish and Wildlife Service, 2016). As participation in hunting declines, participation in other outdoor activities is rapidly increasing. In the 2021 Outdoor Participation Trends Report, the Outdoor Foundation recorded that 63.8 million Americans participated in running, jogging, and trail running. 57.8 million participated in hiking, 52.7 million in road biking, mountain biking, and BMX, and 47.9 million in camping (Outdoor Foundation, 2021).

In their study, Robinson and Ridenour (2012) looked for causes of the decline in hunting. They found that being young, white, male, and less educated predicted hunting participation. Living in a rural area, as opposed to an urban area, also predicted hunting participation. Their study found that in states with less media consumption (measured by the number of hours spent on the internet and watching TV each day), there were more hunting license purchases, higher gun ownership levels, higher costs of hunting licenses, less wealthy residents (state's average income divided by the U.S. average), less urbanized residents (cities over 50,000), and less costly land leases.

Noting the decline in hunting specifically in the Southeastern U.S., Poudyal et al. (2008b) developed a model that indicated an increase in urban development and population led to a decrease in hunting participation in the area. In their conclusion, the authors noted that a decrease in hunting, and therefore a decrease in license purchasing, could have a negative economic impact on state agencies. A separate study by Poudyal et al. (2008a) found that the demand for hunting licenses in the Southeastern U.S. was predicted to decline 9 percent by 2030. The study also focused on socioeconomic, ecological, and institutional explanatory variables within the hunting license demand

equation. Variables with a negative and significant impact on license demand included average license fee, average commute time to work, and counties with a higher percentage of residents having college degrees and full-time jobs. Counties with gun clubs and a greater percentage of white, 35-65-year-olds with less than a high school diploma had a positive and significant impact on license demand. The results were consistent with existing literature stating that hunting popularity is decreasing with the younger generation. In combination with these demographic variables, Poudyal et al. (2008a) noted that the predicted loss of forest areas, decrease in the younger generation hunting at the same time as the current hunting generation aging out, and decrease in the white population of the Southeast by 2030 could lead to a 37 percent decrease in per capita demand for hunting. While the projected population growth in the region could signal a growth in hunting, the authors note that these factors will offset any growth.

### **Hunting Demographics**

According to the 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation survey, in collaboration with the U.S. Census Bureau, 11.5 million Americans identify as hunters. Of those identified hunters, 90 percent were male, while only 10 percent were female. The largest age group was 55-64 years old (24 percent), followed by 45-54 years old (22 percent). Ages 17-24 only accounted for 11 percent of the population. Participation in hunting increased as household income increased until it reached \$100,000 and then began to decrease. Levels of education and participation rates were mostly similar. The population was 97 percent white, while the sample size for



African Americans and Asians was too small to be reported reliably (U.S. Fish & Wildlife Service, 2016).

As previously noted, several demographics – such as being white, male, less educated, and living in a rural area—were correlated with an increase in hunting participation (Robinson & Ridenour, 2012). Models created from the National Survey on Recreation and the Environment and GIS data estimated that immigrant status, age, living in an urban dwelling, and being black or Hispanic are all negatively correlated to visiting wildland. Being male and having a higher income and level of education were positively correlated to participation in wildland recreation (Bowker et al., 2006.) Creating a model to interpret constraints to hunting participation, Wright and Goodale (1991), found that age and hunting participation were inversely correlated, more men than women hunted, and people reporting less education hunted more than those with higher education levels. Those living in rural areas were also more likely to hunt than those in urban areas.

### **Attitudes Towards Hunting**

MacKay and Campbell (2004) found that in Manitoba Canada, the public was more likely to support hunting as a means of tourism rather than trophy hunting. They also found that residents, even those who didn't support hunting, viewed hunting fees to support wildlife management in a positive light. In their study of Virginia hunters, Wright and Goodale (1991) noted several trends. Age and participation were inversely related, more males than females hunted, rural areas had more hunters than urban areas, and more educated people were less interested in hunting. Within the hunting group, more educated participants wanted to increase their frequency of hunting while lesser-educated

participants did not want to increase. Constraints to hunting noted in the study were anti-hunting attitudes (ex. 'Hunting should be outlawed since there is no longer a need to hunt to survive'), limited access to hunting lands, limited knowledge of hunting, lack of someone to hunt with, license/travel/equipment costs, perceived problems on public lands such as safety and crowding, work or family commitments, and physical effort.

An online study of 825 U.S. residents was conducted by Byrd, Lee, and Widmar (2017) to determine the public's view of hunting, hunters, and hunting practices. The respondents were asked to agree or disagree with several statements. 87 percent of respondents agreed it was acceptable to hunt for food. Comparatively, only 37 percent believed that it was acceptable to hunt for trophy. 48 percent of respondents agreed that hunting helps to keep nature in balance, 45 percent agreed that hunting helps to reduce damage to agricultural crops, and 31 percent agreed that hunting helps reduce wildlife diseases. 69 percent of respondents agreed that everyone should take a hunter safety course, and 37 percent agreed that hunters often ignore safety rules. Respondents that were male, knew other hunters, participated in hunting-related activity, and visited livestock operations had more positive perceptions of hunting. Women, pet owners, and those who did not know a hunter had more negative perceptions. One quarter of the respondents said that they did not know enough about hunting techniques (including hunting over bait, hunting in wildlife preserves, trapping, and using dogs) to comment on whether the techniques were detrimental to animal welfare.

## **Sunday Hunting Studies**

Few studies have been done on attitudes toward Sunday hunting. In 2006, Hooper distributed questionnaires to 917 North Carolina hunters. The reported constraints to hunting included time, not enough game animals, and confusing hunting regulations. Those opposed to Sunday hunting gave reasons such as Sunday being a holy day and their desire for a day to be set aside for other recreationists. Those in favor of Sunday hunting cited reasons such as an additional day for working people to hunt and the idea that Sunday hunting should be a personal decision and not a government decision. Approximately 60 percent of respondents noted that even with Sunday hunting, they would most likely hunt the same number of days. Those opposed to Sunday hunting remained opposed when limitations such as age, type of animal, type of weapon, and time of day were introduced. Those initially in favor became opposed when limitations were introduced, indicating an 'all or nothing' mindset. Looking at demographics, Hooper noted that respondents who were younger, lived in urban areas, hunted big game, and did not own land were more likely to be in favor of Sunday hunting. Respondents who were older, lived in rural areas, attended church, and hunted small game were less likely to be in favor (Hooper, 2006).

A Virginia study conducted in 2006 sent questionnaires to 2,789 hunters in the state (Jagnow & Ellis, 2006). They found that 64 percent of respondents were in favor of Sunday hunting, 34 percent were opposed, and 4 percent had no opinion. Similar to the Hooper study, 87 percent of those in favor wanted Sunday hunting with no limitations. Those in favor of Sunday hunting responded that allowing it would result in an increase

in youth participation, interest in hunting, retaining current hunters, number of animals harvested, and opportunities to hunt. The authors found that the greater the distance a hunter had to travel to hunt, the more the hunter supported Sunday hunting. Respondents who were younger and living in urban/suburban areas were more likely to support Sunday hunting than those who were older and living in rural areas.

In 2020, North Carolina Wildlife Resource Commission and Group Solutions conducted a study to better understand the attitudes, values, and perceptions of participants regarding Sunday hunting. The study administered 30,000 surveys and conducted listening groups with a total of 400 people. Findings included the concern of urban encroachment and habitat fragmentation, a sense of ownership that North Carolina citizens felt toward the land, and the belief that all game land users should contribute something towards maintaining them. Hunters were concerned with nonrestrictive access, the complexity of game land laws, and the limitations imposed on them by day, species, or weapons. Non-hunters, comprised of bird watchers, equestrians, hikers, and bikers, were concerned with peace, quiet, and safety. Compromises that were discussed in the listening sessions included archery only on Sundays, allowing Sunday hunting but removing hunting from a weekday, Sunday hunting by lottery, buck-only hunting, specific permits for Sunday hunting, alternate Sundays by week or month, and allowing Sunday hunting but shortening the deer season (Boston & Herr, 2020).

Perhaps the most cited Sunday hunting survey is that of Casola et al. in 2020, where 2,096 North Carolina citizens were surveyed. Reasons for supporting Sunday hunting included doubling the number of opportunities for working people, facilitating

recruitment and retention, assisting wildlife managers in meeting harvest goals, and the belief that it was a personal choice. Those against Sunday hunting cited reasons such as safety, the impact on game populations by not having a day ‘off,’ and being respectful of religious views. Only 60-70 percent of the hunters surveyed were in favor of Sunday hunting. Those most opposed to Sunday hunting were equestrians and bird watchers. Casola noted that conflict among these user groups was rare but typically occurred due to differences in social values and negative perceptions of hunting. Conflict could be reduced by enacting safety precautions, zoning, and increasing education (Casola et al., 2020).

In their historical overview of Sunday hunting, Balestra (2008) noted current arguments in favor and against Sunday hunting across several states. Those in favor of Sunday hunting cited reasons such as an extra day to hunt, working six days a week, the declining number of hunters (noted in Virginia), the ability to control the deer population, the ability to control the overpopulation of foraging animals, especially for farmers (noted in Maryland, Connecticut, and Pennsylvania), and the economic benefits (noted in Maine, Pennsylvania, and Virginia). Those against Sunday hunting cite a day of rest, religion and tradition, the desire of non-hunters to have a day to themselves, and the belief that hunters have enough opportunities as it is. Two interesting caveats in this debate were noted, as found and cited in two opinion pieces in different states. In a Pittsburgh newspaper, it was noted that the concern of working six days a week had never been able to overcome the ‘traditional opposition to change’ (Moyer, 2006). In regard to economic benefit, a sportsman magazine in North Carolina noted that any benefit would

be offset by the added expenses of employing and compensating wildlife enforcement officers (Holt, 2007).

In summary, documented opposition to Sunday hunting includes the perception of reduced safety, religious reasons, a negative impact on game populations, and the idea that other recreational groups should have a day of peace, since they represent more of the user population (Casola et al., 2020; Hooper, 2006; Ovitt, 2018). Proponents of Sunday hunting documented reasons such as increasing time, opportunity, and access to hunting lands (especially for the working class), more opportunities to try new places to hunt, an increase in participation and interest in hunting (commonly referred to as R3 – recruitment, retention, and reactivation), and the belief that the decision to hunt should be personal and not a government decision (Birdsong, 2019; Casola et al., 2020, Hooper, 2006; Jagnow and Ellis, 2006; Ovitt, 2018). Common demographic trends of being in favor of Sunday hunting include being young, male, and living in urban areas. Demographic trends of being against Sunday hunting include being older, female, religious, and living in rural areas (Casola et al., 2020, Hooper, 2006; Jagnow and Ellis, 2006). Dog hunting on Sundays was mentioned as being unpopular among both hunters and non-hunters in several studies (Boston & Herr, 2020; Jagnow & Ellis, 2006). A short summary of these findings is listed in Table 1.

<b>Table 1. Sunday Hunting Studies</b>			
<b>Study</b>	<b>Lessons Learned</b>	<b>Study Sample</b>	<b>States Surveyed</b>
Hopper, 2006	Reported constraints to hunting; reasons for being in favor or opposed to Sunday hunting; demographic analysis	<i>n</i> = 917; hunters only	North Carolina
Jagnow & Ellis, 2006	Percentages and reasons for those opposed and in favor; demographic analysis	<i>n</i> = 2,789; hunters only	Virginia
Boston & Herr, 2020	Reasons for being in favor or opposed; compromises between user groups	<i>n</i> = 30,000 / 400 attending listening sessions; hunters and non-hunters	North Carolina
Casola, 2020	Categories presented for arguments in favor and opposed	<i>n</i> = 2,096; hunters and non-hunters	North Carolina

### **Conflict in Outdoor Recreation**

Jacob and Schreyer (1980) created four major classes of factors which could lead to conflict in outdoor recreation. They are activity style, resource specificity, mode of experience, and lifestyle tolerance. Activity style refers to the personal meanings that people attach to activities. Differences in this style include the intensity of participation, status, experience, and definitions of quality. Resource specificity represents how individuals believe the resource should be used, varying by evaluations of resource quality, status, and sense of possession. While sense of possession, or place attachment, may lead to a user's increased desire to protect the land (Halpenny, 2010), it may also lead users to believe that they should have a say in how the area is managed (Jacob & Schreyer, 1980). Conflict here occurs when a user with "a possessive attitude towards the

resource confronts users perceived as disrupting traditional uses and behavioral norms” (Jacob & Schreyer, 1980, p. 374). The third category, mode of experience, refers to the varying expectations of how one’s interaction with the natural environment should be. Lastly, conflict can occur within lifestyle diversity. Here, an ‘in-group’ and an ‘out-group’ are perceived and evaluated. The authors note the importance of confronting this type of user group conflict early.

