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The Camouflaged Crime: Perceptions of Poaching in Southern Appalachia

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A thesis  
presented to  
the faculty of the Department of Criminal Justice  
East Tennessee State University

In partial fulfillment  
of the requirements for the degree  
Master of Arts in Criminal Justice

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by  
Randi Marie Miller  
May 2021

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Dustin Osborne, Ph.D., Chair  
Larry Miller, Ph.D.  
Chris Rush, Ph.D.

Keywords: conservation officers, poaching, southern appalachia, rural crime

## ABSTRACT

The Camouflaged Crime: Perceptions of Poaching in Southern Appalachia

by

Randi Marie Miller

The purpose of this study was to explore perceptions of poaching within the Southern Appalachian Region. To date, little research has been conducted on the general topic of poaching and no studies have focused on this Region. Several research questions were pursued, including perceptions of poacher motivations, methods and concern regarding apprehension and punishment. The study gathered data through qualitative interviews with 27 conservation officers and outdoorsmen located in Southern Appalachia to address these questions. Results provided useful information regarding the unique characteristics of the poaching problem within the Region, which are discussed in detail. Implications and directions for future research are also covered.

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## Chapter 1. Introduction

Historically speaking, the majority of crime in the United States has been thought to occur within its cities (Berg & Delisi, 2005; Foster & Hummel, 1997; Ruddell, 2014; Weisheit et al. 2006). The most noteworthy “urban” crimes—including rape, homicide and drug distribution—are regularly explored by researchers in the criminal justice field. With that said, some crimes tend to be overlooked by scholars. One example are crimes unique to rural areas (Berg & Delisi, 2005; Ruddell, 2014; Weisheit et al., 2006). Studying these crimes is made somewhat difficult due to the fact that no one definition of rural has been accepted by researchers within the field (Barclay et al., 2015; Berg & Delisi, 2005; Ruddell, 2014; Weisheit et al., 2006). Some scholars have sought to conceptualize their own definitions, focusing on factors such as prevalence of farmland, geographic isolation and distrust of government (Andreescu & Shutt, 2009; Foster & Hummel, 1997; Ratcliff et al., 2016). With that said, most researchers seek to use formal definitions when conducting “rural” research, with options including *Rural-Urban Continuum Codes* and *Metropolitan Statistical Area Status*.<sup>1</sup> Despite definitional differences, crimes commonly considered to be rural in nature include thefts from farms, drug production and poaching (Barclay et al., 2015; Forsyth, 2008; Muth & Bowe, 1998). Some research exists in relation to each of these problems, but many questions remain to be answered.

This is especially true for poaching (defined as the illegal taking of plants or wildlife) which has received a scant amount of attention over the years. Poaching presents problems not only for hunters who follow established laws, but also for the biological system (Crow et al., 2012; Gavin et al., 2010; Green, 2004, 2011; Manel et al., 2002). Broadly speaking, the term

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<sup>1</sup> Rural-urban continuum codes define rural areas as places with fewer than 2,500 people. Metropolitan Statistical Areas do not feature a single definition of rural, but consider those areas not deemed MSAs as rural in nature (USDA, 2019).

encompasses the activities of hunting, fishing, trapping, seining, netting, and other methods of capturing wild flora and fauna that violate established laws (Musgrave et al., 1993).

Initial laws regarding poaching originated in the Middle Ages in Europe as a means to protect the rights and powers of landholders. Similar laws were implemented in the United States once settlers began to realize the problems that came along with a lack of environmental regulation (Green, 2004). These laws have developed considerably over time, with special units (e.g., conservation officers) created to enforce them. Though beneficial, research suggests that these wildlife officers face many challenges due to a lack of human resources and ever-increasing demands of the black market (Estrada et al., 2017; Forsyth, 2008; Forsyth & Forsyth, 2009; Garber et al., 2017; Green, 2011). While these challenges are somewhat understood, little research has explored the motivations of those who violate laws or the manner in which they are perceived. This study serves to partially fill that knowledge gap.

### **Historical Aspect of Poaching and Wildlife Laws**

In Medieval Europe and England, measuring a person's wealth focused on land holdings, rather than monetary sums (Musgrave, 1993; Schulte, 1994). Land owners would also control the rights of hunting that took place within their boundaries (Musgrave, 1993). This signified that the wildlife on the person's land was their property and did not belong to the “state”. Therefore, hunting was viewed as under the control of the wealthy and only a small number of people were granted rights. Impoverished people or non-landowners had to be reliant on the approval that they received from the landowners. However, poverty and the need to survive led many to disregard the status quo (Musgrave, 1993; Singler, 1956). In order to protect the landowner and their property, trespassing and hunting laws were established. These strict laws served to criminalize those who failed to gain landowner permission and labeled them as “poachers”.

Nonetheless, impoverished people still hunted illegally to provide for their families. Furthermore, poaching allowed them to learn skills and knowledge that aided in wartime, as using weapons and stealth translated to the battlefield (Musgrave, 1993). Because conflict was an ever-present threat, this was viewed as a benefit that outweighed the potential risk of being caught. Social benefits were also weighed by offenders, as sharing the adrenaline rush of almost being caught bonded them with other community members (Manning, 1993). In sum, attempts by landowners to curb poaching were less than successful due to the advantages perceived by offenders.

Research suggests that poaching remained a concern in the centuries that followed. Schulte (1994), studying offending in Upper Bavaria in the mid-1800s, observed from court records that poaching was an activity done by unemployed, lazy, and parasitic citizens of the community (based upon official perceptions). However, he also noted that disdain for hunting laws led members of society to find ways to thwart the system. For example, respectable citizens would testify that the alleged offender was working at the time that the crime was committed. Furthermore, he found that while unemployed young males of the time committed poaching crimes, employed males did their fair share as well. Most of the men worked in fields with large scythes, possessing weapons to kill the wildlife when the opportunity arose. Isolation and dense cover also allowed them to hide their kill until a suitable time. Once the workday was over, workers could go back to the scene of the crime and retrieve it (Schulte, 1994).

Schulte (1994) also found that poaching was a rite of passage for young adult males, serving to test their courage and skills in avoiding detection. These skills were learned by tagging along with elders in the family through a socialization process. When the time came (in the eyes of these elders), the young male would go on his own (or sometimes as a group) poaching

expedition to prove his manhood (Schulte, 1994). Groups were relatively small in order to avoid detection, but served to create bonds and social ties amongst young males.

### **The United States of America**

Issues related to wildlife and hunting rights were not unique to Europe. Having an abundant supply of wildlife in early America, settlers began to take from the environment when wanted in much the same way that their ancestors had prior to immigrating to the “New World” (Sigler, 1980). Over time, however, similar wildlife conservation laws were created at the state level, with the earliest example being Pennsylvania in the late 1800s. Pennsylvania did not need poaching laws specifically, because the citizens of the rural communities were only taking wildlife that seemed necessary for providing for their families (Miller & Baker, 1909; Warren, 1997). However, when new immigrants moved into these communities, public outcry began to take shape. Established citizens felt that incoming immigrants threatened flora and fauna, and that they would reduce the amount of wildlife available to already-established residents (Warren, 1997).

The laws and acts (i.e. Lacey Act of 1900, Migratory Bird Conservation Act of 1929, and Hunting Stamp Act of 1934) resulting from this concern and associated political pressures helped establish bag limits and hunting seasons, while outlawing the killing of certain animals, mainly songbirds (National Research Council Committee on Agricultural Land Use and Wildlife Resources, 1970). In spite of this move, poaching persisted due to the fact that Pennsylvania had no dedicated wildlife officers to enforce the newly-established laws. Enforcement fell on local police officers initially, a group that was underequipped and undertrained (Warren, 1997). Realizing this shortcoming, Pennsylvania created a state police force that provided enforcement powers over hunting and fishing violations in 1905 (Miller & Baker, 1909; Warren, 1997).

As time went on, concerns transitioned from fear of immigrants to the loss of natural resources and a desire to protect them. As such, new laws were created to place additional limits on the behaviors of hunters and fishers (Miller & Baker, 1909; Warren, 1997). This rationale was in line with early European interventions focused on protecting land holders, with the state now viewed as the entity worthy of protecting (Musgrave, 1993). Shortly after the developments in Pennsylvania, other states began to regulate illegal harvesting along the Atlantic seaboard (Musgrave, 1993). Several species of animals became protected, and laws limiting hunting during mating seasons were enacted. This movement was supported by the Supreme Court's ruling in *Greer v. Connecticut* (1896), which found that states had the right to handle wildlife issues within their territory. The ruling bolstered calls for increased regulation, with many states enacting various laws in the years that followed.

### **Current Status of Conservation Laws**

Regulations have changed over time, though they still feature similar foci and rationales as those established near the beginning of the 20<sup>th</sup> Century. Current regulations encompass many violations that constitute crimes against wildlife and are heavily influenced by national and international treaties. These include the *Endangered Species Act* and *Migratory Bird Treaty Act of 1918*, among others (Musgrave et al., 1993). Most laws serve to focus on broad concerns. First, fishing, hunting, or harvesting certain plants without a license is illegal in all U.S. states, as is doing so outside of defined "seasons" (Eliason, 2003; Oldfield, 2002). Second, the use of certain firearms (e.g., machine guns), poison, explosives, snare traps, nets and pitfall traps are banned (Musgrave et al., 1993). Additionally, baiting wildlife with food, decoys, or mechanical calls has been banned under certain conditions, with the primary goal of ensuring fairness. Other common violations include harvesting wildlife from a moving vehicle, using a spotlight to hunt

wildlife at night and not properly tagging (i.e., claiming through a state-regulated process) the harvested wildlife (Musgrave et al., 1993). Though each of these measures has been designed to protect the abundance of wildlife and wellbeing of the natural environment, enforcement has been far from an easy task.

### **Conservation Officers**

In order to enact wildlife laws there has to be an authority to enforce them. As previously stated, Pennsylvania established the first wildlife officers, otherwise known as conservation officers, to reduce strain on local police forces (Warren, 1997). Their initial success led many other states to create similar agencies in hopes of protecting their own resources (Morse, 1973). The most recent estimate suggests that there are roughly 15,000 conservation officers employed throughout the United States (Reaves, 2011). Though a sizeable force, the United States Fish and Wildlife Service (2011) suggests that roughly 33.1 million citizens fish on an annual basis, with nearly 14 million hunting. This number, in combination with the large swaths of land that officers must patrol, makes enforcing laws difficult (Eliason, 2014).

It also serves to increase the levels of stress felt by conservation officers. Forsyth (2008) discusses how the stresses of the job can be overbearing at times. Wildlife officers are often in remote areas and working alone for the duration of their shift (Forsyth, 2008). The potential for physical harm is ever-present, with concerns relating to armed hunters and dangers associated with the environment (e.g., snakes, difficult terrain). In addition, officers are increasingly being pushed into other responsibilities that are not within their original mandate. These include duties associated with general law enforcement, such as serving warrants, combatting the drug trade and motor patrol (Shelley & Crow, 2009; Sherblom et al., 2002). Because most enter the field out of a desire to protect wildlife, such duties serve to create dissatisfaction and diminish their

motivation for effectively enforcing laws (Carter, 2004; Filteau, 2012). As such, it seems logical that these changes and the resulting stress have limited their ability to successfully confront poaching and protect the targets of it.

## **Targets of Poaching**

### **Poaching of Wildlife**

Though the literature related to poaching is scant in comparison to other crime problems, several studies have described the different techniques employed by offenders (Eliason, 2012; Forsyth, 2008; Forsyth & et al., 1998; Forsyth & Forsyth, 2009; Forsyth & Marckese, 1993). Furthermore, it has been revealed that their primary targets are deer, bear, turkey and other small animals (U.S. Fish & Wildlife, 2015). A significant amount of poaching can be attributed to the desire to provide food for rural families, but the use of animal products in non-traditional and traditional medicines may also serve as a driver of the poaching crisis (Davis, et al., 2019; Mano & Ishii, 2008; Servheen, 1999).

For example, poaching of black bear has increased in recent years due to a decline in their population within Asian countries and the popularity of their gallbladders (Davis et al. 2019). Mano and Ishii (2008) state that the bile from the gallbladder is commonly used in traditional Asian medications. Additionally, Duffy et al. (2015) discussed that certain species of bear are in demand to produce cheap pharmaceutical products. Poachers have been incentivized by the emerging Asian market, which pays them approximately two hundred dollars per one kilogram of weight (for the gallbladder). This equates to between five thousand and ten thousand dollars for one specimen when selling it on the black market (Zhao, 2013).

Products derived from deer are also a commodity within the Asian market. Wu et al. (2012) discuss how the base of deer antlers is widely use in traditional Chinese medicines, as

they are perceived to nourish the “Yin” of an individual, tonify the kidney, invigorate the spleen, strengthen bones and muscle and promote blood flow. With that said, most hunters who poach deer do so for other reasons. A desire to provide food for their families is perhaps chief among these (Forsyth et al., 1998). Though research on the topic is quite limited, a recent study in Southeastern Kentucky suggests that poaching of deer is far from uncommon. Assessing mortality rates, the researchers found that lawful hunting accounted for 16.7% of deer mortality during the timeframe under analysis. Poaching, on the other hand, accounted for 27.7% of mortality. Though restricted to one area, the findings lend support to the notion that poaching is problematic in rural areas (Haymes et al., 2018).

Trophy hunting is also commonly cited among reasons for poaching wildlife within the United States (Eliason, 2012). This form of hunting has been popular for generations, though it began to increase in the late 1980’s (Brymer, 1991; Gavitt, 1989; Musgrave et al., 1993; Muth & Bowe, 1998). Trophy hunters have been found to have two motivations: (1) a desire to show off their “kills” and (2) the high monetary values associated with specimens (e.g., mounted heads). It should be noted that trophy hunting is not illegal in all instances—only those in which the hunter takes the animal out of season or in violation of other established laws. Common targets of those who poach for these “trophies” include deer, bear, bighorn sheep and elk.

Researchers have found (by interviewing wildlife officers) that trophy poachers are oftentimes aided by taxidermists and hunting guides (Eliason, 2012). These individuals offer services to known poachers in return for higher than normal fees. Furthermore, it is thought that some guides and taxidermists market themselves (under the table) to potential hunters through word of mouth (Eliason, 2012). Though conservation officers have made concerted efforts to target these individuals, the problem remains significant in many parts of the country.



## **Poaching of Ichthyology**

Research relating to poaching is relatively sparse in general and especially rare in relation to the poaching of ichthyology, or fish. Flowers et al. (2018) briefly touched on the poaching of trout, a freshwater fish living in mountain streams and common to the Appalachian region, in their study of fish population trends. They found that the illegal taking of fish significantly contributed to reductions in trout populations throughout their study area. Their findings are echoed in the work of Green (2011), who found (through interviews with active poachers and wildlife officers in the Appalachian Region) that most individuals who poach animals also violate fishing regulations on a regular basis.

