Prescribed Fire Perspectives of African American Landowners in Alabama, Florida, and Georgia

La' Portia J. Perkins

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T. Adam Coates, Chair

J. Kevin Hiers

Michael Sorice

Cassandra Johnson-Gaither

Karen Kovaka

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ABSTRACT

African American landownership is decreasing in the southeastern United States. At the same time, prescribed fire use, research, and outreach are increasing. This disparity between changing landowner demographics and a renewed interest in a historically prevalent land management tool has prompted a broader conversation about diversity and inclusion in outreach programs and land management preferences. Therefore, an exploratory qualitative study was conducted using semi-structured interviews with African American non-industrial private landowners (NIPLs) in southern Alabama, northern Florida, and southwestern Georgia. The objectives of this study were to address the following questions: 1) Do African American NIPLs use prescribed fire?; 2) Why do they choose or refuse to use prescribed fire?; 3) What potential constraints discourage African American NIPLs from using prescribed fire? Twenty-one African American landowners within these states were interviewed from May through August 2019. Analysis of these interviews was completed using rapid rural appraisal, a method used to quickly gather data from individuals in rural settings. The results suggested that 81% of the African American NIPLs interviewed used prescribed fire to accomplish specific land management objectives, such as hazardous fuel reduction, undesired vegetation control, timber stand improvement, pest and disease reduction, and aesthetics. These individuals faced unique potential limitations including a lack of relevant information regarding prescribed fire permits, smoke management, safety, and burning smaller parcels. These individuals also desired opportunities to retain land within their own families and also felt they were underrepresented

within land management organizations and extension programs. In the future, policymakers' efforts may benefit from an intentional focus on building relationships with individual landowners, enhancing educational programming and access for landowners maintaining small and large parcels, and striving for diverse and inclusive representation within land management organizations.

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GENERAL AUDIENCE ABSTRACT

During a period of time when the use of prescribed fire (i.e. intentionally ignited fires by land managers and professionals) has increased in the southeastern United States, African American non-industrial private landownership has decreased. When surveyed alongside white and Hispanic landowners within this region, African American private landowners expressed negative attitudes toward prescribed fire and responded at lower rates than others. The combined issues of land loss, minority representation, and the need for prescribed fire on private lands has generated questions about diversity and inclusion in landowner assistance and fire outreach programming. To address these issues, first-hand accounts were necessary to understand land management perspectives from African American private landowners within this region. Therefore, a research study was conducted to interview African American private landowners in southern Alabama, northern Florida, and southwestern Georgia. The objectives of this study were to determine what African Americans know about prescribed fire and if African American private landowners use prescribed fire for land management. Through personal interviews, African American landowners were asked to describe what influenced their use or lack of use of fire and what relationships they had formed with outreach and educational organizations. These individuals were also asked how they believed their prescribed fire perspectives and usage connected to their ancestral heritage. Twenty-one interviews were conducted and the results suggested that seventeen interviewees used prescribed fire at communal, historical, and organizational levels, but limitations to prescribed fire use did exist. Agency and organizational

policymakers should focus on building relationships with individual landowners while offering better educational access that focuses on maintaining land legacies, particularly those that would be considered small parcels. Additionally, most of the landowners interviewed believed they were underrepresented within organizational leadership. There is indeed a cultural fabric that cannot be erased from current African American private landowners. Their practices and views are key to the inclusive and diverse conversations that should guide southeastern prescribed fire into the future.

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PERSONAL STATEMENT

In the year 1930, my great-grandmother, Wilhelmenia Gammons, was born to Florence Dickens and L.H. Gammons, sharecroppers in the small town of Marianna, in Jackson County, Florida. Wilhelmenia, also known as "Riddie," was the eldest of 14 children. I am her first great-grandchild, making me the first descendant of the eldest. Ownership of the home and land that belonged to her parents, herself, her siblings, and their children was eventually divided between the siblings; now it is owned by the youngest. In addition, my mother, Cherry Perkins, born in Detroit, Michigan, owns approximately 0.5 acres. As a first descendant of African American landowners, choosing to do this study provided an opportunity to not only tap into the mindset of my ancestors, but to also understand rural land management from an entirely different perspective. Though I carry the bias of being a black American with rural roots originating in the Southeast, I did not grow up this way. I grew up in the suburbs of a military town. My opportunities were not as limited as those of many African American/black children. I did not have to fight for all of my possessions and position until I entered higher education. Even so, my experience as an African American gave me a greater appreciation for the unknown, for the voices that I would be able to hear with open ears, and for the labor involved in modern land management.

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Chapter 1. Introduction

Prescribed fire is regularly utilized as a land management technique in the United States. Its use is currently growing in many locations as a wildfire mitigation strategy (Melvin, 2018). The southeastern United States has an established ecological history of prescribed fire use due to its abundance of fire-dependent species, such as longleaf pine (*Pinus palustris*) (Van Lear et al., 2005). African Americans previously owned many acres of land as communities and families in this same region (Gilbert et al., 2001), but have lost land for many reasons over time. Their connection to land management, including their choices and perceptions of specific land management practices, have not been adequately documented. This lack of knowledge regarding African American land management choices and perspectives includes prescribed fire.

This thesis contains a comprehensive literature review that investigates African American landownership following the Civil War in the southeastern United States. Chapter 2 reviews the economic and social issues related to African American land management and prescribed fire. Chapter 3 documents an exploratory qualitative research study that revealed the ways in which education, legacy, and underrepresentation are affecting African American non-industrial private landowners' usage of prescribed fire in Alabama, Florida, and Georgia. Lastly, Chapter 4 provides a narrative account of what the interviewer learned while visiting African American landowners in these states during summer 2019.

Chapter 2. Literature Review

2.1 Post-Civil War Southern Economics

Many enslaved people in the United States found freedom following the Emancipation Proclamation of 1863. However, this freedom rarely equated to immediate landownership (Tap, 1993). Legal and social injustices were prohibitive forces related to this trend despite the promises of the clichéd "forty acres and a mule" (Mitchell, 2001). This situation was particularly prevalent in the southern states. As a result, a large number of freed southern slaves and laborers fled to northern states during the Great Migration (Trotter, 1991; Hurt 2003). Northern cities offered more job opportunities than southern cities that were ravaged by the Civil War, Reconstruction, and the collapse of a slave-based, cotton-centric economy (Clark, 1966). Even so, the South largely depended upon agriculture and a workforce that primarily consisted of recently liberated people to rebuild its economy after the Civil War (Berstein, 1997).

Post-Civil War, most southern white farmers continued their agricultural practices with a workforce largely comprised of former enslaved people who remained in the South. As part of this activity, state legislatures created "Black Codes" which required African Americans to participate in specific farming contracts or pay fines (Berstein, 1997). Failure to either enter the contracts or pay the fines created hardships for African Americans, such as being labeled "vagrants," which could result in arrest or worse. In South Carolina, these codes included "all persons who [had] no fixed and known place of abode, and some lawful and reputable employment…" (Morris, 2017). Freed women and men were forced to quickly make choices on behalf of their wellbeing and economic vitality. Often, the only reasonable choice was to continue to be part of the land as tenants, sharecroppers, or wage workers.

2.2 Educational Resources

Access to educational resources activated changes for black farmers. The advent of agricultural and mechanical universities following the passing of the Morrill Acts of 1862 and 1890 was a critical step (Brown & Davis, 2009). These institutions included the Tuskegee Institute in Alabama and Florida Agricultural and Mechanical University in Florida. Instruction on farming and trade skills were made available to African Americans at these institutions (Seals, 1991; Whayne, 1998) and those programs were often supported by local churches and other African American community-based organizations dedicated to help individuals increase their career opportunities and improve their income in the racially divided South (Redd, 1998; Allen et al., 2007).

The Cooperative Extension Service, created under the Smith-Lever Act of 1914 during World War I, instructed rural landowners on the scientific nature of farming and helped stabilize agriculture across the nation (Whayne, 1998). Despite the availability of these services, many black farmers had no trust in government-based instruction and support services due to discriminatory language and practices in the South (Whayne, 1998). This distrust was quite prevalent throughout the 1960s and 1970s in the rural South, as much of the Civil Rights Act of 1964 went unheeded (Whayne, 1998; Hurt, 2003). The influence of economic exploitation and mechanization made new, educational opportunities less obtainable. Those working as black extension agents were left invalidated in their efforts to aid African Americans, especially as they attempted to protect black landowners from the prevailing, oppressive culture. The Negro Extension Services were ill-equipped due to a lack of resources and distrust among black farmers because of post-WWII transitioning (Whayne, 1998). The process of attaining landownership, too, proved to be just as challenging (Mitchell, 2001).

2.3 African American Landownership

Despite being declared "free," by the Emancipation Proclamation, full African American freedom was not actualized because societal structures were not immediately amended or created to support verbal emancipation. These injustices included deficiencies in both educational access and financial pathways to promote landownership. Although some of the structured educational programs mentioned above were available in the late 1800s, these resources were seldom made available and accessible for all African Americans until the early 1900s to 1930s (Brown & Davis, 2009).

Sharecropping provided an avenue of hope leading to landownership. Some freed African Americans acquired or maintained land as sharecroppers (Hurt, 2003). Organizations such as the Freedman's Bureau of Beaufort, established in 1865 in Beaufort, South Carolina, provided sharecroppers the opportunity to collectively manage their parcels as a cohort (Graber, 1978; Seals, 1991). It did not, however, provide substantial profitability because African Americans still found themselves indebted to the landowners for whom they farmed. The Federation of Southern Cooperatives in 1867 began to help black farmers get financial assistance to buy and maintain farmland (Siby, 2013). Congress created the Farmers Home Administration in part to build credit for African American farmers and to supply them with information. However, less than 40% of African American farmers at the time knew they could sell their crop shares or knew of opportunities available to farming organizations (Grim, 1996).