Building off the theoretical foundations of the Jacob and Schreyer (1980) article, Vaske et al. (1995) conducted a study among hunters and non-hunters at Mount Evans in Denver, Colorado. The study found that interpersonal conflicts—conflicts occurring when the presence of one group interferes with the goals of another—were limited due to the natural topography and zoning regulations. Much of the conflict stemmed from differences in social values, where the hunters and non-hunters perceived conflict regardless of interaction with one another. Because of this, the authors conclude that conflicts in social value are not likely to be resolved through separating the user groups, but rather through education (Vaske et al., 1995).

In a study of conflict between hunters and hikers, Reis and Higham (2010) found that hunters tend to travel in larger groups, for longer periods of time, with much more equipment, food, and alcohol. However, there was very little perceived conflict between the two groups, and they mostly recognized and accepted their differences. Education of recreation groups was noted as a possible management response to conflict. This could include backcountry behavior norms, the importance of hunting (where other user groups oppose hunting as cruel), and the values that both user groups have in common.



This research highlights the many ways in which conflict can occur in outdoor recreation. A common theme found was that education may be the most useful tool when dealing with conflicts that stems from differences in social values.

## CHAPTER THREE

### EXAMINING THE PERCEPTIONS ASSOCIATED WITH SUNDAY HUNTING RESTRICTIONS IN SOUTH CAROLINA

#### **Introduction**

At its core, conflict exists when incompatible ideas, interest, or goals clash. Land-use conflict can be defined as conflict occurring when “land-use stakeholders have incompatible interests related to certain land-use units” (von der Dunk et al., 2011). This type of conflict can occur at different levels for different reasons, such as differing values, resource scarcity, power imbalances, property right disputes, and more (Brown & Raymond, 2014). Individuals ‘frame’ conflict by interpreting what the conflict is about, why it is occurring, the motivations behind the parties involved, and how it should be settled (Lewicki et al., 2003). Understanding this frame is helpful in managing and resolving conflict. It allows land managers to better understand the root of the issue so that they may manage conflict more effectively.

In South Carolina, Sunday hunting is legal on private lands, but prohibited on Wildlife Management Area lands managed by the state of South Carolina. This regulation remains from ‘blue laws,’ laws prohibiting certain activities on Sundays to honor the Christian Sabbath, enacted in the colonial era (Balestra, 2008). Blue laws are typically thought of as prohibiting alcohol or other retail sales, but eleven U.S. states (ME, MA, MD, WV, VA, CT, DE, PA, VA, NC, and SC) currently have restrictions on Sunday hunting as a result of blue laws (Casola et al., 2020). These laws have been debated as unconstitutionally punishing citizens for a religious purpose (Ovitt, 2018). However, little

research has been done in these states to specifically understand the populations' attitudes, values, and perceptions of Sunday hunting.

During the summer of 2021, Clemson University, in collaboration with the South Carolina Department of Natural Resources (SCDNR), conducted a web-based questionnaire throughout South Carolina to determine the perception of citizens in South Carolina related to Sunday hunting in Wildlife Management Areas (WMAs). Five listening sessions were held throughout the state and open to the public. The survey was intended to inform SCDNR and the South Carolina legislature on respondents' perceptions of Sunday hunting restrictions before making a decision regarding the blue law prohibiting Sunday hunting on WMAs. The survey created by Clemson researchers, and distributed through SCDNR, provided scaled and numerical data as well as four open-ended questions. A total of 15,502 surveys were completed. After reviewing the data for outliers and eligibility, 12,463 surveys were determined to be useable. Additionally, open-ended listening sessions were facilitated by Clemson researchers and members of SCDNR. These were conducted statewide throughout the time the survey was open for use. Listening sessions were held in Pickens, Clinton, Columbia, Florence, and Moncks Corner from June-July 2021. The sessions were attended by 206 people and were recorded. A set of open-ended questions was distributed at each listening session.

Analysis of the data from the survey and the listening sessions was compiled and published in a technical report (Gagnon et al., 2021). Those strongly opposed to Sunday hunting to those strongly in favor of was a 7:13 ratio. Most of the respondents were hunters (86%). However, it is unclear what a representative sample of the WMA's would

be. A representative sample would require year-round field work at several WMA's across the state. It is also important to clarify that identity as a hunter does not predict favorability for Sunday hunting. The report analyzed a sub-set of responses (10% of each) from each open-ended question, randomly selected from information-rich answers. The primary categories developed from this subset, for why respondents were *in favor* of Sunday hunting were 1) opportunity/limits on time, 2) equity/access, 3) common sense/economic/reducing congestion, 4) separation of church and state, 5) increased participation, 6) rights perspective, and 7) sound management. The categories for why respondents were *in opposition* to Sunday hunting were 1) increased pressure on wildlife, 2) impact on other WMA recreation, 3) religion, 4) safety, 5) don't change the system, and 6) entitled hunters are going to get worse. The qualitative analysis of data allowed for a development of themes related to both large and small percentages of the overall sample. This allows for an understanding of important factors that may represent a small number of citizens, but may be crucial for managers to understand for effective management implications to be identified.

In order to more fully understand the WMA user population represented in the survey and the factors that contribute to them being in favor or opposed to changing Sunday hunting restrictions, this instrumental case study examined the full dataset of responses to two of the open-ended questions ( $n = 12,463$ ) about favorability or opposition to hunting on Sunday. Further data interpretation resulted in a typology for future use. The purpose of the typology is two-fold. First, it will help researchers, SCDNR professionals, and the state legislature to better understand the commonly held

motivations related to Sunday hunting. Understanding the internalized and integrated values of the population will help the state legislature in their decision to repeal or maintain the law and will assist DNR in better understanding the population they serve. Secondly, understanding the deeply rooted motivations of the population will assist SCDNR in predicting conflict, should Sunday hunting be allowed.

## **Literature Review**

### *Blue Laws and Sunday Hunting Prohibition*

Blue laws, or Sunday laws, are laws that restrict certain activities on certain days, typically Sundays. In the western world, they were originally enacted for religious purposes and to encourage people to honor the Christian Sabbath. The first Sunday law was passed in 321 A.D. by Roman Emperor Constantine. The law stated that “On the venerable Day of the sun, let the magistrates and people residing in cities rest, and let all workshops be closed. In the country, however, persons engaged in agriculture may freely and lawfully continue their pursuits: because it often happens that another Day is not so suitable for grain sowing or for vine planting (McDonald, 2016).” Instead of observing the Christian Sabbath, this law was meant to allow a day for citizens to worship the Sun god *Sol Invictus*.

The first Sunday law in the western world was passed by Sir Thomas Dale Knight, governor of the Jamestown Colony of Virginia, in 1612. The series of laws, entitled the ‘Lawes Divine, Moral, and Martial’ (often known as Dales Code) contained several religious focused laws. One required every colonist to attend Sunday church in the morning and the evening. Failing to do so would result in increasing punishments, the

final offense being punishable by death. The law also stated that colonists must honor the Sabbath through church and prayer and may not gamble, whether at home or in public (Strachey, 1969). Similar laws were adopted throughout the colonies. In time, they picked up the name ‘blue laws.’ While the origin of this term remains unknown, most historians believe it is because in the mid-18<sup>th</sup> century, religious dissenters began to use the term ‘blue’ as a synonym to ‘puritan.’ The term was used to convey the idea that religious puritans were rigid, gloomy, strict, and overall not fun (Mahoney, 2015). The theory that Sunday laws were written on blue paper, and hence called blue laws, has not been supported by evidence.

Today, blue laws are typically thought of as prohibiting alcohol or other retail sales. Many states have slowly repealed their blue laws, although many still remain. South Carolina state law bans the sale of alcohol on Sundays, while giving cities and counties the option to hold referendums to allow it (ABC Act, 1996). Greenville County approved Sunday alcohol sales as recently as 2016. Although less commonly thought of, several Sunday hunting restrictions remain as a result of blue laws. Figure 3 shows the eleven U.S. states (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, North Carolina, Pennsylvania, South Carolina, Virginia, West Virginia) that currently have some type of restriction on Sunday hunting (Casola et al., 2020). Restrictions can differ based on public and private land, the type of animal that is being hunted, the time of the hunting season, and the particular county (Balestra, 2008).

**Figure 3.** *Map of Hunting Restrictions*



allowing hunting on private land would make it too difficult to enforce the statewide ban on Wildlife Management Areas (WMAs) adjacent to private lands. The court ruled in favor of SCDNR (*Lee et al. v. SCDNR*, 2000). However, in the General Election of 2010, South Carolina citizens voted to amend the South Carolina Constitution to include a right to hunt, effectively allowing Sunday hunting on private lands. (S.C. Const. art. I, § 25).

#### *Hunting in South Carolina*

Wildlife Management Areas (WMAs) in South Carolina are a statewide system of leases that SCDNR holds on land throughout the state for the “enjoyment of all wildlife enthusiasts” (SCDNR, 2020). In total, the WMA system contains 140 units and 1,082,505 acres of land with a variety of landowners including Clemson University, Duke Energy, USDA Forest Service, and local families.

To hunt on a WMA requires a special hunting permit. Currently, the annual pass for WMA hunting is \$30.50 (SCDNR, 2020). This does not include the price of the state hunting license, which is currently \$12 annually for residents. Hunters must complete a hunter education course before obtaining a hunting license, unless they are already certified in another state. According to the SCDNR website, the sale of these permits enables them to “lease approximately 1.1 million acres of land for wildlife conservation and management” (SCDNR, 2020). South Carolina is divided into four game zones, as seen below.

#### **Figure 4.** *Map of SC Game Zones*





11.5 million American's had hunting licenses (U.S. Fish and Wildlife Service, 2016). As participation in hunting declines, participation in other outdoor activities are rapidly increasing. In the 2021 Outdoor Participation Trends Report, the Outdoor Foundation recorded 63.8 million Americans participated in running, jogging, and trail running. 57.8 million participated in hiking, 52.7 million in road biking, mountain biking, and BMX, and 47.9 million in camping (Outdoor Foundation, 2021).

In their study, Robinson and Ridenour (2012) looked for causes of the decline in hunting. They found that being young, white, male, and less educated predicted hunting participation. Living in a rural area, as opposed to an urban area, also predicted hunting participation. Their study found that in states with less media consumption (measured by number of hours spent on the internet and watching TV each day), there were more hunting license purchases, higher gun ownership levels, higher costs of hunting licenses, less wealthy residents (state's average income divided by the U.S. average), less urbanized residents (cities over 50,000), and less costly land leases.

Noting the decline in hunting specifically in the Southeastern U.S., Poudyal et al. (2008b) developed a model that indicated an increase in urban development and population led to a decrease in hunting participation in the area. In their conclusion, the authors noted that a decrease in hunting, and therefore a decrease in license purchasing, could have a negative economic impact on state agencies. A separate study by Poudyal et al. (2008a) found that the demand for hunting licenses in the Southeastern U.S. was predicted to decline 9 percent by 2030. The study also focused on socioeconomic, ecological, and institutional explanatory variables within the hunting license demand

equation. Variables with a negative and significant impact on license demand included average license fee, average commute time to work, and counties with a higher percentage of residents having college degrees and full-time jobs. Counties with gun clubs and a greater percentage of white, 35-65 year olds, with less than a high school diploma, had a positive and significant impact on license demand. The results were consistent with existing literature stating that hunting popularity is decreasing with the younger generation. In combination with these demographic variables, Poudyal et al. (2008a) notes that the predicted loss of forest areas, decrease in the younger generation hunting at the same time as the current hunting generation aging out, and decrease in the white population of the Southeast by 2030 could lead to a 37 percent decrease in per capita demand for hunting. While the projected population growth in the region could signal a growth in hunting, the authors note that these factors will offset any growth.

### *Hunting Demographics*

According to the 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation survey, in collaboration with the U.S. Census Bureau, 11.5 million Americans identify as hunters. Of those identified hunters, 90 percent were male, while only 10 percent were female. The largest age group was 55-64 years old (24 percent), followed by 45-54 years (22 percent). Ages 17-24 only accounted for 11 percent of the population. Participation in hunting increased as household income increased, until it reached \$100,000 and then began to decrease. Levels of education and participation rates were mostly similar. The population was 97 percent white, while the sample size for

African Americans and Asians were too small to be reported reliably (U.S. Fish & Wildlife Service, 2016).