Similar problems appear to exist outside of the Appalachian Region. For example, Cohen (1997) discussed violations of the Legacy Act among fishing companies. Several individuals in the Pacific Northwest were found guilty of falsifying records in an attempt to hide their taking of white sturgeon (for the purposes of making caviar) without the appropriate permits. In total, some 3,000 pounds of caviar were illegally produced and sold through their operations over a five year period (Cohen, 1997).

## **Poaching of Flora**

Similar to animals and fish, the poaching of flora (i.e., plants) has been a common occurrence throughout the decades as people have sought their nutritional and medical benefits (Bishop et al., 2015; McLean, 1995; Weakley et al., 2012). More recently, however, it has been suggested by law enforcement and researchers that the illegal taking of flora may feature more of a monetary rationale (Daerr, 2001; Predny & Chamberlain, 2005; Young et al., 2011). Multiple species of plants are able to be illegally harvested and sold for significant profits, with examples including *American ginseng*, *Bloodroot*, *Black Cohosh*, and *Galax* (Young et al., 2011).

*Galax*, used in many floral arrangements, is commonly poached in the Southern Appalachia's by individuals and families seeking to supplement their income in late spring (Predny & Chamberlain, 2005). The increasing popularity of the plant in European markets, combined with an influx of migrant workers who harvest the plant to augment their income, has contributed to increasing concerns regarding its future. *American Ginseng* is similarly threatened due to monetary motivations, as it is also commonly used in traditional medicines. Robbins (1999) explains that Asian markets take in roughly 60 metric tons (only a portion of which is gathered legally) of *American Ginseng* each year because the root is thought to be more efficacious than the cultivated plants available domestically.

*Bloodroot and Black Cohosh* are the final two common targets for poachers within the Appalachian Region and are also typically sold to Chinese distributors. Both are lucrative opportunities; for example, distributors pay between \$250 and \$880 per pound for *Bloodroot* (Ha et al., 2017). *Bloodroot's* uses range from treating ulcers, ringworm and skin cancer, to inducing abortions and providing a drug-like high (Zomlefer, 2015). *Black Cohosh* is similarly used to treat a wide variety of ailments, including dietary problems and menstrual complications (Borrelli & Ernst, 2008; Gurley et al., 2012).

The National Park Service (2018) recently estimated a 30% decrease in the overall abundance of *American Ginseng*, *Black Cohosh*, *Galax* and *Bloodroot* within a portion of the Appalachian Region. Assuming similar patterns elsewhere, it is likely that their continued availability may be under threat. This realization, in combination with similar concerns regarding fish and wildlife, suggests that it is now more important than ever to provide increased knowledge of the problem and potential solutions to it.

## **Current Study**

The current study aimed to add to the existing literature on poaching by exploring the problem within the Southern Appalachian Region. Largely rural and isolated, the Region has not been the focus of many studies on the topic. Following the approach of Forsyth et al. (1998), this project relied upon semi-structured interviews with both outdoorsmen and conservation officers in Southern Appalachia. Such an approach provided a means of exploring perceptions of the offense and those who commit it among those most likely to understand these topics. In addition, it presented the opportunity to explore the relationship between criminological theory and the crime, a link that has been excluded from much of the previous research.

## **Chapter Summary**

This chapter sought out to provide an overview of the act of poaching. It began by pointing to the lack of rural crime research and the need for studies exploring forms of offending unique to rural areas. It then discussed the history of poaching and development of a variety of conservation laws. Conservation policing, its origin, status and current limitations were also addressed. Finally, it provided a look into our knowledge of the current state of wildlife offending and the goals of the current study. Chapter Two will serve to introduce the literature pertaining to poachers and illegal harvesters of plants and animals within the United States. It will highlight the limited research on the techniques of poaching and efforts to decrease it, before introducing the research questions and hypotheses associated with the current study. Chapter Three will address the study methodology, including a discussion of the interview guide and sampling strategy. Chapter Four will introduce the results from the interviews, while Chapter Five will serve to further explain the relevance of those findings and how they contribute to the extant literature.

## **Chapter 2. Literature Review**

As discussed in the introductory chapter, the literature pertaining to poaching, its impact on the environment and attempts to combat it is relatively sparse. However, a handful of studies have explored these issues within the United States. The current chapter seeks to provide an overview of the findings of these studies, with a specific focus on the characteristics, motivations and activities of poachers and conservation officers. In addition, it will provide an overview of the theoretical frameworks that have been used to explain poaching and present the research questions associated with the current study. Finally, it will present the research questions that the current study sought to answer.

### **Poacher Characteristics, Typologies and Techniques**

Some work has explored the characteristics and techniques of poachers in recent decades. It is important to develop an understanding of these aspects of the offense/offender in order to better understand their motivations for committing wildlife violations. This section will provide an overview of the findings of these studies.

#### **Typologies of Poachers and Techniques**

Several researchers have attempted to develop an understanding of the various types of poachers through data collected from offenders and conservation officers. For example, Eliason (2008) identified several common categories based upon extensive research and a review of the available literature. He classified the first as the *backdoor type*. Eliason (2008) describe these as individuals who illegally hunt on their own land or property belonging to adjacent neighbors. The land is usually privately owned and requires the game warden to obtain a warrant to search the premises. One game warden expressed that, “These guys own 200-300 acres... makes it

difficult to apprehend them” (Eliason, 2008, p. 117). In general, these are perceived by law enforcement agencies as the most difficulty to deter.

Eliason (2008) defines *experienced or habitual poachers* as those individuals who have previously been caught and adapted their techniques to outwit law enforcement. They are perceived to be the most frequent offenders, with conservation officers indicating that they would continue their activities in spite of any enforcement efforts. Furthermore, they seldom discuss their hunts with friends or others in the community, rendering informants of little use in investigations. Conversely, the *opportunist poacher* is one who takes advantage of opportunities as they arise (Eliason, 2008). Essentially, they will act when wildlife presents itself at the “right place and time.” These individuals can be difficult to apprehend, though many are caught due to the speed at which they have to make a decision to pursue the opportunity.

The class of poachers who *mix their schedules up* tend to avoid patterns by choosing different times and locations to commit their acts. These individuals are typically unemployed and have no set schedules, which allows them to more easily diversify their approaches. *Quiet poachers* as a category features some overlap with *experienced or habitual poachers* in that these individuals seldom discuss their acts. However, they are further defined as those who typically hunt alone in areas that they know (Eliason, 2008). Though this allows them to gain familiarity with the ground, it also presents conservation officers with the opportunity to survey specific areas when signs of illegal hunting (e.g., carcasses, tire marks, shell casings) are found.

*Trophy poachers* are those who violate regulations for the purposes of securing large game than can be put on display or shared (through pictures) with their social circle. Though most common in other countries (e.g., parts of Africa), the Western United States also features a

problem with this category of offender. They are difficult to apprehend in the act due to the use of skilled guides, though this does to some degree assist in building cases after the fact.

Eliason (2012) built upon this knowledge by exploring the perceived motivations of trophy poachers through surveys of conservation officers in Montana (N=22). Nearly all agreed that trophy poachers were the most serious of the typologies due to their disregard for conservation and attempts to hunt animals nearing extinction. As such, many focused the majority of their efforts on targeting this class, neglecting cases involving those who fit other descriptions when necessary.

Forsyth (2008) took a slightly different approach to categorizing poachers, focusing on typologies of techniques and how each either aided or impeded their attempts to avoid detection. His work relied on data obtained through interviews with 64 conservation officers in Louisiana. Accounts indicated that the following were perceived as most influential: poaching alone, experience, remaining quiet, remaining mobile, geographic familiarity, and choosing large areas. Conservation officers perceived that poachers who “go it alone” were harder to apprehend because they did not interact with potential witnesses and informants. In fact, most stated that this category of offender was rarely caught (Forsyth, 2008). Those who had gained experience were equally difficult to apprehend. They tended to be the elders of the community who “laid low” and only poached when conditions were favorable. It is interesting to note that they were also perceived to be “flashy” with the money that they made from poaching, using it to buy new firearms and vehicles, among other things.

Those who regularly discussed their poaching activities were thought to be most easily apprehended (Forsyth, 2008). These were commonly individuals new to poaching, or who pursued it as a form of socialization. This relates to the use of informants, which was said to be

the best “tool” available to conservation officers in catching these individuals. They reported commonly letting someone go with the expectation that they would share information with law enforcement on other poachers within the region at a later date.

Mobility was commonly referenced in the interviews, as those who avoided hunting in the same location made officers’ jobs difficult. For example, one game warden stated that, “If he hunts in different areas he is hard to catch” (Forsyth, 2008, p. 48). However, those who commonly travelled to unfamiliar territory lost this advantage due to their lack of knowledge regarding routes and game warden patterns.

Further exploring techniques, Green (2011) attempted to gain a better understanding of the methods that poachers used to carry out their offenses through interviews with 22 self-reported poachers, 14 conservation officers and two (2) law-abiding hunters. He found that many had turned to innovative methods that took advantage of modern technology while poaching both flora and fauna. Night vision goggles, weapon silencers, and dynamite were discussed by the sample as being commonplace, as was “telephoning fish,” which involved using electrical devices (generally powered by a car battery) to shock pools of fish and bring them to the surface.

Rocket nets were also discussed, which involved laying a large net on the ground with bait in the middle and activating it from a distance once the prey arrived. One game warden commented on the use of rocket nets and shared that poachers could eventually catch up to thirty or forty animals if used properly (Green, 2011). Baiting (through various approaches) appeared to be common based upon the results of Green’s (2011) work, as it was discussed by both poachers and conservation officers. Deer, turkey, and coyotes were commonly hunted in this manner. The use of remote-control aircraft (e.g., drones) was also discussed, as these presented the opportunity to better locate prey and scare them towards the hunting party.

Two methods emerged as being most effective in terms of avoiding detection. The first was the use of false compartments in vehicles to hide carcasses. The second was referred to as “hide and return” and involved the poacher simply hiding the illegally harvested animal and coming back later to retrieve it. This allowed them to monitor the area and ensure that no conservation officers were patrolling the vicinity (Green, 2011).

Finally, one attempt has been made to understand the perceptions that poachers have of conservation officers and how typologies (in terms of their mindsets) may be used to better understand them. Filteau (2012) interviewed 16 conservation officers in the State of Maine, in addition to 13 former or active poachers. Most poachers featured negative attitudes towards conservation officers, primarily due to their belief that they had too much power and were disrespectful when approaching potential violators. Conservation officers were well aware of this mindset, though their responses indicated that two prominent typologies of responses existed when poachers were apprehended: compliance or defiance.

Defiant poachers expressed the most frustration, distrust and anger towards conservation officers (Filteau, 2012). One poacher described it in a particular way, “...the older wardens have a real good sense of fairness...the younger wardens...don’t give a poacher a reason to poach...he’s already got enough reasons in his mind...” (Filteau, 2012, p. 244). Of interest, many who were perceived to fall in this category based their frustration on the acts of others. They felt that officers targeted them when they were low-level offenders. In other words, they indicated that they only poached for survival, whereas others were doing it to make a profit or for the sheer thrill of the hunt. Alternatively, poachers in the compliance category were cognizant of their misdeeds and understanding of the game warden’s role. These individuals tended to show



some level of respect to conservation officers and accepted their punishment without significant disagreement.

### **Poacher Characteristics**

To date, only one study has sought to understand the demographic characteristics of poaching offenders. Crow et al. (2013) did so using secondary data provided by the State of Florida that included relevant information for wildlife violators over the course of one full year. Not unexpected, the significant majority were males who resided in the State. Most hunting violations were committed by Black and/or Hispanic individuals, while most who violated fishing laws were White and/or Hispanic. Of interest, it was also found that White individuals were most likely to receive citations and harsher punishments controlling for the nature of the offense. As discussed by the authors, it is possible that the data is not representative of offenders nationwide due to the unique characteristics of the State's population. However, this study does provide a baseline for future attempts to explore offender demographics.

### **Typologies of Conservation Officers and Techniques**

Some research has explored typologies of conservation officers, seeking to determine the forms of offending that they perceive as most severe and the manner in which they perform their jobs. As previously mentioned, most have been found to perceive trophy poaching as most problematic (see Eliason, 2012 for an example). Furthermore, they commonly reference businesses as aiding these poachers. For example, Eliason's (2012) work with conservation officers in Montana revealed that most felt that taxidermists and guides were willing to assist with illegal hunts (and the processing of carcasses) for high fees.

Turning to roles, Forsyth and Forsyth (2012) found that there are two types of conservation officers based on interviews with 27 officers. Bookers are those that apply the law

with no discretion. They have little regard for the excuses provided by offenders and are more concerned with conservation of wildlife. Those who use discretion tend to believe that most poachers do so as a means of survival and that they are deserving of some leeway in certain circumstances. They typically listen to offender accounts and determine whether their justifications have merit. However, and in line with Eliason's (2012) findings, all who favored discretion suggested that this does not apply to those who kill endangered species. As an example, one stated that: "When it comes to an endangered species, the majority of them are protected by federal law and I must say the federal courts... will literally throw the book at them when they are found guilty" (Forsyth & Forsyth, 2012).

Eliason' (2013) also attempted to categorize conservation officers, though his work was focused on the techniques that they commonly used to catch offenders. He found that some favored profiling. For example, one stated that he regularly looked for "... out of state vehicles, people wearing orange, guns in the back of trucks" (Eliason, 2013). Profiling based upon behavioral patterns was also quite common among his sample. They discussed how poachers who had attitudes and behaviors that were out of the norm usually attracted suspicion. Furthermore, conservation officers would look at the behavior of the individual while interviewing them to see if there were any discrepancies in their body language or responses to questions.

Some focused less on profiling individuals and more on profiling locations. These officers positioned their patrols in the areas that they knew, and had previously apprehended poachers. Others favored the use of informants when looking for poachers. Given that there are fewer conservation officers than poachers, the officers used the informants to gain knowledge of the area, animals, other poachers, and time of day/night when poaching was common (Eliason,

2013). Finally, some favored investigating the condition of the hunter's equipment, age of the hunters, and the number of individuals in their hunting group.

### **Motivations and Perceptions of Poachers**

Though research relating to poaching is limited, several studies have explored the justifications of offenders. The theoretical approaches that guide these studies have helped to better understand their motivations and perceptions. For example, Forsyth and Marckese (1993) and Muth and Bowe (1998) have cited profit motivations in relation to illegal hunting. On the other hand, studies from Eliason (2003, 2007, 2008, 2012, 2013) and Forsyth and Forsyth (2008, 2012) have discussed the disadvantages of rural residents and why individuals turn to poaching as a means of survival. Others have discussed how some poachers find pure excitement in committing the crime. Opportunity perspectives (Crow et al., 2013; Eliason, 2012) and theories of neutralization have all been examined by researchers as well.