In spite of these opportunities to own and regain some sort of equitable power, there were still stagnancies. African Americans who did own land still had to rely on white landowners and community members to conduct commerce and obtain resources (Williams, 2003). Additionally, racial prejudice and injustice continued to inhibit Southern African American landownership. For

example, many Southern towns continued to force African Americans to move or denied them credit that could promote landownership (Mitchell, 2001).

Over time, African Americans rebuilt communities decimated by the Civil War and Reconstruction. The epicenters of these efforts were largely local churches or schoolhouses where families would come to worship, tell stories, have parties, and even sell groceries (Hurt, 2003). Around 1910, there were approximately 240,000 or more black farms in the states of Georgia, Florida, and Alabama alone (USDA Census of Agriculture, 1910). A predominant portion of these African American landowners owned land formerly contained in large plantations. Just 89 years later in 1999, a USDA Agricultural Economics and Land Ownership Survey stated that African Americans landowners accounted for approximately 68,000 farms covering 7.8 million acres – approximately 2% of all private landowners in the United States (USDA ERS, 1999). In 2017, it was estimated that there were only 28,000 African American NIPLs and these individuals owned 2.4 million acres (USDA Census of Agriculture, 2017).

The increase of previously black-owned land resulted from lands gained after the end of slavery through the emergence of sharecropping in the 1870s (Mandle, 2008). Freed slaves bought land and some slave-owners relinquished their land to former slaves. Historians assert this black-owned land was often passed down to the next generation through verbal agreements that did not typically include written documentation. In these situations, numerous siblings owned equal shares of land, leaving these properties without a single, dominant landowner. As more generations joined the shared ownership, the number of owners grew exponentially and land tenure became less secure for each individual landowner (Graber, 1978; Rivers, 2006). Land in this situation is commonly known as "heirs' property" (Bailey et al., 2019). Through many of the laws and loopholes governing these types of lands, African American landowners often lost

land outright because of the inconsistency of rights among tenants in common (Mitchell, 2001). One of these practices included a partition sale in which one landowner could sell their portion or an outsider could force a sale of the entire property (Mitchell, 2001). However, these processes were not the circumstance for every single African American landowner possessing heirs' property. Issues of foreclosure or adverse possession also attributed to African American land loss (The Emergency Land Fund, 1980; McGee & Boone, 1976).

Heirs' property, with its inherent lack of clear land title, continues to present landownership problems for many African Americans today. A current demonstration of heirs' property issues can be found with the Gullah-Geechee people located within some of the coastal islands of South Carolina, Georgia, and Florida. These people obtained land specifically through heirs' property practices. Due to the inefficiencies of heirs' property, such as the lack of a clear title listing a single landowner, the Gullah-Geechee have struggled to retain their land amid an expanding tourism industry that has dramatically driven land values upward and invited outside investor interest (Douglas, 2017). Lands highly valued for their cultural and historical value are often removed from the hands of the descendants of the ancestral owners simply because of legal discontinuities and inconsistencies.

As noted, an heir can decide to release his or her tenancy to a developer and then, in turn, the developer can post an entire land parcel for sale, thus removing all of the land from its ancestral heritage. In some heirs' property disputes, land has been sold outright without any property owner notification (Rivers, 2006). One example of a similar situation occurred in Forsyth County, GA when African Americans were removed from their property because of Ku Klux Klan activities (Loewen, 2005). African American-owned land is decreasing, but for those

who still retain their land, there are diverse cultural, spiritual, and sentimental values that serve as strong incentives for its prosperity.

2.4 African American Land Ethic

Carolyn Finney (2014:Preface XV-XI) stated, "Black people have laid it all down in order to feed their children, plant their dreams, and share their experience and history with the environment." Black landowners have established a distinctive land ethic or connection in many locations (e.g., that expressed by the Gullah-Geechee people). The land exists as a symbol of life and ancestral love (Crook, 2008). This may be due to the adverse discriminatory practices African Americans have faced since being enslaved. They have often survived and thrived through the land, which has encouraged an inherent attachment to many African Americans' sense of belonging and personal meaning. In addition, emotional and physical attachments to land that African Americans owned or tended have inspired efforts to retain the land for future generations and have shaped land management decisions.

Those landowners who live, work, and love through their land seem to retain it longer and gain more reward from their ownership (Adams, 2010). Since many African Americans have subsisted on their lands, currently or in their ancestral lineage, it is reasonable to assume they have maintained unique connections with their lands. These connections may be expressed recreationally through hunting and fishing, spiritually through their religious perspectives, or economically through commodity production (Gordon et al., 2013). These connections have not been reported in equal comparison to previous studies due to low response rates (Measells et al., 2005; Jarrett et al., 2009; Lim et al., 2009).

Alabama has at least 2,905 farms owned by African American NIPLs covering approximately 317,092 acres (USDA Census of Agriculture, 2017). This area, that stretches from

Virginia to East Texas, is known as the "Black Belt" due to its rich black soil (Rankin & Falk 1991; Wimberley & Morris 1997) and significant African American population (Allen-Smith, 2000). Part of this "belt" stretches across mid-Alabama where 40.8%-84.6% of the population is African American and forestland coverage is 49.6%-83.9% (Gan et al., 2003). Gan et al. (2003) found that only 26% of these African American landowners used prescribed fire as a forest management tool. Landowner awareness and knowledge of prescribed fire use and policy have been suggested as potential factors affecting this statistic. An additional southeastern landowner survey conducted by Jarrett et al. (2009) suggested that 92% of landowners believed that wildfires posed a serious threat to their land. Seventy-one percent of the survey respondents stated they had engaged in wildfire mitigation strategies on their properties (Jarrett et al., 2009). However, this study and others (i.e. Lim et al, 2009; Measells, 2005) had low African American response, in some cases as low as 7.5% of the sample size. Most surveys have not specifically focused on African American landowners as their primary survey audience, either. Additional information is needed to learn about the complex decision-making processes and landownership concerns African Americans possess regarding prescribed fire and what may be influencing their perspectives.

2.5 Prescribed Burning

Prescribed burning is used as a land management practice on approximately 10-12 million acres annually in the United States (Melvin, 2018). Prescribed fires are implemented under burning conditions that promote human safety, for both the public at large and the burn staff. They are conducted to promote the maintenance of fire-adapted ecosystems and contribute to the growth of many prominent pine species (*Pinus* spp.) (Mitchell et al., 2009; Waldrop & Goodrick, 2012; Kirkman & Jack, 2017). Chemical and mechanical treatments are often more

expensive than prescribed fire and prescribed fire may be the management practice of choice to achieve specific silvicultural and ecological objectives (Waldrop & Goodrick, 2012). Fire exclusion within fire-adapted ecosystems has resulted in major changes in ecosystem structure, composition, and function in many regions (Covington & Moore 1994; Keane et al., 2002; Varner et al., 2005). When prescribed burning is done correctly and carefully, it may enhance sprouting of specific vegetative species, remove unwanted plant species, improve wildlife habitat, and control insects and disease (Waldrop & Goodrick, 2012). Many pine-dominated forests in Alabama, Florida, and Georgia are fire-adapted. Prevalent pine species in this region include loblolly (*Pinus taeda*), longleaf (*P. palustris*), and shortleaf (*P. echinata*) pines. With the removal of fire, mixed stands have developed and include a mixture of fire-intolerant hardwoods (Nowacki & Abrams, 2008; Varner et al., 2016). Prescribed fire is necessary to manage unwanted hardwood regeneration in favor of successful pine regeneration in these mixed stands (O'Brien et al., 2008; Waldrop & Goodrick, 2012).

In contrast, there are still locations where prescribed fire has continued its usage despite prevalent fire suppression and exclusion throughout most of the twentieth century (Pyne et al., 1984). The initial implementers of this practice in these locations would have been Native Americans for plant cultivation, medicine, and game hunting (Ryan et al., 2013). Prescribed fire has shown promise in other nations beyond the United States, including those in Africa, to maintain and achieve specific desired landscape conditions (Trollope & Trollope, 2002). African fire use appears to have historic precedent (Shaffer, 2010). The Loma people of northwestern Liberia and Guinea use ancestral practices, such as swidden agriculture or "slash and burn" agriculture (Leopold, 2006), before planting rice, ground nuts, or beans (Fraser et al., 2015). In the palm oil belt of southeastern Nigeria, "bush fallow" is one method of agricultural burning

and crop rotation that was investigated in the 1970s (Awanyo, 2010). This method was believed to enhance soil processes and properties that may aid in long-term soil fertility. Another method commonly utilized by native peoples is “ley farming.” Using this method, grasses and legumes are rotated for hay production (Lagemann, 1977). Grassland conditions are prevalent on the African continent and have been compared to fire-maintained grasslands in the midwestern United States. Fire type, spread, and intensity were compared between Kansas grasslands and grasslands found within the Kruger National Park in South Africa (Trollope & Trollope, 2002). The results of these investigations suggested that significant similarities existed between head fires in Kansas and South Africa and that prescribed fires in both systems could maintain wildlife habitat and agricultural spaces in savanna-grassland ecosystems.

