

**LANDOWNERS' RELATIONSHIP WITH LAND AND DECISIONS  
TO PARTICIPATE IN PRIVATE LAND CONSERVATION PROGRAMS:  
A PHENOMENOLOGICAL STUDY IN THE TEXAS HILL COUNTRY**

A Dissertation

by

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## **ABSTRACT**

America's private lands are rapidly declining primarily due to land fragmentation and development. Landowners play a significant role in these alarming dynamics as their choices and actions affect entire ecosystems throughout the nation. A better understanding of this group of individuals is imperative to advance stewardship on private lands. Despite a multitude of past studies, little is known about the socio-psychological factors associated with landownership, and specifically, how landownership is experienced by landowners. Using the theoretical framework of psychological ownership (Pierce et al., 2001), this phenomenological study focuses on landowners' lived experiences with their properties and decisions to participate in private land conservation (PLC) programs. Semi-structured interviews (n = 9) were conducted with landowners holding properties in the Hill Country region of Texas, the leading state in the loss of agricultural land. Descriptive statistics such as the method of land acquisition, use of land management plan, and socio-demographics profiled the study participants. The interviews revealed that participants feel a deep respect for their properties and share a strong sense of responsibility to protect the integrity of their land and the privately-owned landscape. Based on the findings of this study, landownership as a socio-psychological phenomenon refers to the continual cycle of the reciprocal owner-land relationship that exists at the intersection of ecocentric and anthropocentric philosophies of the land and nature. Theoretically, this research offers implications for understanding the socio-psychological dimensions of landownership and related behaviors. For natural resource practitioners, the findings of this study may inform design and delivery of PLC programs and policies to promote stewardship and sustainability on private lands.

To my son, Misha.

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## NOMENCLATURE

B&B	Bed and Breakfast
CE	Conservation easement
HCA	Hill Country Alliance
HMI	Holistic Management International
NGO	Non-government organization
NWOS	National Woodland Owner Survey
PLC	Private land conservation
TPWD	Texas Parks and Wildlife
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	United States Fish & Wildlife Service
WVWA	Wimberley Valley Watershed Association

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# CHAPTER I

## INTRODUCTION

### **Background**

Private lands occupy nearly 60 percent of the total land territory in the U.S. (USDA, 2015). Even though legally in the hands of private landowners, the ecosystem goods and services found on private lands represent a common-pool resource critical for the quality of life and well-being of millions of people. The public can benefit from improved water, air and soil quality, wildlife habitat, opportunities for recreation, education and aesthetic enjoyment supported by privately owned space. In addition to environmental and social benefits, private farmlands and forests are the main supplier of food and timber products nationwide.

The responsibility for sustainable use and management of private lands rests primarily on the shoulders of landowners whose individual practices directly influence the quality of the ecosystem services. A diverse group of people, with a variety of worldviews, motivations, conservation views, personal histories and other values associated with landownership own the private lands of America. A reflection of this diversity appears in uncoordinated land-management decisions, affecting the integrity and well-being of entire ecosystems. For example, multiple land uses and management priorities within the same ecosystem may deteriorate the quality of underground and above ground natural resources, unbalancing the functioning of the whole ecoregion.

Given the critical role landowners have in preserving the many benefits that come from private lands, it is important to learn whom these decision-makers are, how they

experience landownership, what relationship they have with their land and how they arrive to decisions to participate in private land conservation (PLC). While researchers have investigated some of these socio-psychological factors in the private landownership domain (e.g., Quinn & Halfacre, 2014), there remains a need for additional scientific inquiry. The present study focused on landowners' relationship with their land and related behaviors.

### **Trends in private open space**

Recent trends in private landownership indicate that America's private lands and the valuable resources they provide are rapidly declining. Between 1997 and 2012, the total area of farmland and cropland decreased by over 4 percent and over 12 percent, respectively (USDA, 2015). The major driving force behind these changes in agricultural land uses are urban development, associated fragmentation, and conversion of agricultural lands into urban uses (USDA, 2015). According to the U.S. Department of Agriculture (USDA), between 1997 and 2012, the total area of developed land increased by approximately 19 percent nationwide, with the majority of the land lost to urban development (USDA, 2015).

Land fragmentation and conversion are compromising the public benefits of private lands and represent the major reasons for the declining open space in many parts of the U.S., with Texas being the leading state in the loss of continuous open space (Wilkins et al., 2003). Private lands in Texas comprise approximately 95 percent of the state's area, historically used chiefly for farming and ranching (Wilkins et al., 2003). Since the 1990s, the average size of farms in Texas has significantly decreased due to land fragmentation, which Wilkins and colleagues (2003) refer to as "the single greatest threat to wildlife and the long-term viability of agriculture in Texas" (p. 5). Most of the farm and ranch loss in Texas has been

occurring near metropolitan centers due to fragmentation of mid-size holdings into smaller ownerships (Wilkins et al., 2003).

Located in close proximity to the cities of Austin and San Antonio, the Texas Hill Country represents one region that has been experiencing fundamental environmental changes due to rapid land fragmentation. The population influx, economic and housing development, and expansion of transportation networks are among the factors affecting the land cover and natural resources of the Hill Country (Hill Country Planning Studio, 2015). Rich amenities and an accessibility of metropolitan resources attract increasing numbers of people to purchase land in the Hill Country. As of 2013, the population of the region totaled 3,383,019 people, and projections estimate the population to more than double by 2050 (Hill Country Planning Studio, 2015). Since 1992, high demand has resulted in the average land market values in the region to skyrocket by more than 86 percent (Wilkins et al., 2003). The increasing demand, and resulting high market values, give Texas landowners an incentive to sell part or all of their land, threatening the integrity of the natural landscape by subdividing the continuous open space (Lai, 2007).

Although economic and residential development significantly contribute to land fragmentation trends nationwide, and particularly in Texas, individuals' personal circumstances influence their decisions to subdivide their land, as well. Such factors as a lack of or multiple heirs, age, financial needs, health, divorce, or other personal circumstances may contribute to landowners' decisions to sell land for development (Baldwin et al., 2017; Rowe et al., 2001). Considering the alarming rates of subdivision and conversion of American privately-owned space into other uses (USDA, 2015), it was

important to investigate the underlying processes contributing to the existing private land management dynamics.

### **Nature of the problem**

The recent land use dynamics show a rapid decline in America's continuous open space predominantly due to the widespread land fragmentation and development. Conversion of the U.S. privately-owned open space compromises American natural heritage and will eventually lead to complete disappearance of essential commodities found on private land. While the ever-increasing population growth and accelerating rate of land conversion contribute to the occurring trends, the influence of land-management behaviors of private landowners should not be underestimated. These individuals' choices and practices affect private land use and shape the state of today's rural landscapes (Gruver, 2010; Lai, 2007). Therefore, understanding landowners and their land-management decisions is imperative for the sustainable management of America's privately-owned landscape.

The relevance of the present study was borne out of insufficient knowledge about socio-psychological factors associated with landownership. Specifically, little is known about landowners' lived experiences with their properties, and how these experiences are reflected in individuals' land-management behaviors. The existing research has also fallen short of understanding the decisions of private landowners to participate in PLC initiatives (Horton et al., 2017; Lai & Lyons, 2011). I conducted this study to improve knowledge about the essence of owning land and provide a framework for understanding landownership as a socio-psychological phenomenon.

## **Need for the study**

The scientific efforts to understand the relationship between humans and nature have historically concentrated around issues relevant to conservation of natural resources found on public lands (Mullendore et al., 2015). The shift of the scholarly attention towards the concerns regarding private land conservation and management began with the publication of Knight's (1999) essay. In his influential work, Knight (1999) emphasized the consistent loss of American private open space to the expanding land conversion stressing the need for more research to understand these disturbing dynamics. Even though numerous studies have focused on private land since Knight's (1999) work was published, research on the socio-psychological dimensions of PLC is rather weak.

The existing research has demonstrated that landowners may develop a strong psychological connection to their land, which has important implications on their land-management decisions, and consequently on sustainability of rural landscapes (Ryan et al., 2003; Selinske et al., 2015). The influence of this psychological connection on landowners' land-management decisions has been examined through place-based theory, theory of reasoned action, and the concept of connectivity with nature (Dutcher et al., 2007; Lai, 2007; Lai & Lyons, 2011; Sorice, 2008). These approaches focus primarily on prediction of individual behaviors, and undoubtedly shed some light onto landowners' choices and actions. However, the mechanisms through which landowners construct the emotional connection to their properties have been largely neglected in research (Quinn & Halfacre, 2014). In particular, the psychological sense of ownership as a potentially influential construct to understand the owner-land relationship and land-management behaviors requires further investigation.



Ownership is a multidimensional phenomenon consisting of legal, social and emotional aspects, all of which produce behavioral effects (Pierce et al., 2003). Learning about individual perceptions of landownership is necessary for understanding the spectrum of feelings landowners associate with their properties and their effect on participation in conservation activities. Incorporating the knowledge about landowners' feelings toward their land can improve the outreach mechanisms, program design and delivery, and contribute to the development of forward-looking policies capable of responding to a variety of individuals' needs and priorities. With the current study, I expand the understanding of socio-psychological dimensions of landownership by providing a detailed examination of landowners' personal contexts, experiences, conservation views, and other factors associated with owning land. Furthermore, through the exploration of individuals' land-management decisions, this research enlarges the existing body of knowledge about management and conservation of privately-owned landscapes.

### **Purpose of the study**

To contribute to the existing body of knowledge concerning landowners' relationship with land and related behaviors, the purpose of this study was to provide an in-depth understanding of landownership as a socio-psychological phenomenon. Furthermore, in this research I sought to explore the nature of the relationship between landowners and their land, and landowners' decisions to participate in PLC programs. Therefore, the following research questions were used to guide this study:

1. What relationship do landowners have with their land?
2. How do landowners make decisions regarding their participation in PLC programs?

## **Theoretical framework**

The theory of psychological ownership provided the framework for this study. This theory emerged within the organizational context to better understand employees' behaviors and improve the outcomes of their work (Pierce et al., 2001). Since ownership occurs in many domains of human lives, the theory of psychological ownership has been applied in a diverse array of disciplinary areas beyond organizational research (e.g., Avey et al., 2009; McConville et al., 2016) including education (e.g., Asatryan et al., 2013), marketing (e.g., Jussila et al., 2015), hospitality (e.g., Asatryan & Oh, 2008), and human health (e.g., Paré et al., 2006). In recent years, the concept of psychological ownership has also been utilized to understand human behavior in relation to the issues of private forest ownership and management (e.g., Lähdesmäki & Matilainen, 2014; Matilainen et al., 2017).

The state of psychological ownership is characterized by how individuals experience feelings of possessiveness towards targets of ownership. This psychological condition constitutes cognitive and affective dimensions (Pierce et al., 2003). The cognitive dimension comprises the individual's awareness and beliefs regarding the target of ownership, whereas the affective dimension includes the feelings that surface when someone else tries to claim or influence the target. Therefore, psychological ownership should be understood as a cognitive–affective human condition in which an individual perceives the target of ownership as 'theirs' (Pierce et al., 2001).

Three intraindividual motives facilitate feelings of psychological ownership: efficacy and effectance, self-identity, and having a place (Pierce et al., 2003). The innate desire of a human to be 'the cause' of alterations to a target of ownership through control actions embodies the efficacy and effectance motives (Pierce et al., 2001). In other words, an

individual perceives an object as their own when they can alter it and produce the desired outcomes through controlling and affecting the object in whatever way they want. According to Belk (1988), who argues that control is critical for the formation of feelings of possessiveness, the more control an individual exercises over an object, the more they think of the object as theirs.

The self-identity motive is rooted in the instrumental role of possessions as a means for self-definition and self-expression (Pierce et al., 2001). When objects are consistent with the perceived sense of self, people tend to regard them as parts of their self (Belk, 1988). This self-association is formed through continuous exploration of and interaction with the object in the living relationship with it (Pierce et al., 2001). Ownership also serves as a psychologically meaningful mechanism for maintaining the continuity of owners' identities through time by supporting the emotional connection between the owners and their past (Pierce et al., 2003).

The human innate need for home and place constitutes the third motive for development of feelings of psychological ownership. According to Porteous (1976), people have a natural need to possess a certain space and make it their own. This natural territoriality need motivates people to invest their time and energy into maintaining, improving and personalizing their possessions to make them better representations of self. The personal investment into the well-being of an object is regarded as part of self because the self is the primary source of one's desire to spend time and energy improving the object (Belk, 1988).

Even though often understood in terms of an individual's legal rights and responsibilities, ownership represents a more complex psychological construct, which has important implications on human behavior. Such behaviors as responsibility, stewardship,

citizenship, personal sacrifice, and assumption of risk are among the positive behavioral outcomes of psychological ownership (Pierce et al., 2003). The negative consequences of psychological ownership may include unwillingness to share the object with others and engagement in territorial behaviors in regards to it (Pierce et al., 2003).

The theory of psychological ownership focuses on the mechanisms underlying the development of the cognitive–affective link between people and surrounding objects. Its main premise is grounded in the idea that an individual’s behavior towards an object can be explained through knowing how they feel about that particular object. The more a person perceives an object as a representation of self, exercises control over it, and invests energy and time into it, the stronger the feelings of ownership towards that particular object. The theory of psychological ownership offers a promising potential to understand the relationship between American landowners and their land, given their diversity of personal backgrounds, notions of property rights, and a strong desire to retain full control over land-related decisions. The application of this theory in the current research has provided a valuable insight into landowners’ decision-making processes in relation to practicing conservation on their land, and thus has enriched the existing knowledge on socio-psychological dimensions of landowners’ participation in PLC programs. The extension of the theory of psychological ownership to the context of private landownership and conservation, has allowed the further refinement of the concept of psychological ownership and expansion of its empirical application.