It is important to note that researchers gather data in multiple ways. Some projects have relied upon surveys and interviews with former/active poachers, whereas others have sought the input of conservation officers and those who hunt legally. The following review of the literature will focus on findings of studies using all of these approaches, with a specific focus on the theoretical underpinnings of each and whether they were shown to be applicable to the problem. To promote clarity, the review is organized by theoretical approach.

#### **Focal Concerns Theory**

Focal concerns theory suggests that individuals offend for psychological fulfillment. It was first applied to the crime of poaching by Forsyth and Marckese (1993). Their study mainly focused on the pleasure gained from committing the crime. A total of 36 poachers from Southwest Louisiana were interviewed by the research team through a snowball sampling

method. Their framework was based upon Miller's (1962) conceptualization and assessed the following focal concerns: trouble, excitement, smartness, toughness, and autonomy.

The *trouble* aspect was found to be a significant theme because running from the "law" was enjoyable for those interviewed. Participants enjoyed being able to tell their peers that they "got away," which provided them (at least in perception) a higher status in their community. The *excitement* factor was derived from the poachers being able to hunt illegally anytime they wanted. Forsyth and Marckese (1993) discussed that their respondents found additional excitement when consuming their illegal harvest. One poacher explained "...it's a real rush knowing that the conservation officers are out there trying to hunt you," which signifies a victory meal for the poacher (Forsyth & Marckese, 1998, p. 161).

*Smartness* was found to apply to the close calls that the poachers had with conservation officers. These allowed the poachers to boast about how they had outsmarted the conservation officers by being more familiar with the terrain. Some of the poachers in Forsyth and Marckese's (1993) study enjoyed sharing their stories of "out running and outsmarting" the conservation officers because it gave them a sense of accomplishment. When poachers were caught, it was found that they tended to blame the other individual(s) that were with them. On the other hand, some poachers who were more experienced stated that poachers who were caught did not understand the patterns of conservation officers (Forsyth & Marckese, 1993).

*Toughness* of the poachers related to the dangers of illegal hunting and various "run ins" with conservation officers. Forsyth and Marckese (1993) displayed accounts of poachers where conservation officers would use, "...large caliber weapons..." to apprehend them (p. 167). Furthermore, the poachers would express how tough they had to be to continue their poaching activities. The last focal concern, *autonomy*, related to how poachers played by their own rules.

This allowed them to feel a degree of independence because they did not have to comply with state regulations. As one poacher explained, "...nobody is gonna tell me what to hunt where to hunt or when to hunt..." (Forsyth & Marckese, 1998, p. 168).

### **Techniques of Neutralization**

Neutralization theory was originally conceptualized by Sykes and Matza (1957) and suggests that offenders use techniques of neutralization to overcome guilt and continue their illegal behavior. Eliason and Dodder (1999) applied the theory to poaching by surveying both poachers and conservation officers in Colorado. Most individuals included in the sample perceived the term "poacher" to be offensive and disliked the idea of being labeled one. Furthermore, most were able to utilize various neutralizations when thinking about their actions. *Denial of responsibility* seemed to be most common, as many of the poachers reported telling conservation officers that they "...thought it was legal..." or "...did not know it wasn't legal..." (Eliason & Dodder, 1999, p. 242).

This was followed by a second (qualitative) study involving interviews with a portion of poachers included in the original sample (Eliason & Dodder, 2000). Findings provided further (and more detailed) support for the application of the theory to the problem. For example, 59% of poachers reported that they did not set out to kill a deer illegally, allowing them to deny responsibility for the significance of their behavior (Eliason & Dodder, 2000). A similar percentage discussed how their "good qualities as an individual" outweighed any harm that came from their actions. Many also agreed that it was okay to poach because everyone else was committing the crime, with some (approximately 26% of poachers) even suggesting that the authorities were illegally harvesting themselves (Eliason & Dodder, 2000). Finally, nearly half

indicated that they poached because they had no other options (i.e., for survival), which is supportive of Sykes and Matza's (1957) concept of "defense of necessity."

Seeking to determine whether similar findings would emerge in a different location, Eliason (2003) interviewed 24 conservation officers and 33 poachers in Kentucky. *Denial of responsibility* once again emerged as a common theme in responses, as most offenders suggested that their crimes were an accident or due to ignorance of various regulations. For example, one individual stated that they had just picked up their friend's fishing pole when the game warden arrived and cited him for fishing without a license (Eliason, 2003). However, conservation officers indicated that they did not cite every individual—choosing to only when they felt as if the individual was lying or faking ignorance.

*Claims of entitlement* were also common across the sample. One individual said that the "...law should be happy we are doing something with our time other than drug dealing/drinking and driving..." (Eliason, 2003). In essence, many felt that they were doing something positive for their community by refusing to commit more serious offenses. Others appealed to *higher loyalties*, which involved referencing their religion in justifying the acts. As an example, one interviewee stated that fishing without a license was not problematic because they were "God's fish," and he should not need a license to catch them. Many also suggested that conservation laws were unfair when the offense occurred on their own property, in some cases tying religion into their arguments.

Finally, some participants discussed the *necessity* of violating fish and game laws in order to provide food and or an income, though most conservation officers in the sample felt that this was simply an excuse that many poachers used to avoid a ticket. For example, one warden expressed that "being called a poacher does not affect them at all" because they rationalize it as

supporting their family even when other options (such as food banks) are available (Eliason, 2003). In sum, the results of these works indicate that neutralizing behavior through various rationales may be common among poachers.

### **Folk Crimes**

Folk crimes are those that are deemed acceptable by individuals in the community that they are committed within (Ross, 1961). In essence, the population of these communities believes that regulations are established without the need for them. Common examples of folk crimes include gambling and the illicit production of alcohol (Forsyth et al., 1998). Some work has also attempted to apply this conceptualization to the work of poaching.

For example, Forsyth et al. (1998) found that most poachers (N=41) interviewed in his work believed that hunting regulations were an overreach by state and federal entities. In their minds hunting was a means to fulfill the needs of rural, impoverished communities and that restricting it violated the norms of these communities. Interviewees indicated that hunting out of season and in violation of restrictions on methods and limits provided them with food, money and exhilaration, while also continuing a tradition that had been passed down for generations. Food seemed to be the biggest motivation for offenders in the sample. They reported that poaching helped to provide food for family members and others in their social network. In addition, most indicated that they would not do so when food was plentiful—that it was essentially a method of last resort. In relation to money, they similarly stated that poaching was an option when economic conditions were poor (due to loss of work or strains on the local economy). The income derived from it was said to not only keep their families afloat in rough times, but also keep local businesses from shutting their doors (Forsyth et al., 1998).

*Tradition* related to the cultural history of the community and common practices of previous generations (Forsyth et al., 1998). Interviewees indicated that poaching was commonplace in the past (primarily due to a lack of regulations) and continuing the tradition allowed their cultural history to survive in modern times. Conversely, they also mentioned the *exhilaration* aspect of offending, though this too tied into cultural norms. Many individuals stated that they also poached because they enjoyed the thrill of running from the conservation officers (Forsyth et al., 1998).

Of interest, Forsyth et al.'s (1998) study also explored the perceptions of conservation officers in the surrounding area. Those interviewed (N=32) indicated that they were more lenient towards poachers who were hunting for the purpose of food. One game warden discussed how, "Some [poachers] do it to survive...fining these poachers will only make their situation harder (Forsyth et al., 1998, p. 66). However, those found to be committing the crime solely for the purpose of income generation were met with no sympathy. Regardless of motivation, most conservation officers stated that it was relatively harder to apprehend poachers due to their acceptance by the community, further supportive of the folk crimes thesis.

### **Subcultural Theories**

It has been posited that many poachers do so as a result of norms that have been passed down from previous generations, similar to one of the elements of the folk crimes hypothesis. Serenari and Peterson (2016) assessed this through interviews with former poachers in North Carolina. Results supported aspects of various subculture theories of offending. They found that geographic isolation facilitated this to some degree. This seclusion served to create a subculture with distinctive norms, networks, and identities that led residents to act against what they perceived to be outside threats (i.e. urban areas). Economic hardships in the 19<sup>th</sup> and 20<sup>th</sup>



centuries led individuals to hunt wildlife throughout the year regardless of repercussions, as they sought to feed their families. Over time, they perceived increased regulation as a threat to their values and livelihood (Serenari & Peterson, 2016).

Furthermore, these individuals felt that they were true conservationists because they lived in the areas in which they hunted. They viewed outsiders (specifically those advocating for and passing various conservation laws) as threatening their culture of hunting. This was (in their minds) magnified by the push toward organic foods by these same groups, which seemed contradictory to the imposition on their preferred way of life. In turn, they fostered a belief that they were the “last of their kind” and that continuing their offending was a statement supportive of their unique cultural values (Serenari & Peterson, 2016).

### **Routine Activity Theory**

One study has explored the role that opportunities and geography play in poaching decisions. Crowe et al. (2013) coded data for over 15,000 offenses occurring within the state of Florida in one calendar year to better understand the locations that offenders chose. Some crimes, such as improper permits, were evenly distributed throughout the State. However, others were more focused in certain locations. For example, the use of illegal methods was common in the Northwestern portion of the State, whereas illegal fishing was concentrated in the Southern Region. He posited that more opportunities specific to each crime were present in the locations that they were common in.

### **The Current Study**

The current study aimed to add to the existing literature by exploring poaching in the Southern Appalachian Region through interviews with conservation officers and outdoorsmen. It

did so by integrating components of the various theories covered in this chapter and focused on the following research questions:

**R1: What forms of poaching are common within the Region?**

As discussed in the first chapter, poaching targets include animals, fish and flora. Typically, the prevalence of offending (associated with specific targets) will vary according to the opportunities unique to a region. To date, little research has explored these targets within Southern Appalachia. This study presented the opportunity for a better understanding of those that are most at risk within it.

**R2: What characteristics are common among poachers within the Region?**

Little research has sought to identify the characteristics of poachers, as most are qualitative in nature and rely on small samples. Though the current study took a similar approach, it should add to the existing knowledge base and provide an understanding of characteristics within the Southern Appalachian Region.

**R3: What motivates poachers to disregard hunting and fishing laws and regulations?**

Several theories have been explored in attempts to better understand the motivations of poachers. However, these may not be generalizable to all settings. For example, it is possible that poachers within the Southern Appalachian Region have mindsets and motivations that differ from individuals located in the Midwest. By interviewing individuals living within the Region the generalizability of the various theoretical approaches were able to be better assessed.

**R4: What factors influence the ability of conservation officers to detect and apprehend poachers?**

A few attempts have been made to assess the perceptions of conservation officers and their abilities to identify and apprehend wildlife violators. These studies have found that

conservation officers vary in terms of their mindsets (e.g., use of discretion) and approaches.

This project allowed for a detailed understanding of these topics within the Region and added to the existing literature.

### **Chapter Summary**

This chapter sought out to discuss the existing literature on poachers, their characteristics and their motivations. In addition, it discussed typologies of conservation officers and knowledge regarding how they perform their jobs. It also provided a detailed review of the theories that have been commonly applied in attempts to understand the crime. Finally, it provided an overview of the research questions that the current study sought answer. Attention will now be turned to discussing the methodology, including the interview guide and sampling strategy.

### **Chapter 3. Data and Methodology**

Chapter Two provided an extensive overview of the literature concerning the issue of poaching within the United States and other countries. In addition, it introduced the research questions associated with this study. The current chapter offers an outline of the methods used to address these questions, with a specific focus on the target population, sampling approach and interview guide. In addition, it will also cover how the data were analyzed.

#### **Sample**

Two population groups were interviewed regarding their perceptions of poaching for this work: (1) conservation officers and (2) outdoorsmen. Participants were acquired through a snowball sampling design in which the author asked each interviewee if they would be willing to introduce her to others who may wish to share their perceptions. Ultimately, 27 individuals agreed to take part, including nine (9) outdoorsmen and 18 conservation officers. Due to the focus of the work, all were located within the southern Appalachian region (Alabama, Georgia, Kentucky, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia). Furthermore, due to concerns regarding informed consent, all were over the age of eighteen at the time of data collection.

Qualitative interviews were conducted with individuals who identified themselves as outdoorsmen (i.e., regularly fished and/or hunted animals or plants). Those who agreed to participate (N=9) in the study were asked to respond to a series of open-ended interview questions (Appendix 1). All interviews with outdoorsmen were conducted over the phone due to the Covid-19 pandemic. Due to the sensitive nature of the research topic, respondents were interviewed about their perceptions and not their lived experiences. Put differently, they were not

asked about their own poaching activities (if applicable). This allowed individuals to more freely communicate about the topic and overcame potential concerns with privacy and legal liability.

Qualitative interviews were also conducted with the United State Forestry Service Officers and state-level conservation officers. These officers were contacted through e-mail or by phone using contact information provided to the researcher (by other participants and contacts). Those who agreed to participate in the study were asked to respond to a series of open-ended interview questions (Appendix 2). All interviews with conservation officers were conducted over the phone. Similar to outdoorsmen, conservation officers were asked about their perceptions of poaching in the Southern Appalachian Region. However, they were also asked various questions related to their experience (as a result of their occupation) with it.

### **Interview Guide**

Based on the research questions that were introduced in the previous chapter, a series of open-ended questions create the interview guides. Separate guides were utilized for outdoorsmen (Appendix 1) and conservation officers (Appendix 2), though the questions remained relatively similar in both. All interviews took a semi-structured approach, which allowed participants to freely discuss their knowledge and perceptions while being prompted with the key topics associated with the study.

### **Introductory Section**

The initial sections of both interview guides focused on participants' backgrounds and familiarity with hunting/fishing. Outdoorsmen were asked questions regarding their age, whether they hunted animals and/or plants, whether they fished, and the forms of each activity that they participated in (e.g., types of animals, fish and plants). In addition, they were asked how old they were when they first began each of these activities (if applicable). This information provided an

understanding of the characteristics of the sample and insight into participants' potential knowledge. Conservation officers were asked similar questions regarding their age, whether they hunted and/or fished and how old they were when they began participating in each. In addition, they were also asked how long they had served as a conservation officer (in years).

### **Research Question #1**

Several interview questions addressed the first research question (*What forms of poaching are common within the Region?*), though they somewhat differed between the guides. Six questions were asked of outdoorsmen and were tailored to their perceptions of the characteristics of poaching in the Region. The first question was *what percentage of outdoorsmen do you estimate poach (either regularly or on occasion)?* This was followed by asking them *what types of poaching they think are common*. This question was supplemented by querying whether they thought the following forms of poaching were prevalent within the Region: (1) hunting out of season, (2) hunting without a license, (3) exceeding limits, and (4) using illegal methods. As active hunters and fishers, these individuals had insight into these topics through firsthand knowledge or stories shared by other outdoorsmen.

Next, outdoorsmen were asked *what percentage of fishers they estimate poach (either regularly or on occasion)*. This was immediately followed by a question assessing the *types of poaching that they perceive to be common*. Sub-questions relating to fishing without a license, exceeding limits and using illegal methods were also asked. Finally, participants were asked about their perceptions regarding the *percentage of those who hunt plants that do so illegally*, and *the types of poaching that are common among those who do so* (e.g., lacking a permit, doing so on private property without permission or on forbidden public property, and exceeding quotas).