2.6 Study Objectives

Despite the widespread use of prescribed fire in the southeastern United States, there is very little information available to determine how, when, and why private landowners select it as a land management tool. The U.S Forest Service National Survey on Recreation and the Environment gathered landowner perspectives of prescribed fire in the southern United States from 1999-2004. The results suggested that ethnicity impacted respondent perspectives. Hispanic and African American survey participants expressed greater concern for smoke and post-fire aesthetics than white landowners who participated in the same survey. A previous prescribed fire survey that was focused on households as opposed to recreational users had not detected these differences (Lim et al., 2009).

Understanding how race and ethnicity impact landowner attitudes, perceptions, and forest management decision-making is a topic of immense interest among both scientists and land managers today (Lim et al., 2009; Ryan et al., 2012). Tall Timbers Research Station and Land

Conservancy is a land management and prescribed fire research organization located in Tallahassee, Florida. Their conservation planning area includes approximately 52 counties stretching from Madison County, Florida to Columbus, Georgia to Mobile, Alabama. Similar to other agencies and organizations like the Longleaf Alliance, U.S. Forest Endowment, and Tree Farm USA, Tall Timbers assists landowners with on-the-ground land management. This includes creating and implementing forest management plans. These management plans often include the use of prescribed fire for site preparation, timber stand improvement, wildlife habitat management, wildfire hazard reduction, and the maintenance of fire-adapted or fire-dependent communities.

Most African American landowners live in the southern United States. In the 2017 USDA Census of Agriculture USDA, 30,339 out of 32,910 African American farms were located with the 15 southern states (92%). African Americans have historically maintained a strong connection to natural resources. They actively participate in row crop agriculture, cattle farming, and timber management in the southeastern United States (Adams, 2010). According to one Tall Timbers' fire ecologist, however, few African American NIPLs have been surveyed within their conservation planning area and that would appear to be the trend for all southern states (J.K. Hiers, pers. comm., 2019).

More information regarding African American NIPLs including their land management goals, priorities, and perspectives would greatly benefit natural resource managers in the southern United States. Therefore, a research study was designed to understand more about African American land management and prescribed fire within Tall Timbers' conservation planning area (Creswell and Poth, 2018). The goal of this study was to depict as accurately as possible the range of perspectives of African American rural landowners regarding prescribed

fire as a land management practice. With the information obtained, opportunities could be presented to assist Tall Timbers and other land management organizations in determining potential discrepancies between African American perception, decision-making, and prescribed fire implementation.

Chapter 3. Prescribed Fire Perspectives of African American Landowners in Alabama, Florida, and Georgia

3.1 Introduction

Prescribed fire is a critical management tool for forests and agricultural lands in the southeastern United States. It is used to accomplish a host of objectives, including site preparation, timber stand improvement, wildlife habitat management, fire-adapted and fire-dependent vegetative community maintenance, and hazardous fuel reduction (Waldrop & Goodrick, 2012). Ten to twelve million acres of forested and agricultural land were subjected to prescribed burns on federal, state, and private lands in the southeastern region alone in 2018 (Melvin, 2018). In recent years, prescribed fire cost share and incentive programs have increased within this region to assist non-industrial private landowners (NIPLs) in both their efforts to manage land and include prescribed fire as part of their management regimes (East Gulf Coastal Plain Joint Venture, 2014; González-Cabán & Sánchez, 2017).

According to previous NIPL studies and surveys in the Southeast, white NIPLs respond at higher rates to landowner surveys than do other races and ethnicities, such as African Americans (Measells et al., 2005; Jarrett et al., 2009; Lim et al., 2009). This does not mean that African Americans are void of interest in land management policies and programs, however. In one survey of Hispanic and African American homeowners in Florida, González-Cabán & Sánchez (2017) found that African Americans were more willing to pay for public wildfire reduction programs than Hispanics. Survey results such as these are not extensive within the southeastern United States, however. This lack of knowledge regarding the interests, perspectives, and land management objectives of African American NIPLs is occurring at a time when African American land ownership is also decreasing. In 1999, it was estimated that there

were 68,000 African American farmers in the entire United States. These individuals owned approximately 7.8 million acres (USDA ERS, 1999). In 2017, it was estimated that there were only 28,000 African American farmers and these individuals owned 2.4 million acres (USDA Census of Agriculture, 2017). Over the 18-year period between these surveys, the totals represented a 59% decline in African American farmers and a 69% decline in African American-owned acreage. In actuality, these ownership and acreage figures may be inflated as a result of distinctions made between "farmers" and "landowners" according to the USDA's survey system (Gilbert et al., 2002).

Lim et al. (2009) noted in their study of prescribed fire and ethnicity in the South that, of the 22% of African American landowners who responded to their survey, 83% agreed that prescribed fire should be used. However, 60% of African American and Hispanic respondents had smoke management concerns and 68% were concerned about potential fish and wildlife effects. Minority NIPLs were 5.7% more likely to be opposed to the use of prescribed fire when compared to their white counterparts. This was due to a variety of factors, such as environmental risk, lack of education, and state liability laws for private landowners. To our knowledge, Lim et al. (2009) and González-Cabán & Sánchez (2017) conducted two of only a few research studies that have focused solely on how ethnicity may impact Southeastern wildland fire perspectives. Few, if any, existing studies have focused solely on African American perspectives, however.

Therefore, due to the low percentage of African American responses reflected in previous studies, it is necessary to use different survey techniques to gain a greater depth of understanding regarding how African American NIPLs in the southeastern US possess both attitudes towards and motivations for prescribed fire use. The disparity between increased prescribed fire incentive programs and management and decreased African American landownership, acreage, and

prescribed fire perspectives presented some interesting research questions for researchers at Virginia Polytechnic Institute and State University, Tall Timbers Research Station and Land Conservancy, and the USDA Forest Service Southern Research Station during the summer of 2019. These questions were: 1) Do African American NIPLs use prescribed fire?; 2) Why do they choose or refuse to use prescribed fire?; 3) What potential constraints discourage African American NIPLs from using prescribed fire? To investigate these questions, African American NIPLs residing in Florida, Georgia, and Alabama were interviewed.

3.2 Methods

3.2.1 Study Area

Tall Timbers Research Station and Land Conservancy is located in Tallahassee, Florida. Their conservation planning area encompasses 52 counties within Florida, Georgia, and Alabama (Figure 1). This area accounts for 10% of the annual acreage managed with prescribed fire in the United States (J.K. Hiers, pers. comm., 2019). This includes the Red Hills Region of northern Florida, an area known for its foundational use of prescribed fire (Johnson & Hale, 2002).

The 2010 U.S. Census (U.S. Census Bureau, 2010) was used to identify counties within Tall Timbers' conservation planning area containing the highest populations of self-identified African Americans. These counties included: Bullock, Alabama; Calhoun, Georgia; Clay, Georgia; Conecuh, Alabama; Dougherty, Georgia; Gadsden, Florida; Randolph, Georgia; and Terrell, Georgia (Figure 2). All study participants were African American NIPLs owning at least 0.5 acres within this conservation planning area.

3.2.2 Landowner Interviews

A qualitative method involving in-depth and semi-structured interviews was selected to obtain information from individual, African American NIPLs. This method allowed for a

potential analysis of existing limitations, unfairness, and injustice within a marginalized group (Marshall & Rossman, 2016). It also provided a level of personal connection with participants and the semi-structured interview provided greater freedom to ask detailed questions and establish rapport in a conversational manner. Analyses were completed after all interviews were conducted to avoid potential biases that may have arisen during each individual interview.

These interviews fit a broad, social science research method known as rapid rural appraisal (RRA). RRA is used to obtain the perspectives of a community or specific group of people (Beebe, 1995; U.S. Fish & Wildlife Service, 2016). It generally provides a rapid assessment with minimal overhead costs involved, particularly in rural landscapes (Chambers, 1981). When considering prescribed fire implementation, African American NIPLs compose a small and potentially marginalized demographic. When obtaining a rapid rural appraisal, the goal is to acknowledge that social aspects may be connected to a specific people group's perspectives and motivations. This method generally promotes an exchange of in-depth, individualized information that can be evaluated more broadly when multiple individuals are interviewed. Potential limitations for this method may include some reduced reliability and credibility, mostly related to the speed at which the assessments are conducted. However, study design and implementation are not generally considered potential limitations for the use of this method. Therefore, this method seemed appropriate for the in-depth, individual interviews conducted as part of this study.

All interviews were conducted May 20 to August 9, 2019, either in person (13) or via telephone (8). Tall Timbers Land Conservancy and Research Station's offices in Tallahassee, Florida served as the central point of contact for telephone interviews. Potential interviewees within the selected counties were identified by Tall Timbers' personnel, the Natural Resource

Conservation Service (NRCS), Auburn University Extension, University of Georgia Extension, Florida A&M University Extension, practicing foresters, and other local citizens. These individuals had personal networks that included African American NIPLs and their help was vital for recruitment.

Seventy-six percent of the interviews were conducted with NIPLs who expressed some form of connection to one or more of the professional organizations, entities, and personnel mentioned above. Interviewees that were first identified by organization or agency personnel typically identified additional potential NIPLs they knew through their own private networks or friends and family. This process, known as snowballing (Goodman, 1961), was key to interviewee acquisition. Due to race being a criterion for landowner interviews, it was difficult getting any cooperation from state or federal agencies to help identify candidates. Therefore, there was a heavy dependence on snowballing and word of mouth because the research was limited to a three-month period (May-August).