### **Personal background and reflections**

My personal background and experience living on the land prompted my interest in this area of research. In my childhood years, my family owned several acres of land located

in central Ukraine. From my early years, I knew the important value that the land had in my family's life — it was the main provider of the fresh fruit and vegetables that we grew on it, clean water that we drew from our well, organic meat and fresh dairy products, and multiple opportunities for playing outside and learning about nature.

While our living on the land was always rewarding, all members of our family had to be involved in the maintenance of it throughout the year. We primarily used our land for non-commercial farming, and I was often engaged in any land-based activities with which my parents needed my help. This often included planting, harvesting, and preserving fruits and vegetables from our small farm. In addition, my brother and I assisted with aerating the soil, weeding, watering, and picking slugs and insects off the leaves of the vegetables.

Growing up on the land allowed my brother and I to spend a significant amount of time outdoors, which taught us to appreciate nature and the resources it had to offer. Our land had access to a lake, and almost every day we would fish. We also had a small beach of our own and enjoyed swimming and playing in the lake during summers. As a child, I loved climbing trees, building hovels out of tree branches, catching and studying insects, making fires, and many other fun activities that I was able to enjoy on my family's property. My positive interactions with the land through work, recreation, and play further translated into the strong conservation views I hold today.

My philosophy regarding private land management is centered around the belief that landownership assumes the duty to manage the land in such a way that its resources remain available for future generations. I adhere to the view of private land as a community resource, the care for which is entrusted to its legal owner. While private property rights should always be respected, private land management should not infringe upon the land's

long-term ability to provide benefits to the public. In my perspective, the impact of landowners' decisions is not bounded by property lines. Rather, it covers entire ecosystems as they spread across the boundaries of privately-owned holdings. Hence, I maintain that it is the landowner's responsibility to manage the land in their possession with its public benefits in mind and in a way that ensures the quality and availability of the land's resources for the well-being of present and future generations.

### **Definitions of terms**

*Agricultural landowners:* Individuals who are involved in agricultural production through day-to-day decisions related to management, labor and field operations.

*Commercial producers:* Individuals who are involved in agricultural production solely for generating profit.

*Conservation easements:* “Legally binding agreements that limit certain types of uses or prevent development from taking place on the land in perpetuity while the land remains in private hands... In a conservation easement, a landowner voluntarily agrees to sell or donate certain rights associated with his or her property — often the right to subdivide or develop — and a private organization (a land trust) or public agency agrees to hold the right to enforce the landowner's promise not to exercise those rights” (TNC, 2018a).

*Conservation:* “The protection, maintenance, and rehabilitation of native biota, their habitats, and life-support systems to ensure ecosystem sustainability and biodiversity” (Moore & Jennings, 2000, p.61).

*Hill Country:* A vernacular term used to refer to a region located in central Texas. For the purposes of this study the Hill Country was defined in terms of 28 counties (Figure 1, p. 36).

*Landowners:* For the purpose of this study, landowners are individuals in possession of title for a parcel of land larger than 25 acres located within the Texas Hill Country region.

*Lifestyle-oriented landowners:* Individuals in possession of title for a parcel of land, who are financially independent on land-based income and utilize their land primarily for non-commercial reasons such as recreation, second home residence, hobby farming, etc. (Gill, Klepeis, & Chisholm, 2010).

*Private land conservation (PLC):* “A tactic that leverages the increasing interest of the private sector to take part in conservation” (TNC, 2018b). For the purposes of this study, PLC refers to landowners’ participation in conservation programs.

*Private lands:* Non-federal lands “belonging to an individual person or persons” (USDA, 2015).

## CHAPTER II

### LITERATURE REVIEW

#### **Ownership of America's private lands**

Out of the 2.3 billion acres of the U.S. total land area, nearly 60 percent is in private ownership (USDA, 2011). Although legally in hands of private landholders, these lands offer endless benefits to society including the provision of unique and sensitive habitats for thousands of plant and animal species, food and drinking water for millions of people, opportunities for recreation and education, aesthetic enjoyment, and overall enhancement of psychological well-being. Landowners shoulder the responsibility of stewardship of these public resources found on private lands as their choices and actions affect entire ecosystems throughout the nation.

Despite this high proportion of privately-owned land, information about who owns it is rather limited. The U.S. Census of Agriculture represents the richest and most systematically updated data source on landownership (Eno et al., 2006). According to the U.S. Census of Agriculture, there are approximately 2.1 million farms managed by 3.2 million operators, with an average farm size of 434 acres (USDA, 2015). A principal farm operator is most typically a 58-year-old white male. While the prevalence of the Caucasian race among principal farm operators has been consistent over the past several decades, a noticeable increase in the average age has been observed, up from an average of 50 years recorded in 1982 (USDA, 2015). A farm operator is usually married, with their spouse often listed as a secondary operator. Generally, the spouse is not intensively involved in farm-related activities, and usually has employment outside the farm. According to the U.S.



Census of Agriculture, three-fourths of farm operators reside on their farms, and 48 percent report farming as their primary occupation (USDA, 2015).

The USDA Forest Service (USFS) regularly conducts the National Woodland Owner Survey (NWOS) that provides another systematically updated source of information on landowners. One of the purposes of conducting the NWOS is the aggregation of the socio-demographic data on American private forest landowners. In addition, through the NWOS, the USFS aims to improve the understanding of landowners' reasons for landownership, general characteristics of their land, concerns for their forests, as well as the current and intended ways they use and manage their forests (USDA, 2015). According to the most recent NWOS results, the forest owner profile is somewhat similar to the one of a farmland operator described above (USDA, 2015). A forest owner is typically a married white male who primarily resides on his land. The average age of a forest owner is 55–64 years old, and has been increasing over time. Comparing both groups of landowners, forest owners hold smaller tracts of land ranging from one to 49 acres, as opposed to farmland operators who often own several hundred acres of land (USDA, 2015).

The U.S. Census of Agriculture and NWOS databases contain the most detailed and systematically aggregated information on private landownership; however, both sources have limitations related to their methodology. Some scholars consider the information in the U.S. Census of Agriculture incomplete due to the methodology used to collect and process these data (e.g., Eno et al., 2006). In particular, the definition of a landowner used in this source is restricted to farm operators, leaving landowners who engage in different land uses or stay uninvolved with any land-related activities unrepresented (Eno et al., 2006). Data comparisons utilizing NWOS results are complicated by inconsistencies in the information

collected at different periods of time (Butler et al., 2016). Since conducting the first NWOS in 1978, the USDA only used the same data collection protocol twice, for the two most recent survey iterations (Butler et al., 2016).

The shift from traditional production-oriented land uses to lifestyle-driven motivations for landownership has resulted in the emergence of a new group of landowners in the privately-owned landscape (Fuguitt, 1985; Gill et al., 2010; Mendham & Curtis, 2010). Lifestyle-oriented landowners differ significantly from production-oriented individuals (Abrams & Bliss, 2013; Gosnell et al., 2006). To date, there seems to be no systematic data source documenting socio-demographic characteristics and other attributes of lifestyle-oriented landowners; however, existing research can draw a suitably detailed profile. Researchers have found that lifestyle-oriented landowners are often younger, well educated, and most commonly derive their income from sources not related to the operation of their land (Ernst & Wallace, 2008). They typically hold smaller properties, regarded as their lifestyle assets (Sorice et al., 2012b). Many lifestyle-oriented landowners use their land as a secondary residence and may not live on their properties all year round, or can be absentees (Gosnell et al., 2006; Stedman, 2006). According to past research, these landowners are also distinguished for their strong conservation views and high interest in stewardship (Mendham & Curtis, 2010; Rudzitis, 1999). However, scholars have noted that lifestyle-oriented landowners generally lack knowledge and skills for properly managing their land (Kreuter et al., 2004).

Landowners represent a diverse group with a variety of motivations for landownership, land-management objectives, land uses, worldviews and conservation values. For some, land serves as their full-time job and the main source of income, while for

others it is a place to escape and engage in favorite outdoor activities. Systematic documentation of this information together with the socio-demographic data on private landowners is necessary to achieve sustainable use of natural resources and preservation of the numerous benefits that exist on private lands.

## **Landowners' relationship with land**

### *Lifestyle-oriented landowners*

Existing research presents compelling evidence that, given an opportunity, the vast majority of Americans would prefer to live in the country rather than metropolitan centers (Milburn, 2010). Recent trends in nonmetropolitan migration indicate that motivations for owning rural land are shifting towards lifestyle-driven reasons from the traditional association with agricultural production (Gill et al., 2010; Gosnell & Travis, 2005; Sorice et al., 2012b). Researchers' attempts to explain this socio-demographic phenomenon date back to the 1970's, when the major population growth was recorded in nonmetropolitan areas nationwide (Fuguitt, 1985). The attractiveness of countryside, detractions of city centers, and individuals' desire to improve the quality of life by leading a rural lifestyle are factors identified among the primary drivers of the widespread migration to American rural areas (Dillman, 1979; Gosnell et al., 2006; Thomas & Bachtel, 1978).

Many scholars investigating lifestyle-driven landownership are primarily concerned with individual owners who hold land for non-commercial use and utilize them for leisure-related purposes. The literature is replete with a diversity of terms used in referring to these individuals including 'new rural landowners' (Gill et al., 2010), 'newer landowners' (Cearley-Sanders, 2005), 'amenity buyers' (Gosnell & Travis, 2005), 'amenity landowners' (Abrams & Bliss, 2013), 'lifestyle-oriented landowners' (Sorice et al., 2012b) and 'lifestyle

landowners' (Meadows et al., 2013). To distinguish this group from other landowners, I will use the term 'lifestyle-oriented landowners' to emphasize the priority of lifestyle-driven reasons for landownership, as opposed to production-driven motivations.

Lifestyle-oriented landowners utilize their properties for a variety of purposes, perceiving landownership primarily as an opportunity to connect with and enjoy the natural environment of their land (Lai, 2007). Many lifestyle-oriented landowners wish to lead a rural way of life, described in terms of such qualities as enjoyment of natural beauty and scenery, peacefulness, privacy, freedom, space, and control over own environment (Gill et al., 2010; Milburn, 2010; Sorice et al., 2012b). Lower population densities, a perceived strong sense of community, and cultural amenities of rural areas are also attributable to the rural way of life as perceived by lifestyle-oriented landowners (Sullivan, 1996). Scholars have shown that lifestyle-oriented landowners grow attached to their land because it allows participation in desired recreational activities, creation of favorable environments for raising children, spending time with the family, and opportunities for practicing stewardship on their property (Abrams et al., 2012; Gosnell et al., 2007; Stedman, 2006). Therefore, for this group of landowners, the relationship with their properties is embedded in the land's functionality to fulfill these lifestyle aspirations and provide a desired way of living.

The function of land as a supporter of a preferred way of life has important implications on how lifestyle-oriented landowners view themselves (Lai, 2007). Through participation in enjoyable activities on their properties, these landowners have endless opportunities for self-fulfillment and expression of their identities. For example, in her study focusing on psychological determinants of landowners' relationship with their properties in Central Texas, Cearley-Sanders (2005) found that these individuals view themselves as

passionate stewards who utilize land to engage in responsible pro-environmental behaviors. Participation in conservation gives them feelings of happiness, pride, and self-actualization as stewards and caretakers of their land (Cearley-Sanders, 2005; Lokhorst et al., 2014).

The presence of lifestyle-oriented landowners who purchase and use their land to be able to meet certain lifestyle-driven objectives is altering the social and geographic landscapes of American rural areas (Abrams & Bliss, 2013; Bohnet, 2008). There is an ongoing debate among researchers regarding the significance of these changes with two contrasting views leading the discussion (Gill et al., 2010). These owners bring a new culture and values, strong concern for environmental protection as well as substantial financial resources to promote and support conservation in nonmetropolitan communities (Gosnell et al., 2007; Greiner et al., 2009; Mendham & Curtis, 2010). On the other hand, their preference for smaller properties increases human density, land fragmentation, development of infrastructure, resource consumption, and causes major alterations to the local biodiversity (Knight et al., 1995). Additionally, a weakening of the regional social capital and disappearance of the local knowledge and culture may connect to the increasing presence of lifestyle-oriented landowners in rural areas (Abrams et al., 2012; Gill et al., 2010; Kreuter et al., 2004).

An improved quality of life, participation in favorite recreational activities, and the ability to enjoy the aesthetics of natural features are among the values contributing to the owner–land connection for this group of landowners. Lifestyle aspirations brought by the newcomers from city centers are supplanting the agrarian values traditionally associated with rural lands (Gosnell & Abrams, 2009; Sorice et al., 2014). With more people choosing to purchase rural land for lifestyle-driven purposes, environmental and socio-cultural

features of rural communities are undergoing significant changes. These landowners' strong conservation ethics and desire to be good stewards of their properties offers considerable potential to enhance conservation efforts on private lands.

### ***Agricultural landowners***

Unlike lifestyle-oriented landowners, agricultural landowners who have been a dominant part of the rural social landscape are typically thought of as profit-driven producers. However, according to some researchers, while productivity of the land remains important, many farmers and ranchers perceive working on the land as a means to achieve such non-financial ends as the ability to maintain the agrarian lifestyle and identity (Liffmann et al., 2000). Therefore, the bond between these landowners and their land is embedded less in the land's function as a provider of economic security, but rather in nontangible values of land operation and of significant experiences associated with land (Lai, 2007; Stedman, 2002).

Research focusing on topics ranging from individuals' willingness to protect their land (e.g. Cross et al., 2011; Lai & Lyons, 2011; Ryan et al., 2003) to decisions to subdivide or sell their properties (e.g. Kuehne, 2013; Rowe et al., 2001) provides evidence of agricultural landowners' affective connection to their land and the factors contributing to it. In their separate examinations of the effects of urbanization on landowners' decisions to stay in ranching, Liffmann et al. (2000) and Rowe et al. (2001) have arrived at similar conclusions arguing that profitability of the land alone does not influence these individuals' decisions to continue ranching. Rather, they stay in ranching because they consider it a preferred way of life of which they are proud, and desire to pass the ranching tradition down to their children. In the study by Rowe et al. (2001), the importance of ranching as a lifestyle, desire to

preserve the family tradition, and landowners' emotional attachment to the geographic location of the ranch all outranked the importance of motivation by profit.