Conservation officers were asked to respond to a nearly identical set of questions. However, as opposed to asking about their perceptions based upon knowledge of others, they were asked to respond to each question based upon their experience as an officer. Exploring these questions with both groups provided a thorough understanding of the prevalence and form of the poaching problem within the Region. In addition, it gave insight into whether estimates and perceptions differ between officers and outdoorsmen.

### **Research Question #2**

The second research question (*What characteristics are common among poachers within the Region?*) was explored through two interview questions. Both groups were asked whether *they think that poachers share any demographic characteristics*. To further promote discussion, they were queried regarding their perceptions of age and gender, and whether either characteristic influences the likelihood that someone will poach. This was followed by a question asking if they *think that there are different types of poachers (e.g., opportunistic, habitual)*. As discussed within the review of the literature, several typologies have emerged. Responses to this question provided further insight from both conservation officers and those who actively hunt and fish within the Region.

### **Research Question #3**

Several studies have explored the motivations of poachers, seeking to understand why they commit the act, and in some cases, how they go about neutralizing or justifying their behavior. In line with this, the third research question explored the factors that *motivate poachers to disregard hunting and fishing laws and regulations*. Both groups were asked to respond to an identical set of interview questions investigating their perceptions of motivations. The initial question was *what do you think motivates the individual's that poach to do so?* All participants

were allowed to respond freely at first, with sub-questions based upon past theoretical findings subsequently used. These explored whether they perceive poachers to be motivated by (1) survival, (2) psychological fulfillment, (3) ability to neutralize their behavior, (4) socialization, (5) acceptance of poaching by their peers/the community, and (6) contempt for rules and regulations. Finally, participants were asked whether *they think that motivations depend upon the type of poaching (e.g., animals, fish, and plants)*.

#### **Research Question #4**

The last research question focused on how *poachers perceive the likelihood of apprehension and potential punishments* (in the minds of outdoorsmen and conservation officers). The initial three interview items related to this question were asked of both groups. First, they were asked whether they *think that most poachers are worried about being caught* and their rationale (poachers) for feeling that way. Next, they were queried regarding whether they *think that potential punishments (such as fines or incarceration) are taken into account by offenders*. Third, both groups were asked to respond to the following question: *How do you think that poachers go about avoiding getting caught?* Conservation officers were asked one additional question related to the topic: *Are any types of poachers more difficult to avoid?* Though outdoorsmen may have some knowledge of this, it was assumed that conservation officers would be able to offer the most relevant (and valid) information.

#### **Method of Analysis**

All participants were asked for permission to audio-record interviews and agreed to this approach. Each was transcribed using available software after they were conducted. The resulting data were assessed through content analysis of these transcriptions. This allowed for relevant quotes to be identified in relation to each research question. Commonalities and



differences within responses were explored, with themes emerging as a result of this process. Findings (within the results chapter) were detailed based upon these themes.

### **Chapter Summary**

This chapter provided an overview of the research methodology that was used in the current study. As discussed, it sought to address four research questions related to poaching within the Southern Appalachian Region. Data were gathered from two groups: (1) outdoorsmen, and (2) conservation officers employed by federal and state agencies. Snowball sampling was utilized to identify potential participants within both groups. Both groups were asked to take part in semi-structured interviews that were conducted over the phone due to geographical location and the Covid-19 pandemic. Responses were analyzed through qualitative methods focused on themes and commonalities within the data. The results that emerged from this process are covered in the chapter that follows.

## Chapter 4. Results

The purpose of the current study was to explore perceptions of poaching through qualitative interviews with conservation officers and outdoorsmen located in the Southern Appalachian Region. The first two chapters discussed the history of poaching, current status of wildlife laws and regulations, and past research on the topic. The purpose of the current study and methodology associated with it was discussed in Chapter 3. This chapter presents a summary of the results gathered from the interviews. A content analysis was conducted to answer the research questions first presented in the second chapter and reiterated in the following table for reference (Table 1). Results are discussed in relation to each of the research questions in the sections that follow. First, however, a brief description of the sample characteristics is provided.

### Table 1

#### *Research Questions*

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R1: What forms of poaching are common within the Region?

R1<sub>a</sub>: What types of poaching is common amongst hunters within the Region?

R1<sub>b</sub>: What types of poaching is common amongst fishers within the Region?

R1<sub>c</sub>: What types of poaching is common amongst plant hunters within the Region?

R2: What characteristics are common among poachers within the Region?

R2<sub>a</sub>: Do poachers share any demographic characteristics?

R2<sub>b</sub>: Are there different types of poachers?

R3: What motivates poachers to disregard hunting and fishing laws and regulations?

R3<sub>a</sub>: What motivates individuals to poach?

R3<sub>b</sub>: Do the motivations depend on the type of poaching?

(continued)

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Table 1 (continued)

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R4: What factors influence the ability of game wardens to detect and apprehend poachers?

R4<sub>a</sub>: Do poachers worry about being caught?

R4<sub>b</sub>: Do poachers consider the potential punishments?

R4<sub>c</sub>: How do poachers avoid detection?

R4<sub>d</sub>: Are there a certain type of poacher that is more difficult to apprehend?

(Specifically asked to the officers).

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## **Demographics and Outdoor Experience**

### ***Outdoorsmen***

Three demographic questions were assessed for outdoorsmen: (1) *gender*, (2) *age*, and (3) *geographic origin*. Additionally, the first part of the interview guide included a few basic questions regarding participant experience with hunting and fishing. Each participant (nine in total) was a White male, with an average age of approximately 29 years. The geographic origin of the outdoorsmen was predominantly Northeast Tennessee and Western North Carolina.

Most of the outdoorsmen reported regularly taking part in both small- and big-game hunting, with nearly all beginning early in life. Most also fished on a regular basis and reported that their interest in it also started at a young age. Fewer individuals (N=5) reported regularly harvesting plants and as a group these individuals began doing so at a slightly older age (typically in their 20's). The most popular plants (that these individuals pursued) were Ginseng and Morels (an edible mushroom), with one also reporting an interest in the Cohosh plant.

### ***Conservation Officers***

Characteristics of conservation officers were also explored. Similar to outdoorsmen, (1) *gender*, (2) *age*, and (3) *geographic origin* were assessed. In addition, officers were asked about the number of years they had worked as a conservation officer. The sample (N=18) was predominately male, featuring only one female officer. The average age for the group was approximately 42 years, and in relation to tenure, participants had worked in the field an average of 16 years. Geographic location varied, as individuals were located in eight states within the Southern Appalachian region: West Virginia, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, and Alabama.

All (N=18) officers reported hunting both small and big game and began hunting early in life (the average age of initiation for the sample was approximately nine years old). Moreover, all reported regularly fishing and beginning that hobby at a similar age. Mirroring outdoorsmen, officers were split in terms of their interest in hunting plants. Eight (N=8) reported having hunted plants such as Ginseng and Morels. The approximate starting age of harvesting plants for this group was roughly 28 years (similar to outdoorsmen in terms of a later start to the interest). The remaining officers reported no experience in this activity.

### **Poaching in Southern Appalachia**

The first research question sought to understand the forms of poaching that are common within the Southern Appalachian Region in relation to hunting, fishing, or harvesting plants. Examples were provided to spark conversation, such as hunting, fishing or harvesting plants without a license, trespassing to harvest wildlife, using illegal methods, or exceeding established limits. As discussed in Chapter 3, the interview questions differed slightly between outdoorsmen and conservation officers, which allowed for both sides of the poaching problem to be explored.

## *Outdoorsmen*

**Animals.** To understand common forms of poaching, the interview guide queried all three possible forms: (1) poaching animals, (2) poaching fish and (3) poaching plants. Somewhat surprisingly (in light of previous research), a portion of outdoorsmen did not believe poaching to be overly common (N=4). These individuals believed that roughly 25% of hunters intentionally poached, though they did as a group indicate it likely differed by area. For example, Hunter 9 stated, “I would think that it would kind of vary between different areas, but I would say probably at least 25%.” However, the remaining outdoorsmen (N=5) all estimated that between 35% and 65% of their fellow hunters regularly did so. Hunter 5 expressed the following: “...I know of several. Out of all the people that hunt in my area, I would estimate that 40-50% of all hunters take part in poaching in one form or another.”

Based on the interviews, the methods of poaching were perceived to vary. Hunting out of season, hunting without a license, exceeding limits and using illegal methods were all seen as common forms of poaching within the Southern Appalachian Region. For example, Hunter 7 stated “I would say probably the biggest one is hunting out of season or killing more than the allowable limits...” while Hunter 2 stated, “... the biggest thing would be hunting without a license.” With that said, four outdoorsmen did express that hunting out of season was not a significant problem in their minds, as evidenced in the following quote from Hunter 5: “In my personal opinion, very few animals are harvested out of season.” There was more agreement among the outdoorsmen that illegal methods and exceeding limits constituted the biggest problems. For example, Hunter 8 stated that, “I would say the two worst within the area is exceeding the limits and using illegal methods such as using a rifle during bow season... stuff like that.” This point was further expounded upon in the following quote from Hunter 5:

“I know a few people that live for hunting season. All year long they are in the timber trying to find a mature buck’s bedding area or find different ways to access areas where they will disrupt the habitat leaving little to no human interference. When these hunters tag their final deer for the season, it's hard for them to comprehend that their season is over and they simply don't report their harvest leaving them with another tag to fill.”

**Fish.** Seven (N=7) outdoorsmen in the study estimated that fewer than 20% of fishers poach intentionally, whereas the remaining two felt that around 50% did. All agreed that the most common forms of poaching (as it relates to fish) were exceeding limits and fishing without a license. Some even pointed to specific examples, as evidenced in the following quote from Hunter 6: “... the highest problem because I know a lot of people who fish and do not have one... also a lot of dates with boyfriends and girlfriends are fishing and you know neither one of them have a licenses.” With that said, one participant (Hunter 9) expressed concerns related to individuals not using the proper equipment while fishing: “And then as far as fishing, just. I mean, I've even seen people fishing up above me using stuff that they're not supposed to be using. And then fish are just coming down the stream dead.”

**Plants.** A significant amount of variation existed among outdoorsmen in terms of their perceptions of plant poaching. Three (N=3) felt that less than 10% poach plants, while one felt that nearly all who seek out plant life poach at some point. The remaining estimates fell somewhere in between. Hunter 5, who relayed the highest estimate, had the following to say:

“I'll be honest, I would estimate that 99% of people that harvests ginseng is doing so illegally. Everyone I know that hunts ginseng, does so either by trespassing or digging on public ground. Ginseng is hunted year-round by many and is becoming very difficult to

find and will become extinct in this area if people aren't more careful with what they dig.”

Hunter 4 had similar feelings and felt that the illegal poaching of plant life was more common due to the market: “Not many avenues to sell meat like plant which makes it more reasonable to sell plants. I do feel like they were all illegal, there was no legal harvesting.” On the whole, those interviewed felt that the most common method of poaching plants was trespassing, with eight (N=8) outdoorsmen expressing this concern. For example, Hunter 7 stated: “... and I would say most of the poachers would be just trespassing, you know if people's hunting for ginseng or something, they would go on someone's land they're not supposed to.”

### *Conservation Officers*

Conservation officers were asked about similar perceptions in relation to the prevalence and forms of poaching within the Region. Of interest, however, most had key questions regarding the definition of poaching prior to responding. These primarily related to whether poaching (for the purposes of the research project) involved intentional or accidental acts. For example, Officer 15 explained that intentional poaching is, “... more of a willful act...” and individuals who poach are doing so intentionally. Officer 17 defined individuals who forget as: “... forgetful Phillips, that just don't get a license or they forget to get it or they let it lapse. They had one and they just let it lapse most of the people that we run into.”

**Animals.** Conservation officers (as a group) explained that animal poaching is a problem, but not necessarily a rampant issue among the outdoor population. Ten (N=10) conservation officers expressed that 10% or less of the hunting population poach with intent. For example, Officer 10 shared: “I would say there is a percentage given the correct circumstance that anyone is capable and it has to be one of those wow factor type deals where they see a big deer or

something of that nature, but on an intentional, go out with malice. Maybe somewhere around 5%...” On the other end of the spectrum, three (N=3) officers voiced that there is a higher percentage of hunters who intentionally poach. For example, Officer 15 discusses how individuals would intentionally violate a wildlife law regardless of the situation:

“... this would be just an estimate at best, but you know of the total number of hunters, those who would intentionally violate the law at any given time, and this could be way off, I would probably think 30 or 40% would break a rule intentionally. If it benefits them.”

Nine (N=9) officers expressed that there are individuals who are new to the sport and are possibly not aware of laws relating to seasons, methods, permits, locations, and/or how to properly check in their harvest. Officer 15 explained that it is a pure accident and not an intentional act against the wildlife, “...10% you know are maybe just beginning or whatever, and they don't know and they made a mistake in paperwork or they don't have a permit that they need or whatever, but it's an accident.” Furthermore, Officer 13 discussed how these individuals who unknowingly break the law and believe they have what they need are not the true poacher: “... but I wouldn't classify that person as a poacher. That's somebody who probably thought they were doing right.”

The most common form of poaching that was experienced by the officers was illegal use of methods. Eight (N=8) officers shared several accounts of individuals using the wrong equipment. For example, Officer 2 stated the use of traps, “... in the northern states, you'd see that [foot hole traps] or snares, but here you know they'll build live cage traps and trapping that way.” When using traps, the poacher can leave the trap and come back later to receive their harvest. Baiting the wildlife seems to be the dominant outcome when looking into illegal



methods. Four (N=4) officers expressed a concern of hunting over bait during both deer and bear season. Officer 17 expressed the challenge of catching a poacher using this method: "... somebody killing a bear over bait has got to be #1 or #2 of the of the two hardest charges we have to make because in order to make that charge we pretty much have to catch them feeding them." Spotlighting wildlife at night and utilizing a different weapon than what is required in the given season were other forms commonly mentioned by the sample.

Five (N=5) officers indicated that hunting without a license is the most prevalent form of poaching. Officers 7 and 12 both discussed that they encounter hunters without a license on a regular basis. Hunting out of season and exceeding limits were not perceived to be serious issues. However, when an individual did hunt out of season or exceeded the limits it seems (in the mind of those interviewed) to be more detrimental than a licensing problem. For example, Officer 9 explaining how poachers ride around and shoot wildlife:

"They got too much time on their hands. They're riding around and they say, "hey lets shoot that deer," I've even busted them where they were playing a game to see how many they could kill... killing 30 and 50 deer season, and half the time they leave them and not pick them up. And it is sad for the ones who truly hunt legally. That's your vandals."