As previously noted, several demographics – such as being white, male, less educated, and living in a rural area, were correlated with an increase in hunting participation (Robinson & Ridenour, 2012). Models created from the National Survey on Recreation and the Environment and GIS data estimated that black, Hispanic, immigrant status, age, and living in an urban dwelling are negatively correlated to visiting wildland recreation and visitation (Bowker et al., 2006). Being male and having a higher income and level of education were positively correlated. Creating a model to interpret constraints to hunting participation, Wright and Goodale (1991), found that age and hunting participation were inversely correlated, more men than women hunted, and people reporting less education hunted more than those with higher education levels. Those living in rural areas were also more likely to hunt than those in urban areas.

#### *Sunday Hunting Studies*

Few studies have been done on attitudes toward Sunday hunting. In 2006, Hooper distributed questionnaires to 917 North Carolina hunters. The reported constraints to hunting included time, not enough game animals, and confusing hunting regulations. Those in favor of Sunday hunting gave reasons such as Sunday being a holy day, a day for other recreationists, additional opportunity for working people, and the idea that Sunday hunting should be a personal decision and not a government decision. Approximately 60 percent of respondents noted that even with Sunday hunting, they would most likely hunt the same number of days. Those opposed to Sunday hunting

remained opposed when limitations such as age, type of animal, type of weapon and time of day were introduced. Those initially in favor became opposed when limitations were introduced, indicating an ‘all or nothing’ mindset. Looking at demographics, Hooper noted that respondents who were younger lived in urban areas, hunting big game, and did not own land were more likely to be in favor of Sunday hunting. Respondents who were older, lived in rural areas, attended church and hunted small game were less likely to be in favor (Hooper, 2006).

A Virginia study conducted in 2006 sent questionnaires to 2,789 hunters in the state (Jagnow & Ellis, 2006). They found that 64 percent of respondents were in favor of Sunday hunting, 34 percent were opposed, and 4 percent had no opinion. Similar to the Hooper study, 87 percent of those in favor wanted Sunday hunting with no limitations. Those in favor of Sunday hunting responded that allowing it would result in an increase of youth participation, interest in hunting, retaining current hunters, number of animals harvested, and opportunities to hunt. The authors found that the greater the distance a hunter had to travel to hunt, the more the hunter supported Sunday hunting. Respondents who were younger and living in urban/suburban areas were more likely to support Sunday hunting than those who were older and living in rural areas.

In 2020, North Carolina Wildlife Resource Commission and Group Solutions conducted a study in order to better understand the attitudes, values, and perceptions of participants regarding Sunday hunting. The study administered 30,000 surveys and conducted listening groups with a total of 400 people. Findings included the concern of urban encroachment and habitat fragmentation, a sense of ownership that North Carolina

citizens felt toward the land, and the belief that all game land users should contribute something towards maintaining them. Hunters were concerned with nonrestrictive access, the complexity of game land laws, and the limitations imposed on them by day, species, or weapons. Non-hunters, comprised of bird watchers, equestrians, hikers, and bikers, were concerned with peace, quiet, and safety. Compromises that were discussed in the listening sessions included archery only on Sundays, allowing Sunday hunting but removing hunting from a week day, Sunday hunting by lottery, buck only hunting, specific permits for Sunday hunting, alternate Sundays by week or month, and allow Sunday hunting but shorten the deer season (Boston & Herr, 2020).

Perhaps the most cited Sunday hunting survey is that of Casola et al. in 2020, where 2,096 North Carolina citizens were surveyed. Reasons for supporting Sunday hunting included doubling the amount of opportunities for working people, facilitating recruitment and retention, assisting wildlife managers in meeting harvest goals, and the belief that it was a personal choice. Those against Sunday hunting cited reasons such as safety, the impact on game populations by not having a day 'off,' and being respectful of religious views. Only 60-70 percent of the hunters surveyed were in favor of Sunday hunting. Those most opposed to Sunday hunting were equestrians and bird watchers. Casola noted that conflict among these user groups was rare, but typically occurred due to differences in social values and the negative perceptions of hunting. Conflict could be reduced by enacting safety precautions, zoning, and increasing education (Casola et al., 2020).

In their historical overview of Sunday hunting, Balestra (2008) noted current arguments in favor and against Sunday hunting across several states. Those in favor of Sunday hunting cited reasons such as an extra day to hunt, working six days a week, the declining number of hunters (noted in Virginia), the ability to control the deer population and overpopulation, especially for farmers (noted in Maryland, Connecticut, and Pennsylvania), and the economic benefits (noted in Maine, Pennsylvania, and Virginia). Those against Sunday hunting cite a day of rest, religion and tradition, the desire of non-hunters to have a day to themselves, and the belief that hunters have enough opportunities as it is. Two interesting caveats in this debate were noted, as found and cited in two opinion pieces in different states. In a Pittsburgh newspaper, it was noted that the concern of working six days a week had never been able to overcome the ‘traditional opposition to change’ (Moyer, 2006). In regard to economic benefit, a sportsman magazine in North Carolina noted that any benefit would be offset by the added expenses of employing and compensating wildlife enforcement officers (Holt, 2007).

In summary, documented opposition to Sunday hunting includes the perception of reduced safety, religious reasons, a negative impact on game populations, and the idea that other recreational groups should have a day of peace, since they represent more of the user population (Casola et al., 2020; Hooper, 2006; Ovitt, 2018). Proponents of Sunday hunting documented reasons such as increasing time, opportunity, and access to hunting lands (especially for the working class), more opportunity to try new places to hunt, an increase in participation and interest in hunting (commonly referred to as R3 – recruitment, retention, and reactivation), and the belief that the decision to hunt should be

personal and not a government decision (Birdsong, 2019; Casola et al., 2020, Hooper, 2006; Jagnow and Ellis, 2006; Ovitt, 2018). Common demographic trends of being in favor of Sunday hunting include being young, male, and living in urban areas. Demographic trends of being against Sunday hunting include being older, female, religious, and living in rural areas (Casola et al., 2020, Hooper, 2006; Jagnow and Ellis, 2006). Dog hunting on Sundays was mentioned as being unpopular among both hunters and non-hunters in several studies (Boston & Herr, 2020; Jagnow & Ellis, 2006). A short summary of these findings is listed in Table 2.

<b>Table 2. Sunday Hunting Studies Amended</b>			
Study	Lessons Learned	Study Sample	States Surveyed
Hopper, 2006	Reported constraints to hunting; reasons for being in favor or opposed to Sunday hunting; demographic analysis	$n = 917$ ; hunters only	North Carolina
Jagnow & Ellis, 2006	Percentages and reasons for those opposed and in favor; demographic analysis	$n = 2,789$ ; hunters only	Virginia
Boston & Herr, 2020	Reasons for being in favor or opposed; compromises between user groups	$n = 30,000 / 400$ attending listening sessions; hunters and non-hunters	North Carolina
Casola, 2020	Categories presented for arguments in favor and opposed	$n = 2,096$ ; hunters and non-hunters	North Carolina
Gagnon et. al., 2021	Categories presented for arguments in favor and opposed	$n = 15,502 / 206$ attending listening sessions; hunters and non-hunters	South Carolina



Jacob and Schreyer (1980) created four major classes of factors which could lead to conflict in outdoor recreation. They are activity style, resource specificity, mode of experience, and lifestyle tolerance. Activity style refers to the personal meanings that people attach to activities. Differences in this style include the intensity of participation, status, experience, and definitions of quality. Resources specificity represents how individuals believe the resource should be used, varying by evaluations of resource quality, status, and sense of possession. While sense of possession, or place attachment, may lead to a user's increased desire to protect the land (Halpenny, 2010), it may also lead users to believe that they should have a say in how the area is managed (Jacob & Schreyer, 1980). Conflict here occurs when a user with "a possessive attitude towards the resource confront users perceived as disrupting traditional uses and behavioral norms" (Jacob & Schreyer, 1980, p. 374). The third category, mode of experience, refers to the varying expectations of how one's interaction with the natural environment should be. Lastly, conflict can occur within lifestyle diversity. Here, an 'in-group' and an 'out-group' are perceived and evaluated. The authors note the importance of confronting this type of user group conflict early.

Building off the theoretical foundations of the Jacob and Schreyer (1980) article, Vaske et al. (1995) conducted a study among hunters and non-hunters at Mount Evans in Denver, Colorado. The study found that interpersonal conflicts - conflict occurring when the presence of one group interferes with the goals of another - were limited due to the natural topography and zoning regulations. Much of the conflict stemmed from differences in social values, where the hunters and non-hunters perceived conflict

regardless of interaction with one another. Because of this, the authors conclude that conflicts in social value are not likely to be resolved through separating the user groups, but rather through education (Vaske et al., 1995).

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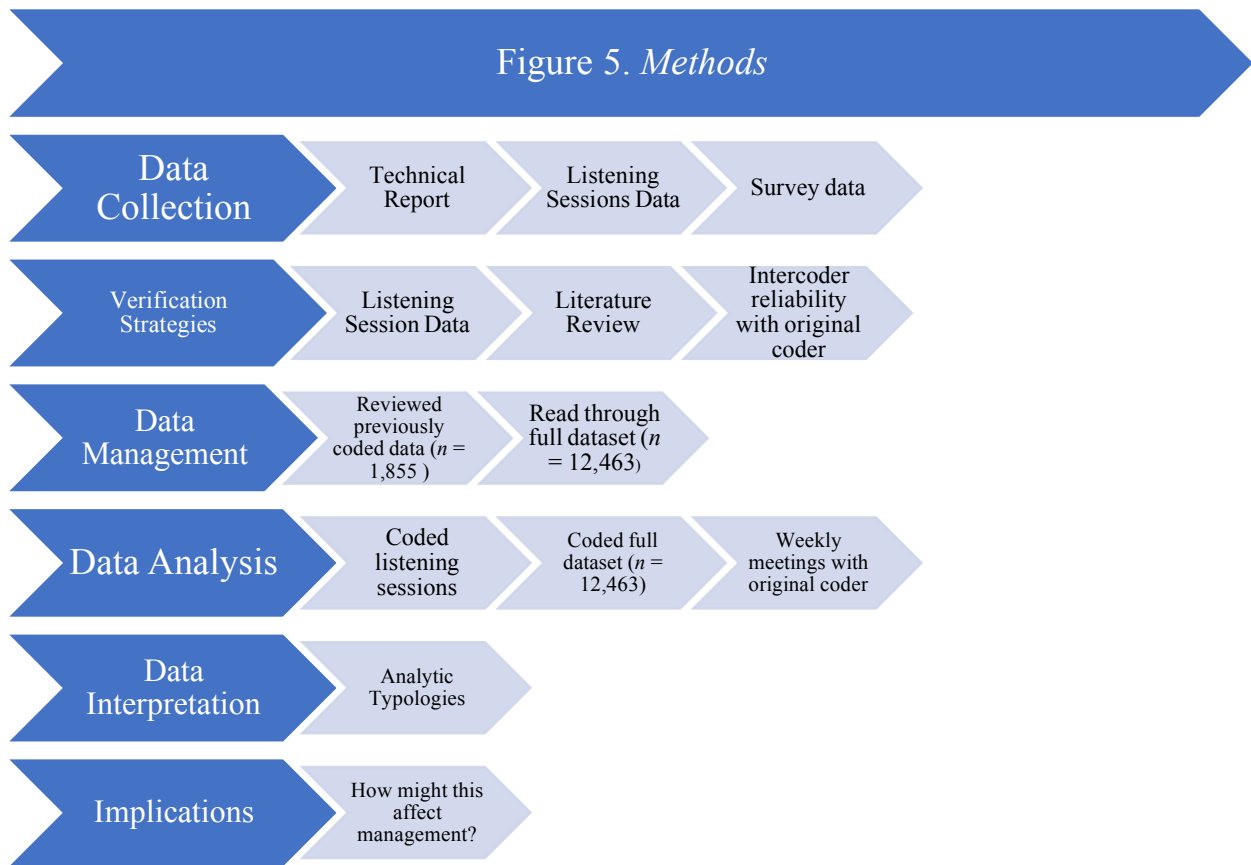
This research highlights the many ways in which conflict can occur in outdoor recreation. A common theme found was that education may be the most useful tool when dealing with conflicts that stems from differences in social values.

## **Methods**

The approach to research stemmed from the belief that the main goal of qualitative research is to “improv[e] understanding of how things work in their particular setting (Stake, 2010, p. 122).” I sought to include all participant’s voices by coding the entire dataset of the two opened ended questions regarding favorability of Sunday hunting in South Carolina. Despite the large number, dedication to the idea of pluralistic realism, as defined by Martin Packer (2011, p. 5), drove me to study the population not as objects, but as “beings who live in particular cultural and historical forms of life and who are made and make themselves as specific kinds of subjects.” Although there may be one

objective truth to be found or approximated, everyone's perception of that truth may differ and affect behavior. Each perception is important to understand and the key to studying a population is not discovering who is 'right,' but rather gaining a deep understanding of what motivates each individual's thinking and response. Having been born and raised in South Carolina, I felt a deep connection to the participants as well as a duty to tell their story with respect and dignity. I wanted to make sure that every voice was heard, without the interference of stereotypes or assumptions. Therefore, the methods included verification strategies and regular meetings with the original coder of the data. This iterative approach (Figure 5) built from the data up and allowed for the discovery of items that were low in frequency but highly important in answering the questions the research set out to answer.