In their research, Lai and Lyons (2011) showed the importance of intangible values associated with landownership and land operation. In their exploration of the influence of place meanings on land management practices, the authors attempted to explain landowners' connection to their land through the meanings these individuals associated with the biophysical, functional, and socio-psychological aspects of owning land. Lai and Lyons (2011) concluded that landowners deeply value the land's function as a provider of the preferred way of life and as a source of natural amenities and scenery. Furthermore, feeling connected to the area's history, 'at-homeness', self-identification with the community and its values, and personal enjoyment from socializing with other residents represented socio-psychological values fundamental for the formation of the affective owner-land relationship (Lai & Lyons, 2011).

By considering agricultural production their lifestyle, landowners feel proud of their occupation, which they often view as enjoyable and fulfilling (Sorice et al., 2012a). For example, Quinn and Halfacre (2014) have found that South Carolina farmers describe working on the land as a recreational, restorative and therapeutic activity. From the analysis of the interviews with the farmers, Quinn and Halfacre (2014) concluded that through sustainable farming operations, land provides security for the families and a family legacy for generations to come.

Agricultural landowners experience a strong affective attachment to the physical qualities of their properties (Kabii & Horwitz, 2006; Lai & Kreuter, 2012). This emotional attachment, or as some researchers refer to it, 'love for the land', has been well documented

in the literature and defined as an important component of the affective owner–land relationship (Ryan et al., 2003). Through the performance of day-to-day activities on the land, landowners have an opportunity to interact with its resources. This regular interaction results in an intimate understanding of the land and a deep connection to its environmental qualities and biophysical resources (McGaffin et al., 2013; Miller et al., 2010). To preserve these valuable natural qualities of their properties, agricultural landowners engage in active conservation assuming the role of stewards and caregivers of their land (Cearley-Sanders, 2005; Lai & Kreuter, 2012; Lai & Lyons, 2011).

Involvement in land operation as a family tradition also has important implications on how agricultural landowners feel about their land (Jorgensen & Stedman, 2006; Quinn & Halfacre, 2014). Generational landowners form a strong sentimental attachment to the land and its resources from their long family history, significant experiences on the land and self-identification with a particular activity and piece of geography (Cearley-Sanders, 2005). These strong emotional ties with inherited properties are rooted in a deep appreciation of the family heritage and connection to the past through the land operation as a family tradition (Lai, 2007). For inheritors, land is more than just a piece of geography, and land operation is more than just a source of income. Instead, landownership bears a unique symbolic meaning, that the performance of iterative tasks related to land management and operation constantly reinforces (Burton, 2004). In this way, landowners who operate inherited properties view themselves as an intergenerational link tasked with the preservation of the symbolic meaning of the production-oriented activities and passing along the tradition to future generations.



Results from previous studies indicate that non-economic factors significantly outweigh financial benefits of land operation among agricultural landowners. Even though land is an important source of financial well-being, these individuals view it more than just a supporter of livelihood. Rather, they are proud of what they do on the land and want to pass the land operation tradition on to their children. The intimate knowledge of the land, significant experiences and family history contribute to the formation of a deep connection between agricultural landowners and their land.

However, not all landowners involved in land management or enterprises on the day-to-day basis develop feelings of affection for their land. In contrast to the agricultural landowners reviewed above, commercial producers are engaged in operating land exclusively for profit generation and are distinguished by their strong business focus (Primdahl, 1999). For these individuals, the land's function as a provider of economic security is set far apart from other values, directly influencing the ways these landowners treat their land. Researchers characterize commercial producers in terms of exploitation of natural resources and subordination of the environment to the efficient operation of the farm business (Walter, 1997). Brodt et al. (2006) support this point by demonstrating that farmers with a strong business orientation express a willingness to alter the natural qualities of their land by the use of chemicals if it is required to benefit production.

Generating profit from land operation brings commercial producers feelings of pride associated with a sense of achievement as a professional farmer and the perception of personal victory over nature (Burton, 2004). The land's profitability and production qualities are critical for this group of agricultural landowners due to their distinguished lack of environmental concern, emphasis on production-oriented values, and desire to submit

natural resources to personal financial benefits. Therefore, the relationship between commercial producers and their land is reduced to mere business, where the former take a role of consumers of the goods provided by the latter (Cearley-Sanders, 2005).

## **Conservation of private lands**

### ***Private land conservation programs***

The importance of private lands to our well-being and quality of life makes involvement of landowners in promoting sustainability of natural resources in privately owned landscape imperative (Knight et al., 2010). There is a diversity of conservation policy options available to private landowners across the nation. Each program has a set of specific conservation goals and relies on voluntary or involuntary participation, or a combination of both. Involuntary approaches to conservation on private lands assume the role of government, rather than a landowner, as the main decision-maker regarding future land use. Examples of involuntary conservation strategies include total land acquisition, compulsory displacement, and imposed restrictions and regulations, often without a landowner's input (Kamal et al., 2015). Although these approaches have been linked to successful conservation outcomes, they are not socially acceptable when compared with voluntary strategies. Voluntary programs rely on landowners' decisions to become involved in conservation of biodiversity and other environmental features on their land. Examples of voluntary approaches include formal and informal private reserves, conservation easements or covenants, and other conservation programs. This approach to conservation is more popular in the U.S. In contrast, involuntary conservation has historically been associated with conflicts over property rights, and has ultimately resulted in government mistrust and landowners' unwillingness to collaborate with government agencies (Kamal et al., 2015).

PLC programs are implemented through numerous incentive instruments such as tax benefits, direct payments, and other incentives to compensate landowners for participation. For example, placing a CE restricts certain activities on the land in perpetuity, leading to a decrease in the land's market value. To compensate landowners for the difference in the land's market value before and after the easement was donated, easement holding organizations offer financial benefits in the form of tax reliefs (TNC, 2018c). Donors of CEs receive such benefits through federal income tax deduction, federal estate tax deduction, state income tax credits and property tax relief (Gattuso, 2008).

Different administrative levels in the U.S. offer PLC programs. The federal government has created many opportunities for landowners to engage in conservation. For example, the U.S. Fish & Wildlife Service (USFWS) runs the Endangered Species program to protect endangered species found on private lands. Through collaboration with private landowners, the ultimate goal of this program is to increase the numbers of endangered species to the point where protection under the Endangered Species Act is no longer required (USFS, 2016). For adopting practices benefitting the endangered and threatened species on non-federal lands, landowners may be eligible for tax benefits in accordance with the provisions of the Farm Bill (USFS, 2010). The Partners for Fish and Wildlife is another program offered by this federal agency, tasked with providing landowners financial and technical assistance to improve fish and wildlife habitats on private lands (USFS, 2015). Other examples of federal-level programs include the Conservation Reserve Program, Environmental Quality Incentives Program, Conservation Stewardship Program and the Conservation Technical Assistance Program.

American landowners also have access to myriad conservation resources through state-level PLC programs. Some examples include the Texas Farm and Ranch Land Conservation Program in Texas, the Pheasant Habitat Improvement Program in Colorado, the Deer Management Assistance Program in Oklahoma, and the Natural Resources Stewardship Program in South Carolina. These initiatives offer professional advice and an array of other technical and financial resources necessary to implement conservation practices on private lands (George, 2002). Considering the overwhelming variety of PLC programs and other resources, program administrators work with each landowner's individual case to ensure the choice of the right program and the match of its characteristics with landowners' preferences and needs.

The prevalence of non-governmental organizations (NGOs) and other civil society groups operating on the national and regional levels offer landowners numerous resources and diverse incentives to engage in conservation on their land. PLC across the country has benefitted from the valuable input of these NGOs, as the recent proliferation of land trusts and increasing acreage of private lands conserved through cooperation with landowners illustrates. According to the most recent National Land Trust Census Report, the total amount of land conserved by land trusts comprises 56 million acres, an increase of 9 million acres recorded in 2010 (Land Trust Alliance, 2015).

Existing conservation programs offer landowners an opportunity to choose one they feel is tailored to their needs and priorities. With many federal, state, and regional conservation programs available in the U.S., private landowners have access to educational, technical and financial resources customized to the specific conservation and personal needs of each landowner.

### *Drivers for participation in PLC programs*

Decisions to participate in conservation arise from the complex interaction between landowners' values, worldviews, reasons for landownership, socio-demographic characteristics and other contextual aspects (Greiner et al., 2009). Scholars have linked landowners' participation in conservation to such social and economic factors as landowners' socio-demographic characteristics, land use preferences, economic dependency on the land, and others (Daley et al., 2004; Ernst & Wallace, 2008; Gosnell et al., 2007; Greiner et al., 2009; Mendham & Curtis, 2010). The existing literature provides a distinct profile of landowners who are inclined to engage in conservation. These individuals are typically younger, with less than 10 years of landownership, formally educated, less economically dependent on the land, and own smaller parcels of land, which they utilize mainly for recreation and aesthetic purposes (Brodt et al., 2006; Daley et al., 2004; Kabii & Horwitz, 2006). This profile resembles the one of a lifestyle-oriented landowner, whose desire to protect the natural amenities supporting the preferred lifestyle typically drives their decisions (Gosnell et al., 2007). Although agricultural producers also exhibit interest in conservation, it is lessened by perceived negative outcomes of participation including potential financial obligations, restrictions on land use, loss of managerial control over property, and general mistrust in government and other regulation mechanisms (Kabii & Horwitz, 2006; Miller et al., 2010).

Strong conservation ethics and lifestyle considerations have been shown to translate into individuals' willingness to adopt conservation practices on their properties. Landowners exhibit a strong desire to preserve the natural values of their properties and community for future generations (Ernst & Wallace, 2008). A deep appreciation of local biophysical

qualities results in landowners' self-identification with the natural and cultural attributes of the area that they want to preserve (Cross, 2001; Drescher, 2014). For example, in the recent study by Horton and colleagues (2017), concerns for future generations and a desire to prevent local development attracted 89 percent of Colorado landowners to enter CE agreements. A perceived moral obligation to improve the condition of the land and preserve the ranching lifestyle influenced ranchers' participation in conservation as demonstrated by Huntsinger and Hopkinson (1996). Likewise, Farmer, Knapp and colleagues (2011) concluded that environmental ethics and land values prompted farmers in Indiana to restrict their land use practices through CEs. In this way, the participating farmers were able to protect not only the environmental and recreational qualities of their properties, but also family-related memories and personal histories associated with that particular piece of geography (Huntsinger & Hopkinson, 1996). Finally, Miller et al. (2010) identified that a strong desire to protect the integrity of the open space in combination with personal lifestyle considerations are among the most influential motives for participation in conservation among the Wyoming and Colorado landowners.

Social influence plays an additional role in landowners' decisions to become involved in conservation on their properties. Landowners, especially professional farmers and ranchers, appear to be very concerned about others' opinions regarding their properties and themselves. For example, in the study by Brodt et al. (2006), profit-oriented farmers expressed concern with the visual appearance of their farms and its influence on the success of their business operations. According to the interviews with the farmers in this study, a farm that looked unmanaged might detract people from buying the produce. Moreover, aesthetically appealing farms provided landowners with confidence in farm operation and in

this way contributed to the self-perception as a successful farmer (Brodt et al., 2006). Ryan et al. (2003) also found the importance of the visual appearance of the farm as a motivating factor to adopt conservation practices. In their study, through participation in conservation and maintenance of the visually appealing condition of farms, Michigan landowners were striving to convey a message of good stewardship to neighbors and other members of the community.

Multiple studies have been conducted to determine and explain the drivers for landowners' involvement in PLC programs. Numerous interrelated factors, including emotional attachment to the land, personal conservation views and social factors have been found to influence landowners' decisions. Despite the existence of various incentives encouraging landowners' participation in PLC programs, there is a number of barriers that prevent landowners' involvement in such initiatives.

### ***Barriers to participation in PLC programs***

Researchers focusing on landowners' motivations for participation in conservation identified factors impeding stewardship efforts on private lands. Among these factors is a strong notion of property rights and a desire for independence common among private landowners (Kreuter et al., 2004; Sorice et al., 2013). These personal values may result in negative perceptions of participation in conservation practices. For example, conservation programs may be associated with a perceived threat to managerial control over the property and changes and restrictions in land use (Kabii & Horwitz, 2006; Miller et al., 2010). The study by Brook et al. (2003) identified a distrust in government and conservation organizations as one of the main obstacles to cooperation with Michigan landowners to support the endangered species habitat. Landowners in this study valued their control over

properties and perceived any outside intervention as a threat to their property rights and freedoms. Reading and colleagues (1994) reported similar findings in a study involving ranchers in the Greater Yellowstone Ecosystem. The authors concluded that a fear of increased governmental control as an outcome of their involvement deterred many ranchers from participating in the local ecosystem management.

Adoption of PLC practices has been linked to land's profitability and agricultural value. Evidence suggests that the level of dependency on the land-based income influences landowners' willingness to engage in conservation on their properties (Cary & Wilkinson, 1997; Greiner et al., 2009). For example, Mendham and Curtis (2010) have found that landowners utilizing their land for lifestyle-oriented purposes and amenities exhibit higher interests in conservation compared to long-term landowners for whom land provides support of their livelihoods. Rosenberg and Margerum (2008) found that residential landowners not depending on land-based income were more interested in improving wildlife and fish habitat on their properties in contrast to agricultural landowners who utilize their land mainly for economic purposes. Daley et al. (2004), who also linked the land's economic function to landowners' participation in conservation, similarly concluded that those who were financially dependent on their land were hesitant to join any conservation initiatives without compensation. Finally, Farley et al. (2017) identified financial incentives as one of the most influential factors driving private rangeland management among ranchers in California.