During the initial phase of NIPL contact, an organizational recruitment script (Supplementary Information 3.7.1) and landowner recruitment script (Supplementary Information 3.7.2) were used to explain the purpose of the project, provide confidentiality information, and share interviewer contact information as required by Virginia Polytechnic Institute and State University's Institutional Review Board. Most of the names, phone numbers, and email addresses were very difficult, if not impossible, to obtain without permission from the NIPLs individually. This information, along with an individual's verbal landownership affirmation, was required from each interviewee. Agency personnel assisted with the delivery and attainment of the required documentation. Interviewee personal information was confidentially secured and stored on a password-protected and encrypted laptop. Verbal consent

and a signed, written consent letter (Supplementary Information 3.7.3) were obtained from each participant at the time the interview was conducted.

One researcher conducted all interviews and each interview was digitally recorded. The interview script (Supplementary Information 3.7.4) contained three major sections. In section 1, the interviewer introduced the project, discussed the parties involved, and obtained verbal interview consent. Rapport with the interviewee was generally established during this time. Additional information related to a NIPL's land management goals and priorities was generally conveyed informally during this time, as well. In section 2, specific prescribed fire questions were asked. To do this, a generic description of prescribed fire was provided to the NIPL if the NIPL was not knowledgeable about this management technique. In cases where the NIPL was knowledgeable about prescribed fire, time was not spent describing any general prescribed fire information. In section 3, questions were asked to determine if the NIPL had specific ties to any prescribed fire organizational programs or outreach efforts. It is important to note that the question of underrepresentation in organizational programming and agency affiliations was not in the original script and was included through probing questions. When the interview concluded, landowners were asked if they knew of additional NIPLs who might be willing to participate in the research and this allowed the snowballing process to continue.

After an interview was completed, the audio was removed from the personal recording device and uploaded to a personal laptop. Each interviewee was assigned a participant ID based upon the order in which the interview took place and the date of the interview, i.e., P101012019. A detailed and complete audio transcription of each interview was completed using Microsoft Word. No language modifications were exercised during transcription in order to preserve an interviewee's original ideas and inflections (Mergenthaler and Stinson, 1992). Thirteen

categorical codes were created to capture broad response themes (Table 1). Analyses of these focused on three major themes: (1) evidence of prescribed fire use and motivations for use, (2) limitations to prescribed fire use and implications for policymakers, and (3) cultural values of African American landownership and fire. These themes were chosen based upon interviewee responses to specific questions. However, added value was expressed by each landowner when they described their own personal land ethic. Often, that land ethic was intertwined with fire usage. Therefore, these expressions were included as "cultural values" and were designated as potentially distinctive, cultural aspects African American landowners possessed. An attempt was made during the interview process to determine if similar themes would surface among all landowners. For example, some similarities may have existed between landowners regarding reasons for prescribed fire use (i.e. a history of ancestral plantation work or foundational prescribed fire education/knowledge).

An additional journal was maintained by the interviewer to record notes and important points. These journal entries also included additional activities in which the interviewer was involved during summer 2019. This record provided additional insight regarding local cultural knowledge that assisted in NIPL understanding. For example, the interviewer visited black archives and museums, attended tenant farm exhibits, and conversed with local historians within the study region. Participation in these activities provided additional access to potential interviewees and allowed the interviewer to gain rapport with community members.

3.3 Results

3.3.1 Prescribed Fire Use

Fifty-five African American NIPLs were contacted and asked to interview. Twenty-one of these NIPLs were interviewed. This group consisted of 1 female and 20 males. Nineteen of the

NIPLs interviewed were over age 50. Landownership ranged from 7 years to over 100 years of family legacy ownership. Land acreage ranged from < 0.5 to 365 acres.

In total, 17 interviewees (81%) used prescribed fire and 4 did not (19%). Nine NIPLs (43%) described using prescribed fire annually or biennially and five NIPLs (23%) reported infrequent use of prescribed fire ranging from once every 5 years to once every 30 years. Figure 3 displays the landowners who were actively conducting prescribed burns and those that had a gap in their usage in coordination with the 2010 African American Census population demographic data. Three interviewees worked on a tract greater than 1000 acres in size. They worked on this tract for decades, but the specific size and operational scope of those prescribed fires were not directly applicable to their own properties. Most burners stated that a family member had shared with them the importance of prescribed fire for land management.

3.3.2 Motivations for Prescribed Fire Use

Motivations for prescribed fire use were based upon management goals. These included pest and brush control, hazardous fuel reduction, wildlife species management, timber management, and invasive species management (Figure 3). One NIPL detailed their prescribed fire experience with the following quote:

> "*Only [with] my father - we did [prescribed fire]. We did pro burns along with the local fire and rescue - we did do that on several occasions. That was to prevent, you know how they burn to prevent actual [wild]fires] from taking place and I actually have burns built up to protect certain areas [along] the tree line. We let it burn where it came to the tree line. Separate the tree line from the area that was cleared - that's for when [if] there was a fire, it wouldn't mess up the hardwoods. We've always tried to maintain the hardwoods."* (P18)

Another interviewee suggested that burning was used to prevent the spread of harmful soil biota:

> "*A way to get rid of parasites and diseases and pest - I learned that [prescribed burning] was the way to get rid of those…issues*." (P2)

Two Georgia centennial farmers, maintaining a working farm that had existed for 100 years or more, were interviewed as part of this study. They expressed the influence community has on their land management decisions. These farmers, who produced hay, cattle, and row crops, had learned from their fathers and grandmothers the modes and expectations of managing land. In their time, neighboring plots were owned and farmed by African Americans who bought communal equipment to be used by local friends and relatives as a group. Within this community, many people understood the value of burning smaller parcels to avoid potentially hazardous wildfires. For example, one landowner said:

> "*When I was growing up, that was a tradition. We always burned the grass and it always came back prettier, so that's the only thing I know we did.*" (P5)

The NIPLs interviewed made it quite clear that connection to the land was very important to their family's sense of belonging and being. A heavy expression of devotion was made by one NIPL who stated:

> "*You know God ain't making no more land, so I think land is a precious thing and one of the most precious commodities that he left us with*." (P18)

Another NIPL described the sense of community in this way:

> "*They call it the wood rattlers, they keep look over the place like security. They mostly help burn, you know? They ride along, throw a match out, you know? And also, the area where we were sharecropping. My grandad, he used to burn. He used to walk 'round*

with a big old box of matches, them big old long matches and strike, just drop. Basically, everywhere that we were farming, he would keep all that burnt." (P9)

The cohesive desire of these landowners to maintain a community-driven, land preservation initiative using the inherited knowledge of their predecessors was a motivator and testament to the foundations of prescribed fire in their lives and for their land. When asked how they learned about prescribed fire, another NIPL stated:

"*Just from other people in the community, I think, and it was just kind of a basic practice that was done by just about everyone in the area.*" (P15).

3.3.3 Limitations to Prescribed Fire Use

Most of the NIPLS interviewed shared unique and intricate landownership stories that contained related and similar limitations. Education was covered as a topic and potential limitation in 57% of the interviews. This included safety, permitting challenges, prescribed fire knowledge, information related to long-term management planning, specific information about landowner assistance programs, and even working within natural resource organizations. When asked about prescribed fire, one of the first NIPLs interviewed stated:

"*See, throughout my lifetime, I have always lived in areas where people around me engaged in prescribed fire. I knew there was some purpose behind it, but I have never taken the initiative to find out why it was done. And I've never had anyone articulate in my presence why it was important.*" (P1)

One NIPL interviewee lived in Thomas County, Georgia. This individual has owned 140 acres for the last 39 years. They used prescribed fire for timber stand improvement and undesired vegetation control. Though it had been done on their land previously, almost 30 years ago, substantial burning risks were identified. When there is an increase in brush buildup over time,

for example, there is a risk that a well-intended and properly planned prescribed fire may grow from a low-intensity, low-severity surface fire into a crown fire because of increased surface and ladder fuel development (Gan et al., 2015). This individual stated:

> "*Once permits [were] required, people kind of stopped burning and I guess the other reason why they stopped burning was because people started building houses.*" (P15)

Though conceived of as a simple addition to the process for liability reasons, permitting also presented a potential limitation to prescribed fire use through its association with government authority.

Some organizations, like the NRCS, local fire and rescue services, and county Extension agencies, were mentioned in 76% of the interviews as sources of educational information and assistance. An example of this came from one NIPL who mentioned:

> *"The division of forestry [came] out and did the line for me. Yeah, they do my fire breaks and recently last year, they helped me do the burn*." (P17)

Other landowners belonged to more community-based or regional organizations that promoted agricultural management rather than intensive forest management. Interviewees discussed connective networks as part of their educational resources. Specifically, one NIPL stated:

> "*I'm part of the SAAFON* [Southeastern African American Farmers' Organic Network]. *They're part of like a networking organization and they help black farmers do different types of certification classes you can take [that are] offered in different areas."* (P2)

In some cases, landowners created their own connections and networks to disperse information. One NIPL noted:

> "*We have a little local group, but it don't have no name. But we probably meet about 4 times a year [and] let other farmers know what's going on*." (P20)

However, there were some interviewees that expressed zero connection to land management agencies or institutions. One NIPL suggested:

> "*If forestry did more programs promoting... like go to different counties and say, 'We're hosting a training on forestry management,' that way…people who want to get into it [could].*" (P2)

In most cases, though, an African American NIPL was presently or formerly part of a formal or informal organization during at least part of their ownership history.