Figure 5. *Methods*



### *Data Collection*

This case study uses data from the questionnaire and subsequent technical report published by Gagnon, Baldwin, and Gibbons (2021). The questionnaire contained 33 items, mostly consisting of Likert scales. Four opened ended questions were also included. These asked “what is the primary reason you hunt on private land in South Carolina,” “what is the primary reason you hunt on WMA lands in South Carolina,” “please share why you might be in favor of expanding hunting on Sundays on SCDNR WMA’s,” and “please share why you might be against expanding hunting to Sundays on SCDNR WMA’s.” The latter two questions were analyzed and coded. For the initial technical report, ten percent of respondents were randomly selected from each question,

resulting in 947 respondents for Sunday hunting and 908 responses against Sunday hunting. The responses were coded, analyzed, and placed into overarching categories by Dr. Baldwin. Seven categories were developed from the data to describe why people were in favor of Sunday hunting on WMA land in SC and six categories were developed for why respondents were against hunting on Sunday on WMA land.

I attended the listening session in Clinton and listened to the four other recorded listening sessions from across the state of SC. Using a combination of descriptive and in vivo coding, I coded each listening session. Codes were used to develop themes and these were compared and combined with the original themes developed by Dr. Baldwin for the technical report. This practice resulted in a more robust analysis of listening sessions. It also served as a verification strategy to examine coding and theme building between researchers. This can be seen in Appendix A.

#### *Verification Strategies*

Before reviewing the raw data and codes, I reviewed past research, including the history of blue laws, hunting trends and demographics, and studies done in other states with Sunday hunting restrictions. I was able to better understand the context before interacting with the data. I also saw that themes found in other Sunday hunting studies were similar to the themes I found. I reviewed the listening session before and after I coded the entire dataset. Weekly meetings with Dr. Baldwin, the original coder, allowed intercoder reliability.

#### *Data Analysis*

Next, I read through Dr. Baldwin's coding of the sample ( $n = 1,855$ ). There were twelve codes for in favor of Sunday hunting and thirteen codes for opposed to Sunday hunting (this table can be seen in Appendix B). Over the course of several months, I coded the full dataset ( $n = 12,463$ ), making notes when an idea was repeated that wasn't represented in the codes and adding additional codes when necessary.

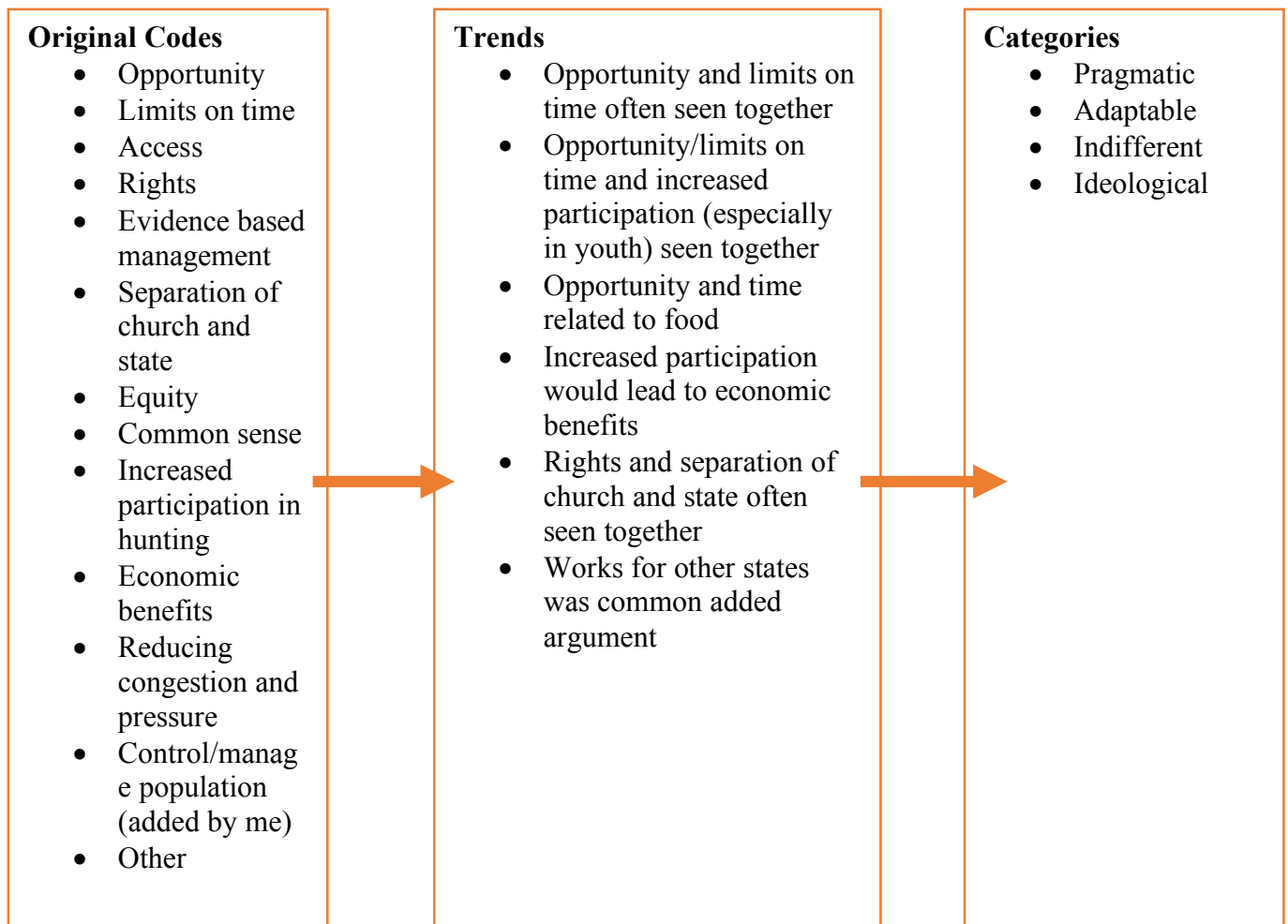
## **Results**

Approximately 7,290 respondents provided an answer to the question 'please indicate why you might be in favor of expanding hunting on Sundays,' while 2,882 respondents left the question blank. Approximately 5,216 respondents provided an answer to the question 'please indicate why you might be against expanding hunting on Sundays.' However, 1,599 of these also provided an answer for being in favor and 3,026 respondents left this question blank.

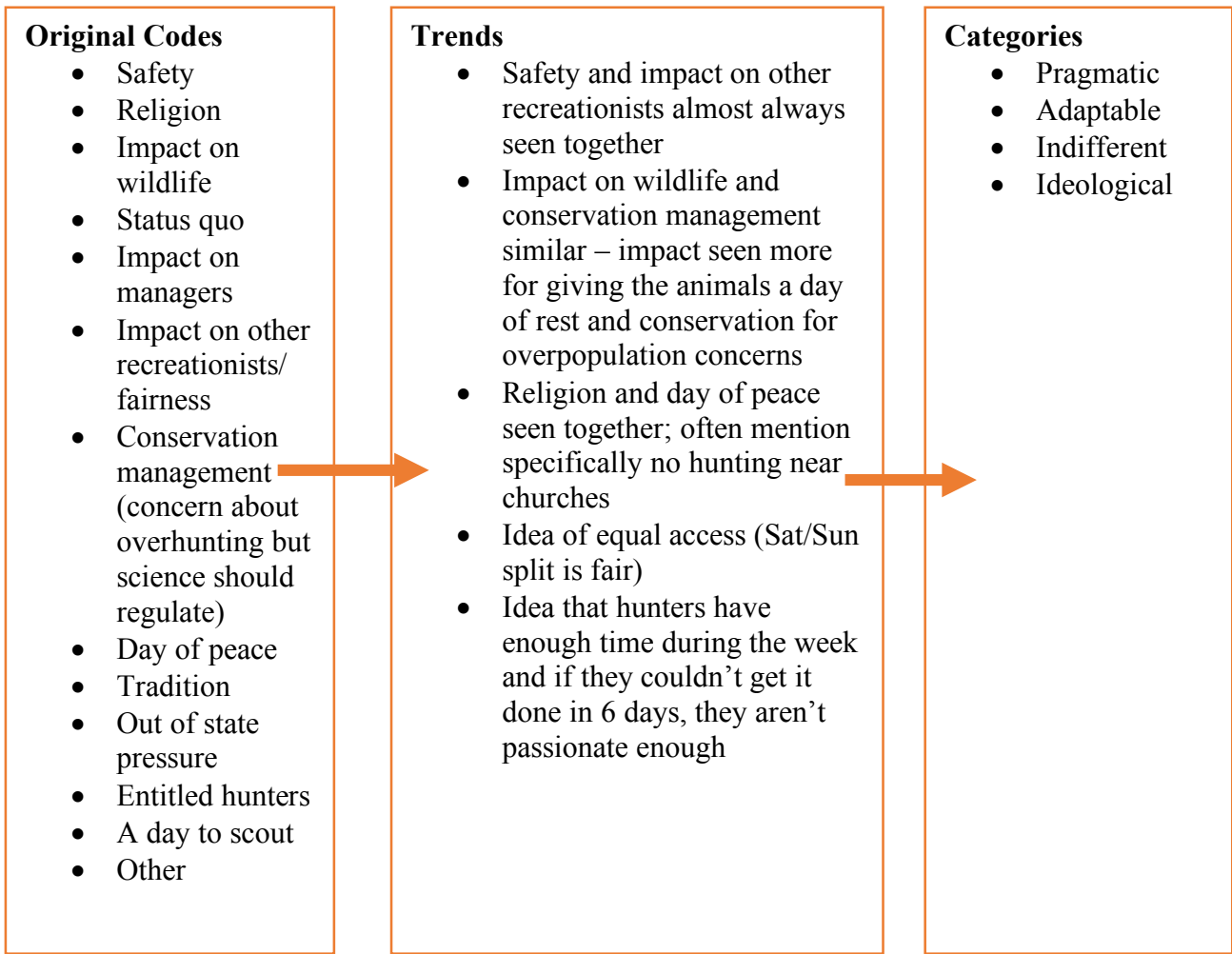
### *Data Interpretation*

From this detailed analysis of codes that included all responses and regular analytical meetings with the original coder, themes were developed. From the themes, categories for data interpretation were created in order to better communicate and represent the data. This process is shown in Figures 6 and 7.

**Figure 6.** *In Favor of Sunday Hunting Codes, Trends, Categories*



**Figure 7.** *Opposed to Sunday Hunting Codes, Trends, Categories*



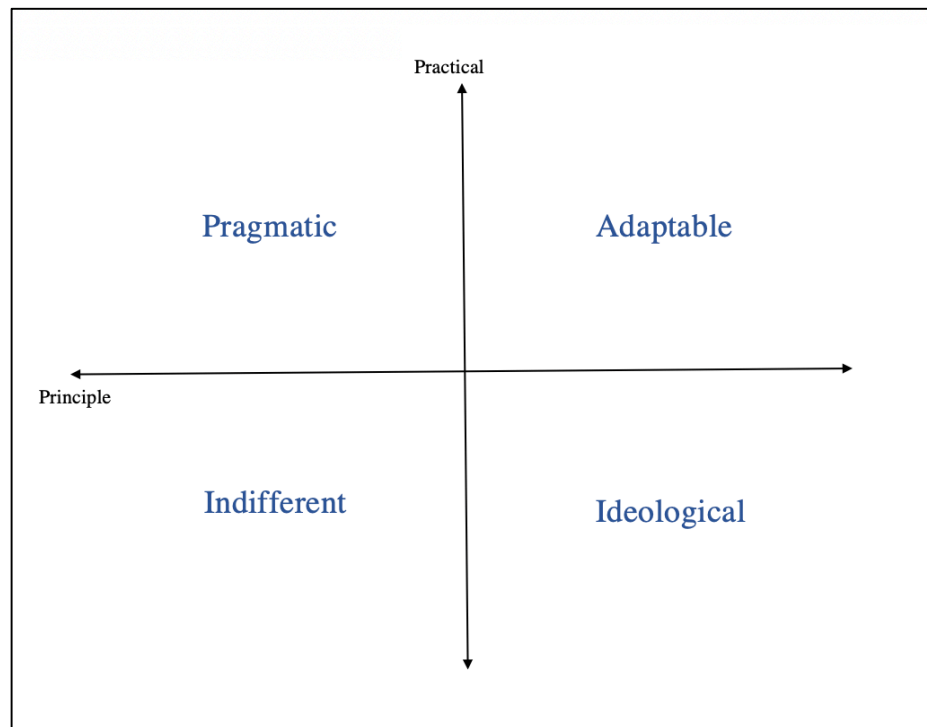
### **Typology**

The four categories were then developed into a single typology. Typologies are used to organize and understand people based on their commonalities and differences. Typologies can offer strong descriptions of groups and comparisons between them, as well as hypotheses about human thought and behavior (Stapley et al., 2021).