**Fish.** When discussing illegal fishing, 11 officers felt that exceeding limits was the primary concern. For instance, Officer 4 stated, "the over the limit would honestly, I think, be greater than fishing without license now in comparison..." Officer 8 agreed, stating "...and over the limit, especially with trout." Nine (N=9) officers expressed that fishing without a license is a significant problem. As an example, Officer 18 discussed how easy it is to fish without a license, "... it's much easier to be in violation because you can pass four classifications of water..." while Officer 16 explained how high school aged individuals usually fish without a licenses: "A

lot of times you'll get more high school kids in the evenings on summer night and a lot of times you'll get them fishing without the license.”

Officer 9 discussed how some poachers who are fishing over the limit are also fishing without a license, “... most of the time it is people fishing over the limit you know, they’re fishing without a license.” Of interest, one officer mentioned how they oftentimes identified those likely to be fishing without a license:

“... like I said, if I see that guy that's decked out from head to toe in fishing gear you can pretty much guarantee he got his license because you know, I have caught those guys and their license be expired and they weren't aware of it and that was more embarrassing to them, then if you know, anything could have happened because they've spent thousands of dollars on equipment and to say that they couldn't pay a fishing license” (Officer 10).

Few officers mentioned illegal tactics being a concern. Officer 2 mentioned the sein net problem by stating that the individuals who use these nets can “... drag whatever fish they can.” This participant also discussed how there were some illegal methods that they knew of but did not personally experience them, “... I have heard that [telephone fishing] but, it's funny how those things stop at state lines... you know it's just the communities.” With that said, as a group concerns regarding licenses and limits were much more prominent.

**Plants.** As a group, officers perceived those who poached plants as calculating. In other words, they believed that most individuals intended to commit the crime as opposed to committing a simple mistake. Eleven of the officers (N=11) indicated that Ginseng is the most commonly poached plant in the Region. Two also suggested that Cohosh was regularly poached. Officer 8 summarized the most commonly poached plants as follows:

“Stuff like bloodroot and cohosh and Ginseng, Yellow Root and all those things that people collect. Uh most of those collectors, that's gonna be our percentage of those intentionally trying to violate the law. I'd say that's probably above 90%.”

Officer 9 discussed how Ginseng is, “...Appalachian gold...” due to the popularity of a television show:

“That caused the Ginseng poaching to go crazy and what happened years ago whenever I first started only people that hunted Ginseng was mainly you know the old locals. Nobody else done it, just a few people did. The young people didn't care about those things it was a dying art and so you still had a few younger people, you know that as it came down. You know, and it worked down that into younger folks still had a few that were doing it. Yeah, well that program and that program came on. TV. The poaching went crazy.”

Officer 18 further elaborated on the impact of shows and how individuals are seeking monetary gain:

“... the problem with Ginseng is about mostly the TV show 6 or 7 years ago. It broke the value of Ginseng talking like 10 years ago and... I mean if somebody can go out in the day. You know and make 4 or \$500 per day digging Ginseng or they can get a job and make \$100 a day. I mean, it's just really a reason for them to go dig it... And a lot of the people I did catch were involved in meth.”

The vast majority of officers (16 in total) perceived that poaching of Ginseng and other plants have detrimental impacts on supply and the environment. Other unique findings emerged, including a discussion of a form of plant poaching not previously discussed in the literature.

Officer 15 explained that a certain tree bark has been a concern due to the high demand for the

decorative appeal it gives for houses: "...every person that was stripping the Black Haw Bark was trespassing and stealing that bark without permission."

Of interest, 13 officers expressed that poaching of plants it is the biggest problem they currently face. This is partially due to the crimes that accompany it—specifically, drug related issues. For example, Officer 1 explained the situation as follows:

"... the majority of the people we catch have meth or meth paraphernalia this year. One officer I work with in an adjoining county, every single person, he charged with illegally digging ginseng this year. Also, at the same time had meth or meth paraphernalia on it. 'cause he was like I can't catch someone that doesn't have meth... It's you know, people are trading Ginseng straight for meth now."

Eight officers expressed that when they encounter an individual who is illegally harvesting plants there is a high probability that they have drug paraphernalia on their person. This oftentimes comes with certain patterns related to age, as evidenced by the following:

"There's usually an older guy, and I don't know why they're older, they're usually retired. They got a little bit of money and they purchase Ginseng illegally. But they try to buy it for \$5 an ounce, and then hold the root and then wait for the season to sell it for \$20... So you got your buyers that ask for the root, and I've had a few diggers that are actually trading pills, weed, you name it for anything. But there's no exchange of currency. It's the root paying for the drugs" (Officer 16).

Providing more detail, Officer 9 discussed how there is a common theme among plant poachers, "...when I get people illegally harvesting ginseng. Probably three-fourths of the time they will have drug paraphernalia, or evidence of drug use on or about them." Officer 4 further stated:

“... in my 15 years is an extreme increase in drug activity. On wildlife manage lands in National Forest... these people plant hunting right, and they go to these lands. They don't have to worry about getting called on for trespassing, and so on, because they're illegal to be there. But that's what we've seen a huge change in as people come in there to deal drugs, use drugs, etc...”

### **Characteristics of the Poacher**

The second research question investigated the perceptions that both outdoorsmen and conservation officers have of those who poach. Specifically, it sought to understand whether demographic characteristics such as age and gender feature any patterns, in addition to whether typologies exist among those who poach. This section provides an overview of the findings by sample.

#### **Outdoorsmen**

**Age.** When asked if age plays a role in poaching, seven (N=7) outdoorsmen agreed that it does but that there are differences in each generation. For example, Hunter 1 discussed how learning and perceptions of wildlife had changed over the years: “Now I do know from learning my hunting from my dad that things have changes a lot... I feel like used to there was more of an appreciation for the wildlife than there is now.” Hunter 4 provided additional insight by elaborating on their life experiences and age group of growing up in the Appalachian Mountains:

“With my age group when I was younger. I had around 2 or 3 out of 10 that did not poach and would tell on you if you did poached... Most poaching is done for food or money and there are a few that is killing to kill. Even when you bring up a younger hunter it is just them wanting that first kill but once they achieve that it is done. Around 85% the

ones who poach do it for food and money period. If it was too small [plants] respectful by cutting the leaves so another person did not dig it up.”

Moreover, Hunter 5 expressed that age plays a small role because some individuals age out but not all:

“When it comes to poachers, I think age plays a small role in the amount of poaching that takes place. I know some people that poached when they were teenagers but as they got older they seen the harm they were causing and they stopped, but most of the individuals that poach do so their entire lives.”

Only two outdoorsmen felt that age did not play a role in poaching or illegally hunting wildlife. For instance, Hunter 9 stated, “I wouldn't think that age would play as much of a role into it...”

**Gender.** All nine outdoorsmen expressed that males are more likely to intentionally poach, with Hunter 9 stating, “All of the poachers I’ve ever known, have been male.” With that said, most thought that this may be a function of hunting demographics (more males than females participating in the hobby). For example, Hunter 3 explained, “Well, more males than females. I don’t know of a lot of female hunters also...” and Hunter 4 shared, “... there are not as many females as males that hunt.”

Two outdoorsmen expressed that if a female is involved in poaching it is more than likely due to the male persuasion. For instance, Hunter 8 expressed, “... the leadership of a male is probably what gets them involved... like checking in a deer under their wife’s name and stuff like that.” Hunter 1 expressed similar notions, stating that females tend to follow rules, “... I do feel like females are more likely to follow the rules than males.”

## *Poaching Typologies*

Outdoorsmen were queried regarding different types of poachers and if they were perceived to be more opportunistic or habitual when illegally harvesting wildlife. Seven felt that poachers were more opportunistic in nature. Hunter 3 explains how missing work is a letdown personally, but for others is an opportunity to poach: “I do work, a lot. Don't get to hunt as much, but then other people will see that as a reason to poach...” Hunter 5 expressed a slightly different view:

“There are several people in my area that say they would never poach, but if the opportunity presents itself, it is simply too hard for them to resist. For instance, say they have been hunting a target buck all season, and he has eluded the hunter all season but on his way back home he sees the buck on the side of the road and proceeds to shoot him from his vehicle. This is a more common type of poaching in my area...”

Hunter 6 also discusses that missing the season could be a possibility for a hunter to become a poacher:

“I would say it would definitely probably started opportunistic. Some guy didn't get a lot of time in deer season and right after it closes a huge monster walks out before he started back to the truck and he just blows a hole in it. But I would say that kind of behavior would probably lead to a pattern 'cause If you've already done it once. It's probably easier for the second...”

Only two outdoorsmen felt that poachers were habitual in nature and poached regardless of whether opportunities were presented to them. Hunter 4 stated the following “... Use to there were ones who would get off of work to hunt regardless of the time. Don't know if that was habitual or not but he did know it was wrong...” Interestingly enough, Hunter 6 explained that

the opportunistic nature of poaching could eventually lead into a habitual practice, "... but I would say that kind of behavior would probably lead to a pattern, 'cause If you've already done it once. It's probably easier for the second..."

### **Conservation Officers**

**Age.** Ten of the officers agreed that age does play a role in poaching, with most pointing to changes over the years. For instance, Officer 6 explained how they believe the younger generation does not possess the mindset that hunting and fishing is, "...their God given right..." while Officer 7 explained that the younger generation feels more invincible because they, "...may not think that they are gonna get caught for a while." Officer 8 further elaborated by stating that younger individuals become involved due to boredom: "You know, teenagers that live in rural counties and there's not much to do, but drink and go shoot something." The younger generation tends to make games out of poaching according to Officer 9:

"They [younger generation] got too much time on their hands. They're riding around and they say, "Hey lets shoot that deer." I've even busted them where they were playing a game to see how many they could kill... is a whole different mindset."

Three officers indicated that they perceived many people to "age out of poaching" to some degree. Reasons cited by these officers related to deteriorating physical abilities and the stress of having to be aware of their surroundings when committing the crime. For example, Officer 7 stated, "You are starting to see your older ones age out of their actions and poaching activities," and Officer 17 exclaimed, "Because a lot of times some of our biggest poachers that we had when they were that age they've aged out of it, so they had mamas and daddies that bailed them out."



**Gender.** Similar to the outdoorsmen as a group, 17 conservation officers felt that there were more males than females that hunted and fished in general. Officer 6 stated, "... Are there male and female poachers? Absolutely... there's definitely more males that hunt than females." More importantly, all 17 officers commented on the idea that poaching is male dominant and when a female is involved, they are usually an accomplice of some sort. For example, Officer 14 indicated: "... my, I thought more males just like there's more males in hunting in general... the males are usually with a female that he is involved with, a girlfriend or a wife, and she's, you know, she's just kind there along for the ride, so to speak."

One interesting discussion of gender is the female presence in Ginseng poaching. The only time a female truly committed a poaching act was during the poaching of plants for their drug addiction. Several officers commented on their increasing involvement in it, with the following quote from Officer 9 serving to summarize their perceptions: "You never seen females out there, but drug market change that. You know when I started seeing the folks that were coming out there gathering Ginseng and to get cash for drugs. That's when the female started coming along."

### ***Poaching Typologies***

All (N=18) officers agreed that there are different types of poachers, with most indicating that habitual and opportunistic individuals were common. For instance, Officer 9 said:

"I'm gonna say it's about 50/50 because a lot of the ones, A lot of criminals are opportunistic in nature, and poaching is criminal activity. And so when they're out doing this stuff, you know, some people do it because that's what they like to do. They like to wander around the Woods and they're gonna do this and I wanna find myself extra money... 'cause they go out wandering the Woods and walk all day long."

With that said, the majority of the officers indicated apprehending opportunistic ones more frequently, as discussed by Officer 5: “If an opportunity presents itself to a poacher. And they think that they will not get in trouble for it, they'll take that opportunity...” Officer 14 agreed, stating that poaching is, “...an opportunistic thing...” and the poachers, “...don't go looking for it...”

Though they are viewed as slightly less prevalent, six of the officers indicated that habitual poachers present many problems. For example, Officer 10 asserted that the habitual poachers are the individuals who guide private hunts for hunters and outfitters who help with hunting expeditions:

“Your habitual are gonna be the ones that are really making a huge profit off of it, and then when I say profit, it may not be the actual profit off of the individual animal, but like an outfitter service or something of that nature when they will go to any extreme to make sure their client is happy with the full \$5000 they spend... So they don't necessarily do profit off the animal. They profit off the person that's willing to pay this for them to guide him, and at that point they'll go out of their way such as trespassing and whatever, just to make sure that client keeps coming back.”

Many of those interviewed discussed how habitual poachers tend to stick to the areas that they know best. Furthermore, they indicated that these individuals like to commit their crimes by trespassing on private property. Officer 17 explained an example case in this way:

“Some of my officers in [omitted] County. They say they found some guy that were not supposed to be on this piece of property. They had already written them tickets and lit them up for trespassing, so they knew they were not supposed to be there. So, they went a little further into the woods and they opened the gate so they could drive their vehicle

through the gate, and then shut the gate making it look like no one was up there. And then they were in there with no license, no deer tags, over the limit buck, over the limit doe and they didn't have any of the required license.”

### **The Motivation to Poach**

Research Question #3 set out to explore the motivations of poachers in the Region and whether these motivations were perceived to depend on the type of poaching (i.e. animal, fish, or plant) in question. Several example options (i.e. survival, psychological fulfillment, neutralizing behavior, learned behavior, acceptance among peers, and contempt for rules and regulations) were provided to those being interviewed. The findings are once again discussed in relation to both outdoorsmen and conservation officers.

#### ***Outdoorsmen***

**Motivations to Poach.** Some outdoorsmen felt that motivation was multi-faceted and could not be attributed to any one thing. For instance, Hunter 3 described how an individual may poach, “... to provide food for their families... while other people see it as a trophy...” However, others felt that most did so for a single reason (though this reason varied). For example, five interviewees believed that survival was the main motivation for poachers. Hunter 7 suggested that they “knew a lot of people don’t have a lot of money or unemployed, so the motives would be to get free food for their family.” Hunter 9 agreed, indicating that they “Just don't have as much money and are trying to find ways to harvest fish or deer or bear anything just to be able to have that food source.” Others took a different stance, with the following quote from Hunter 4 serving to contradict this logic:

“... used to people would poach because you were only allowed one antlered deer and individuals needed more but now that time has gone and times have changed... The

individual who says they are hunting for food but are not makes other hunters mad because they truly do not understand what it means to survive... However, with today and how the government offers all of the different types of programs, individuals should not have to say they poached because they need to survive.”