Legacy was the second limitation that surfaced in 33% of the interviews. These NIPLs consciously exerted effort to engage relatives or other black landowners to preserve and continue the work of their predecessors. The landowners interviewed hoped their children would both continue to own their ancestral lands and continue burning in those locations where it was actively being used. One NIPL stated,

> *"I wouldn't depart with [the land] for nothing. People have been trying to purchase it and said that they'll give me a reasonable price for it, but as far as I'm concerned, it's going to stay in the family for as long as I live. And we're going to keep it.*" (P17)

One interviewee was a centennial farmer residing in Thomas County, Georgia. This individual owned 37 acres of heirs' property and this land had been in their family for more than 100 years. Annual prescribed burns have been conducted on this property as part of the broad land management activities. This landowner was well-versed on the utility of prescribed fire and had utilized their local community, family, and other organizational affiliations to gain prescribed fire knowledge and experience. This individual had attempted to buy other black-owned land throughout southwestern Georgia and northwestern Florida. They took pride in

owning land, but realized that it may soon be beyond their ability to maintain it. The landowner mentioned:

"*My wife won't do it and my sons don't want it.*" (P4)

On the occasions where family members were not available or willing to assist with prescribed burns, this NIPL had not been able to burn. However, his centennial lands held value for their long-term management history and legacy:

"*I grew up on this property, I guess, and then had the opportunity, you know in 1980, to buy a portion of it. Hopefully, it'll be something that I can pass on to my sons and they [will] value that.*" (P15).

As noted previously, 90% of the NIPLs interviewed were over age 50 and questioned their landownership legacy. They wanted to teach younger generations about the arduous task of land management. Another landowner stated:

"*The interest and thoughts I have on landownership are tied to my overall commitment to leave a personal legacy to our boys, but it's important to me, as an African American, to leave a financial and economic legacy.*" (P1)

The financial implications of land management could potentially stifle some landowners from using prescribed fire, even when legacy ownership and historic management techniques are highly valued.

Underrepresentation in land management agencies and organizations was mentioned in 33% of the interviews as a third potential limitation to prescribed fire use and landowner connections. Participants were asked:

"*Do you feel there is African American representation through your affiliations and networks?*"

Some NIPLs responded similarly:

> " *No, [there's] not enough representation for the dark or black people."* (P21)
>
> "*Yeah, you know it's two different worlds - you're still in this world and there is still another world [racially].*" (P20)

These NIPLs admitted that they existed in a world where race and social issues continued to impact their land management goals and relationships with agencies and organizations. The best mitigation for this is active engagement with rural and urban communities of color. In this way, these educational programs might be more focused on this demographic and may, in fact, eventually originate from individuals within that demographic.

3.3.4 Cultural Values of African American Landownership and Fire

Distrust of land management organizations and agencies has surfaced as a potential cultural issue affecting African American landowner survey responses in other studies (Lim et al, 2009; Adams, 2010). This was noted through our interview process, as well, as landowner accessibility was one of the more challenging aspects we faced. Approximately 95% of all participants were referred to the interviewer by a friend or family member, therefore, snowballing was essential to increase interviewee participation. A landowner noted their "tight knit" community by saying:

> " *I grew up in a family of rural farmers. They value the land, because that's how we made a living*." (P18).

African Americans in this region currently face two broad issues: smaller parcels sizes and a lack of ownership representation. Many African American NIPLs, even some of the interviewees, made it their duty to take responsibility for retaining lands within their families:

"*In fact that's why I came back, to protect and preserve the land, because [loss of ownership] is happening to a lot of African American land."* (P7)

African American NIPLs have also used prescribed fire outside of the constraints of the laws that now govern Alabama, Florida, and Georgia addressing private landowner liability. As a cultural value, one landowner did not allow potential permitting barriers to prevent them from using prescribed fire:

"*[Our fires weren't] controlled like the forestry service do. We just got out there and burned.*" (P5).

Many of these individuals have learned what was necessary and have maintained their lands using fire, even when regulatory compliance may have posed a potential threat.

3.4 Discussion

Surveys including African American NIPLs have previously suggested that: (1) there is a collective discontent toward prescribed fire use (Jarrett et al., 2009); (2) there are constraints for timber management and land legacy due to heirs' property issues in many locations (Bailey et al, 2019); and (3) this marginalized group broadly distrusts land management organizations due to continual land loss, a lack of organizational cooperation, and unshared management goals (Whayne, 1998; Christian et al., 2013).

Based upon our results, it appeared that African American NIPLs in Alabama, Florida, and Georgia actively use prescribed fire to accomplish similar objectives for similar reasons as other NIPLs that have been surveyed previously in the southeastern United States. Eighty-one percent of the landowners surveyed used prescribed fire to accomplish a range of objectives, including timber management, pest and disease reduction, wildlife habitat management, and more. It appeared that the assumption of a lack of African American prescribed fire use obtained

using broad survey data would not adequately characterize African American landowners in this region. Their lack of response to broad, impersonal surveys overall would potentially be influenced by distrustful attitudes toward survey institutions. Previous research has documented specific difficulty accessing African American NIPLs when discussing forest management because of heir's property issues, distrust, a lack of experience with natural resource professionals, and predatory timber harvesting practices (Schelhas et al., 2018; Bailey et al., 2019). While the smaller sample size and snowballing techniques here may have also skewed our study results, the word-of-mouth connection to landowners may bridge the trust divide noted in other surveys. Similarly, the detailed depth of conservation promoted throughout this study promoted a complementary and robust look into this target community's attitudes and land management approaches.

Despite similar prescribed fire use and motivations, the African American NIPL interviewees described potentially unique and dynamic factors that may discourage prescribed fire use for this people group. These factors included a lack of trust in stewardship and Extension organizations, largely fueled by a lack of representation within these entities. Educational resources catered to NIPLs managing smaller parcels also appeared to be a potential deterrent for their engagement in training activities. Increased smoke management resources and more detailed descriptions of each state's prescribed fire permitting process would greatly benefit African American NIPLs. Additional assistance for community-led prescribed fire organizations would also have some benefits, according to the interviewee responses. Localizing efforts to ensure that landowners are not limited when seeking outside information would be beneficial. For example, one NIPL attended classes nearly 200 miles away that were offered by the Longleaf Alliance in Alabama. African American landowners, especially those working toward

specific land management goals, wanted more information and improved access to programs and knowledge.

Despite a high interest among this community to maintain a continuous landownership legacy, many of the NIPLs interviewed stated that a lack of interest from family members and direct descendants may prohibit both the continued use of prescribed fire and property ownership. Since the 1860s, African Americans have trudged through many forms of discrimination as they have strived for full assimilation as Americans (Tap, 1993; Berstein, 1997; Mitchell, 2001; Morris, 2017). Among the issues mentioned previously that may discourage African American prescribed fire use, natural resource managers and policymakers should consider potential incentive programs geared particularly toward African American landownership to maintain the legacy and heritage that so many rural African American communities hold dear. It is important that policymakers understand the unique variables associated with African American landownership and any current prohibitive factors impacting it, such as heir's property (Hitchner et al., 2017). One potential avenue that could be explored is providing African American landowners designated opportunities to purchase black-owned lands. Conservation easements or alternative management strategies might be explored through land management agencies or non-government organizations.

Several shortcomings of this study should be noted. Multiple interview observers may have added additional nuance to the subsequent transcriptions and analyses. In some cases, face-to-face, on-site interviews may have been better than telephone interviews. Including additional interviewees would have broadened the diversity of responses received and may have added perspective regarding prescribed fire's influence in specific localities and organizations within the 52-county area surveyed. The use of the rapid rural appraisal method resulted in a rapid

turnaround and was needed for the time constraints in which this study was conducted. Potentially having additional time to obtain more perspectives from additional interviewees, however, could have increased the diversity of perspectives represented. Additionally, the only NIPLs interviewed with these specific questions in this survey were African American NIPLs. No direct questions were asked of white or Hispanic NIPLs within this region. In that regard, a direct comparison with other demographics from this particular study during this same time period cannot be made. However, as mentioned previously, broad generalizations from other surveys in this region are potentially skewed toward white NIPLs. Therefore, although this study could be viewed as limited by its lack of respondent diversity, this was an intentional aspect of this study's design. In this regard, the isolation of one specific demographic may be viewed as a tremendous strength due to the critical and foundational knowledge gap it attempted to address.

Overall, many African American NIPLs in Alabama, Florida, and Georgia 1) continue to support and use prescribed fire, 2) engage in natural resource management programming when it is made available to them, 3) develop community assistance programs for themselves when needed, and 4) possess a strong land conservation ethic. Their long-term management objectives and landownership may be impeded by a lack of relevant educational resources, no direct heirs seeking to continue landownership or land management, and underrepresentation within agencies and land management organizations. These NIPLs were diverse and were not monolithic. Policymakers and organizations within this region may benefit from intentional efforts to support this community in equal proportion to other NIPLs within the region. This may include workshops designed specifically for African American NIPLs and/or workshops that focus on achieving multiple management objectives on small parcels. This research shed additional light on the pressing importance of African American NIPLs and their lands as part of Southeastern

ecosystem conservation (Christian et al, 2013; Goyke et al., 2019). Their voice as historic "keepers of the land" should not be dismissed. The effort forestry organizations have previously exerted to promote desired forestry practices should connect with both current and historic local culture, practices, and people.