This typology describes the practical and principle motivations behind being in favor of or opposed to Sunday hunting. The X axis represents principle, or emotional, motivations, while the Y axis represents practical, or intellectual, motivations. This typology can be seen in Figure 8.

**Figure 8.** *Motivations for Sunday Hunting Typology*



Each category can be used for both in favor of and against Sunday hunting. Verbatim quotes are used from the survey data to illustrate each category.

*Pragmatic (In favor)*

Each category can be used for both in favor of and against Sunday hunting. Starting with those in favor of Sunday hunting, a ‘pragmatic’ is an individual with low principle but high practical motivations. These respondents were in favor of Sunday hunting due to the feasible benefits it would provide. The most prevalent reasons were

time and opportunity, indicating that those in favor wanted more time and more opportunity to hunt. This was tied to more time/opportunity for food, to teach others (specifically the younger generation who are in school Monday to Friday), to help manage the overpopulation of species, and to travel to WMAs further from home. Many respondents noted that they didn't live near a WMA, and it wasn't worth the trip to one to only be able to hunt for one day. By allowing Sunday hunting, more hunters would be out and spending money in the local economy, more people would buy hunting permits, and there would be an increase in out-of-state hunters buying permits. Several respondents indicated that Sunday hunting should be allowed in South Carolina because it works for other states that have Sunday hunting. Also, it was noted that if Sunday hunting is allowed on private land, it should be allowed on public land. Not only is it confusing when private and public land border one another, but it is perceived by respondents to be a punishment for those with fewer means to afford private land. Lastly, if Sundays were open to hunting, there may be less crowding on Saturdays, which would decrease conflict and increase a hunter's chance to be successful. Below are examples of respondents in this typology.

- *“I work Monday through Friday, it only gives me one day to hunt on wma properties a week. I hunt to provide food for my family.”*
- *“Work Monday through Friday and kids normally have soccer games on Saturdays only leaves Sunday for the chance to teach the younger generation how to enjoy the outdoors for those who don't have private land to hunt.”*

- *“It would increase the hunting opportunities of the public and help wildlife managers meet the management goals. Many people in the state do not have access to private lands to hunt on and Sunday WMA hunting would increase their hunting opportunities. Also more hunting access would benefit the state through increased tax revenue on hunting goods and equipment, gas hunters would use on Sundays, and other expenses like food. Wildlife would also benefit through the sale of additional hunting licenses, WMA permits, and revenue generated under the Pittman-Robertson Act.”*
- *“We enjoy hunting public lands but have to travel to them. Only problem is we only have the weekends to hunt due to work. If we drive Friday night hunt Saturday we have to leave because we are not allowed to hunt on Sunday. Which in doing that miss out on hunting Sunday morning on public as well as our private land”*
- *“We are losing hunter participation every year. I have taken it upon myself to teach a class every year in my circle of influence to help promote safe and responsible hunting. Anything the state can do to expand participation will in my opinion help more people appreciate the gift of our creation, and get off their phones!”*
- *“It would benefit me for the sole reason of a Monday through Friday work week and though I hunt WMA in the evenings (but with shortened daylight hours its an hour or 2) that only gives you Saturday for a full days hunt.*

*Also, if I can hunt on private land on Sunday I should be able to hunt WMA on Sunday. Some of the questions asked about non hunting users using the WMA'S, so whats the difference on Monday through Saturday? Their isn't any... I know the WMA'S I hunt never have an issue with hunters/non hunters... They do their thing we do ours.”*

*Pragmatic (Opposed)*

Respondents against Sunday hunting could also fall into the “pragmatic” category. These respondents were concerned about the tangible consequences of Sunday hunting. This includes people who mentioned safety, the impact on wildlife and conservation management, the impact on managers, the impact on other recreationists, the increased pressure of out-of-state hunters coming, and the loss of a safe day to scout. It also included people who live near WMA land and wanted a day with less noise or where they felt safer. A less common but present answer from hunters was the fear that the prices of taxes and license fees may go up or the fear that Sunday hunting would damage what they experienced to be an already negative perception of hunting. The most common responses were safety, impact on other recreationists, and conservation management. Below are examples of this typology.

- *“Horseback riding during hunting season is stressful due to concerns about less than diligent hunters. Having Sundays available to ride during hunting season allows for non-hunters to share the public lands. While hunting is an economical advantage to the state, public use of land should be shared. Disregard to others using public lands for non-hunting*

*purposes is detrimental to the public image of sharing the land.*

*Considerations of opening land for hunting on Sundays is disheartening to those who use it otherwise.”*

- *“I do not feel safe to visit any areas when and where hunting is permitted, there is just too much risk for my safety and that of any animals I may bring with me. Therefore, if hunting is expanded, I will not be able to visit any of these areas during any and all hunting seasons. Please consider the needs and safety of those that are not hunters.”*
- *“This would create extra work for DNR officers that it is not necessary. IT would take them away from private land recons where most of the issues arise anyway. Game and roads on WMAs need some off-time and Sunday provides that now. You can already hunt private land on Sunday so there is no reason to burden WMAs with hunters that will conflict with regular Sunday WMA non-hunting visitors. It will create a new adverse safety condition for those Sunday non-hunters. Many non-hunters visit WMAs only on Sunday afternoons with their families confident in the fact that there are no hunters to be weary of during that time period. DNR must give consideration to the non-hunter and his/her safety and rights to visit WMAs and ensure no fear of being accidentally shot or intimidated by Sunday hunters.”*
- *“I live adjacent to WMA land and would prefer that a day be left open from hunting. Most days there are multiple hunters within my area and I*

*am concerned about safety. Also, I feel the wildlife needs a day of less stress.”*

- *“I live in Wedgefield across from WMA land archery only I don’t want the activity and also my private hunting land if surrounded by WMA land I don’t want any more trespassing with the excuse “I thought I was on state property” and all game needs a break too !”*
- *“I like the idea of resting the game for at least one day a week. With the exploding population in the low country. If not given an opportunity to rest I fear the animals could be pushed out into the surrounding areas by the increased presence of the North American shoe footed booby.”*
- *“Sunday family hiking, exploring, etc, would be a safety issue concern. If you can’t do it in six then you won’t do it in seven. Everything needs rest including conservation officers and wildlife.”*

### *Adaptable*

The ‘adaptable’ individual has high principle and high practical motivations. These individuals share motivations with both the pragmatic and the ideological and may therefore be more adaptable to change and open to both sides of the argument. These respondents had conditional or ‘if’ statements, such as they would be in favor if there was a different day with no hunting or SCDNR determined it was necessary for population management. This also included people who mentioned that they would not hunt on Sundays (for religious reasons, traditional teachings, or time constraints) but believed others should be able to make their own choices.

For those opposed to Sunday hunting, the ‘adaptable’ respondents included several of the 1,599 respondents who marked they were in favor but provided a reason for being opposed to Sunday hunting. Reasons included impact on the wildlife, impact on the land, overcrowding, and safety concerns. Also present in this group are people who proposed compromises such as creating safety zones near churches, opening only certain WMAs to hunting, or allowing Sunday hunting and closing a weekday. Below are examples of this typology.

- *“If Sunday hunting is allowed, it could be archery. This would be slightly safer in compatibility with other recreational uses. I don’t think gun hunting is unsafe but I would choose archery if I thought there were non-hunters in close proximity...If a WMA has no other recreational use, Sunday hunting is OK. I can't think of any WMA that doesn't have potential for other recreational use, but it may exist...If population management absolutely requires Sunday hunting, allow it.”*
- *“I would be in favor of Sunday hunting if SCDNR biologist are allowed to make recommendations that the population size of the resource being hunted can be sustained within the confines of the given WMA habitat and that SCDNR receives adequate resources from the state to enforce Sunday hunting laws. Other considerations would be: 1) limiting the hours such that hunting would be after noon so as not to interfere with religious activities and 2) hunting only by bow and arrow in order to avoid*

*nuisance noise for neighbors close by WMAs who enjoy peace and quiet on Sundays.”*

- *“I guess I would 'be in favor of' that Sunday for hunting ONLY IF there are other days of the week that are closed off to hunters.”*
- *“If Sunday was the only day available for hunters to hunt [t]he WMAs, I would accept Sunday hunting although a day during the week is a much better idea”*
- *“I am religious myself . However I do not see harm in someone hunting enjoying Gods Country.”*
- *“I recognize that there will be conflicts between hunters and non-consumptive users due to real and perceived safety issues, disturbance issues, etc. I encourage SCDNR to take a site-specific approach to balancing these uses on Sundays, Saturdays, holiday weekends, etc. These approaches may include morning hunting only, firearms and/or hunting dog restrictions, and opening only portions of certain high non-consumptive use WMAs to Sunday hunting.”*
- *“If there are churches nearby the WMA, it is not fair to them to have gunshots going off during church service. I think there should be a moratorium on hunting from 9-12 AM on Sundays.”*
- *“Would want to know about extra potential costs and what other groups might have to give up.”*



- *“It will hinder access to use WMA land for non-hunting purposes on Sundays. I think it will cause issues between hunters and non-hunters. Issues that the hunting population doesn't need to get into at this time. While hunting may be on the decline I do not think pitting hunters and non-hunters to fight for something we don't have now will help increase the numbers of hunters.”*
- *“I hike as a hobby and understand that expanding hunting to Sundays could deter hikers from using WMAs on Sundays. However, as a hiker, I also understand that there are far more places to hike in SC than there are to hunt on Sundays, so I'm willing to hike elsewhere for 1 day a week so that hunters are able to enjoy WMAs on Sundays.”*

### *Indifferent*

The “indifferent” represents individuals with low principle and low practical motivations. An indifferent individual would be someone who did not care either way and had little opinion on the matter. This response, though few in frequency, was present in both those in favor and those opposed to Sunday hunting. Below are examples of respondents in this typology.

- *“I don't have any suggestions since I don't use them”*
- *“I couldn't care less”*
- *“I don't hunt wma but I trout fish and rarely do that Sunday so no big deal to me.”*
- *“I really don't care. Wish that they were managed better as they are”*

- *“Not having WMA land on Sundays has not affected my hunting.”*
- *“I rarely hunt on Sundays”*
- *“At 78, I’ll be neutral.”*

*Ideological (In favor)*

Lastly, ideological individuals had high principle motivations but low practical motivations. These arguments are more emotional and focus on the idea, or meaning, of Sunday hunting. This included the belief that hunting is a God-given or constitutional right, it isn’t fair that no one else is restricted on Sundays (especially hunters who have money to afford private land), the law is outdated and/or doesn’t make sense, and the government should maintain a separation between church and state. Also present is the argument that other religions recognize Saturday as a Sabbath and therefore would be able to hunt either day. The most prevalent argument for this typology was the idea that hunters pay for the land, so they should be allowed to be there any day. This was mostly attributed to WMA hunting permits, but also included paying taxes and the idea that public land meant publicly owned. Below are examples of respondents in this typology.

- *“It is unfair to limit hunting opportunity based on religious beliefs. Additionally, most states allow recreational and hunting activities to coexist without the person performing the recreational activities feeling unsafe.”*
- *“It’s long past time to open them up for everyone 7 days a week. It’s everyone’s land to share and not up to the state to dictate when people can be on it based on religious beliefs. Any feeling of being unsafe would be*

*from generations of being used to not hunting on Sundays, and poor education surrounding hunting dangers.”*

- *“Never understood why there was always a difference between hunting and fishing. If you can fish on Sunday, why can you not hunt on Sunday. Because a gun was involved??”*
- *“You can fish anywhere in the State 7 days a week, you can hunt for numerous animals 7 days a week on private land. To fish and hunt on WMA's 6 days a week doesn't make any sense”*
- *“I do not support restrictions on activities based on religious beliefs. Having an area open every day increases the opportunities to use it. Since it is public land, I believe that it should be available to me all the time.”*
- *“Not everyone works M-F. Licensed hunters should be able to choose to lawfully hunt on Sunday. People who prefer to attend church on Sundays will and hunt in the afternoon. Hunters who are Jewish can't hunt at all on Saturday Sabbath so Sunday would work for them. The time is past for the state to tell everyone to honor Sunday for any reason.”*
- *“.... you have a drivers license and you can drive on PUBLIC roads on [S]unday so if you have a WMA permit you should be able to hunt on [S]undays.*

As respondents moved farther along the x-axis, there was a more extreme view. Here, this is a distinct lack of empathy, tone of aggression, and a sense of possession or aggression. These can be seen below.