Even though profit and production considerations remain important motivations for participation in conservation, scholars urge not to focus on these factors as sole drivers of PLC. For example, while landowners may rank natural resource protection as the main reason to engage in conservation, they also express an interest in receiving financial



compensation for their conservation efforts (Ernst & Wallace, 2008). However, the financial incentives in the study by Ernst and Wallace (2008) were primarily perceived as a means to achieve conservation-related ends on private lands rather than a direct reward for protection of the natural resources.

Scholars have demonstrated that commercial and residential development, together with the regulatory and environmental changes it causes in rural areas, discourages landowners' participation in conservation. In their study, Lai and Kreuter (2012) present clear evidence that increased land demand and value caused by environmental and social changes associated with development give many rural landowners a strong incentive to sell their land resources for additional income. Notably, this group of landowners did not exhibit strong psychological ties to their properties, which could partially explain the decisions to sell. The findings of the research by Armstrong and Stedman (2012) indicate the effect of negative evaluations of urbanization on landowners' conservation decisions as well. These authors found that development and population increase discouraged long-term farmers from participating in riparian zone management because of the farmers' expectations of inevitable development in the area. Such behavior represents a practical illustration of the effect of the "impermanence syndrome" when landowners consider development unavoidable and lose motivation to take care of their land (Huntsinger & Hopkinson, 1996).

The perceived negative outcomes of participation in conservation combined with landowners' expectations to receive financial benefits for conservation efforts considerably reduce the stewardship capacity on private lands. Additionally, uncontrollable factors altering the biophysical, social and cultural features of rural communities further discourage participation in PLC, including development, landscape change, policies and regulations.

Considering the alarming rates of fragmentation and conversion of American private lands into other uses, it is imperative to expand scholarly understanding of the landownership phenomenon. Specifically, there is a need to explore how landowners experience landownership and what emotions they associate with owning land. This knowledge is necessary for a better understanding of landowners' decisions to participate in PLC programs, which is vital for the long-term success of private land stewardship.

## CHAPTER III

### METHOD

#### **Justification of the approach**

For this study, I used qualitative methodology to obtain rich data for an in-depth understanding of landowners' relationship with their properties. According to Creswell (2013), the qualitative approach is appropriate when “a problem or issue needs to be *explored* [emphasis added]” and “a *complex* [emphasis added], detailed understanding of the issue” is needed (pp. 47–48). The positivist and postpositivist traditions that the quantitative paradigm adheres to would reveal limited information about the issue under study by considering only predetermined and anticipated factors. The qualitative paradigm, on the other hand, allows the researcher to gain the insider's view of the issue and capture unique experiences of individuals that quantitative research may overlook (Creswell, 2013).

While the majority of scholars focusing on private land management utilize the quantitative paradigm to explain human behavior, others assert that the socio-psychological aspects of human–nature interaction should be studied through qualitative inquiry. For example, Sayre (2004) emphasizes the need for qualitative approaches to capture the breadth of landowners' personal, historical, social, political, and economic factors contributing to individual decisions. Madsen and Adriansen (2004) state that the subjective and contextual nature of such human factors as personal values, worldviews, thoughts and beliefs could only be understood through the flexible design of qualitative methodology. Likewise, in this study, I utilized qualitative methodology to acquire a broad spectrum of individuals' experiences, values, beliefs, personal histories and other factors associated with

landownership. This research provides a detailed understanding of the complexity of landowners' behaviors when it comes to conservation decisions.

### **Philosophical assumptions**

To conduct the present study, I relied on a phenomenological approach, a method of philosophical inquiry that focuses on individuals' understandings and experiences of a specific situation or phenomenon (Creswell, 2013). Phenomenology emphasizes the critical role of human consciousness in understanding the meanings of several individuals' experiences regarding a phenomenon, which in combination constitute reality (Creswell, 2013). The phenomenon of interest in the present study is landownership.

The common-law system defines ownership in terms of legal rights and responsibilities associated with owning property. The review of the literature on landownership, however, clearly suggests that owning land is more than holding a bundle of rights and responsibilities. Researchers have demonstrated that landowners experience a profound emotional connection towards their land. For many landowners, owning land allows realization of lifestyle aspirations, interaction with and enjoyment of the natural environment, opportunities for self-expression, preservation of the family heritage and symbolic meaning of landownership and operation (Gosnell et al., 2007; Lai, 2007; Sorice et al., 2012a). In addition, landownership can serve as a main occupation, as well as a provider and supporter of livelihoods for many landowners and their families (Quinn & Halfacre, 2014). Owning and operating land is often associated with feelings of pride, gratitude, happiness, and respect for the land and its resources (Cearley-Sanders, 2005; Lokhorst et al., 2014). Such personal values as privacy, freedom and control over one's own environment further contribute to the formation of the affective bond landowners develop

towards their properties (Gill et al., 2010; Millburn, 2010). These individuals reflect their deep appreciation and ability to enjoy the benefits of landownership through their land-management behaviors. For example, researchers have shown that landowners with a strong attachment to their land tend to engage in conservation behaviors to protect the natural qualities of their properties (e.g., Ryan et al., 2003). In contrast, a lack of emotional connection to the land may lead to exploitation of its natural resources to increase landowners' personal financial benefits (e.g., Brodt et al., 2006). Therefore, from the socio-psychological perspective, landownership involves landowners' feelings and behaviors towards their properties, and can be understood as the emotional connection that landowners develop through experiences with their land, and the resulting land-management behaviors.

To better understand the psychological meaning of landownership the inclusion of multiple perspectives is necessary. Therefore, in this phenomenological research I relied on the principles of the social constructivist paradigm. The social constructivist philosophy emphasizes the subjective nature of reality and complexity of human experiences by regarding each individual as a unique subject guided by their own set of values and beliefs. Due to this subjective nature of reality, social constructivism considers absolute objectivity unattainable, and highlights the critical role of values in explaining reality as they are embedded in human beings (Creswell, 2013). Consequently, the ontological stances of social constructivism are grounded in the idea of multiple realities that are shaped by actors' constructions and interpretations through social interaction (Slevitch, 2011). In contrast to the focus on cohorts of individuals by positivism and postpositivism, social constructivism utilizes the idiographic approach to provide an in-depth understanding of a phenomenon exclusively through inductive reasoning (Creswell, 2013). In other words, there are no pre-

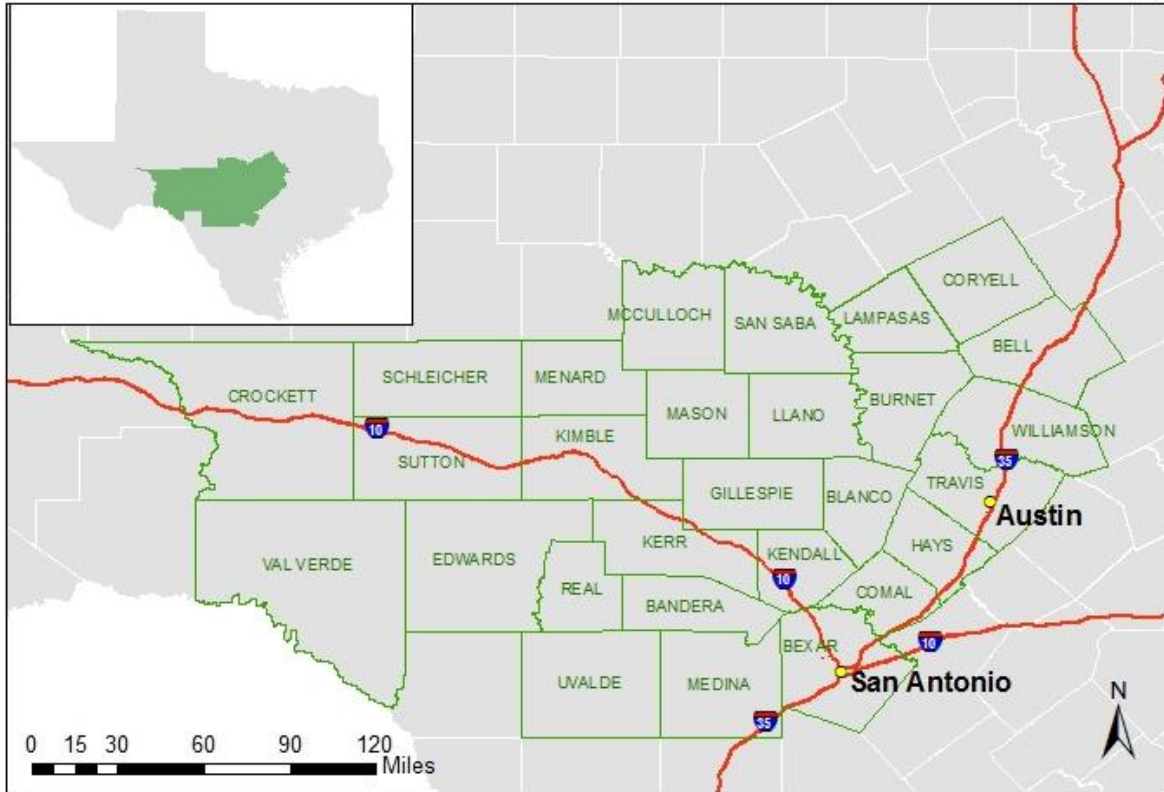
determined truths or hypotheses that a researcher attempts to test; rather, the goal is to learn about the reality through investigation of individual characteristics and circumstances. Thus, in the present study I focused on multiple individual landowners, their experiences, opinions, values, beliefs and other factors to understand their relationship with land and conservation decisions.

### **Study area**

This study was conducted in the Texas Hill Country, one of America's most scenic and amenity-rich ecosystems. The informal term 'Hill Country' includes a geographical region comprising several counties in Central Texas. The Hill Country Alliance (HCA) defines the region as encompassing 17 counties (Hill Country Planning Studio, 2015), whereas the Texas Park and Wildlife Department's (TPWD) definition consists of 25 counties (TPWD, n.d.-a). For the purposes of the present research, the combination of the HCA's and TPWD's definitions of the Hill Country outlined the study region encompassing the total of 28 counties (Figure 1).

The Hill Country is distinguished by a plateau surface dissected with steep-sided canyons, composed of karst topography with layers of limestone and granite underlying most of the area (Stanley, 2009). Throughout the region, the elevations range from approximately 1,000 to 2,500 feet above sea level and generally rise towards the north and west of the Hill Country (TSHA, 2010; Wrede, 2010).

The region is notable for the valuable groundwater resources that are vital for human and plant communities. The area contains several aquifers, including the Edwards Aquifer located along the eastern edge of the Edwards Plateau. Considered one of the nation's most productive groundwater resources, the Edwards Aquifer is the primary source of drinking



**Figure 1.** Texas Hill Country (Hill Country Planning Studio, 2015; TPWD, n.d.-a)

water for over 1.7 million people, including regional farmers and residents of Austin and San Antonio (Edwards Aquifer Authority, 2011). The Hill Country also has numerous streams with several permanent bodies of water including the Frio, Sabinal, Medina, Guadalupe, and Blanco rivers (Wrede, 2010).

Local vegetation consists of a mix of evergreen savanna, upland deciduous, and lowland riparian plant communities including such species as live oak, Ashe juniper, black walnut, evergreen sumac, Texas persimmon and others (Wrede, 2010). Regional wildlife includes deer, foxes, raccoons, rabbits, coyotes, bobcats, quail, turkeys, warblers and hummingbirds among other species (Wrede, 2010). The Hill Country supports critical habitats for 88 rare, threatened and endangered species, including Texas blind salamander,

San Marcos salamander, black-capped vireo, golden-cheeked warbler, and Tobusch fishhook cactus (TPWD, n.d.-b).

Agriculture and ranching are the predominant land-based activities, serving as the main source of economic security for many local landowners (HCA, 2008). Vineyards and winemaking are gaining popularity as a local industry as well, giving the Hill Country a potential to become ‘the next Napa Valley’ according to some national wine experts (HCA, 2008). Being one of the most popular tourist destinations in the U.S., the Hill Country supports a variety of recreational activities including hiking, wildlife watching, hunting, fishing, kayaking, horseback riding and others (Emmrich et al., 2008).

More than 90 percent of the land in the Texas Hill Country is in private ownership (Hill Country Planning Studio, 2015). Rolling hills, abundant biodiversity, clear streams, the rural character of the area, and the proximity to the metropolitan centers of San Antonio and Austin make the Texas Hill Country an attractive place to live for many people. During the last several years, this region has undergone significant environmental and socio-economic changes caused by the increasing in-migration and development of infrastructure to support the population growth (Hill Country Planning Studio, 2015). As of 2015, the Hill Country had a total population of 3,383,019 people, and projections estimate the population to reach at least 4.3 million by 2030 (HCA, 2008; Hill Country Planning Studio, 2015). These social and economic developments have resulted in the unmanaged growth, characterized by the loss of a considerable amount of open space to land fragmentation and conversion (HCA, 2008; Wilkins et al., 2003). Land market values have skyrocketed because of high demand for land in the Hill Country, contributing to decisions of many large-scale landowners to subdivide their properties into smaller ownerships and sell them to newcomers (Lai, 2007;



Wilkins et al., 2003). Anticipated consequences of the occurring and projected changes in the Hill Country include a noticeable decline in the local biodiversity, and deficiencies in ground and surface water supplies (HCA, 2008). Such fundamental land cover change and fragmentation of natural habitats threaten the integrity and well-being of the sensitive ecosystem found in the Hill Country and the benefits it supports (Wrede, 2010).