3.5 Conclusion

From this study, it appeared that African American NIPLs' resilience and continuous dedication to land management has persisted in this region across multiple generations despite discrimination, land loss, and financial incongruencies. Prescribed fire has been and continues to be a part of land management commonly practiced by African American NIPLs in this region as a means to promote a pine-dominated landscape, wildlife habitat, cultural values, and a continuity of historic land management practices. However, to sustain its use by African American NIPLs, a focus for policy incentives must address identified challenges in this study: a lack of adequate prescribed fire education, a shortage of direct heirs interested in land management, and unequal representation within formal and informal land management organizations. Policy that does not account for these hindrances and distrust of government programs will not effectively reach African American NIPL prescribed burners. Government agencies and support personnel may best serve their constituents by establishing rapport with NIPLs in a given locality. Understanding the unique educational needs and land management objectives of the individuals in a given area will benefit land conservation and management globally.

There are deeper issues still present for African American NIPLs within this region, highlighted by the unfair acquisition of heir's property in many southeastern states. Many generations of African Americans have utilized prescribed fire on their lands and the

continuation of that management practice on these lands may hinge on highlighting and sharing the collective "burn stories" that many generations have told and shown time and time again.

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Figure 1. Map of 2010 census data illustrating the populations of African Americans across Tall Timbers Research Station and Land Conservancy's 52-county conservation area.

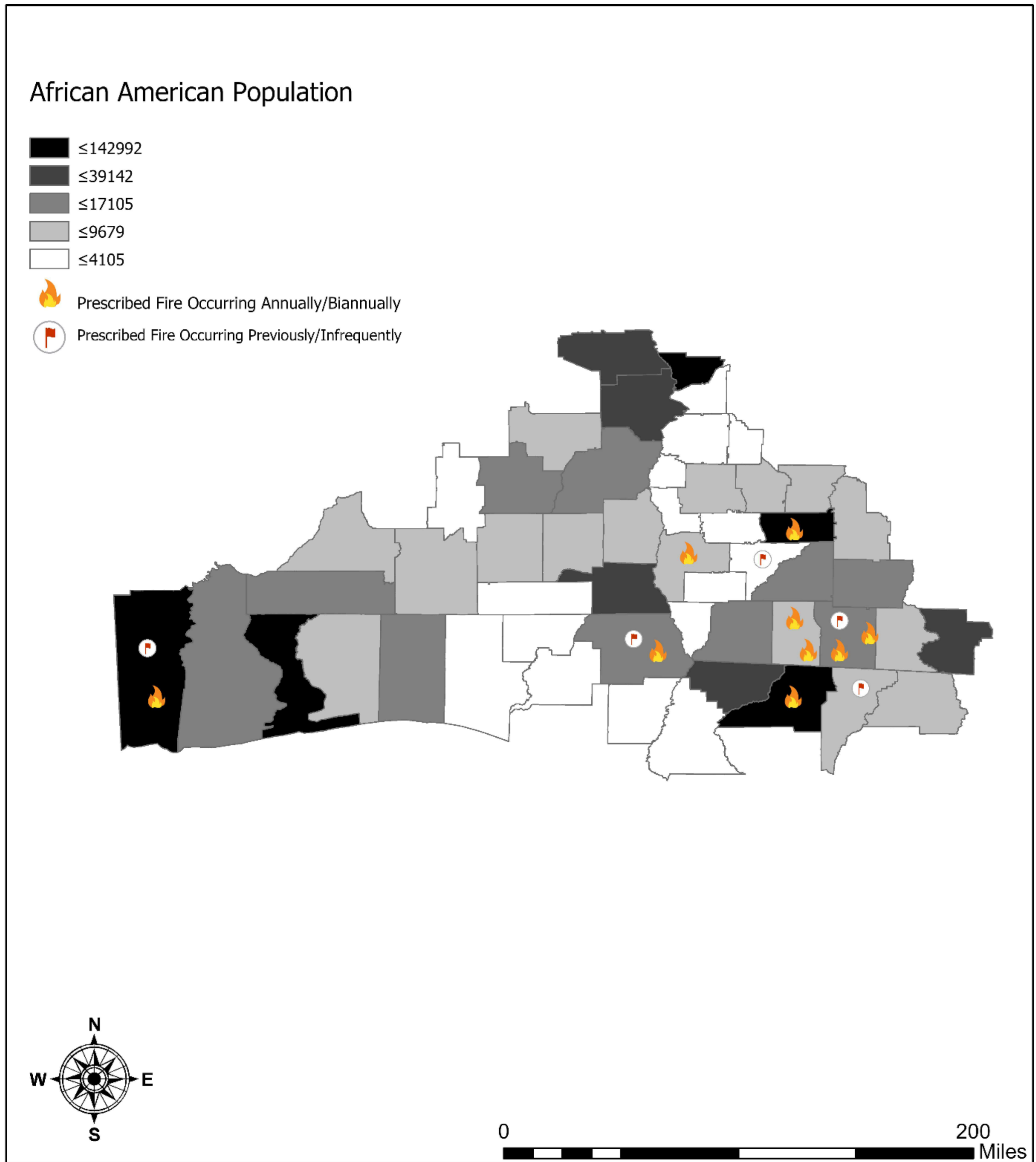

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Figure 2. Map of prescribed fire occurrence annually, biannually, and infrequently among participants within Tall Timbers' conservation area.

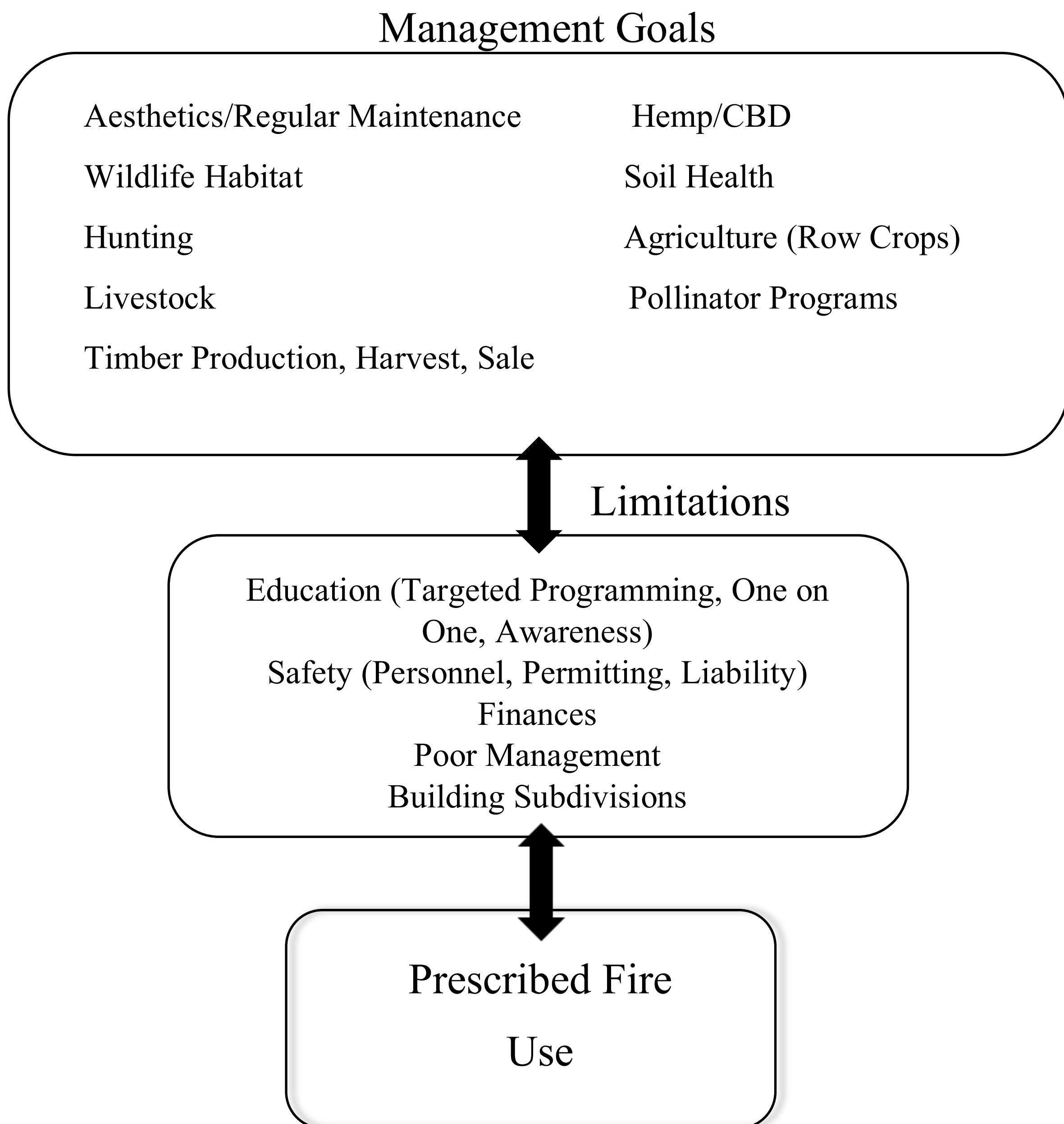

Figure 3. Flow chart of various management goals and potential limitations to prescribed fire use that were identified by the interviewees.

Table 1. Transcription codebook used to categorize broad themes presented during the interview process.