***Extreme Ideological (In favor)***

- *“My money pays for the land and I should be able to use it as I want. I should not be governed to not be able to do something that I pay to be able to do. Who should choose what day I can do something? What if that is the only day off of work that someone has? Should they not be able to hunt?”*
- *“Because I actually buy a license and hunt which funds the WMA’s. The bible and non-license purchasers shouldn’t have a say.”*
- *“... People that hunt on WMSs are disturbed and harassed by non hunters any given day of the week while it's OUR money that is providing the WMA. Nonhunters do NOTHING to add to the WMAs except their trash.”*
- *“Private land and hunt clubs boarder many wma and are hunted Sundays. This negates the baseless counter point of giving the game animals a "break". Many hunters including myself work all wee and sometimes Saturdays preventing hunting. Bikers, hikers and all other non hunters don't pay for a wma permit (not required) therefor they have no bearing on this decision.”*
- *“Because it’s my land, and DNR has no business keeping me from hunting it.”*
- *“.... One argument is safety for non-hunters and that non-hunters want a day to enjoy the woods without hunters. Tough. They have state parks, county parks, and heritage preserves all over the state that hunting isn't allowed on ever. They also have WMAs that have more weeks not part of*

*a hunting season then that are part of a hunting season. Lastly, they pay almost nothing for the WMA lands so forgive me but I don't really have much concern for their desire of taking half our hard-earned weekends to say we can't hunt.”*

- *“...Non-Hunters can sit on a pin if they don't like it. Game seasons are closed longer than they are open and WMAs exist for and because of hunters!*

#### *Ideological (Opposed)*

Similarly, respondents opposed to Sunday hunting also fell into the ‘ideological’ category. These arguments are less focused on the potential negative outcomes of Sunday hunting and more on the moral or idealistic views of what Sundays should be used for. This included religious reasons, the idea of tradition and not changing the status quo, and the idea that Sunday should be a day of rest for all. This also included respondents that believed they had just as much of a right to be on the land as hunters did (due to paying taxes) and that hunters had ‘enough time’ and did not need Sundays. Examples of this typology are below.

- *“Sunday is a Holy day of worship to a God who gave us the opportunity to manage and care for WMA in the first place. Biblically God rested on the 7th day of creation. So should we all. We don't need to hunt and fish every single day of the year.”*
- *“The Christian faith is the foundation of this country's constitution. It is essential. So in a word, religious.”*

- *“Everybody and everything needs a day of rest.”*
- *“Six days is enough. Maintain the value of Sunday's as it has been forever. Everyone needs to be with family on Sunday.”*
- *“Some things need to stay the way they are”*
- *“I was always taught not to hunt on Sundays, and I’m gonna stick with that.”*

As respondents move farther along the X-axis, there is a distinct tone of aggression or contempt. These responses typically made broad assumptions about hunters and their time or denounced hunting altogether. Below are examples of this typology.

***Extreme Ideological (Opposed)***

- *“I believe if a person wants to hunt they can get it done in the 6 days it is open.”*
- *“Most people spend thousands of dollars for expensive gear but want to hunt property for free or cheap. If someone wants to hunt on Sundays so badly they can spend money to join a club or acquire a private lease. I don't think the state has the resources, personnel wise, to police all the WMA's It would put much more pressure on our wildlife that is already stressed under depredations due to coyote and feral hogs.”*
- *“Slob hunters are bad enough with 6 days to hunt. Sunday has always been a safe day for events at wmas.”*
- *“Most hunters are rude, inconsiderate liars. I know. My own land borders land leased by a hunt club. We are constantly having to run the*

*trespassers off. Their dogs scare our horses and run the deer on our land. If you allow hunting on WMAs on Sundays, then no other activities will be safe.. I would never bird watch or ride on land if there were hunters actively hunting in the same area. That would be crazy!!!! Hunters will intimidate other users just so they can have everything for themselves. I am a tax payer, too. I am begging, don't make this mistake."*

- *"There are already plenty of hunting opportunities and as an employer I can tell you hunters have no problem taking off during the week to pursue their pastime. However hiking, biking, etc are very family oriented and even the sound of gunfire on a weekend is enough to make me not feel safe."*
- *"The idea that we need to pander to hunters to support public lands is both laughable and insulting to non-hunting tax payers. I personally am part of several foraging, animal ID, and plant ID groups for the Carolinas and know that many individuals will stop using public lands for recreation if they feel they are not being supported."*

## **Summary of Results**

Overall, the majority of respondents fell into the 'pragmatic' category. The majority of those in favor of Sunday hunting fell into the 'pragmatic' category, followed by 'ideological,' 'adaptable,' and 'indifferent.' The majority of those opposed to Sunday hunting also fell into the 'pragmatic' category, followed by 'adaptable,' 'ideological,' and

‘indifferent.’ One may infer that non-hunters are more likely to be adaptable in the presence of Sunday hunting, while hunters are more likely to have an ‘ideological’ view.

### **Additional Results**

There were a number of related issues that did not fit neatly into the typology. These include assumptions of non-hunters, issues with WMA landowners, and hunting with dogs. Quotes from each category are listed below and explained further in the discussion.

#### *Non-hunter Assumptions*

Several non-hunters had certain assumptions about hunters’ time and resources, as seen below.

- *“If you aren’t making time for your passion (like the rest of us do on Sunday) then you’re not very passionate about it own the first place.”*
- *“If someone wants to hunt on Sundays so badly they can spend money to join a club or acquire a private lease.”*
- *“Ma[n]y people work Mon- Fri, the weekends are the only time they can get out and enjoy nature. Taking Sunday away cause them to be less interested. Hunters take a week or whatever days they want to hunt off.”*
- *“Hunters can hunt on their authorized hunt days. They will make accommodation to do so.”*
- *“There are already plenty of hunting opportunities and as an employer I can tell you hunters have no problem taking off during the week to pursue their pastime.”*



- *“That's a lot of money and I don't understand why, this is not 1840 we don't have to hunt for food. We have Ingles, BI-LO, and any other place you want to go”*

#### *WMA Landowners*

Lastly, the issue of landowners who lease to the WMA system are seen below.

- *“As a landowner who contributes land to the WMA program, Sundays are the days that we actively manage our land. We will likely pull our property from WMA if it is expanded to Sundays. Our neighbors don't want to hear shooting on Sundays and the majority users that are frequenting our properties are not hunters anymore, they are hikers, photographers, birdwatchers and fishermen. Expanding another day for hunters without opening additional lands for the biking community or equestrian community, for example, is a bad precedent.”*
- *“We need a safe day for non hunting activities, a day of rest for game. WMAs in the Piedmont are being hunted HARD. Populations of Turkey, Deer have plummeted due to technology, poor management, and hunting pressure especially. Private landowners beside WMAs are constantly being harassed and tested during seasons. Sunday is the only day of rest and safety, if this passes, there needs to be a 300 yard stand off from private property lines for hunters using WMAs. This would give some measure of safety for landowners and could also be implemented on the Palmetto trail, horse trails etc. I think an easement like this would give landowners and others a degree of safety. DNR doesn't have the law enforcement, biologist to cover what land they have. Sunday hunting on WMA is only going stress the system. As it is now, they can't respond quickly or efficiently*

*to calls on Our WMA. They are under staffed with limited budgets. The adjacent landowners are a minority for sure in this, but have made huge real dollar investments in their land, taxes, insurance, agriculture, and wildlife practices: you need to reach out to this group also!!! And get their feed back. Also, if this goes through, all WMAs should be opened, not just select ones. It would be discriminatory not to include ALL WMAs.”*

- *“WMAs are for the most part already over hunted. It would be very disrespectful to the families that have donated land over the years and done so thinking that Sunday’s would be off limits to hunting. I think less family’s will donate land if Sunday hunting is allowed.”*

#### *Hunting with Dogs*

Some respondents noted that Sunday hunting would allow more time for hunting with dogs, while others were strongly opposed to any hunting with dogs.

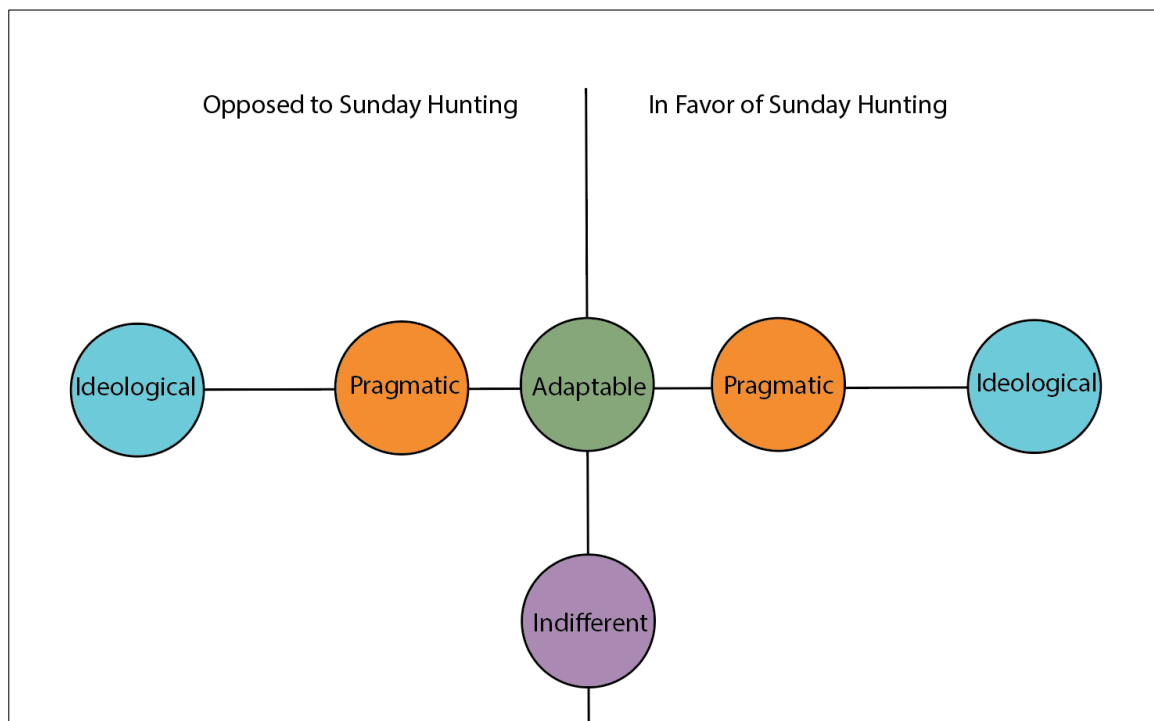
- *“The only way I’d support it is if it allows more dog days on Saturday”*
- *“With an expanded timeframe you can possibly move dog hunting to those sundays. Then the still hunters would still be able to hunt as normal or they would still be able to go on Sunday if there were not able to hunt an area due to the Saturday dog drives.*
- *“Not in favor unless it going open for dog hunting.”*
- *“Sunday hunts would be great, but 9 times out of 10, they will only be opened to still hunters, and us dog hunters already don’t get enough days. Specially not as much as we use too. Still hunters can hunt any time. Unlike dog hunters.”*

- *“STOP USING DOGS! IM TIRED OF TRYING TO SAVE STARVED HUNTING DOGS...MAKE IT ILLEGAL TO USE DOGS TO HUNT WITH!!! MORE IMPORTANT THEN SUNDAY HUNTING!!”*
- *“I am not in favor! More important is to stop using dogs for hunting!”*
- *“The only draw back that I have between hunting on WMA's is if dog hunting is continued to be allowed in these areas. Let's face it, this is a big reason for me hunting on private property. Too many dog hunters do not care where their dogs run and that is a negative on them!”*
- *“The absence of dog hunters on WMA lands is an extremely important aspect for me. Dog hunters seem to have less respect for hunters who participate in the sport without the aid of hunting dogs.”*

## **Discussion**

Below the data can be seen operating together in one figure. In practice, people will not exist in a vacuum, but will interact with one another on the land. The following diagram is a way to think about the complexity of land management and the complexity of the people being guided by the management. Viewed on a continuum, as seen below, the categories may fall closer or farther from the center. Those in favor of and opposed to the idea of Sunday hunting can fall into the adaptable, pragmatic, ideological and indifferent categories as seen in Figure 9.