Nearly all (N=8) agreed that psychological motivations play some role. Satisfaction associated with harvesting a trophy deer, catching the most fish, or obtaining the most Ginseng was perceived to be important to poachers. Hunter 1 exclaimed the excitement of seeing a mature deer while driving: “Now I know what it feels like driving down the road and seeing a field full of deer and seeing a big buck within that field. My adrenaline is pumping... but the thought of houses being around or close to a roadway always strikes my mind and I mind my own business... But I could only imagine for a poacher.” Hunter 5 elaborated on this point by discussing a mindset that they saw as predominant in the Region:

“Now the poacher who is out to boost his ego and shoot the biggest buck he can, there seems to be more of this poacher than any other. This is someone who isn't willing to put in the time and effort to harvest a trophy buck legally and simply has to have the biggest buck among his friends. This type of poacher is a creature of habit and will continue to do so every year even if he is apprehended by a Warden. Very few people poach to provide for their family, but several poach for the trophy. Nothing more, nothing less.”

All of the interviewed outdoorsmen (N=9) shared accounts of how they learned their hunting and fishing techniques from their fathers or grandfathers. Five thought that poaching could also be a learned behavior. For example, Hunter 1 offered the following: “Now I do know from learning my hunting from my dad that things have changes a lot... I feel like used to there

was more of an appreciation for the wildlife than there is now... If I was taught my ethical ways of hunting then that feels like they were taught their unethical ways of harvesting.”

Hunter 5 agreed, indicating that habits learned at an early age through socialization may play a role: “I know several people whose father or grandfather would take them "hunting" only to harvest the first targeted species they seen. Humans are creatures of habit, and it's likely they will poach for the duration of their life.”

**Motivations and Typologies.** Finally, outdoorsmen were asked whether they perceived motivations to differ by type of poaching (e.g., plants, wildlife, and fish). Of interest, all nine believed that plant poachers were primarily concerned with monetary gain. They also felt that fish and animal poaching was primarily driven by ego and excitement.

### **Conservation Officers**

Conservation officers provided a different perspective to the discussion when asked about the motivation of poachers within Region. Similar to outdoorsmen, they were asked to address their perception of the importance of things like survival and thrill in the poaching decision-making process. What follows is a summary of the findings for this portion of the sample.

**Motivations to poach.** Thirteen (13) of the conservation officers felt that survival was once a predominant reason for poaching, but that it had changed over the years. As mentioned by one of the outdoorsmen, five officers believed that the availability of government programs no longer meant that individuals had to rely on poaching to survive. For example, Officer 1 stated:

“In my personal opinion. The survivalist poacher. It's not something that factors in any kind of significant percentage or portion of the dilemma. The survival is poacher with now in a few factors that contribute to that, government assistance is in the form of whether it be food stamps or you know help with getting nutritional community kitchen

things like things of that nature are readily available to the public. You know, I've had the argument with poachers of, 'I'm just doing this to feed my family,' but the deer is still there. You know parts of the deer going unused or the deer. I've seen 'em. Have that argument and then literally have the deer there. Just cut the horns out of it and waste the rest of it by not even cut it up.”

Officer 2 further discussed the impact of time, explaining that “now, people might say it is for meat, but they just bought a thousand-dollar rifle and driving around in a new truck.” Several officers (N=9) felt that the survivalist motivation is nothing more than an excuse that poachers use to justify their actions. Officer 14 offered the following to support that assertion: “Hey, it's almost never for survival... You know, 'I lost my job, I'm just, you know, I've got two kids at home,' and then when you follow up and say where did you work and then you go talk to their employer and they'll say, 'you know he takes a voluntary layoff every year,' it's never because they're starving to death.” Officer 11 also exclaims how the survival aspect is an excuse and there are government programs to assist people in need:

“I've only heard the survival thing maybe once or twice, but at the same time when you go to these people's houses, they have plenty there. This kind of excuse is you know pretty much middle-class people... Safety net programs and the government has played. There should really be nobody going hungry.”

Twelve officers believed that psychological motivations were the primary driver for those who poached. Officer 2 provided the following thoughts in support of that belief: “I think that's what drives most poachers it is absolutely greed and ego... it's just a mindset. 'I want to kill the biggest deer because for some reason if I kill bigger deer, then you don't kill a bigger deer then, it must mean I'm a better Hunter,' which you know that's not at all the case, but that's what

the mindset is just a... I think they're greedy." Officer 5 continues by discussing when a, "... poacher poaches it's a psychological fulfillment whether it's opportunistic or habitual." Most others provided similar statements, reinforcing the perception that many poachers do so for the sheer thrill and enjoyment of it.

Nine officers expressed that poaching, like hunting, is learned from parents and other close relatives at an early age. Officer 15 explains, "Some of them were raised that way, and they'll do it until they die," and "A lot of 'em. You know we're raised by their uncles and fathers and older brothers. It's acceptable within their family and friends, and they don't think a thing about it." Somewhat related, others mentioned that poaching is generally culturally acceptable. This in turn prevents individuals from reporting the behavior and reinforces poacher's mindsets. For example, Officer 11 stated:

"Cultural acceptance... and I'm not saying so much that the person or other people who don't hunt or don't poach condone it, but they may have knowledge of it and they may not necessarily report that person, even though they know that they are involved with it. So, I think there's a little bit of the culture that goes with it and not reporting when the people that are involved with it. I guess they grew up riding around at night with their pap or whoever, and you know pop off stuff with that big spotlight."

Officer 1 elaborated on this point by discussing how the Southern Appalachian mindset is unique when compared to other areas of the United States and how the motivations of poaching have evolved within the Region:

"... in Southern Appalachian mindset is something that's completely set aside from the majority of our states, and when I say that, it is a very traditional thing here. I think it began with the substance. You know, I think it began as a survival thing. But I think it

evolved from there... But there is an unsaid rule that they don't like... calling the game warden or reporting it [poaching].”

Seven officers expressed that being accepted among their peers is a major concern for poachers. Put differently, not only does the acceptance of poaching to some degree influence their behavior, it also serves to motivate it. Officer 2 explains it as: “... a lot of these people grew up in a culture or they were raised in the idea that meant they were better. ‘My Granddaddy killed the biggest deer of anybody in this community.’ ‘My Granddaddy could kill more bears than anybody in this community, he had the best dogs of anybody in this community.’ That type of thing.” Officer 10 believed that the rise in social media popularity made this even more likely, as individuals are able to display their kill in hopes of community praise:

“I think social media is one of the biggest reasons for the bragging side of it for the self-esteem side. Hey look what I got. And with social media, I mean, that's one of our biggest enforcement tools because they have to brag there's no reason to poach an animal, really, unless you're profiting off of it or consuming it.”

Somewhat fascinating was the revelation that three of the interviewed officers experienced backlash from family members when pursuing the occupation. As a group they felt disowned, looked down upon and constantly judged. They mentioned that many in their family did not perceive poaching to be a problem and thought that the officers were on the “wrong” side of the issue.

Five officers suggested that part of the issue could relate to general unease with governmental agencies and employees within rural Appalachia. For example, Officer 1 clarifies stated:



“You know, and in parts of the rural Appalachian Mountains, there's a little bit of an antigovernment kind of mentality or social stigma. So, we have like one more proud self-sustaining kind of people and this is how they were raised. And they don't want any kind of government interference in their life. Whether it's telling him what to do or making laws or anything.”

Officer 1 offered that many poachers felt that officers were violating their “...God given rights,” and limiting what they could do on their own land. This becomes somewhat dangerous for officers when those individuals are associated with the sovereign citizen movement, a concern relayed by more than one of the participants. One interesting finding is that some officers perceived individuals to take pride in their defiance. The following quote from Officer 2 expresses this notion:

“Who knows what drives people, but I do know that poachers have a negative impact on that [leaving the hunting heritage to the generations to come] so, and I don't think that's really the mindset. They [poachers] just wanted to be defiant. I don't think that's the reason. I think that's some people's reason. So I get that part as far as the greed part. I think that's what drives most poachers it is absolutely greed and ego.”

Officers were also asked whether they perceived poachers to neutralize their behavior through various tactics and/or responses. They were nearly unanimous in their belief that neutralization was not common, though it could be argued that defiance and contempt for governmental agencies is one form of that.

**Motivations and Typologies.** Similar to the outdoorsmen, all (N=18) conservation officers felt that poacher motivations did depend on the type of poaching being committed. Officer 1 explained it best by stating:

“I think it's just as a distinction between animals, fish and plants. Uh. The big game animals. That emotion, that kind of self-fulfilling thrill and adrenaline rush plays into the big game. More than others. I think greed, plays into fishing. Except with fishing it can be a trophy kind of thing, but in the Appalachian Mountains, successful fishing a lot of times is counted in quantity... It's not about necessarily poaching that ginseng. And to some of 'em, it gives them a rush, but just like dealing would. But it's not necessarily about the Ginseng. It's the money they get from it. And that subset can intertwine a lot of times. Um, somebody who is prominent to dig Ginseng is also a lot of times prominent to break other game laws. Even overall disregard for them.”

With that said, all officers (N=18) explained that plant poaching is likely always motivated by financial gain. Officer 3 exclaims that, “... somebody sees that plants are money and that they can take the plant and then sell it to make money.” They did not perceive the form of plant to matter due to the fact that Asian markets have a high demand for numerous products. This high demand results in poachers being interested in harvesting plant products through any means necessary. Related, several officers believed that the profit motivation of poaching was driven by the desire to obtain drugs. As previously discussed, many plant poachers have drug addiction problems and use these illegal funds to support them. For example, Officer 16 discusses, “Under the plant things all of it is for money, but mainly their drug addiction.”

When discussing the poaching of animals, universal agreement existed in terms of the role of psychological thrill and ego. Officer 8 explained, “The deer hunters and the bear hunters. It's almost like you know, even by bragging rights or just because there's something that they want to do but it has no monetary gain,” while Officer 13 asserted, “Animal wise, I think it's the ego.” With that said, other motivations may also exist. One example is provided by Officer 4:

“We have the elk that has become extremely commercialize for us. So we see a lot of violations and even locally with deer here and Turkey as well, but through Guide Services. So, you see them piggybacking. One person got a guide service and they're using multiple guides to bounce off their license and they're doing that illegally and let him participate [in different hunts] in way more than they are allowed to and having more assistance in their layout and so on, because of the commercial side of it is huge... your commercial deer farms, you know that we consider that a form of poaching and we have charges for that, so it has become unbelievably commercialized in these high fence hunting areas.”

Those fishing illegally were perceived to have similar motivation (as it relates to thrill and fulfillment). However, there was some discussion of greed motivating these individuals since they were perceived to exceed limits more than animal and plant poachers. Officer 8 explains how catching over the limit allows the poacher to brag to others, “... people that catch over the limit this almost just for bragging rights. Rocket catch 20 fish instead of 8 fish.” Only two officers that survival played a role. For instance, Officer 18 discussed how fish poachers is, “... more about the food... ‘I want to eat fish tonight,’ and four fish will not feed the family,” and Officer 17 likewise stated “You know when it comes to fishing, the motivations probably is to eat or to feed a large amount of people, and you know there's just one of them, and sometimes they'll try to get an extra one or two or 10 without being caught.”

### **Detection and Apprehension of Poachers**

Research Question #4 investigated the factors that influence the ability of conservation officers to detect and apprehend poachers. Specifically, two areas of interest were explored: (1) Whether poachers worry about being apprehended by conservation officers, and (2) if potential

punishments are considered. Findings for these queries are discussed in relation to outdoorsmen and conservation officers below.

### *Outdoorsmen*

**Considering Apprehension.** Outdoorsmen expressed how even legally hunting brings about some sense of anxiety. For instance, Hunter 1 said, “Even on hunts where the officer checks in I feel like I have done something wrong when I have not.” In line with that logic, only two individuals thought that the potential for apprehension did not worry poachers. Hunter 5 discusses this aspect by stating:

“When it comes to getting caught by the game wardens, I believe that is the last thing on a poacher’s mind when they see what they are after. I’m sure they are always looking to see if the coast is clear, but they certainly aren’t going out of their way to try and be hidden or make sure nobody can witness them during the act. One reason they aren’t afraid of being caught is even if they are seen by a bystander, the response time of the local police is slow enough for the poacher to escape. If an act is reported to a game warden, it may take up to an hour or longer for one to reach the scene being because of the lack of wardens in the area. A game warden doesn’t cover just one county, but multiple in a given area. If poachers know the warden is in another county that gives them a sense of safety from being caught.”

In addition, some participants felt that past experiences likely influence poacher logic. In essence, the group did not feel that being apprehended was common and as such poachers did not spend a significant amount of time worrying about it. Others posited that the lack of conservation officer presence likely meant that the risk of detection is not perceived to be high:

“I mean it depends where the stream that that I fish is stocked. You know I rarely ever see any game wardens over there, so I think that can lead people to think that, ‘oh, this is a place is not checked very much. This is a safe place’” (Hunter 9).

**Considering Punishment.** Outdoorsmen were next asked their perceptions regarding poachers and their potential concern for punishments. Three felt that poachers do consider potential punishments, though they felt that it also depends on what type of punishment will be administered (i.e. monetary fines, suspension of license or confiscation of their hunting gear). For instance, Hunter 4 states: “Oh yeah! This is the most that they think about because you can lose your rifle, truck, freezer, but not so much of the hunting privileges. But if they do not think about the precautions, they are being stupid, not ignorant.” Others felt that many poachers likely do not consider it, as evidenced in the following quote from Hunter 5:

“If they are caught, the punishments are severe. Every item that the animal touches, every item that was used during the harvest, including the vehicle, will be confiscated along with a year or longer of his/her hunting rights revoked followed by a hefty fine and possible jail time. With fish I know you will be charged a fine for every fish you have in your possession that is over the legal limit or under the size limit, and the punishment for being caught poaching ginseng is a large fine and possible jail time. The odds of a poacher being caught is so slim that I believe none of these consequences are considered before, during, or after the act of poaching is done.”

**Avoiding Conservation Officers.** Finally, outdoorsmen were asked about the tactics that poachers may use to avoid conservation officers. Several provided insight into the topic. For instance, Hunter 1 felt that poachers did not have to take steps in avoiding officers due to the terrain of the Region: “not really because we all live in the mountains, so the location is on their

side.” Hunter 9 went further by stating that poachers are, “Going to places that make it harder for game wardens to get to them maybe,” while Hunter 5 explained how, “Poachers avoid being caught because there's no law enforcement around to apprehend the wrongdoers. Even if law enforcement has been notified, they have enough time to flee the scene of the crime.”

One outdoorsmen elaborated on some things that poachers may do to keep a “look out” for officers in the current area. Hunter 4 stated, “Calling their buddies and telling them where the Game Wardens are at...back then they would have to have face to face conversations but now the use of texts and phones make it easier.” An interesting comment was made by Hunter 6 in relation to plant poachers and how they avoid apprehension: “The plant poacher is able to hide better because they are able to hide the roots better than a fisherman and a hunter with their equipment.”

### *Conservation Officers*

**Considering Apprehension.** As the outdoorsmen mentioned, the number of conservation officers is relatively small in comparison to the number of those hunting and/or fishing. Officers are well aware of this fact, as depicted in the following quote from Officer 11:

“Yes, they [conservation officers] have their region and there's a, you know, maybe half a dozen of them, but the time you take a couple of 'em out for Lake Patrol, couple of them out for their normal days off for sick, sick day or something like that. I think numerically we are obviously a very low deterrent...”