### **Participant selection**

Participants of this study included individual landowners holding land properties of 25 or more acres located in the Texas Hill Country. Landowners with parcels less than 25 acres were excluded from the sample due to the small size of their properties and limited influence on the ecosystem management at the landscape level (Lai & Kreuter, 2012). No other restrictions in regards to the property size, land use, or other parameters associated with landownership were applied to ensure the diversity of personal accounts. Since the goal of phenomenological research is to provide a complete understanding of a social phenomenon, the sample size is incidental. Instead, the quality of the sample is assessed based on the relevance of the knowledge participants can bring to the study (Slevitch, 2011).

Names and contact information of potential participants were obtained from a key informant from the Wimberley Valley Watershed Association (WVWA). The WVWA is a landowner-driven nonprofit organization promoting protection of natural resources found on private lands in the Texas Hill Country (WVWA, n. d.). Since 1996, the WVWA operates to raise awareness of a respectful relationship between humans and nature through active participation in and support of the regional conservation initiatives, development of natural resource policies, and establishing partnerships (WVWA, n. d.).

To collect extensive detail on how landowners experience landownership and make decisions regarding participation in PLC programs, I employed convenience and snowball sampling strategies. Convenience sampling is utilized when the subjects are easily accessible to participate in the study (Creswell, 2013). The present research was conducted in Texas, justifying the use of this sampling technique by the convenient location of the study area and potential participants. Even though convenience sampling saves the researcher's time and effort by ensuring easy access to participants, it bears significant biases related to the quality of the study sample (Creswell, 2013). To mitigate the inherent limitations of convenience sampling, I utilized snowball sampling as the second sampling technique. Snowball sampling is a non-probability sampling method that relies on participants' referrals to information-rich sources (Creswell, 2013). At the end of the interview, I asked each participant if he or she knew of anybody who might serve as a rich source of information for this study. This strategy allowed an enrichment of the diversity of backgrounds and experiences within the study sample. In addition, participants' referrals further improved the quality of the sample by including landowners not originally mentioned in the list of potential participants provided by the key informant from the WVWA.

### **Data collection**

Considering the subjective nature of reality, the epistemological beliefs of social constructivism assert that true knowledge can only be obtained (or co-constructed) through interaction between the researcher and the investigated subjects (Creswell, 2013). Therefore, in-depth semi-structured interviews with landowners represent an appropriate tool to ensure richness of information. Semi-structured interviews are conducted face-to-face with each participant in a conversational manner, and rely on open-ended questions to give participants

freedom to express their views on the investigated phenomenon. Furthermore, the flexibility of semi-structured interviews allows researchers probing for information and investigation of issues participants may consider important (Longhurst, 2016). In this way, semi-structured interviews are well suited for exploration of individual contexts and personal experiences regarding a complex phenomenon.

I began contacting participants in April 2018 via email. Each participant received a consent form containing the central purpose of the study and detailed information regarding participation. The consent form was required for each landowner to sign prior to the interview, should they decide to take part in this study.

These data were collected over the period of two months, April and May 2018. Upon receipt of a signed consent form, an in-person interview was scheduled. Prior to the interview, I provided each participant the interview protocol (Appendix A) and a background questionnaire (Appendix B) to give them an opportunity to reflect on the questions and fill out the questionnaire. All interviews with participants occurred at a public location agreed upon in advance, and were guided by the interview protocol. The semi-structured interviews were conducted to elicit rich information regarding the meanings landowners ascribe to landownership, participants' relationship with their properties, and their decisions to engage in PLC programs (Table 1).

Participants' responses were audio recorded and transcribed following each interview. The audio files and transcribed version of participants' responses were stored in two locations: a personal computer and a flash drive, each maintained to be only accessible to me. Since the purpose of the study was to understand the phenomenon of landownership as it was experienced by landowners and their decisions to participate in PLC programs,

there was no predetermined sample size; the data collection continued until data saturation was reached (Creswell, 2013).

**Table 1.** Semi-structured interview questions

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**What relationship do landowners have with their land?**

1. What do you do on your property? What factors influence your choice of activities on your land?
2. Please describe the emotional connection you feel towards your land. What contributed to its formation? (Cheshire, Meurk, & Woods, 2013). How have these feelings changed over time? (Baldwin et al., 2017)
3. What is your favorite place on your land? Please describe this place. Why is it meaningful to you? (Cross, 2001)
4. What does it mean to live on your land?
5. What challenges have you faced as a landowner? (Lähdesmäki & Matilainen, 2014)
6. What has changed on your land since the time you acquired it? What were the reasons for those changes?
7. Concerning the surrounding area, how have things changed over the term of your ownership? How have these changes affected you personally? (Cross, 2001)
8. What concerns do you have regarding the future of your property? (Wilmer & Fernández-Giménez, 2015)

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**How do landowners make decisions regarding their participation in PLC programs?**

1. Describe your management plan. What factors do you consider when making land-management decisions?
  2. (*If participating*) What conservation program are you part of? What factors and/or people influenced your decision to join that program? What conservation activities do you practice on your land as part of this program? What are the top three goals for your land that you are trying to achieve through participation in this conservation program? (Farmer et al., 2011).
  3. (*If not participating*) What do you do to protect the qualities of your land? What are the reasons for non-participation in conservation programs?
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## **Data analysis**

The final product of a phenomenological study is a set of logically related categories constituting the essence of human experiences in regards to a specific phenomenon (Creswell, 2013). To achieve this, I employed systematic qualitative data analysis procedures following Creswell (2013) and Moustakas (1994).

The transcriptions of the interviews were organized in the qualitative data processing software NVivo 12 Pro, which I utilized through all stages of the data analysis. Once these data were organized, I read each transcript and identified significant statements related to participants' experiences of landownership and decisions to participate in PLC programs. Horizontalization of these significant statements was then performed through assigning the equal value of importance to each statement (Moustakas, 1994). I further grouped these statements in non-overlapping categories, from which I identified themes or meaning units (Creswell, 2013). These larger units of information served as a basis for the individual textural descriptions of *what* each participant experienced. The textural descriptions contained the themes themselves and the participant's quotes to support the emergence of these themes from each interview. The individual textural descriptions were integrated in one general textural description reflecting the non-repetitive themes identified from all interviews. Based on the textural description, I developed the structural description analyzing *how* the phenomenon was experienced by participants (Creswell, 2013). The final stage of the data analysis incorporated the textural–structural synthesis of these descriptions to present the essence of participants' lived experiences in relation to landownership and participation in PLC programs (Moustakas, 1994).

Finally, I supplemented the qualitative data with descriptive statistics in form of a summary of participants' socio-demographic characteristics.

### **Trustworthiness**

Considering the subjective nature of qualitative research, validation of data is a critical component of any qualitative study (Creswell, 2013). To ensure that the findings are valid, it is necessary to establish trustworthiness. To generate confidence, I performed the necessary procedures, which improved the trustworthiness of my findings; specifically, credibility and transferability were established (Lincoln & Guba, 1985).

Credibility of the results in a qualitative study is dependent on the level of agreement between a researcher's understanding of the phenomenon under investigation and participants' statements (Slevitch, 2011). According to Lincoln and Guba (1985), credibility is the 'truth value' of the findings achieved when "*reconstructions* [emphasis added] ... that have been arrived at via the inquiry *are credible to the constructors of the original multiple realities* [emphasis added]" (Lincoln & Guba, 1985, p. 296). In the present study, I achieved credibility through member checking, a data validation tool that relies on participants to check the validity of the findings by reviewing their statements for accuracy (Creswell, 2013). This approach allowed me to collect participants' comments and clarifications and further incorporate them into the final report of the study (Creswell & Miller, 2000).

Transferability is the extent the results can be transferred from one context into another (Lincoln & Guba, 1985). Unlike in quantitative research, where generalizability depends on the size of a sample, transferability of the findings in qualitative studies is primarily concerned with the quality of the sample. The researcher's main task is to "provide the *data base* [emphasis added] that makes transferability judgements possible on the part

of potential appliers”, thus leaving the latter to decide if the findings of the research can be transferable to other situations (Lincoln & Guba, 1985, p. 316). I achieved transferability of the results through a ‘thick description’ of the setting, participants, time, and other context-specific factors (Lincoln & Guba, 1985).

Finally, I employed bracketing and reflexivity throughout all stages of conducting this study to further increase the trustworthiness of potential findings (Creswell, 2013; Lincoln & Guba, 1985). Both bracketing and reflexivity are qualitative research tools used to mitigate the presence of the researcher’s personal understandings regarding the phenomenon under investigation (Creswell, 2013). I performed bracketing and reflexivity through regularly writing memos in a reflexive journal during the data collection and processing (Cutcliffe, 2003).

## CHAPTER IV

### RESULTS

#### **Sample profile**

To provide a holistic understanding of participants' lived experiences as landowners, I conducted nine semi-structured interviews with individuals owning 25 or more acres of land in the Texas Hill Country. The interviewees included individual landowners as well as couples. At the beginning of each interview, the respondents filled out a socio-demographic questionnaire (Appendix B). The sample profile contained only the information of the person who filled out the questionnaire, thus establishing the sample size of nine landowners ( $n = 9$ ). Even though spouses' socio-demographics were not accounted for in compiling this sample profile, the perspectives and stories that they shared during the semi-structured interviews were included in the qualitative data analysis.

The data were collected from individuals with properties located in Hays, Uvalde, Travis, Real, Kendall, Williamson, and Gillespie counties. The property size ranged from 35 to 35,000 acres, with the majority between 112 to 250 acres ( $n = 6$ ). Five landowners inherited their properties, while the rest ( $n = 4$ ) purchased their land. For the inheritors, the average time that the land had been in the family was 69 years. At the time of participation in this study, the respondents had lived in their community for nearly 29 years.

The age of the respondents varied between 53 and 75, with more than half ( $n = 6$ ) in the 60–75-year age range. All landowners but one used their land as the primary residence ( $n = 8$ ). The majority of the participants were married ( $n = 7$ ) and lived on their land with their spouses. All but one landowner had children, who lived elsewhere ( $n = 8$ ). Most of the respondents held a four-year college degree or higher ( $n = 8$ ). Among those who chose to



report their income (n = 6), the annual household income was \$100,000 or higher. The employment status varied throughout the sample: four landowners were employed full-time, three were retired, and two were self-employed. None of the landowners reported that they generated their income primarily from land operation.

Most of the participants reported that they were involved in one or more PLC programs (n = 7). When asked about a land-management plan, eight landowners stated that they had created and followed one, but only six of them indicated that their land-management plan represented a formally signed document.

### **Participant introductions**

#### ***Cindy***

Cindy is an owner of more than 200 acres that she inherited from her parents. She lives on her land and proudly continues the long-term family tradition of landownership and operation. Her land-management strategy is primarily guided by the strong conservation principles that Cindy has established through her personal experiences on the land and the life-long career in the field of natural resource management. The main land uses include wildlife management, agriculture, and recreation.

#### ***Dan***

Dan owns and manages nearly 35,000 acres that his grandfather passed down to him. His land is split into three properties located throughout the Texas Hill Country. Some of the land has been in Dan's family for nearly 80 years. Even though he does not use any of his land for his primary residence, Dan is actively involved in management of all three properties. His land-management decisions are guided by the desire to preserve the family

tradition of landownership and protect the integrity of his land through active stewardship. Dan uses his land for ranching, wildlife management, and recreation.

### ***Sam***

Sam is the owner of over 182 acres that he bought 27 years ago. Since that time, he and his wife made the land their home and love to think that they live “in paradise”. Being retired, Sam spends most of his time working on the land, which he finds fulfilling and rejuvenating. He used to practice agriculture on his property, but later switched to wildlife management, which remains the primary focus of Sam’s land-management practices.

### ***Melinda***

Melinda is an owner and manager of 112 acres that she inherited from her step-father. Melinda’s land has been in the family for 33 years, and she is proud to call it her home. She admires her step-father’s love for nature and is honored to steward this property to continue his legacy. Melinda recognizes healing properties of being out in the country and operates a bed & breakfast (B&B) to allow others the opportunity to rejuvenate and escape everyday life. She uses her land primarily for wildlife management, ranching, and recreation.

### ***Ron***

Ron is an owner of 335 acres of ranchland, which are part of the 13,000-acre property that was passed down onto him and his siblings. Ron’s great-grandfather established this ranch more than 130 years ago, and even though the land has been divided between the family members since then, it still operates as one ranch. Ron lives on the land and enjoys ranching and photography. The realization of the lack of natural resource education among the general public drove Ron’s professional career and made him a strong advocate for opportunities to bring people outdoors.

### ***Matt and Barbara***

Matt and Barbara owned 35 acres, but had to sell their property shortly before their participation in the interview for this project. They built a house on the land, and enjoyed the solitude and quiet of living in the country for nearly 15 years. During the term of their ownership, Matt and Barbara were actively engaged in wildlife management, which was the primary use of their land. Their land stewardship philosophy was grounded in the principle of management with no harm. Personal health-related reasons left them no option but to sell the land and move to an urban area to be closer to their children. However, Matt and Barbara are happy to know that the people who bought their property share their values—respect for the land and its resources.

### ***Jason and Susan***

Jason and Susan currently own 160 acres, accumulated over several years by purchasing the surrounding properties. The primary reason for buying their original property was access to the clean waters of the Blanco River for recreation. Jason and Susan built the house on their land and have been living there for 15 years. They are devoted to wildlife management and believe that it is their responsibility as landowners to take care of every creature on their land. Both Jason and Susan take stewardship very seriously and have been avid advocates for environmental protection throughout their lives. They are looking forward to more opportunities to expand the size of their property.

### ***Fred and Carol***

Fred and Carol own 150 acres that they purchased 23 years ago. Similar to Jason and Susan, the current size of their property was achieved through purchasing the land properties surrounding their original piece. Fred and Carol's main reason for acquiring land was their

desire to have their own space and live in a peaceful natural environment. Since they moved onto their property, they utilize their land for agriculture and recreation. They operate a B&B on their property, and feel blessed that they can share their place with others.