**Figure 9. Typology Continuum**



From a managerial standpoint, the adaptable and indifferent individuals will be of least concern. The adaptable individuals fall in between opposed to and in favor of Sunday hunting, as they share motivations of both. They are the most likely to see the issue from both sides and be accepting of any change, or no change, to the law. Those who fall in the indifferent category will remain indifferent on the issue. The pragmatic individuals are on opposite sides, but are still relatively close to the middle. I believe this group may have some conflict, but will overall be accepting of either outcome. They also share similar motivations with one another (such as time and access), and may be more accommodating to change if the reason behind the change is well communicated. I believe that the ideological group is most likely to create or be involved in conflict. They

are the furthest from each other in the continuum and are most likely to stand their ground in the face of opposition.

We can examine conflict from the four classes (activity style, resource specificity, mode of experience, and lifestyle tolerance) described by Jacob and Schreyer (1980). The difference in activity style is seen between hunters and non-hunters. While this causes an interpersonal conflict—conflicting goals between the two groups—it can also occur within the groups as they experience differences in intensity of participation, status, and experience. Resource specificity represents how individuals believe the resource should be used, varying by evaluations of resource quality, status, and sense of possession. Here, a user with “a possessive attitude towards the resource confronts users perceived as disrupting traditional uses and behavioral norms” (Jacob & Schreyer, 1980, p. 374). This sense of possession was often noted in the ideological category. Mode of experience refers to the varying expectations of how one’s interaction with the natural environment should be. This could occur within groups or between, as seen when hunters denounced horseback riders for harming the environment and horseback riders denounced hunters for harming the environment. Lastly, diversity of lifestyle tolerance can occur by causing an ‘in-group’ and an ‘out-group.’ This could be seen by hunters and non-hunters or by socioeconomic status. Further research could examine the correlation between class and conflict in regard to Sunday hunting. For example, a majority of those in favor of Sunday hunting were in favor due to the possibility of an increase in time and opportunity to hunt, often related to the need to hunt for food. Non-hunters had certain assumptions

about the resources available to hunters, as seen under ‘Non-hunter Assumptions’ in the results.

### **Additional Findings**

A strong benefit of qualitative data is being able to hear from the population study directly. This allows us to have a deeper understanding of the issue and the population that our decision will affect. It also brings to light the smaller, less frequent, issues that do not stand out in a quantitative study but are equally important. A few sub-concerns noted during this process were WMA landowners and hunting with dogs. Response quotes from these issues was presented under the Additional Results heading.

Beginning with landowners, there were some participants that questioned why WMA landowners weren’t specifically sought out and surveyed. Some landowners noted that they may pull their property from the WMA program if Sunday hunting was allowed. This could lead to a significant decrease in WMA land, which would subsequently decrease recreational opportunities for all user groups. Secondly, a small but very passionate group was vocal on the issue of dog hunting. This included those who wanted Sunday hunting as an extra day to hunt with dogs or wanted more ‘dog hunting days’ in general, as well as those who were strongly opposed to hunting with dogs. As this did not pertain to the immediate study, it was not fully investigated. Further research may be eye-opening and useful to management.

## **Communication Strategies**

In previous research of user group conflict, education is often cited as a possible management response (Vaske et al., 1995; Reis & Highman, 2010). This could be implemented by SCDNR in several ways.

The regulations for WMAs are quite extensive and vary based on several factors such as the game zone, weapon being used, and species being hunted. Some respondents feared that having a nuanced approach (such as certain WMAs being open or certain Sundays being open) would add to the confusion. Those in favor of Sunday hunting noted that some WMAs border private lands where Sunday hunting is allowed, which creates further confusion. Several respondents, often those in the “adaptable” category, noted that whatever SCDNR decided to do about Sunday hunting, they just hoped they made the laws clear and wrote the regulations “in English not ‘lawyer.’” Clearing up confusion on the regulations already in place may decrease some of the conflict.

Along with this issue, there was a clear belief among some hunters in the ideological category that they had a right to be on the land. Several noted that owning a permit meant they should be able to be on the land any time they wanted because they ‘owned it.’ There was also the belief that the money from the hunting permits is what allows SCDNR to lease, manage, and maintain WMAs. In truth, public land belongs to all of us. Hunters purchase a permit because they are removing a resource from the shared land. They don’t own the right to the land, they own the right to *hunt* on the land. This notion may be further confused by the WMA website which states:

“Through the cooperative effort of private landowners, the U. S. Forest Service, and the SCDNR, Wildlife Management Areas (WMAs) are provided for the enjoyment of all wildlife enthusiasts. Funds generated from the sale of WMA permits enable the SCDNR to lease approximately 1.1 million acres of land for wildlife conservation and management.” (SCDNR, 2020)

Similarly, one of the SCDNR representatives present at the listening sessions—where the issue of whose money funds the WMA was very prevalent—responded to a question of funding with the following:

“We don't have exact figures on that. Our budgets are very complex. We have a few large pots of money, federal funding, and those type things, and a lot of smaller pots. It's probably close, this is an estimate that I came up with in my head, based on real numbers, about 60% is funded by hunter dollars and about 40% funded by general revenue sources. That's for the management of the land. We don't have a line item for WMA management. It goes into what we call our Regional Wildlife Operations, which is everything that happens across the state. A lot of that is WMA management obviously, but it's in our Regional Wildlife Operations. As far as acquisition of the land, there's typically very little hunter dollars involved in that, we don't use Pitt-Robertson federal funding for purchase of lands –it's infrequent. We bought a track for youth recruitment and a shooting range that type of stuff, but those are typically other public funding sources, like the South Carolina conservation money and federal grants or that type thing.



There's usually just a little bit of hunter dollars involved in purchasing the land itself, if any at all.”

Perhaps a clearer explanation of how the funding works, as well as a statement that hunters do not own the land through their permit, may reduce conflict between groups.

Lastly, several respondents appeared to use the open-ended questions on the survey as a ‘complaint box’ for SCDNR, expressing all of their issues with the WMA system. I believe having a social scientist on the SDNR team, or specifically a social scientist liaison between the agency and the user population, would deeply benefit SCDNR in addressing and mitigating user conflict. A liaison could ensure that users feel their complaints are being heard and respected, which may increase their overall satisfaction with WMAs. As previously noted, I believe informing the user population of the reasoning behind changes, such as Sunday hunting, will reduce conflict among them. If, for example, Sunday hunting is allowed, a liaison could work with each category of users – ideological, pragmatic, adaptable, indifferent - based on their needs. The ideological individuals in favor of Sunday hunting may need to be made aware that WMAs do not exist wholly for hunters. The ideological individuals opposed to Sunday hunting may need more information on hunters to disrupt common stereotypes. Pragmatic individuals may need a logical explanation for allowing Sunday hunting and to be made aware of the arguments in favor and opposed to it. Adaptable and indifferent individuals may need changes to Sunday hunting regulations to be clearly communicated and posted.

## **Conclusions**

No decision will make everyone happy. However, the population we serve is most often the best equipped to tell us how to serve them. By administering surveys such as the one used in this study, we can better understand and provide for our communities.

Several respondents noted their recommendations for the issue of Sunday hunting. The most common was to close a week day to hunting in exchange for opening Sundays.

Other ideas included opening one Sunday a month, opening certain WMAs but not all, implementing a draw system for hunts, only allowing for small game, and opening in the afternoon only. As is often found with most management issues, a nuanced approach may be the best plan of action for Sunday hunting. For example, it may be beneficial to allow Sunday hunting on WMAs that are primarily used for hunting, but not those that are primarily used for other recreational activities.

Overall, the respondents had many of the same arguments. Those in favor of Sunday hunting believed it would give them more time to hunt since they work Monday to Friday. They noted that their money paid for the WMAs, that they would spend more in the local economy if they could be out hunting on Sundays, and that hunting caused less damage to the land than other activities such as horseback riding. Those opposed to Sunday hunting wanted more time to enjoy other recreational activities without the fear of hunters. They noted that Sunday is their only day to recreate since they also work Monday to Friday. They believed that their tax dollars paid for the WMAs, that they would spend more in the local economy if they could be in the WMAs on Sundays, and that their recreational activities caused less damage to the land than hunting. To simplify

the issue to one basic question, it comes down to ‘who deserves Sunday more?’ Both sides believed they did, often for the same reasons.

### **Contribution to Literature**

This study corroborated the findings of the four existing studies on Sunday hunting restrictions. Similar arguments for being in favor of Sunday hunting included time, opportunity, access, rights/sense of ownership, evidence-based management, separation of church and state, increased participation, economic benefits, and controlling wildlife population. Opposing arguments included religion, tradition, safety, impact on managers, impact on other recreationists, day of rest for all, and the idea that hunters had enough time and opportunity to hunt (Boston & Herr, 2020; Casola, 2020; Hopper, 2006; Jagnow & Ellis, 2006). Some overarching arguments that were noted in several studies were also confirmed through this study, such as the idea that WMA laws are already confusing, that all user groups should pay fees to use public lands, and that a compromise could be opening Sunday hunting and closing a week day (Boston & Herr, 2020; Hopper, 2006). This study found additional arguments for being in favor or opposed to Sunday hunting. For in favor, this included allowing more time for sustenance hunting, the inequality of private lands being allowed to hunt but not public, that no other activity was restricted except for hunting, reducing congestion of hunters on Saturdays, and that allowing Sunday hunting has worked in other states. Additional arguments for opposing Sunday hunting were the impact on wildlife, keeping the status quo, having Sundays as a day for hunters to scout, and an increase in out of state hunters. The sample size of this study also allowed for further insight into the known arguments of Sunday hunting and

allowed for more arguments to come to light. It is also the only study conducted in South Carolina. North Carolina was studied by Boston and Herr (2020), Casola (2020), and Hopper (2006). Jagnow & Ellis (2006) studied Virginia, and Balestra (2008) cited arguments from opinion pieces in Connecticut, Maryland, Maine, North Carolina, Pennsylvania, and Virginia. With its sample size, study of South Carolina, creation of a typology, and creation of a continuum in which to study the typology, this study contributes something unique to the overall literature on Sunday hunting and managing user conflict on public lands.

## APPENDICES

Appendix A

Listening Session Coded

<b>Those in Favor of Sunday Hunting</b>	
<p>Opportunity/Limits on Time</p> <ul style="list-style-type: none"> <li>• More opportunity and addressing limits on time with the addition of another day on the weekend</li> </ul>	<ul style="list-style-type: none"> <li>• work 5-6 days a week/only one day to hunt (x16)</li> <li>• limits ability to hunt (x3)</li> <li>• hunt to feed family (x2)</li> <li>• ‘you’re restricting me ‘</li> <li>• hunting season is only October – January (x3) <ul style="list-style-type: none"> <li>○ so other user groups can deal</li> </ul> </li> <li>• ‘taking away 50% of the average working person’s ability to hunt the public land that we pay for’</li> <li>• other user groups get all 7 days</li> </ul>
<p>Rights perspective</p> <ul style="list-style-type: none"> <li>• Some hunters believe they have a right to WMA land</li> </ul>	<ul style="list-style-type: none"> <li>• “We pay for the right to be on government land”</li> <li>• Buying a permit should let you hunt all days (x6)</li> <li>• other user groups should have to buy a permit too (x6) <ul style="list-style-type: none"> <li>○ “Why are we footing the bill for everybody and they’re not paying for nothing?”</li> <li>○ “They’re benefitting from our money; they’re not paying to be on that land”</li> <li>○ “You’re discriminating against me’</li> </ul> </li> <li>• private property can do ‘whatever they want’</li> <li>• ‘should be the decision of the individual’</li> <li>• “I support the choice for people to make, as granted to us in the first amendment, where the separation of church and state is spelled out’</li> <li>• ‘no legal reason the state should be limiting hunting rights’</li> <li>• unconstitutional</li> <li>• “my choice”</li> <li>• want ecological/economic studies done, studies on conflict (#’s to back up the law)</li> <li>• “can’t be based on emotions...[need] scientific data” (x2)</li> <li>• ‘hunters fund this entire program, 100% of the funds come from hunters’ (DNR corrected him – federal tax, hunting/fishing</li> </ul>