Code	Definition
Acreage	The number of acres owned in total
Evidence of Rx Fire Use*	Any mention of prescribed fire use, practice, management on the land owned or in community
Fire-Adapted Species	Various southeastern US pine species (longleaf pine, shortleaf pine, loblolly pine) adapted to fire for germination and habitat resilience
Forested Acreage	The number of acres owned consisting solely of forested land
Land Connectivity	Landowner personal, spiritual, or financial connections to the land reflected as feelings, reasoning, anecdotes, or history
Limitations to Rx Fire Use*	Practices, structures, laws, people, history, or organizations that infringed upon a landowner's ability to conduct prescribed burns
Location	The county in which the land was located
Management Goal	A landowner's desired outcome for the management of their land e.g., wildlife habitat or timber harvest
Organization	Any connections with groups, programs, or agencies that aided a landowner or prescribed fire use
Process of Landownership	How did the landowner become a landowner? Inherited, purchase, transfer, rent to own, etc.
Solution to Rx Fire Use*	"Reasons for," "aids with," "creations," or "protections" in the effort to conduct prescribed burns
Time of Landownership	Length of time the land discussed has been owned
Underrepresentation	African American representation within agencies and organizations or educational resources related to prescribed fire

3.7 Supplementary Information

3.7.1 Organization Recruitment Script

Hi ,

My name is La' Portia Perkins and I am a master's candidate in Forestry from Virginia Tech. I am currently stationed at Tall Timbers Land Conservancy in Tallahassee for the extent of summer 2019. I will be interviewing African American landowners to learn more about their land management preferences and choices. More specifically, interested in their exposure to and perspectives on prescribed fire. I am contacting you to see if you are connected to or could put me in contact with any African American forest landowners who own property (of any acreage) in the counties under your direction.

I plan to conduct interviews this summer for my research throughout southwestern Georgia, southeastern Alabama, and northwestern Florida. Detailed below are the counties in your state that I am focusing on. Anyone willing to be a part of the study I can travel to or they're welcome at Tall Timbers. Your help would truly be appreciated.

Counties: [Counties of the State]

Please email me at laportp@vt.edu or call (757) 230-4133 for more information.

Sincerely,

La' Portia Perkins

Graduate Research Assistant

Department of Forest Resources and Environmental Conservation

3.7.2 Landowner Recruitment Script

All recruitment will take place in the form of phone calls or emails, based upon preferred contact method, to landowners that fit the criteria for the research through agricultural extension agents, Tall Timbers, and/or consenting word of mouth.

My name is La' Portia Perkins and I am a graduate student at Virginia Polytechnic Institute and State University working on a project that involves talking to African American landowners to better understand their perspectives on land management practices, prescribed fire, and [to those that it pertains] living in a Wildland Urban Interface. This research is being conducted in partnership with Tall Timbers Research Station and Land Conservancy in Tallahassee, FL.

I have received your contact information from [Florida, Georgia, Alabama County Extension Agency, or Tall Timbers] who have identified you as meeting the criteria of an African American forested landowner. [insert contact's name] thought that you may be interested in participating

At this time, I am simply calling to tell you more about my project, who we are, and to see if you would be interested in participating.

The goal of this study is to better understand how African Americans have historically managed their land, to determine if fire is part of that management, and to determine if African American landowners have access to and readily participate in prescribed fire education and implementation programs. If interested, we will provide contact information and education related to programs that provide landowners with prescribed fire resources. The interview will be confidential and can be conducted at a time that is most convenient for you.

Does this sound like something you would be willing to speak with me about?

Sounds good. For interested landowners, I would like to schedule a visit to converse with you face-to-face and view your land in person, if that is easily accessible.

Yes: Schedule Interview.

No: Thank you so much for your time and I hope you have a great day.

3.7.3 Landowner Consent to Interview Form

To conduct interviews, each participant must agree to the terms and conditions of the interview process. Printing and signing below confirms and maintains the understanding that both parties are willing participants in the interview.

Terms and Conditions:

I understand that my information will be kept confidential.

I understand that consent can be removed at any point in time during the interview and research process.

The only time your name will be asked is in the beginning of the interview. In terms of data collection, your name will not be used; your participant number will be used, then the date.

I understand that this interview has minimal risk and will not involve any physical activity. Your safety and comfortability is of the utmost importance and will be adhered to.

I understand that this interview will be recorded with audio equipment (hand held recording device) and that at any point I may request that a recorder or my responses not be used.

I understand that the purpose of this research is to understand and better assess the perspectives of African Americans and prescribed fire on land management and that any detours from this subject are not permitted during the interviewing process.

Your signature documents your permission for you or the individual named below to take part

Signature of adult subject capable of consent or adult subject's legally authorized representative	**Date**
Printed name of subject (not required if subject personally provided consent)	**Date**

Signature of person obtaining consent **Date**

If the person obtaining assent will document assent on the consent form, add:

- ❑ I have explained the study to the extent compatible with the subject's capability, and the subject has agreed to be in the study.

OR

Signature of person obtaining assent **Date**

3.7.4 Interview Script

Introduction

Hello, my name is La' Portia Perkins and I am a graduate student at Virginia Tech. I am working with Tall Timbers Research Station and Land Conservancy to get a better understanding of African American landowner perspectives regarding prescribed fire. I am conducting these surveys in selected counties of Alabama, Georgia, and Florida. Tall Timbers is in northern Florida, in Leon County, and again, I am at Virginia Tech in Blacksburg, VA.

One of Tall Timbers' goals is to conduct research on prescribed fire in the southeastern US. Prescribed fire is managed or controlled fire. It is a practice where landowners and natural resource professionals intentionally ignite fires to burn vegetation and woody debris. These burns may reduce materials that might ignite during a wildfire, or an uncontrolled fire. They may also maintain specific species that are beneficial for wildlife.

To start, I'd like to ask you some questions about your land, your knowledge of Tall Timbers, and your opinion regarding prescribed fire. All information collected during this interview will remain confidential except to the research team. This team includes me, Dr. Cassandra Johnson with the US Forest Service, Mr. Kevin Hiers from Tall Timbers, and Drs. Mike Sorice, Adam Coates, and Karen Kovaka at Virginia Tech. At any point during the interview, please feel free to ask any questions that you may have about this project. There are no benefits for participation nor penalties for your choice not to participate. You can also refuse to answer any questions or stop the interview at any time.

Do you agree and consent to be interviewed?

YES [continue]

NO [refrain, thank you again]

Interview Questions

1. What county do you live in?
2. Did you grow up in this part of Georgia/Florida/Alabama? Was it mostly a rural area or small town? Have you noticed recent changes in population growth?
3. How long have you owned your land?
4. From whom did you obtain ownership and how did this occur? (Inheritance, auction, etc.)
5. Can you briefly describe your personal attachment or feelings toward your land? (Emotions, Ideas, Disconnect)
    a. Were similar feelings carried by the previous or associated landowners?
    b. Would you say that your feelings about your land play a role in your management?
6. How many acres do you actively manage?
7. Approximately how much of this acreage is forested?
8. Is this forestland located in the same county where you live?
9. Generally, what tree species grow on your forested land? Are those the species you desire?
10. What are your management goals for your property?
    a. If none, what do you utilize your property for (Aesthetics, Property, etc.)?
11. Are there specific management practices currently utilized to manage your land, such as forest harvesting/thinning, prescribed fire, vegetative control, mowing, etc.?

    If none are identified:

    a. Have you had any experience with professional natural resource management?
    b. Are there any new goals or objectives you would like to pursue on your land in the near future?

I'll read a short description of prescribed fire. I mentioned it when I introduced the survey, but I'd like to talk about it in more detail here:

**Prescribed fire or burning is fire set intentionally for purposes of forest management, farming, or restoration. The goal of prescribed fire is to control and manage vegetative competition. It also can improve habitat for wildlife and foraging for livestock and reduce wildfire risk. This could happen if a lightning strike were to ignite leaves or debris or if an arsonist had plans to criminally ignite fires.*

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12. Have you used prescribed burning on the land you currently own?

    12a. YES

        a. How often do you burn? (yearly, every 2 years, etc.)

        b. How were you introduced to prescribed burning? (Friends, Family, Classes)

            [If introduction is from family or friends]

                i. Would you describe how your family/friends conducted prescribed burns?

        c. Are there any specific methods for burning that you have used over time?

        d. How does the application of prescribed fire either fit into or inhibit your land management goals?

    12b. NO (additional information needed or lack of experienced use)

        a. Why have you not chosen to burn on your property?

        b. Could you describe any knowledge you may or may not have had about prescribed fire prior to this interview?

        c. Do you think that prescribed fire could fit into your management goals?

13. Do other people in your community conduct prescribed burns?

a. If yes, can you describe how this affects you? (i.e., smoke, traffic, signage, breathing concerns, etc.)

b. If no, what might be some reasons why people do not conduct burns in this area? (i.e., previous exposure to/effects of wildfire, lack of information, etc.)

14. Have you been presented with information regarding prescribed fire as a potential management tool in the past? (i.e., invitation to landowner workshop, school-based natural resource program, etc.)

15. Are you involved in any federal, state, or Tall Timbers landowner/fire programs?

    a. If so, which and why?

    b. If not, what do you feel would be necessary for you to be involved in landowner/fire programs?

    c. Do you feel these programs connect with your management goals?

    d. Do you feel your demographic is underrepresented in these types of forums?

16. Are you a part of any organizations, co-ops, or other affiliated groups for minority landowners?

    a. If so, which one(s) and how has the organization(s) shaped your land management decisions?

    b. Do these organizations discuss prescribed fire?

        b2. As best as you can remember, has prescribed fire been a topic of discussion in or supported by [the organization]?

Closing Remarks/ Follow- Up

1. Would you be interested in someone from Tall Timbers contacting you about assisted prescribed fire management on your land?

**Assisted prescribed fire management would simply involve a member of landowner fire assistance via Tall Timbers coming to you to help you conduct prescribed fire or vice versa, where you could come to the associated facilities, to learn more.*

2. Is there anything within this interview that I did not address that you would like to discuss?

Thank you for your time and responses for this interview. It is truly appreciated. If there is any additional information necessary, we will be in contact.