### ***Jack and Katherine***

Jack and Katherine live on 220 acres that originally was part of a more than 1,000-acre ranch Jack and his siblings inherited from their parents. This land has been in the family for nearly 80 years, and Jack is proud to continue the family tradition of ranching. Since their parents' passing, some of Jack's siblings have sold their partitions, and now Jack and Katherine entertain the idea of finding a way to buy those parts of the property back. Katherine teaches a holistic management course for local landowners, and Jack, despite his retirement age, continues working full-time to be able to keep the land in the family. They realize the healing powers of nature and look for the financial opportunity to build a retreat center and invite people for educational and personal healing purposes.

### **Relationship with the land**

The qualitative data analysis strategies offered by Moustakas (1994) and Creswell (2013) guided my analysis of the interview data. All interviews were audio-recorded and transcribed. I analyzed each transcript, resulting in the development of the individual textural descriptions of each participant's lived experiences as a landowner. These textural descriptions captured separate contexts and feelings related to owning land, and were further integrated into a composite textural description, which reflected *what* all respondents experienced. I then constructed the composite structural description from the composite textural description to understand *how* participants experienced the phenomenon of landownership. Lastly, the synthesis of the composite textural and structural descriptions

provided the framework for an understanding of landownership as a socio-psychological phenomenon.

The analysis of the interview data resulted in the identification of two structural and five textural themes. The textural themes are composed of a set of sub-themes illustrating the diversity of the respondents' experiences related to landownership. Table 2 depicts the list of textural and structural themes and the sub-themes developed through the analysis of the qualitative data.

**Table 2.** List of themes and sub-themes

Structural Themes	Textural Themes	Sub-themes
I. Respect for the land	1. Land as a supporter of the quality of life	1a: A desired lifestyle 1b: Sense of belongingness 1c: Tangible benefits 1d: Personal wellness
	2. Land as a connection to the natural world	2a: Love of nature 2b: Learning experiences
	3. Land as a link between the past and present	N/A
II. Sense of responsibility	4. Awareness of threats	4a: Development and change 4b: Natural events 4c: Family-related concerns
	5. Perceived moral obligation	5a: Duty to steward the land 5b: Provision of recreation and education 5c: Participation in PLC programs

### ***Structural theme I: Respect for the land***

The interviews showed that the landowners were emotionally connected to their land. One of the components of this affective connection was grounded in the feelings of respect that landowners experienced towards their properties. Respect for the land and its resources originated from the meaningful interactions with the land and the owners' ability to enjoy the tangible and intangible benefits that it provides. This structural theme is composed of three textural themes: *Land as a supporter of the quality of life*, *Land as a connection to the natural world*, and *Land as a link between the past and present*.

#### *Textural theme 1: Land as a supporter of the quality of life*

##### Sub-theme 1a: A desired lifestyle

Eight out of the nine participants indicated that they resided on their land and described their experience of living on the property predominantly as fun and exciting. Through landownership, the respondents were able to lead a preferred lifestyle and maintain a desired quality of life. Such words as “peace”, “privacy”, “quiet”, “solitude”, and “freedom” were often used to describe the lifestyle supported by the land. The landowners felt fortunate that they had the opportunity to live out in the country and enjoy rural living. Sam was one of the respondents, who was very emotional when speaking about the privilege of living on his land, which he compared to life in paradise:

*My wife and I think that we live in paradise, because it's quiet, it's private, it's beautiful, and there's always stuff to do.*

Besides the peacefulness and aesthetics of the natural setting, the landowners valued the independence and freedom that came with landownership. A desire for space and control over own environment were among the quality of life considerations that the respondents

viewed as beneficial and enjoyable. For example, having spent most of their lives in the city, Fred and Carol made the decision to purchase their property in part because they sought full control over their own space, in addition to other desired qualities of country living:

*[The land] was outside of anyone's control. We have no homeowners' association that we have to deal with, we have a view. It is away from highways and very peaceful and rural. No close neighbors. And we absolutely love it! The main thing was that no one could tell us what to do with the land.*

In many cases, the appreciation of the land as a supporter of the preferred lifestyle was expressed in terms of the positive feelings that participants experienced while on the land. In their discussions of the advantages of owning and living on the land, several interviewees mentioned feelings of safety and security. For instance, Jack and Katherine discussed how living on their property in the country was not only peaceful but safe as well:

*I feel safer out there than in town, and that's always been true... I think it's more about the way I feel when I'm out there – a lot of peace. I really enjoy seeing what's going on there, and it's quiet... You know, it just creates a different atmosphere and attitude about it [the land] — respect and reverence for it.*

Furthermore, the landowners valued the land's functionality as a supporter of the desired outdoor experiences. Personal recreation preferences and the unrestricted ability to participate in favorite outdoor activities were mentioned as some of the lifestyle-related benefits that were supported by the land. When Jason and Susan initially acquired their property, their primary driver for buying the land was access to the Blanco River for swimming. Camping opportunities presented another incentive for their land purchase:

*My main reason [for buying the land] was because it's hot, and I want to go swimming in clean water... I've always enjoyed being in nature and wanted to go camping... and was looking for a campground that wasn't too crowded.*

To highlight the distinctiveness of the country lifestyle, many participants described it by contrasting living in the rural area and living in the city. All interviewees shared that they lived in an urban area at some point of their lives. In these discussions, it was apparent that the landowners perceived their quality of life in the city as less desirable when compared to country living. For example, Ron referred to the city population as people “raised in captivity,” because the urban environment restricted them from enjoying the freedom and natural resources unique to the rural lifestyle:

*You know what I call people who live in the city? They are raised in captivity as far as I'm concerned. Rooftops and asphalt. They can't see the stars because the lights are too bright, you know.*

Additionally, the respondents often compared the peaceful rural setting to the fast-paced energy of the city. When asked what it meant to live on their land, Fred and Carol discussed how living in the country improved their lives since they moved out of the city:

*We cannot imagine living back in the city again... because the whole thought of not having the space, and the view, and the freedom of moving around, the peace and the solitude... We probably gained fifteen years of our lives back that we were losing in the city. Seriously.*

Jason and Susan also contrasted the negative energy of the urban environment with the positive experiences of living in the country. They were excited to return home after a day



in the city and looked forward to the relaxing atmosphere of their land. The feelings they experienced when on the land were opposite to how they felt in the urban area:

*The frenetic city energy melts away when being in nature...When you, you know, after being in town and driving and finally getting there, you roll down the windows, and it's quiet, it smells good, relaxing, it's not tense, it is comforting and nourishing. When you drive out to the land and go through the front gate, it's like everything drops away, all of the tension of town, all of that – just people, pressure, whatever. Just go through that gate and you're just in a sacred place like a little paradise, another world, a private refuge for myself as well as for the animals.*

Through landownership, participants had the opportunity to enjoy the country lifestyle, which was considered one of the main benefits of owning land. Moreover, the desire to live in a rural setting often motivated people who did not originally have the land in the family to buy a property outside the city. The land's ability to meet and support the landowners' lifestyle aspirations impacted landowners' feelings towards their properties. They felt privileged to be surrounded by the environment where they could breathe in fresh air, hear sounds of nature, observe wildlife, watch stars, and enjoy the natural beauty and scenery of their properties. These experiences on the land typically occurred in conjunction with feelings of happiness, joy, comfort, and other positive emotional conditions. The deep appreciation and respect for the land in many ways stemmed from its ability to provide the landowners with the desired qualities of rural lifestyle.

#### Sub-theme 1b: Sense of belongingness

In addition to the valuable lifestyle qualities, landownership facilitated the sense of belongingness, which was an important aspect of the landowners' lived experiences with

their properties. For the vast majority of the participants, the land was their primary home (n = 8). However, not all interviewees lived on their land since the time they acquired it. Those who inherited their properties explained that they used to live in the city until the land was passed down to them and it was time for them to become in charge of it. They typically lived on their properties longer compared to the landowners who purchased their land later in life. For the inheritors, who interacted with the land for most of their lives, the understanding of the property as their home was innate to the land itself, as it had always represented the place where their family was. By perceiving the land as an essential part of the family's life, the landowners viewed their land as part of their family. For example, when discussing their reasoning for living on the land, Jack and Catherine shared the following: *"It's almost like, you know, living there because it's [the land is] a family member."*

Melinda, who became the main decision maker on the land after her step-father's passing, had never felt as if she belonged anywhere else but the land in her possession. During the interview, she shared the following:

*I think it's [the emotional connection] just in my blood. My step-dad bought it [the land], and his love for it was paramount. But even before then, my grandparents grew up on farms, and it's just always been a huge connection. We've never been city people, there's always been some root connected back to the land forever as far as my life.*

Similar to the inheritors, those respondents who purchased their properties also showed a strong emotional connection to the land as their home place. Most of the buyers acknowledged that they initially acquired the land as an investment; however, they regularly visited it predominantly for personal recreation purposes. Through this repeated interaction

with the land, the respondents developed an emotional tie to its biophysical features and the location of the place. Some shared that they eventually realized they no longer wanted to leave their land and return to their homes in the city. Eventually, those participants built houses on their properties and moved out of the city to live on their land. Sam was one of the landowners who originally bought his land as an investment. Living in Austin at that time, Sam used his new property as a place to enjoy camping and escape the city life during weekends. Soon he felt that he grew attached to his place in the country, which ultimately led to his and his wife's decision to move to the land:

*We bought the first part of our land [when] we were living in Austin and looking for a place to get out of town. At least a weekend place... We started coming out to the land over weekends, and the weekend kept getting longer, and we kept not wanting to go back to town. So, we finally decided to move out there for good and have lived out there ever since... It's always been important for me to have a sense of place, the place where I feel like I belong. And having my own piece of land gives me that, and my wife too, I think.*

The similar perspective was shared by Jason and Susan, for whom the relationship with the land began with camping on the property and enjoying swimming in the river. The positive experiences from the interaction with the land's natural resources further contributed to their desire to stay on the land and make it the place of their own:

*We camped on the land for years while we designed the house... We built it for a long time and finally moved into it in 2003. And so, then we had a nice place to be, to do our land work.*

Having a house on the land was one of the contributing factors to the landowners' perception of the land as the place where they belonged. Another factor that facilitated the formation of the feelings of belongingness was apparent in participants' discussions about the changes they made on their land over the term of ownership. These changes were often related to land management, specifically stewardship and conservation activities. The implementation of the changes on the land in accordance with the personal conservation beliefs gave rise to the feelings of belongingness when the landowners were able to observe the results of their own work. While the visible outcomes of land stewardship practices brought feelings pride and self-fulfillment, they also added to the uniqueness of the place. Fred and Carol were one of the couples who spoke about the improvements they had made on their land. At the time they purchased the land, it had many cedar trees that Fred and Carol felt diminished the well-being of the land. Since their goal was to ensure that the livestock had healthy grass available on the land, this couple decided to eradicate all cedar trees to let the native grasses grow. Removing cedar significantly changed the visual appearance of the land, which this couple found very appealing and rewarding. Fred and Carol indicated that they did not want to leave the land because it had become a very beautiful place to be. They sounded excited and proud discussing how their own work made the land a better place to live:

*We sit out there on our patio and look out over the land and wonder: Who did this? How did it become so beautiful? It's taken us twenty years to do it. It's hard to remember how bad it looked when we bought it as to what it looks like now... sometimes we sit there and say: We would pay to take a vacation to come to a place that looked like this! And here it is, in our own backyard. So why go? Why leave?...*

*And we have a trailer, an RV to go out camping, but we get it maybe once a year, because we don't want to leave the property.*

The landowners perceived the land primarily as their home and the place where they felt they belonged, rather than real estate that they legally had in their possession. The interviews revealed that the meaningful interactions with the land were vital for the formation of the feelings of belongingness. For the inheritors, these feelings originated from their connection with the land throughout life. For those who bought their properties, the feelings of belongingness developed over time through the continuous interaction with the land. The affective owner–land bond formed as a result of the positive experiences on the land ultimately led to participants' perception of the land as their home and place to be.

#### Sub-theme 1c: Tangible benefits

Besides the intangible benefits of landownership, participants emphasized that receiving material goods from the land was an important aspect of their relationship with their properties. The landowners understood the significance of their role as responsible land managers, so they could gain personal benefits from its natural resources. Their ability to enjoy those valuable necessities provided by their land also had implications on how the landowners felt about their properties. The land's functionality as a provider of fresh food, clean water, and an extra income gave rise to the feelings of respect for the land.