	<p>license, state appropriated money, state conservation money, DNR owns land – hunter \$ not used to purchase land)  **Clinton transcript*</p> <ul style="list-style-type: none"> <li>• ‘why would the people who pay for a majority of the funding for these lands be more restricted for our unsafe of the land then people who pay nothing?’</li> <li>• ‘we’re the ones that have to step off the trail..concede a day a week, a deer a year, a bird a year...we give and we give and we give and we give’</li> <li>• ‘as Americans, we all have equal access to the land that we own’</li> <li>• saying that the hunters don’t provide the majority of the \$ to DNR is ‘just not right, it’s misleading’</li> <li>• kind of different: Monks corner talking about no dog hunting, ‘don’t discriminate against certain factions to give things to other people.’ Talk about their dogs being cooped up but the horses aren’t</li> </ul>
<p>Access &amp; Equity</p> <ul style="list-style-type: none"> <li>• There is currently a disparity between who can pay to hunt on Sunday and who can not</li> </ul>	<ul style="list-style-type: none"> <li>• “if you’re hunting game management, you’re treated like a peasant”</li> <li>• “if there’s going to be equal access for everyone then everyone should pay the same fees’</li> <li>• plenty of state park land with no hunting allowed (7 days for other user groups). To hunt you have to drive to get to land you can hunt on</li> <li>• “It should be open to anybody, most of the time to do just about anything, especially if it’s federally or government owned land.”</li> <li>• Some people can’t afford to buy private land</li> <li>• If everyone else can use it 7 days a week, so should the hunters</li> <li>• ‘as Americans we all have equal access to the land that we own’</li> <li>• hunters do what’s asked of them and follow regulations &amp; ‘respect that land because it’s a privilege for us. So I think taking that day</li> </ul>



	<p>away, it's kind of a punishment more than anything"</p> <ul style="list-style-type: none"> <li>• "It's essentially abuse of the authority and the power of the state to enforce an anti-gun and anti-hunting political agenda. It discriminates against hunters and relegates us to a second-class citizen kind of status" - Columbia</li> <li>• some people don't have 'expendable funds' to lease land on Sunday (x1) <ul style="list-style-type: none"> <li>○ not fair to people who can't pay for a club</li> </ul> </li> <li>• only 5 months &amp; only about 7% of the state – theres much more land that isn't open to hunting that other use groups could use</li> </ul>
<p>Religion/Separation of Church and State</p>	<ul style="list-style-type: none"> <li>• separate church and state (x3)</li> <li>• "don't have to be in a church" to be with God</li> <li>• "the first things in the Bible is for us to take dominion over the land"</li> <li>• church gets out at 12 – you can go after church (x1)</li> <li>• some people keep the Sabbath on Saturday (x1)</li> <li>• 'you're not going to force people to go to church because they can't hunt on Sunday'</li> <li>• can fish, can play football on Sunday – why hunting?</li> </ul>
<p>Common Sense, economic, reducing congestion</p> <ul style="list-style-type: none"> <li>• Allowing hunting on Sunday makes sense and will provide economic benefits, and reduce pressure on areas</li> </ul>	<ul style="list-style-type: none"> <li>• overpopulation issue</li> <li>• opening Sunday hunting would increase out-of-state licenses which make more money for DNR (x2)</li> <li>• all the other blue laws (alcohol, stores, tilling etc.) have been lifted</li> <li>• 'with a little common sense, we can hunt and ride horses and bicycles and all do it safely' (you would think)</li> <li>• population control: opening it on Sunday wouldn't change the tag limits</li> <li>• hunters can spread out if they have more than one day (x1)</li> </ul>

<p>Sound management</p> <ul style="list-style-type: none"> <li>In favor of Sunday hunting with sound, evidence based management</li> </ul>	<ul style="list-style-type: none"> <li>Kind of goes here – mention that hunting on Sunday would increase in DNR spending to pay for staff (x1)</li> </ul>
<p>Increased participation</p> <ul style="list-style-type: none"> <li>Sunday hunting will encourage new and novice hunters. This includes youth hunters.</li> </ul>	<ul style="list-style-type: none"> <li>‘entice hunters to buy more licenses’ if they could hunt Sunday (x2)</li> <li>‘recruit, retain, and reactivate hunters’</li> <li>speaking for the people who haven’t been recruited yet</li> <li>average hunting age is increasing and ‘were putting roadblocks in to get those new hunters on board’</li> <li>restriction hurts the younger generation (x4) <ul style="list-style-type: none"> <li>kids have sports on Saturdays; Sundays allow them to ‘carry on the tradition, pass on the tradition and the heritage to the kids.’ Gives them more opportunity to teach their kids how to hunt</li> <li>show kids the ‘South Carolina tradition of hunting’</li> <li>younger crowd doesn’t have the funds to lease private land to hunt on Sundays (x1)</li> </ul> </li> </ul>

<b>Figure 2. Those Against Sunday Hunting</b>	
<p>Tradition/ Status Quo</p> <ul style="list-style-type: none"> <li>Defines people that believe either because of tradition or their experience that the system is not in need of change.</li> </ul>	<ul style="list-style-type: none"> <li>tradition – grandmother had a rule against hunting on Sunday</li> <li>“let’s talk about hunting traditions South Carolina. It includes, for the most part, not hunting on Sunday”</li> <li>“stand up for my traditions”</li> </ul>
<p>Safety</p>	<ul style="list-style-type: none"> <li>WMA land adjacent to parks/forests etc – have to wear orange vests because of hunters (x1)</li> </ul>

	<ul style="list-style-type: none"> <li>• Have to wear bells, sing, etc so not accidentally shot</li> <li>• Hunters that hunt from sound/movement</li> <li>• People have had horses shot, been shot</li> <li>• Gunshot scares horses – bucked off (x2)</li> <li>• Own land near a hunting club – Sunday is the only day it’s ‘safe to be out in the yard’</li> <li>• also with youth retention – won’t take grandchildren riding on Sunday for fear of them being shot</li> <li>• ‘because of the danger of being shot and that danger, gentleman, is very real’</li> <li>• ‘not every hunter is responsible, and that is the problem. It’s called being responsible for your actions and not being a Rambo out there in the woods with a gun’</li> <li>• safety concern from a fisher (‘deer hunters...don’t hit the target all the time and that bullet is going somewhere’)</li> <li>• safety concern from a hunter who scouts on Sunday (x2)</li> <li>• equestrian held at gunpoint by a hunter (Moncks Corner)</li> <li>• shot in the head by a squirrel hunter (Moncks Corner)</li> </ul>
Religion	<ul style="list-style-type: none"> <li>• never hunted on Sunday because ‘my daddy taught me that way’</li> <li>• “honor the Lord’</li> <li>• only one Lord’s day</li> <li>• “they’re supposed to be in church” (x2)</li> <li>• apostles didn’t fish on Sundays</li> <li>• Churches ‘stuck right in the middle of game management land’</li> <li>• ‘taught not to hunt on Sundays’</li> <li>• ‘My family believed that Sunday should be the Lord’s day. You don’t go hunting on Sundays, because that’s the Lord’s day’</li> <li>• “We're still holding fast to the traditions and the fact that we do love the Lord.”</li> </ul>
Day of rest	<ul style="list-style-type: none"> <li>• day to take care of the land</li> <li>• manage property</li> </ul>

<ul style="list-style-type: none"> <li>The concept of a day of rest to reduce pressure on wildlife was most prevalent, but also a day of rest for managers and people in and around WMAs</li> </ul>	<ul style="list-style-type: none"> <li>land near private land; give those owners a day with no shots</li> <li>give landowner the option to allow hunting or not on Sunday</li> <li>you can find time to hunt, have 6 other days (x2)</li> <li>'all living organisms need a day of rest' (x2)</li> <li>low carrying capacity – can't allow another day of hunting or there will be nothing left (x1)</li> </ul>
<p>Mutually Exclusive Activities</p> <ul style="list-style-type: none"> <li>Activities in WMAs with a perceived need to be done on a non-hunting day, but throughout hunting season. This includes hunters and non-hunters.</li> </ul>	<ul style="list-style-type: none"> <li>'horses and hunting do not mix' (x1)</li> <li>hunting season is also prime riding season (x1)</li> <li>like the peace and quiet to do other activities on Sunday (photography, wildlife watching, kayaking) x1</li> </ul>
<p>Out of State Pressure</p> <ul style="list-style-type: none"> <li>This relates to the perception of increased pressure from out of state that will grow if SH opens up on WMAs</li> </ul>	<ul style="list-style-type: none"> <li>Same way South Carolinians go to other states to hunt on Sundays – if we open it people from restricted states will come <ul style="list-style-type: none"> <li>Will lose deer to 'out of staters'</li> </ul> </li> </ul>
<p>Entitled Hunters/Safety (?)</p> <ul style="list-style-type: none"> <li>There was real fear when describing ownership hunters display during hunting season, and worry about 7 days of this</li> </ul>	<ul style="list-style-type: none"> <li>'We've confronted hunters and quite frankly the attitude we get, we're a little bit scared of them. We don't know what's going to happen if they shoot at us or not' <ul style="list-style-type: none"> <li></li> </ul> </li> <li>been harassed by hunters ('this is just for hunters')</li> </ul>
<p>Response to 'they don't pay'</p>	<ul style="list-style-type: none"> <li>those paying for the WMA permit get an animal for the fee <ul style="list-style-type: none"> <li>"You get to bring home a bear or five deer. Passive recreation people that we got using properties take pictures and leave footprints."</li> </ul> </li> <li>other user groups pay for a permit just to support the land, not to hunt</li> <li>equestrian group clean trails and donate for facilities (x1)</li> <li>mountain bikers manicure the trails</li> <li>pay for an annual pass</li> <li>'South Carolina the equestrian industry puts in billions of dollars every year'</li> <li>\$25 permit to ride in a state forest</li> </ul>

	<ul style="list-style-type: none"> <li>• equestrian and camp: pay riding permit, camping fees, &amp; put revenue into the state (bought a trailer and trucks, farm store for feed)</li> <li>• pay taxes</li> </ul>
<p>Access/Limits on time</p> <ul style="list-style-type: none"> <li>• basically, everyone wants that Sunday spot. If you let hunters hunt, the equestrians won't come out on Sunday</li> </ul>	<ul style="list-style-type: none"> <li>• Also work 5-6 days and feel they can only ride when there's no hunting (x1) <ul style="list-style-type: none"> <li>○ Guns scare horses (can buck someone off – dangerous)</li> </ul> </li> <li>• Can't take animals out when it's too hot, too cold, too windy, bad weather, too</li> <li>• "Hunters have 6 days to hunt freely. Equestrians would like to retain one day they can ride safely without fear.' (x1)</li> <li>• (apparently) only 23 out of 93 WMA's allow equestrian</li> <li>•</li> </ul>

Appendix B  
Original Codes

In Favor of Sunday Hunting:

<b>Codebook</b>	<b>#</b>	<b>description</b>
Opportunity	1	provides more opportunity to people to hunt more or hunt on WMAs at all
Limits on time	2	When people specifically note that their own time is limited and thus they are in favor
Access	3	When access is noted, and ability to access places that are a drive or hard to get to
Rights	4	WMA permits provide these people with the perception of a right to the land; freedom; overall 'right' to hunt as an American or as a taxpayer
Evidence-based management	5	People that are in favor as long as the impact on wildlife is monitored and changed if needed. If management says it needs to be
Separation of church and state	6	religion should have nothing to do with it/outdated blue laws
Equity	7	people that can not afford to hunt on private land can not hunt on Sunday-not equitable; not fair or equal that the rules are different, laws should be the same for each
Common sense	8	Makes sense, no reason not to, 'right' thing to do
Increased participation in hunting	9	increase participation in hunting (others will learn to hunt, I can take my kids)
Economic benefits	10	economic benefits to stores and from tourism related to the whole weekend being open; increased hunting license to fund DNR
Other	11	miscellaneous and ideas for DNR
Reducing congestion and pressure	12	This refers to the added pressure from only having one day on the weekend
**Control/Manage overpopulation	13	overpopulation of species, 'manage' the wildlife

\*\* = added by author Ryan Piller

Opposed to Sunday Hunting:

<b>Codebook</b>	<b>#</b>	<b>description</b>
Safety	1	issues of safety are raised by hunters and non-hunters as a concern when opening Sunday to hunting on WMA

Religion	2	People opposed to SH for religious reasons
Impact on Wildlife	3	The impact on wildlife was a concern from hunters and non-hunters
Status quo	4	People believe that the system is not broken, so it should not change.
Impact on Managers	5	Impact on adding a day of hunting on managers schedules and the cost of this is a concern
Impact on other recreationists	6	This represents any conflict due to other recreational uses of the WMA land. This includes a fairness component.
Conservation Management	7	Perception of overhunting (but stipulation that days could be added based on science)
A day of Peace	8	A real effort to voice the importance for peace and quiet in the woods at least one day a week.
Tradition	9	Some focused on the way they were raised and taught as the primary reason to be against SH.
Out of State pressure	10	This relates to the perception of increased pressure from out of state that will grow if SH opens up on WMAs.
Entitled hunters	11	There was real fear when describing ownership hunters display during hunting season, and worry about 7 days of this.
A day to scout	12	This is an activity done by hunters, and one they prefer to do on a day when there is no hunting
Other	13	other ideas or issues very specific

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