Moreover, Officer 16 explained how infrequently conservations officers interact with hunters and fishers, saying “it’s funny 'cause a lot of times I'll check somebody and they are like, ‘You're the first game warden that’s checked and I've seen in 10 years,’ I get that speech a bunch.”

Officer 11 also discusses how there are so few officers that poachers know that their chances of

being apprehended are small: “I think they [poachers] know it's very unlikely, and it's just because of the numbers [of officers] ... Well for me, for example, I'm one officer in my district, and I have six counties in this district.”

Knowing that the number of officers is low means that many poachers are ambivalent to their presence, though this is not perceived to be the case for all. For instance, Officer 8 stated, “Oh yeah, so that's probably a 50/50 ratio. Some people really don't care. They don't worry too much about it and others go to great lengths to steer clear of enforcement and investigation.” Some officers felt that poachers gave some consideration to the severity of the punishment when thinking about the possibility of being apprehended. Officer 11 discusses how the severity of the poaching may be outweighed:

“It depends on the severity of it. Most violations really don't carry much more than a fine. When you get into the large profit where they're making \$100,000 a year on some nice poaching, to lose their license for one year will hurt them financially.”

Another example mentioned was that some poachers do not want the “record” that comes with being apprehended. Officer 14 exclaimed how his job is to, “... keep honest people honest,” and this breaks down to some individuals, “... not wanting that on their record,” such as the, “... more of the upstanding people, especially don't want that to rest on their record.”

Nonetheless, there are poachers who do not care that they are apprehended since they are going to continue their lifestyle with little regard for hunting and fishing laws. Officer 17 expands on these poachers stating:

“No, they know they know what's coming. If they get caught, they read up on it, they look for loopholes. They don't worry about it because they know that we know. when you live in a place... where there's a lot of kind of personal murders and rapes and

different things that go on that are higher up on the docket than night hunting bear...the only time they think about it is when there is a possibility of it going to the magistrate instead of the civil court..."

**Considering Punishment.** Eight officers felt that punishments were given more consideration by poachers than being apprehended. This is due to the severity of sanctions associated with many offenses. For example, Officer 3 exclaims: "... poaching has a pretty heavyweight on a lot of what we do. It's a lot more than like traffic violations because ours are actually misdemeanors, and fear is not only in charge but they are like 'I can lose my rifle, or my in my vehicle.'"

Some discussion revolved around the way that courts handle poaching cases. Officers 11 and 16 discussed how federal and state courts are similar in this regard. Officer 11 stated that the "... federal court here absolutely has no... appreciation of what's being lost or what's being affected by poaching," and Officer 16 continues, "... I guess the system they [poachers] know, especially how they're like, 'they're not putting me in jail for stuff like this.'"

However, poachers are perceived to be more comfortable with paying fines than potentially losing their license. For example, Officer 14 stated "They just say, 'I can't lose my license for three years. I'll gladly pay the \$5000 fine, I just don't wanna lose my license.'" Furthermore, the lack of significant sanctions for not paying fines was perceived to be problematic in the mind of Officer 16:

"Well, the penalty for not paying for your fines is taking your driver's license. Well, if you didn't have one then what does that matter? Or if you don't have your hunting license and they revoke your hunting license. Again, what does that matter? It doesn't do anything, so if there's people that they know the system, then they could care less."



**Avoiding Conservation Officers.** Officers suggested that tactics to avoid them varies by individual. The most common options were perceived to be calling other poachers regarding the whereabouts of the officers, removing their hunting orange, being dropped off and picked up by different individuals, use of night vision binoculars, red lights and hidden compartments. Officer 3 addresses some of these in the following quote:

“... you know if somebody is trespassing, a lot of times they would remove their blaze orange... They'll be dropped off or park far away... You know for spotlighting, people will use night vision scopes to try to see the deer out, but they use a red light flashlight, which is not seen by the naked eye.”

Furthermore, GPS technology was seen as a viable tool to hide from officers due to its ability to mark where the illegally harvested wildlife is and then returning at a later time to retrieve it. For instance, Officer 3 discusses, “GPS for actual geographical locations... have been used for them [poachers] to go back.”

Technology in general was viewed as making the jobs of officers more difficult. Officer 13 discussed options such as “night vision and infrared stuff getting more available and less expensive, more reasonably priced, but it's you know, to the point now where it's attainable by everyday people so to speak.” With that said, more traditional options are still witnessed by these officers. Officer 2 discussed a case where fishermen went to great strides to hide the fish they over caught:

“We got some people with a cooler, and they had filleted the fish. Rolled the fish up like you may see like a piece of sushi, roll it up like that. They had drink cans. They had cut the bottoms off of. Put the Fish Filets rolled up inside the drink cans, and set them in a cooler of ice, so you know, we popped the cooler open it looks like drink cans...”

Some more advanced (i.e., professional) poachers were perceived to go to great lengths to avoid detection. Several officers (N=3) mentioned that these individuals will become familiar with the officers' homes and drive by to see if they are on patrol. For example, Officer 1 shares:

“Um, a lot of times the guys that we work on. Know our name. Know where we live. Can drive by check our house and see if our trucks are there. Um, whenever they are on the Marine Band radios bear hunting or see us in a specific area, so they text or call and say they seen the game warden here, or the game warden is coming, or I just drove by his house and he is home... Um, they have went as far as have lookouts in specific areas, for actually the bear season... But I think with the ones who are habitual in it, it's a concerted effort to avoid us. They know what they're doing to get them all (wildlife). They know if we catch him that there's going to be a punishment involved, and they actively try to work around them. It's an active, intentional thing... They (poachers) know we can't be everywhere.”

One interesting finding came from Officer 15, who discussed how some poachers go as far as purchasing older cars that would only be utilized in poaching activities. In their state, if an individual is caught poaching they could possible lose their car, prompting them to use ones with little value:

“...there are guys who actually own two or three old Junker cars, and they'll drive one, one day and drive another one the other day. If they're not running out of 'em. It's like a \$400 or \$500 cars. It'll vary, so they look at it as if they get caught that is the car that will be seized, or whatever. They're not losing anything.”

**Difficulty of Apprehension.** Conservation officers were asked if there was a specific type of poacher was the most difficult to catch or apprehend. Seven (n=7) officers stated that

“quiet” poachers are the hardest to catch due to the nature of poaching. Most cases present with little to no tangible evidence and when the residents of the community will not talk it is generally difficult to investigate them. For example, Officer 4 states: “... quiet culture... It's the quiet ones. I think you've probably heard as a whole. I can't imagine that you haven't and we rely a ton on the help of the public. That's why relationships in this job is so important. And if those people are silent not talking. We're not getting a lot of information.” Officer 6 further describes these individuals as “...true outlaws, the ones that can keep their mouths shut.”

Some officers indicated that apprehension was made difficult by the type of poaching that hunters pursued. Officer 9 discussed how they perceived bear hunters to present the biggest challenge because they work together in familial groups:

“... the worst groups that we have for poaching is the bear hunters. They are the worst. They operate with a gang mentality... I'm talking about dog bear hunters... The bear hunters are probably the most difficult because they have radios. They running games like gang mentality, yeah, so whenever they see one of us. Everyone knows about it with within 30 seconds. So they hide everything real quick.”

On the other hand, Officer 9 perceived poachers of plants to be the hardest to apprehend because they look like regular people hiking in public forests: “Your ginseng would be the biggest and hardest one, to catch anybody on... they look like regular people.” Officer 11 also discusses how plant poacher are able to change their appearance after poaching, further complicating detection:

“They know when they come out of the woods they might want to pack a change of clothes or to change clothes and wash up a little bit. Get some of the fresh dirt off like,

‘you and maybe put on like hiker type clothes instead of somebody who's been out digging.’”

Conversely, catching those fishing illegally was seen as a relatively straightforward task as evidenced by the following quote from Officer 9, “... for poaching in the area of fishing stuff is probably pretty level playing field, because you got an area where you have to set up on the fisherman.”

### **Chapter Summary**

This chapter served to discuss the content of the interview with outdoorsmen and conservation officers and how their perceptions of poachers work to address each of the established research questions. Characteristics of poachers and the poaching problem, factors that serve to influence it and perceptions of apprehension and punishment were discussed. The final chapter will provide a discussion of these findings and highlight the theoretical and policy implications associated with them. The limitations of the project and some directions for future research will also be covered.

## **Chapter 5. Discussion**

Little research attention has been steered to rural communities, at least in comparison to more urbanized ones. As a result, crimes that are unique to rural areas are understudied (Berg & Delisi, 2005; Ruddell, 2014; Weisheit et al., 2006). This is especially true for the crime of poaching. Though some studies have explored it, much remains to be understood. For example, no research to date has addressed poaching within the Southern Appalachia Region. To address this, the current study created several research questions designed to shed light on various aspects of the problem: (1) What forms of poaching are common within the Region, (2) what characteristics/typologies exist among poachers, (3) what motivates individuals who offend, and (4) what factors influence the ability of conservation officers to detect and apprehend them? These questions were answered through semi-structured interviews conducted with conservation officers and outdoorsmen across eight states within the Region. The previous chapter discussed the common themes found within those interviews. This chapter serves to summarize those themes and tie them to the existing knowledge. In addition, implications, directions for future research and limitations of the current study are covered.

### **Common Forms of Poaching**

To better understand the impact of poaching in Southern Appalachia, it was important to determine the common forms of poaching perceived to occur within the Region. The majority of outdoorsmen and conservation officers did not perceive the poaching of animals to be a rampant problem. For example, most officers believed that fewer than 10% of all hunters poach, with around half of all outdoorsmen reporting a similar estimate. With that said, is important to note that several believed that percentages probably differed by area and target. In addition, over half of all conservation officers discussed how the poaching of animals is oftentimes simply a

mistake on the part of a new or “ignorant” hunter. Put differently, they indicated that these hunters may not be aware of rules regarding methods, seasons, permits and/or locations.

Conservation officers, as a group, perceived that illegal methods were the most common problem. For example, they mentioned how certain traps were improperly used or how some hunters would use a weapon during a part of the season when it was not allowed (e.g., bow hunting in rifle season). With that said, several also indicated that hunting without a license was also a frequent issue, as was exceeding limits. Similar findings emerged within the outdoorsmen interviews.

In regards to the poaching of fish, most outdoorsmen believed that fewer than 20% of individuals do so on a regular basis. They indicated that exceeding limits and fishing without a license were likely the most common forms. Conversely, few mentioned perceived issues with illegal methods such as telephoning fish. Conservation officers shared these perceptions in that they agreed that exceeding limits and licensing issues were the most common problems that they faced. Several also mentioned that those violations often worked in conjunction, with individuals violating both requirements. They also had similar views on illegal methods. A handful mentioned the use of nets, but other tactics were not commonly seen within the Region.

Finally, officers and outdoorsmen were asked about their perceptions of plant poaching. The officers, as a group, believed that it is a significant problem. Most indicated that Ginseng is the most commonly poached plant in the Region, while admitting that Cohosh, Bloodroot and other plants are also at risk. Of interest, 13 officers (the clear majority) thought that the poaching of plants was the most significant problem that they face. This problem was suggested to be compounded by the fact that many offenders are intertwined with the drug trade, using the profits from their activities to fund their addictions. Findings differed among outdoorsmen, as there was

a good deal of variation in their perceptions regarding plant poaching. Some thought that it was a significant problem, whereas others perceived that few people did it.

### **Characteristics and Typologies of Poachers**

Crow et al. (2013) conducted the only study to date focusing on the demographics of poachers. They found that the majority of offenders were White males. The current study built upon this work by assessing perceived characteristics of poachers within the Southern Appalachian Region. Similar findings emerged in that most hunters and conservations officers perceived offenders to be males. With that said, several noted that females do participate, though usually as some type of accomplice. They suggested that offenders would regularly have their wives or girlfriends tag along as drivers or to assist with other aspects of the offense. The only exception appears to be in relation to plant poaching, as several officers indicated that females are now becoming more involved in illegally harvesting Ginseng. One unique finding was that some illegal hunting (i.e. bear hunting and raccoon hunting) tends to involve close family groups. This consequently created problems for the interviewed officers since obtaining information was difficult due to the bonds and secretive nature associated with such groups.

Several officers and outdoorsmen felt that age played a role in the decision to poach, though this relationship was perceived to depend upon the passage of time. Many agreed that younger individuals who poach do so out of boredom and have no other activities to fill their time. Conversely, they suggested that the older generation tends to poach due to the opportunity presenting itself at the right moment in time. Some officers also expressed that older poachers seem to be more conservation minded and only poach what they would use, while younger poachers act in the interest of sheer excitement and for acceptance among their peer group (i.e., boasting about their activities and posting on social media).

Officers and outdoorsmen were also asked whether they perceived any typologies to exist among poachers. All officers felt that this was the case, pointing to those they would define as habitual and those who were better described as opportunistic. The opportunistic typology was viewed as being most common by both outdoorsmen and conservation officers. This is similar to the work of Eliason (2008), who also found that many poachers in his sample were opportunistic in nature. With that said, a handful of officers indicated that habitual poachers presented greater problems since they were most commonly interested in profits and poached at a higher rate than their opportunistic counterparts. Furthermore, they were perceived as being more organized and difficult to apprehend due to their skillsets and knowledge (obtained through practice). Many officers also expressed that habitual poachers are generally discreet about their activities, further complicating officer efforts.

This too matches up with the limited literature on the topic to date. For example, Forsyth (2008) determined that habitual poachers (defined as those with the most experience) were the most difficult for officers to apprehend do to their secrecy and knowledge of the areas in which they committed their crimes. A similar finding emerged in the work of Eliason (2008), with surveyed officers reporting that those who were more opportunistic in nature tended to be somewhat easier to catch due to their lack of planning.

### **Motivations of Poachers**

Much of the research literature indicates that the primary motivation of poachers is monetary in nature due to the demand for products in Asian markets and the prices that various items can bring (Duffey et al., 2015; Mano & Ishii, 2008; Wu et al., 2012; Young et al., 2011; Zhao, 2013). Several participants felt that this does play a role, though only in regard to plant poaching. Of interest, and unique to the current study, it was found that plant poaching is



perceived by officers to often be tied to the drug trade. Many individuals (that they arrest) admit to using the funds that they gain from their offending to fuel drug habits. Though exploratory in nature, this points to the need to further assess the motivations and activities of those involved in this specific form of poaching.

Some discussion is warranted considering the contradictory findings of the work (in comparison to previous studies that find a monetary motivation). It is possible that the isolated nature of the Appalachian Region prevents individuals from connecting to larger markets needed to move products internationally. Of likely greater importance, few trophy animals are present within the Appalachian Region. Past studies have found that these are valued by collectors, which may explain why studies in Western States (where such animals are plentiful) find that monetary concerns motivate many individuals. It may also be possible that products popular within Asian markets (such as Black Bear gallbladders) are more easily transported and smuggled when the prey is taken closer to ports on the Pacific Ocean (such as Los Angeles and Seattle).