Some landowners compared their land to a parent, who was taking care of them through the provision of food and water necessary for healthy living. For example, Cindy put it in the following words:

*I think the land is sustaining me, parenting me. I raise a lot of my own food and we eat off the land, and we eat that food, and drink the water, which tastes fabulous.*

A similar perspective was expressed by Sam who compared his land to the mother supporting him:

*It feels like it's [the land is] the mother who sustains us and gives back to us more than we put into it. It sustains us even through the winter – for example, we eat a lot of greens out of our garden all year round.*

While recognizing the importance of the material goods for their own livelihoods, the landowners also acknowledged the value of the resources found on private land for broader populations. In his perspective, Ron highlighted the significance of the land's life-sustaining properties for the well-being of all people, and regretted that those who lived in the urban environment did not understand the values supported by the rural landscape:

*Clean air, clean water, you know, things that restore your soul, plants, food, fiber, shelter, energy – it all comes from out here. And that's the emotional connection to realize that life itself is supported by the landscape, not by asphalt.*

The land's ability to provide income is another example of a material good supported by landownership. Even though none of the landowners in this study earned their income primarily from land operation, almost all of them expressed an appreciation for the opportunity to generate a supplemental income from land-management activities. For example, Melinda was able to earn some money by selling fresh meat:

*There is a financial aspect – I sell grass-fed beef. So, the cows have their purpose in revitalizing the land, and then I cull off some for grass-fed beef. And that also feels good that I'm providing clean beef for the people.*

Some participants generated income by allowing others to visit their properties for recreation. Those landowners shared that they typically charged a reasonable fee for access

to their land, which was usually low to ensure affordability of the outdoor recreation experiences they offered. While income was an important aspect of opening the land to public, none of the landowners indicated that making money out of admission fees was the driving purpose for inviting visitors to the land. For example, even though hunting was a profitable activity, Dan considered it more of a conservation necessity rather than an income source:

*We also have lease hunting on all three ranches, which is a wildlife management tool, but also an income source... Really, it was the wildlife management that drove us into the hunting program. We're grateful for the income, but we probably would have needed to do it [allow hunting] anyway.*

The operation of a B&B on the land brought in some income as well. Fred and Carol enjoyed managing their B&B not only because it was a pleasant work to do, but also because they were able to use the funds that they generated through this business to pay taxes:

*It [the B&B] also pays our taxes. Yeah, it makes money in the process. We started off living in a cabin which we now use as our B&B. So, otherwise, we would just have had a cabin rotting, but now we use it for something we like.*

In this way, by acknowledging the sustaining function of the land, the landowners often tended to view the land as a reliable partner “who” supported their livelihoods. The perceptions of the land as a partner resulted in the personification of the land, when landowners began attributing human qualities to their properties. For example, Jack and Katherine compared their property to a boss, with whom they have a mutual relationship. When discussing their role in relation to the land, they pointed out the latter’s ability to support their lives in exchange for their stewardship of its resources:

*The land is the boss, and we're not. You know, it's a partnership, it really is. It treats us really good when we treat it really good. When we don't treat it really good, it can't give us what we want from it. It doesn't treat us bad, it just can't produce, you know. There isn't a negative bone in the land's body if it has a body, there isn't a negative thought in the land, you know. It just can't do what it wants to do. It definitely has a personality.*

The personification of the land as a partner surfaced in Melinda's perspective as well, who referred to her land to a caretaker that looked after her. She indicated that the care she received from the land came in exchange for her stewardship:

*I'm its caretaker, and it takes care of me. Both ways, it goes both ways... It clears my head, it calms me down, it provides me new perspectives when I ask for it, it provides for the cattle.*

The land sustained the landowners' livelihoods by providing them with such material goods as fresh food, water, and a supplemental income. Participants were aware that their ability to enjoy those resources in many ways depended on their choices and actions as land managers. In other words, the land provided the material goods in exchange for the respondents' management practices favorable for the well-being of the land's resources. As a result, participants showed a tendency to perceive the land as a partner with whom they had mutually-beneficial relationship.

#### Sub-theme 1d: Personal wellness

The supporting functionality of the land was further expressed in participants' perspectives regarding the healing qualities of nature. The landowners appreciated the land's ability to improve and maintain their personal well-being, both physical and psychological.



Physical health was often discussed in terms of the physical exercise that the respondents received when performing land-management tasks on the land. While working on the land was never described as easy, the landowners enjoyed the physical activities that the maintenance of the land required. For example, Fred and Carol referred to the physical work related to keeping the property in a proper condition as a fulfilling and joyful experience:

*[We feel] empowered and tired. It's better than any gym. It fulfills. It's the joy of listening to the birds, of smelling the plants, of working your body—we're enjoying doing this. The joy of having tired muscles too, because of something that you've been out working all day. It's healthy.*

The wellness qualities of the land were also associated with the healthy eating habits that living on the land encouraged. In their interview, Jack and Katherine discussed how eating fresh produce from the land was necessary for a healthy lifestyle and physical wellness. They criticized the quality of foods found in grocery stores and linked it to the declining human health. They further emphasized the land as a valuable source of physical well-being:

*Lifestyle practices go with the diet practices... Food is the first in line for wellness. If we want to stay healthy, we personally need to get really in touch with the land, because the land is the direct reflection of our body, and what's going on on our land is going on in our body also. We can begin to really connect with that. We believe that we can experience some wellness.*

In addition to the physical health, the land enhanced and maintained landowners' psychological well-being. The therapeutic function of the land surfaced in many interviews.

Such words as “rejuvenation”, “healing”, “peacefulness”, “relaxation”, and “comfort” were used often when describing the land’s functionality to maintain humans’ psychological well-being. For example, Melinda indicated that her land supported her mental health by providing her with inspiration and fresh ideas:

*One of my biggest passions is the effect that the land has on me when I go out and walk the pastures, and I’m chewing on the problem. I need a new idea, I’ll go and check the horses, I’ll go check the cows. And usually by the time I come back in, there has been an inspired thought. So, it’s literally to me it’s physically connecting with the land.*

Many participants indicated a deep spiritual connection to their land and regarded the land as a supporter of their spiritual wellness. The landowners expressed that through landownership they became aware of their connection to the greater whole, which was referred to often as the “natural world”, “universe”, or “cosmos”. For example, when on his property, Dan felt a strong spiritual connection to the land and the species found there, which he described in the following words:

*I would say that for me, in terms of my spirituality, being close to nature is really important to me, and in those ways, time on the ranch is important to my sort of overall spiritual and psychological well-being... I feel more peaceful and relaxed, and then I feel sort of a, you know, connection to the larger world and other species, you know, it’s like my place in the cosmos.*

For Jason and Susan, the spiritual connection to the natural world meant being intimate with nature. They appreciated their property allowing them an opportunity to be close to and feel part of the natural world:

*We as humans are already part of the natural world and being intimate with the land is a way to recognize this existing reality... Simply slowing down and observing with all senses the natural world around you... It is comforting to simply enjoy the peacefulness enhanced by occasional bird songs and frog croaks. There is an awareness of my connection to the natural world. There is a comforting knowing that I'm attuned to the laws of nature. There's a sense of harmony with the spirits of plants and animals as I am with them on the land... It's a realization, you know, of continuity in the universe. I don't want to feel apart from anything... You know, just have this continual experience. That land is a part of you. It's a very deep spiritual connection.*

The spiritual connection to the land was also expressed in terms of the belief in the divine energy of the land and its healing properties. Jack and Kathrine shared that being in close touch with the land leads to spiritual health:

*We think there's also a spiritual dimension to the land, and we think that experiencing that is important to a person's mental and physical health. Our belief system includes the belief that there's a divine spirit that lives in everything – people, animals, and in the land, plants, trees. It's a life force... We believe that the energy that is emitted from living things and from the Earth is the healing energy. And when you soak that up, when you get to spend time out there and soak it all up, it can have a pretty profound effect on a person.*

The feelings of respect for the land in part originated from the perception of the land as a supporter of personal physical and psychological well-being. Physical fitness, healthy

eating habits, and spiritual wellness were among the personal health-related benefits that participants appreciated and enjoyed through landownership.

*Textural theme 2: Land as a connection to the natural world*

Sub-theme 2a: Love of nature

The interview data showed that the landowners were drawn to their land by their love of nature and the ability to interact with the wildlife and landscape features on their properties. The interviewees shared that through landownership they remained connected to the natural world, particularly to the animal species that they encountered on their land. All landowners indicated that they enjoyed observing wildlife and expressed interest and curiosity in animals' behavior. For example, Sam described his experience as follows:

*It's always interesting... The foxes are out in my bird feeder in the morning, you know... One time a deer came dashing from up the hill to our yard. What's he running so fast from? He came and then a coyote right after him as fast as it could go, you know. There's all kinds of stuff. We think we have mountain lions, we've never actually seen one, but we think they're out there, we've seen evidence. So, being in the wild, this is wonderful.*

The enjoyment of the natural features was expressed often in terms of pleasant experiences observing wildlife. The discussions about participants' interaction with the wildlife were full of excitement and fascination. For Matt and Barbara, observing birds and other species throughout seasons constituted an important aspect of how they felt about their land:

*We had lots of birds and we managed for birds and just enjoyed them so much. And we built a pond on the land, a little one, and enjoyed the frogs, the dragonflies and*

*the damselflies — all of that kind of stuff. We really enjoyed it... And we loved the turkeys! That was one of my favorite times because they're so wonderful. They were just so fun! And they were pretty. They were gorgeous. In the sun they've got all this iridescence and the males prancing around, and the young toms trying to be as tough as the old toms. And we'd see the little ones coming through. That was one of my favorite times of the year when we could see turkeys.*

The privilege to watch wildlife was discussed as an important aspect of landownership by Jason and Susan as well. The land enabled them to closely observe the animals' behavior, which they found an interesting and unique experience:

*The land is beautiful, and therefore, pleasant to simply hang out and observe... Feeding animals is part of my wildlife management plan, and it's an easy way to closely observe animal behavior. Watching the hummingbirds share the sugar water feeders with bees is interesting to observe. An intimate view of animal mothers caring for their youngsters is a special treat. It is interesting to notice changes of the seasons of plants and animals.*

Through continuous interaction with wildlife, the landowners developed a strong connection to the species that they encountered on their properties. For some, this connection resulted in the perception of the wild animals as their own. For example, Melinda indicated such possessiveness by referring to the wild animal species as *my wildlife*:

*[I have] my wildlife – my deer, my owls and my hawks. I love them – they go after snakes. I really love watching them dive down into the pastures and then come out with a snake.*

Besides wildlife, the landowners' love of nature was expressed in terms of their appreciation of the land's natural beauty and scenery. All participants spoke of the unique topography of their land. Many of them found the interaction with the landscape attributes pleasant and fun. Jack and Katherine sounded happy describing a variety of landscape features of their land:

*We have a lot of riparian area... A part of that riparian area are some really tall bluffs, and it's fun to be out there. There's places where you can see, you know, a view that goes many, many miles. We have canyons and variety of places that when we're there, we just really enjoying them.*

Visually appealing topographic features contributed to the creation of favorite places on the land, which the respondents found pleasant to see and visit. Participants appreciated the aesthetics of far-reaching natural views and the open space surrounding their homes. For instance, Fred and Carol created open space by eradicating all cedar trees on their property. They found the new look of the land visually attractive and indicated that the places where they could see far away were their favorite spots on the land:

*It's [our favorite place is] either on our patio, because we can sit there and look out over the land, or we have a lookout point with the bench that looks far father, much father... because we can see what we've accomplished and we can see more what the land has to offer us that is not blocked by other things. The views are now not blocked.*

Some landowners suggested that threats to the quality of the natural resources on their land, including the scenery, resulted in a deeper appreciation of those resources. The most frequently discussed threats were light and noise pollution due to the encroaching

development. Cindy was one of the interviewees who shared how much she grew to enjoy the view out of her bedroom window and appreciate the natural silence over time:

*There's a view out of my bedroom window... that is incredible, and every day it's different, every morning it's different... I appreciate it more and more. I used to not think anything about that view... Maybe it's this encroachment of light... I'm letting brush grow up closer to the road, you know, we're doing everything we can do to shield and protect our little place.*

The interview data revealed that through the interaction with their land participants grew attached to the wildlife and the topographic attributes of their properties. The enjoyment of the natural features originated from the landowners' personal love of nature. Feeling connected to the natural world through the ability to observe wildlife, interact with the land's topography, and enjoy open space and far-reaching views further reinforced the landowners' emotional tie to their properties.

#### Sub-theme 2b: Learning experiences

The ability to learn about the natural world through the interaction with the land was frequently mentioned as an important experience associated with landownership. Participants valued these learning experiences and admired the infinite educational opportunities they could receive from being on their properties. For example, Jason and Susan referred to the learning experiences on the land as "little interesting surprises". According to them, learning about their property intensified their emotional connection to it:

*I think it [the emotional connection] just grows deeper over time, because you learn more about it [the land]. It's like: Oh, I didn't know this little corner had this special*

*thing. Or, look at this unique plant! Or, like that surprise bobcat sighting. You get these little interesting surprises all the time... to me, the learning about nature and the land just evolves, there's no end to it, because there's always something interesting to learn about whatever creature or plant. And plus, things change over time. You know, environmental changes like weather, floods.*

For Matt and Barbara, being on their land was also associated with pleasant learning experiences. Similar to Jason and Susan, this couple indicated that their land was a unique place to become knowledgeable about nature:

*I just found it very emotional to learn from it [the land], because there's so much you learn from being in nature... It was my special place to learn... because every day there was something new and different, it never got old. Because when you walked around, you'd walk into a little bit different place.*

The variety of the land-management practices that participants engaged in on their land represented another avenue for the improvement of their personal knowledge and skills related to land management. The learning experiences associated with the process of managing the land and its resources allowed the landowners to gain knowledge and skills specific to their own piece of geography. For example, Dan shared that in order to steward his land's resources properly, he had to learn about multiple aspects of wildlife management. He found learning about the local wildlife a fascinating and exciting process, which strengthened his affective connection to the land:

*I think for me, as a land steward actively managing the land, you know, for the benefit of wildlife has deepened my tie to the ranch... That's something I find exciting, and I learn a lot, because, you know, it's challenging and it's a trial and error – some*



*things that you do don't work like you hope. To me, it's endlessly fascinating... because I have to learn about so many things to do my job, you know, like the needs of particular bird species or the strategies for getting rid of invasive species.*

Their experiences on the land influenced how the respondents viewed their role as landowners. Some of them perceived the land as a teacher, who offered never-ending lessons in a natural classroom. Melinda, for example, compared her land to a teacher, because it had “more potential and more knowledge” than she did. Likewise, Cindy indicated that she had a student-teacher relationship with her land, in which she was a student and the land was her teacher:

*Student-teacher relationship I think is a good one. The land is the teacher. There's not one day you can't learn something from it. The lesson is always going on whether you stop and listen and participate, or you put it off. The lessons are there. So there, so available.*

The respondents had a desire to expand their knowledge about the natural world and valued every opportunity to learn from their land. The personal enjoyment of the day-to-day interactions with the land triggered the landowners' curiosity and desire to explore their properties and become knowledgeable about the natural processes. Such experiences as sighting an unusual plant or a unique wildlife species on the property for the first time constituted meaningful learning experiences. In this way, the landowners tended to view their land as a teacher who educated them about the natural world.