Chapter 4. A Summer in the Red Hills Region with African American Landowners

4.1 Narrative

Miles and miles of longleaf pine: you would have thought it was Christmas time for a girl like me. Just miles and miles of pines stretching across my front windshield as I drove through southwestern Georgia, seeing only to my right Alabama and into Tallahassee, Florida. Where I grew up, the tree I knew most was a big southern red oak that lived in front of my house. The suburbs aren't impressive. No open land, unless it's a yard with a pool. No wildlife, unless it's just a grey squirrel on the fence, or in Virginia, at least a cardinal in springtime waking me for school. I didn't envision only three years after moving away from home I'd be driving through pines as tall as skyscrapers and as wide as my grandmother's hugs. As a descendent of African American sharecroppers paternally, there is a lot to be said about the connection that part of my family has to their more rural beginnings (Figure 4). It serves as a reminder of simpler and more arduous times, but also of family and community. Something, more than anything, that they taught me each summer when I found myself back in Tallahassee with my grandma and grandfather as a young child.

However, the summer of 2019 was different. It smelled of smoke from none other than the embers of fire. Prescribed fire to be exact (Figure 5). In the South alone, according to surveys, non-industrial private forest and woodland ownerships cover over 21.8 million acres of the region and over 44.2 million acres in the U.S., total (Butler et al., 2016). African Americans own approximately 2.4 million acres in the U.S (USDA Census of Agriculture, 2017), which may include all African American landholdings, not just forests. Among this small group of landowners were indeed members of my own family still owning and tending land in Northern Florida where most of their lives had begun and where a journey for me was just beginning. With

this information, I wanted to find a connection. For so long, I had been disconnected from a world of rural agrarian life and the land management found in it. During my undergraduate studies at Clemson University as a wildlife major, I learned so much about the outdoors and natural resources. I instinctively felt intrinsically connected to the principles I learned, and yet, I had no first-hand experience of any of it. So, in the beginning of my master's education, where the science and utilization of prescribed fire were part of a national and global discussion, I knew I had to join the conversation: a conversation in which my family and their compatriots were not adequately represented.

When I investigated the current literature regarding prescribed fire use, I discovered that the southeastern United States led the nation in prescribed fire use in 2017, conducting prescribed burns on nearly 7.6 million acres (Melvin, 2018). However, studies from previous years had not provided evidence to support pragmatic approaches to offset potentially negative prescribed fire connotations shared by African American respondents. Smoke management was a concern among those that offered insight. However, few African Americans engaged in the surveys, at all. These components of land management practice, race, and the overarching cultural relations that connect them are important. However, they are under-observed and lack personal feedback from African American landowners themselves. When my graduate advisor and I discussed potential research avenues for my graduate thesis, we designed a study that would allow me to speak with African American landowners, even if only a few, to better understand their perspectives, historic legacies, and land ethic.

In the beginning of my research, it felt like a giant black history lesson. I found myself quite literally trying to soak up every ounce of detail that was shared. These realities were the type that will most likely never be read in textbooks. I was struck by the knowledge of sustained

poverty in the Post-Reconstruction South through the end of the 1800s and into the 1920s. There was then an influx of agricultural and technical education at historically black land-grant universities and credit bureaus. These complex and unique dynamics set the stage for the small African American non-industrial private landowner population base we have today and the continued legal nuances of heirs' property for many of these landowners. The landownership journey has been a long and discriminative one for African Americans, my family included. However, the land practices they have maintained have not changed much at all.

Over the summer of 2019, I personally interviewed and engaged with 21 African American landowners connected to 21 different families and backgrounds. All interviews were semi-structured and open-ended, held in person or over the phone. Through this process, landowners shared their own voices, experiences, and practices. All landowners reported owning acreages ranging from 0.5 to 365. Of the participants, 9 used prescribed fire annually or biennially. Five others used fire infrequently ranging from once every 5 years to once every 30 years. Four participants did not use prescribed fire. Most landowners had maintained their ownership from 7 years to over 100 years. A centennial farm that was visited during the interview process is shown in Figure 6.

Along with fire, they each expressed a connective feature between themselves and their land. This was a unique, impactful part of this study. The stewardship, ancestral continuity, and regional land ethic were overwhelming. One landowner told me,

> "*The land is not really owned by us. I'm a caretaker. I maintain [it]. I grew up in a rural area on a plantation and I moved to another small farm. [I'm] on my own this time. So, farming has been in my family for quite a few generations: granddaddy, uncles, my*

daddy, and all. Some of them [were] independent farmers. Some of them work[ed] in farms on the plantation" (P13)

A plantation culture was evident for hunting and timber sales, mostly, but it also included row crop agriculture, cattle, and wildlife needs. The region I studied hosts some of the largest plantations containing some of the oldest pine forests in the South with so many that even the highway linking Thomasville, Georgia to Tallahassee, Florida is called Plantation Parkway. These large plantations, Tall Timbers Research Station and Land Conservancy included, display large-scale prescribed fires and were the beginnings of fire ecology as we know it today, with the advent of serious bobwhite quail hunting.

With all of the positive aspects regarding the use of fire, for many of the landowners I spoke with, this was their first time having a conservation one-on-one with someone about prescribed fire. It was the first time they had been asked to reflect upon their views and share their perspectives and stories. They were given an opportunity to discuss the lack of new educational information regarding prescribed fire. They discussed their concerns regarding how they could maintain their property with prescribed fire in the years to come while being the sole property manager and burn boss. They often felt like organizations and agencies had no individuals that looked like them and could understand their local culture and history. This led me to understand that policymakers should be focused on three major limitations facing African American NIPLs – education, legacy, and underrepresentation.

African American landowners do not need to be excluded as prescribed fire science and use advances. Applicable educational resources should be made available to them that address the size and scope of their burn units. With regard to legacy, the first thing to address is the inherent value of African American/black owned land. Showing African American NIPLs that

we, as natural resource professionals, value them as landowners is critical. The emergent theme of organizational underrepresentation is one that resonated deep within my soul. I have consistently felt isolated in my academic and professional pursuits. In general, there have been no other African American women in my classes, departmental affiliations, or job experiences. Where could we possibly go if someone like me could lead us? How could this community be advanced? What could that mean for small rural landowners?

There has to be more work done to preserve black land, whether through conservation easements or the creation of landowner networks that can support African American landowners. It is scary to consider that even with drastic conservation efforts and well-conceived organization, many African Americans may not return to lands that once belonged to their ancestors. The history and culture associated with some of the original caretakers and keepers of the flame will be lost. It also seems imperative that prescribed fire scientists and educational specialists need to prioritize the diversity of forest uses, values, and management approaches landowners possess. One size-fits-all fire programs will neither meet all people's needs nor ensure forest sustainability (Schelhas et al., 2003). Different programs and policies focused specifically on marginalized demographics are likely necessary to reach these traditionally underserved populations.

It is my hope that my personal encounters and experiences will breathe new life into piles of literature, decades of history, and this present discontinuity. For those seeking greater justice among communities they presently or ancestrally serve, I hope this provides a "spark" to ignite a "flame." In doing this, I hope to preserve this critical piece of the geographically distinct and unique southeastern landscape, the one I grew to love with new eyes for the miles and miles of longleaf pine I saw in 2019.

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Figure 4. Gammons Family picture, Marianna, Florida (year unidentified)
Top left to bottom right: Marvin Kelly, Novella Kelly (neé Gammons),
Kenny Everett, Wanda Grover, Sarah Groover, Lenny Gammons, and Sandy Gammons

Figure 5. Pebble Hill Plantation Prescribed Fire, Thomasville, Georgia (June 18, 2019).

Figure 6. Georgia Centennial Farm (Hay Crop), Thomas County, Georgia

Chapter 5. Conclusion

African American non-industrial private landowners are important to the status of our southeastern natural resources, forests, and communities. Efforts should continue to focus on understanding their management preferences and choices going forward. There are links to the transmission of practices across the diaspora from the continent of Africa to the Americas in terms of prescribed and intentionally ignited fires for varying management goals (Lagemann, 1977; Trollope and Trollope, 2002; Leopold, 2006; Awanyo, 2010; Shaffer, 2010). With landownership for African American NIPLs nearly extinct (USDA ERS, 1999; Douglas, 2017), the findings of this study aimed also to mold a conversation that can increase African American landownership and their use of viable land management practices.

The results and limitations of this study revealed that in even a small sample of 21 interviewees, there was a large variety of complex land types, management goals, and landowner histories. This complexity affected prescribed fire use. Educational resources focused on safety, protocols, and permitting may improve both landowner awareness and prescribed fire use. There is still a need for land preservation of historic African American/black land holdings across the nation, but this is specifically true in the Southeast. Strong familial and communal ties are present for this demographic within this region to maintain a sense of legacy and history. Most notably, there is a need for greater representation of African Americans in the world of prescribed fire. There are still pressing social issues between racial and ethnic backgrounds that need to be addressed for a more inclusive fire culture within land management organizations and agencies.

In terms of the future and next steps, additional studies including an ethnographic approach with even more participants could provide additional insights. A qualitative, interview-

based study with Native Americans within this region would shed additional light on how prescribed fire is valued by underrepresented peoples. Most of the participants in this study maintained a steadfast approach to prescribed fire. In light of this, prescribed fire information and programming might be improved across Alabama, Georgia, and Florida to further enhance and support African American landowners' historic land management ethics, values, and practices.

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