Other studies have suggested different motivations as well, such as survival, excitement and peer acceptance. Contrary to the work of Eliason (2003, 2007, 2008, 2012, 2013), Forsyth (2008), and Forsyth and Forsyth (2012), many participants in the current study expressed that survival is no longer a significant motivation for poachers. They pointed toward the availability of numerous programs that individuals can use when in need of food. In fact, several conservation officers expressed that poaching to survive is simply an excuse that many offenders use when detected. Since nearly 10 years have passed since the data were collected for these studies, it is possible that more programs now exist and the need to hunt for survival is no longer as prevalent. Alternatively, it could be that such programs are more prevalent within the

Appalachian Region than other areas of the country. It has been well-documented that individuals in Appalachia take advantage of public assistance at higher levels than the national average. The independence and anti-government attitudes associated with many Western states may dissuade those in need from doing so there. It should also be noted that other studies have included poachers within their sample and these individuals may explain the need to survive as a form of neutralization, whereas law-abiding outdoorsmen and conservation officers (those interviewed for the current work) believe that such logic is simply an excuse.

Forsyth and Marckese (1993), utilizing focal concerns theory, suggested that individuals may also poach for psychological fulfillment. Similar findings emerged in the current work. Both officers and outdoorsmen believed that many poach for the thrill of it or to boost their ego. The emergence and popularity of social media sites (e.g., Facebook, Instagram, and Snapchat) were thought to amplify this possibility since it has now become easier than ever to share the spoils of poaching with friend groups and others that individuals are attempting to impress. Since the popularity of these sites continues to increase, it may be beneficial to further explore their impact on poaching in the future.

Another possible motivation was raised in the work of Forsyth (1998), who pointed to poaching's folk crime status. In essence, it was suggested that offenders do not view poaching as a serious problem since the activity is so ingrained in rural culture. In the current study, both outdoorsmen and conservation officers expressed that many within rural communities feel this way. They perceived this to be especially true for older generations due to their family history of surviving through hunting and harvesting wildlife during tough economic times. Moreover, conservation officers expressed that some individuals learn their skills and techniques from family members, leaving them with the belief that they must uphold the tradition. Individuals

within the Appalachian Region, as a group, have been found to place great emphasis on kinship and traditions. This finding seems to support the notion that these values extend even to illegal acts.

### **Detection, Apprehension and Punishment**

Previous research has explored the detection and apprehension of poachers (see Forsyth, 2008 and Green, 2011 for examples). These studies have largely found that those who poach use various methods for avoiding detection, such as false compartments (Green, 2011) poaching alone, and not sharing details of one's activity with others (Forsyth, 2008). Conservation officers in the current study indicated that they oftentimes encounter individuals who employ these tactics. However, other unique findings also emerged. For instance, there was some discussion of how family networks within the Region became an obstacle for officers and their investigations. As previously stated, some families tend to poach in groups with each individual having a separate role. One such role is being the lookout for potential officers and notifying the rest of the group when an officer is near. Furthermore, officers reported how questioning those close to an individual seldom resulted in useful information. They perceived these individuals to believe that hunting was a "God-given right" and as such they sought to protect their relatives or close friends.

Another unique finding was the revelation that many poachers use knowledge of conservation officers to determine appropriate times to commit their crimes. Several participants mentioned how poachers would drive by officer's homes in order to see whether they were on patrol. They would then commit the act or notify others that an opportunity was present. This is certainly attributable to the close-knit nature of rural communities, where those in law enforcement are well-known to residents. However, it is also related to the small number of

officers in any one geographic setting. As discussed within the interviews, both outdoorsmen and conservation officers realize that only a few individuals cover large geographic areas. This makes the tactic of driving by officer's homes more realistic for potential poachers.

Related, most individuals did not perceive poachers to consider the potential of apprehension. Participants felt that the geography of the Region provided a sense of safety for poachers in that they believe they can easily avoid officers. Furthermore, punishments were perceived as being low by both officers and outdoorsmen. As several indicated, violations typically only result in a small fine. Furthermore, it was perceived that most who are caught will continue their activities as a result of this lack of deterrence. In fact, the only significant deterrent mentioned by the group was the potential to have a vehicle seized or one's hunting/fishing license revoked. Though these options offer promise, officers frequently mentioned the disregard shown for hunting and fishing violations by both federal and state courts. These findings, taken together, indicate that much work remains to be done from an enforcement and policy perspective to truly deter illegal hunting and fishing.

### **Implications of the Current Study**

The results of this study increased our understanding of poaching in Southern Appalachia in three important ways. To begin, it provided some baseline knowledge in terms of the perceived prevalence and forms of poaching within the Region. Some previous research has explored the common targets of poaching, but no study to date has done so within. Next, it addressed the poaching of plants, which has to date not been considered in other research on the topic. Because the Appalachian Region has ample plant life, such an undertaking was important. Some evidence suggests that the poaching of plants such as Ginseng, Bloodroot and Black Cohosh is a problem, but no empirical efforts have been made to determine the perceptions of

outdoorsmen and conservation officers of it. As such, the findings point to the merit in including this form of offending within the poaching literature. Third, and related, the findings revealed that the poaching of plant life may be at least partially associated with the drug trade in that many offenders were perceived to be using funds to fuel drug habits. It is well-established that the Appalachian Region has a significant problem with drug abuse and this finding offers a unique look at how some individuals support their addiction.

In addition, the study extended our understanding of the generalizability of criminological theory to the crime of poaching. As discussed within the review of the literature, several studies have addressed the applicability of focal concerns theory, techniques of neutralization and opportunity theories to poaching behavior. Interview data indicated that many concepts associated with these theories are perceived to apply to poachers within the Appalachian Region. This should add to the call for greater attention to understanding rural crime problems through established criminological theories.

### **Limitations**

While the current study offered insight into poaching in Southern Appalachia, there were some important limitations. The primary limitation was the sample size (N=27). Interviews were conducted over a limited time frame and depended on the availability of each participant during this period. Given the demanding nature of the field, conservation officers may have not been available to participate since interviews were conducted during the traditional hunting season in the Region. A similar logic may explain why many outdoorsmen declined participation. It is also important to note that they may have been concerned about informed consent (in spite of protections in place) due to the guarded nature of rural society. Understanding each state's wildlife laws and regulations is another limitation the current study faced. This is especially true

for plant harvesting and how each state administers their permits. In essence, variations in definitions and regulations may have impacted the findings of the work.

The last potential limitation is related to the method of sampling. This study relied on snowball sampling, which depended on the motivation of individuals being interviewed and likely served to limit the population of possible participants. It is possible that the participants shared certain viewpoints or experiences that made them more likely to take part in the interviews. This design also essentially excluded individuals that were not part of a social network. However, some conservation officers were contacted using their department websites to address this. Most other works on poaching have taken a similar approach for logistical reasons, serving to lessen these concerns.

### **Directions for Future Research**

This study constituted the first attempt to develop a knowledge of poaching in Southern Appalachia. As such, it has created a strong foundation that future research should build upon. There were several concepts introduced during the interviews that were outside the scope of the current study but could provide important ideas. One such topic is the consideration of court procedures involving poaching crimes. All officers in the current study expressed the lack of concern regarding wildlife law and regulation within both state and federal courts. This lack of concern was perceived to extend from prosecutors to judges. Future research could explore these dynamics by conducting interviews with members of the courtroom workgroup to better gauge their perceptions of the crime and how these cases are typically processed.

Related, researchers could further explore existing punishments for wildlife crimes. Outdoorsmen and conservations officers regularly mentioned the fact that light penalties (that they perceived to be currently in place) were not a significant deterrent. These opinions could be

addressed in greater detail, along with research into the alterations that legal hunters and conservation officers would like to see put in place.

Next, additional research on the poaching of plants is warranted. Only a handful of studies to date have addressed the problem and this work constituted the first effort to understand perceptions of it within the Southern Appalachian Region. Though great insight was provided, it would be beneficial to consider a qualitative study with individuals who have been arrested and/or convicted of the crime. They would likely be able to offer much to our understanding of tactics, motivations and perceptions of apprehension risk and punishment.

Finally, future research should investigate the community programs and courses offered for outdoorsmen. All hunters are required to participate in safety courses prior to receiving a license. Several officers discussed how some individuals that were caught poaching were in the courses that officers had previously taught. It is possible that a greater emphasis on poaching and punishments could serve to lessen the problem. A pilot program involving some manner of experimental design may offer insight into whether this would be effective.

### **Conclusion**

Poaching is a significant problem in the United States, especially within the Southern Appalachia Region. It can be damaging to ecosystems, future species, and economies. As discussed, poaching within the Region has been traditionally considered a folk crime, and as a result the perceptions and experiences of conservation officers and outdoorsmen has earned little attention from scholars. This current study sought to fill this gap by investigating these individual's perceptions of poaching in Southern Appalachia. This not only allowed for a different perspective of poaching, but a new perspective on notions addressed by previous work in other regions. Results from the interviews with outdoorsmen and conservation officers

provided information about the targets of poaching, motivations and characteristics of poachers, and the apprehension of poachers. These findings should serve as a foundation that future researchers can build upon, and increase awareness of the importance of researching and addressing the problem.



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## APPENDICES

### Appendix A: Outdoorsmen Interview Guide

#### **Outdoorsmen Interview Guide**

##### **I would like to start with a few basic questions:**

1. How old are you?
2. Are you a hunter? How old were you when you started hunting?
3. What types of hunting do you commonly take part in?
4. Do you fish? How old were you when you started fishing?
5. What types of fishing do you commonly take part in?
6. Finally, do you ever hunt plants (such as Ginseng, Bloodroot or Galax)? How old were you when you began that?
7. What types of plants do you typically hunt for?

##### **Next, I would like to talk a bit about poaching within the Southern Appalachian Region:**

1. Do you know many hunters who poach? If so, what percentage of hunters do you estimate do it?
2. What types of poaching do you think are common?
  - a. Hunting out of season?
  - b. Hunting without a license?
  - c. Exceeding limits?
  - d. Using illegal methods?
3. Do you know many fishers who poach? What percentage would you estimate do it?
4. What types of poaching do you think are common among fishers?
  - a. Fishing without a license?
  - b. Exceeding limits?
  - c. Using illegal methods?
5. Do you know many individuals who poach plants within the Region? What percentage of those who hunt plants would you estimate do so illegally?
6. What types of poaching do you think are common among those hunting plants?
  - a. Doing so without a permit?
  - b. Doing so on private property (without permission) or on forbidden public lands?
  - c. Exceeding quotas?

##### **My next set of questions deal with the characteristics and motivations of poachers that you know:**

1. Do you think that poachers share any demographic characteristics?
  - a. Does age play a role?
  - b. Gender?
2. Do you think that there are different types of poachers?
  - a. Opportunistic?



- b. Habitual?
- 3. What do you think motivates the individuals that poach to do so?
  - a. Survival (food, money)?
  - b. Psychological fulfillment (excitement, thrill, trophies)?
  - c. Ability to neutralize behavior (rationalizing their actions, blaming others for them)?
  - d. Socialization (learned behavior from parents or others; tradition)?
  - e. Acceptance of poaching among their peers?
  - f. Contempt for rules and regulations?
- 4. Do you think that motivations depend upon the type of poaching (animals, fish or plants)?

**Finally, I would like to ask you about the relationship between poachers and conservation officers:**

- 1. Do you think that most poachers are worried about being caught by conservation officers? Why or why not?
- 2. Do you think that potential punishments are taken into account (such as fines or incarceration)?
- 3. How do you think that poachers go about avoiding getting caught?

**Thank you for participating in this project!**

## Appendix B: Conservation Officers Interview Guide

### Conservation Officers Interview Guide

#### **I would like to start with a few basic questions:**

1. How old are you?
2. How long have you been employed as a conservation officer?
3. Do you hunt? If so, how old were you when you started?
4. Do you fish? If so, how old were you when you started?
5. Finally, do you ever hunt plants (such as Ginseng, Bloodroot or Galax)? If so, how old were you when you began that?

#### **Next, I would like to talk a bit about poaching within the Southern Appalachian Region:**

1. What percentage of hunters do you estimate poach (either regularly or on occasion)?
2. What types of poaching, based on your experience, are common?
  - a. Hunting out of season?
  - b. Hunting without a license?
  - c. Exceeding limits?
  - d. Using illegal methods?
3. What percentage of fishers would you estimate poach (either regularly or on occasion)?
4. What types of poaching, based on your experience, are common among fishers?
  - a. Fishing without a license?
  - b. Exceeding limits?
  - c. Using illegal methods?
5. What percentage of those who hunt plants do so illegally?
6. What types of poaching, based on your experience, are common among those hunting plants?
  - a. Doing so without a permit?
  - b. Doing so on private property (without permission) or on forbidden public lands?
  - c. Exceeding quotas?

#### **My next set of questions deal with the characteristics and motivations of poachers:**

1. Have you found that poachers share any demographic characteristics?
  - a. Does age play a role?
  - b. Gender?
2. Do you think that there are different types of poachers?
  - a. Opportunistic?
  - b. Habitual?
3. What do you think motivates the individuals that poach to do so?
  - a. Survival (food, money)?
  - b. Psychological fulfillment (excitement, thrill, trophies)?
  - c. Ability to neutralize behavior (rationalizing their actions, blaming others for them)?

- d. Socialization (learned behavior from parents or others; tradition)?
  - e. Acceptance of poaching among their peers?
  - f. Contempt for rules and regulations?
4. Do you think that motivations depend upon the type of poaching (animals, fish or plants)?

**Finally, I would like to ask you about the relationship between poachers and conservation officers:**

1. Do you think that most poachers are worried about being caught? Why or why not?
2. Do you think that potential punishments are taken into account (such as fines or incarceration)?
3. How do you think that poachers go about avoiding getting caught?
4. Are any types of poachers more difficult to apprehend?

**Thank you for participating in this project!**

VITA

RANDI MARIE MILLER

Education: M.A. Criminal Justice & Criminology, East Tennessee State University, TN 2021

Certificate Forensic Document Examiner, East Tennessee State University, TN 2021

B.S. Biology and Criminal Justice & Criminology, East Tennessee State University, Johnson City, TN 2018

Professional Experience: Tuition Scholar, Department of Criminal Justice & Criminology

East Tennessee State University, Johnson City, TN, 2018-2020

Courses Assisted:

CJCR 2540 Criminal Law  
CJCR 3650 Criminal Procedure  
CJCR 4670 Race, Gender and Crime

Honors and Awards: Dean's List (2014 & 2015)

Service: Secretary, National Society of Colligate Scholars, East Tennessee State University (2017)

Professional Affiliations: National Society of Collegiate Scholars (2016-Present)

Criminal Justice Honor Society (Alpha Phi Sigma) (2018-Present)

Pre-Law Society (2018-Present)