### *Textural theme 3: Land as a link between the past and present*

Regardless of the method of acquisition of the property, participants tended to view the land as a place that connected the past and present. For the inheritors, the land supported

this connection through the family tradition of landownership and operation. When describing his personal history with the land, Jack and Katherine indicated this sense of connection:

*I've been connected with that land for a long time, most of my life, 90 percent of it probably. So, there are a lot of memories there, you know, lots of people have come and gone.*

For the landowners who managed the land they grew up on or close to, the land represented a bridge between the past and present, thus connecting them to the relatives who lived on the land throughout its history in the family. The significance of the family tradition and personal role as a link between generations was also very apparent in Dan's response:

*And there's also an old hunting blind, a rock hunting blind that my grandmother used to hunt from. So, there's a sort of like a family connection to her there... So there's this sense of legacy, you know, within the family. I have the picture of my granddad up there and the horses... and, you know, being part of something that goes back in time... When I'm on the ranches, I am not only enjoying the place, but I'm feeling this connection, you know, to people who are important to my life.*

The memories of being involved in land-management activities from younger years were cherished by the landowners. The regular interaction with the land further reinforced these memories and intensified their emotional tie to the land. For example, when Ron was asked what it meant to him to be a landowner, he began by stating that the land was his family heritage. Even though Ron did not grow up on the land, he was raised close to that property and often helped his family to take care of it since he was young. Ron remembered his childhood and family-related experiences on the land as very positive and enjoyable:

*This land means more to me than I can put into words... It's our family heritage. We didn't get to do extracurricular activities, you know, the Easter weekend, spring break and summer break, Christmas and Thanksgiving—for all of those we went to the ranch to work because there were screwworms. And from the first of March until the end of October, every waking moment you took time to save the animals being attacked by that screwworm larvae, and you had to catch them and doctor them. And we didn't have that much help, so we were forced to be close to the ranch, and of course, we loved it.*

Owning land was also associated with historic events that happened in the past long before participants' time. The landowners were proud to know about and share what happened on their land throughout history, and therefore appreciated their land for its historic value. For example, for Melinda, the land represented a connection to the past through the historic events that occurred there:

*You go down the hill and there's just an area right next to the water that just has such a cool feel to it. Tonkawa Indians used to live and hang out in this area. Every time I go into this one particular area, I think of them. So, if I were back in the day, I would have pitched a tipi right there. So, I don't know if they did or not, I don't know, but every time I go in that spot, that's what pops in my head, and it has just a very old you're-taken-care-of kind of feeling.*

Similarly, when talking about their experiences on the land, Fred and Carol admired the amount of work that people who settled their land in the past had to do:

*You come to respect what our forefathers did before us to think that they even came across this land in covered wagons and settled this land, and you're kind of like:*

*Wow, how in the hell? Don't think that I would have strength to accomplish what they did. And to walk into an area that was so unknown. And how long it took them to just get into town. You know, it takes us 20 minutes to get into town, but that might have been a day for them to do it.*

Several interviewees mentioned the existence of special places associated with memorable events or experiences on the land as a valuable attribute unique to their property's history. For example, those participants who had an opportunity to interact with their land when growing up exhibited a strong attachment to the particular landscape features that they linked to important memories and peasant experiences. For Dan, who visited the land since childhood, the topographic attributes discovered as a child remained significant throughout his life:

*There's a small waterfall feature, and that's the place... I discovered it as a child, and it's sort of secluded and out of the way. It's sort of like my special place to go, it is very, very beautiful and quiet, and the water is real nice—you can swim there if you want to in the summer time. Then, there's a small mountain behind the house, which I liked to climb and kind of get up on top and see what I can see from up there.*

Those participants who purchased their properties also mentioned the presence of the special places on their land. These usually self-designated areas and objects were created to commemorate important events in the landowners' lives. In this way, the special places embedded with personal historical significance served as a connection between the past and present. For example, since the time Sam purchased his land and started living there, he and his wife designated two areas on the property that were linked to the family-related events:

*We've made some spots on our land. One we call Memorial Park. It's up on the*

*hillside and has a view over to the whole valley, sort of a shotgun view, it's not a panoramic view, but you can see the whole valley. And we buried our parents' ashes out there and we probably bury our ashes out there, scatter them around. So, that's a special spot. Then, we built a labyrinth up on one top of the hill for my wife's 50th birthday. It's big, it's like, oh, I don't know, maybe 50 feet. We go up there and walk the labyrinth, and it's sort of meditation for us. So, that's a special place.*

Significant memories associated with the land and the personal knowledge of the events that happened on the property in the past contributed to the perception of the land as a place in history. Through landownership, participants felt connected to the memorable experiences from their past, history of their families, and events in the land's history. The special places associated with important memories added uniqueness to the property, which further intensified the emotional connection between the landowners and their land. The landowners felt proud to be part of the land's history and were honored to pass this legacy on to future generations.

### ***Structural theme II: Sense of responsibility***

Participants' strong respect for the land and its biophysical resources manifested as a sense of responsibility to protect and enhance the natural qualities of their land. The perceived responsibility was further triggered by their awareness of the ongoing and potential threats to the well-being of the property and integrity of the private landscape in general. The landowners expressed concerns related to the development and change, land-management decisions of their neighbors, potential destructive implications of natural disasters, and family-related challenges regarding their children's unwillingness to continue the landownership tradition. Therefore, to ensure the short- and long-term prosperity of their

land, the respondents considered it a moral obligation to steward the natural resources and do everything in their power to keep the land in the family. In addition, many landowners believed that it was necessary to allow public access to their land to let people experience nature, as well as expand their knowledge about the importance of the natural resources in the private landscape. This structural theme is composed of two textural themes: *Awareness of threats* and *Perceived moral obligation*.

*Textural theme 4: Awareness of threats*

Sub-theme 4a: Development and change

The sense of responsibility to protect the valuable natural resources on the land in part originated from the landowners' awareness of the declining environmental health. All participants discussed how such issues as land fragmentation, light and noise pollution, mineral extraction, and water pumping impacted the well-being of their properties and continued altering the rural character of the surrounding area. Additionally, such global problems as the world's overpopulation and the widespread natural resource illiteracy were mentioned as current and future threats to the environment, and the respondents' land in particular.

Landowners most frequently expressed concern over land fragmentation. They complained about the dramatic increase in the number of neighbors comparing to the past, because the adjacent properties were sold and subdivided over time. To highlight the significance of the land fragmentation problem, participants usually compared the size of neighboring properties before and after this issue began occurring in the area. For example, Cindy, the owner of two hundred and fifty acres, shared that over the fifty years of her life

on the land the surrounding properties were subdivided into many smaller ownerships resulting in her ranch becoming the biggest property in the area:

*We were the smallest place... The places around were much larger: five thousand acres on one side, three thousand on the other side, one thousand acres on one side... That's the way it was fifty years ago. Now it's seventy acres on one side, one hundred and fifty on the other, etc. The county has been fragmented so much that we now have the biggest place in the area. And it's only fifty years. We went from the smallest place to the biggest place.*

Participants considered having more people and houses around as a major threat to their lifestyle and environmental values, as well as the natural qualities of the rural landscape. Jack and Katherine, for instance, found the rapid rate of the land fragmentation process around their ranch depressing to observe:

*It's emotionally depressing to see it [the land] break up and fragment and sell off. There was a couple-thousand-acre ranch down the road from us, and a big chunk of it has been sold off. And now there's a half-a-million-dollar house built on every hill... There are two things about it to us. One is that it's unsightly, because of the way how we see the land. But the other one is that we know how much it damages the ecosystem functions.*

In this way, the landowners viewed land subdivision and construction of houses on smaller properties detrimental to the rural character of the area. Ron took a more political perspective on the issue of land fragmentation and development and indicated that having subdivisions around the ranch would put an end to the ranching tradition in his family:

*We don't know how many more generations this tradition [land operation] will last. Once there are subdivisions around, they're going to have the majority of the votes. And they don't like the cows smell bad and make noise in the morning. They don't like pick-up trucks out there with trailers behind them carrying livestock and going slow on the road when they're trying to get to work in a San Antonio law office. So, when urban areas begin to prevail in the ballot box, the multi-generation ranches are turned into subdivisions... And I expect it'll happen to us eventually, but we're trying to hold it off as long as we can.*

The landowners also expressed worry that more people out in the countryside bring more pressure on natural resources, including groundwater quality and availability. This concern was especially apparent in the discussions about growth of metropolitan centers such as Austin and San Antonio. For example, Dan, who had one of his properties in Travis County, mentioned that the area was undergoing significant urban development altering the peaceful atmosphere of the rural setting and the quality of natural resources:

*Austin is growing around us here. So now we have subdivisions, you know, on the other side of the ranch from town. So, we've got a lot more neighbors. And it has impacts on the ground water availability and water quality.*

The changes in the surrounding land use were associated with the decreased quality of life in the countryside. Such negative factors as light and noise pollution, less seclusion, and the decline in air and water quality accompanied the land fragmentation and development processes. These noticeable changes to the country setting were among the issues participants referred to as insurmountable and difficult to manage. Cindy, for example, considered the encroaching development and its associated impacts an



infringement upon her rights as a landowner that was stealing the ecological and recreational value of her land:

*Absolutely we're being impacted by the light pollution. It is the biggest threat right now, I think, to future and sustainability of what we're doing... Noise and light — the two things you never would have thought of, you know. We're always concerned about water pollution, people trespass, people's dogs, and I had never thought about light and noise till recently... If you were to actionize the civil courts to be able to utilize the private property right, it's an infringement. It is totally an infringement on your ability not just to enjoy but to facilitate commerce or recreation or whatever other values you might want to realize.*

When discussing the topic of land fragmentation and urban development, several participants expressed the opinion that the fast-paced progression of the conversion of the rural land to alternative uses stemmed from the world's overpopulation. The landowners spoke about the increased pressure on natural resources as a result of too many people living on the planet. For example, Sam compared the problem of growing population to cancer spreading in a human body:

*My mantra is that what's wrong with the world is too many people and too much stuff. I think of it as if the world is an organism, and we are one type of cell in that organism who is growing like cancer. And if we keep growing at the same rate, we'll eventually overwhelm the host like cancer does to the human body... humans just want to take over everything.*

In participants' perspectives, an additional global issue that affected the well-being of rural land was the natural resource illiteracy. Interviewees considered this problem to be

mostly prevalent among the city population. Some participants shared that due to a lack of knowledge, people living in metropolitan centers do not realize the critical importance of the ecosystem goods and services supported by the rural landscape for their quality of life. For example, Ron was a big proponent of educating the urban public about the significance of the natural resources for human well-being:

*The root of all the challenges is a lack of education about the natural world and how it all works. And the lack of education about growth and all the other things that are associated with, you know, cities and urban development. I mean, they just cover the landscape with asphalt! I mean, ask somebody now where the water comes from, and they'd say it comes from the tap. It's worse than you can imagine. It's just unimaginable how ignorant the general public is about how the natural world works. It is absolutely stunning.*

The interview data also revealed that the landowners were concerned about their neighbors' land-management actions. This concern arose from the respondents' inability to influence the decisions of neighboring landowners. Several interviewees shared their stories about their neighbors' actions negatively affecting the privately-owned landscape. The potential for land fragmentation because of a neighbors' decisions to sell their land was one of the biggest fears of many landowners. Participants recognized that the encroaching development had increased the economic value of the land in the region, which might motivate other local landowners to sell the land. Those participants not yet directly affected by this process were worried that their neighbors might decide to sell the land for development. Melinda was one of the respondents who expressed concerns about the possible appearance of subdivisions around her land:

*I'm really concerned that my neighbors might sell out and a big subdivision would come in. That's pretty terrifying... I can see that the development is getting closer. And, you know, it'd be real easy to sell out and, you know, get a subdivision right next door. That would be devastating... So, to be completely surrounded by the development would be the end of it. That bothers me a great deal.*

Melinda also shared an instance when her neighbors' land-management choices affected the resources of her property. She began her story by sharing that her step-father, who passed the land down to her, used the two tanks located on the land primarily for fishing. To improve the fish cover, he planted hydrilla and water hyacinth, the growth of which was kept successfully under control. Melinda discussed how farming practices of her neighbors resulted in a land-management problem for herself:

*A couple years ago, we had a lot of rain in the spring. And because of the lay of the land, most of the farmers were uphill from me. So, I'm sure they had just put out chemical fertilizer, and it came down running down through the wash, and it came down to my tanks. And the water hyacinth just exploded. And these are about two-acre tanks, they're quite large, and it absolutely covered the whole thing... Their farming practices uphill certainly affected my land.*

Jason and Susan, who managed their property for wildlife diversity, also shared their experience of being negatively impacted by their neighbors' actions. As a result of choices made by other people who had control over the surrounding land, the altered environmental features were no longer able to support the required habitat for the local songbirds. Jason and Susan described their experience as follows:

*We kind of have a goal to manage for songbirds, but the problem is that things keep changing. The songbird that we were managing for—the golden-cheeked warbler—kind of disappeared, because the guy across the river cut down the forest that he had on his side of the river... Then the guy on the other end of our property cut down all the juniper trees on his property. Then the guy to east of us cut down all the juniper trees on his property. And the guy to north-east cut out half of the junipers on his property. The result is that no more warblers... But you can't tell people what to do with their land. They behave stupidly, and we just stand by with our mouths open.*

The quote from the interview with this couple indicates that even though they seemed frustrated by their neighbors' decisions, they also acknowledged that they could not influence what other people wanted to do with their land. None of the interviewees in this study spoke about directly confronting their neighbors in regards to land-management practices. Rather, while participants themselves enjoyed freedom and independence through landownership, they also came to accept other landowners' decisions. The acceptance of the inability to control neighbors' actions was also apparent in the interview with Fred and Carol, who referred to their neighbors' choices as their "personal privilege":

*The thing is that it is each landowners' personal privilege, because they own it [the land] – they can do whatever with it. If they can destroy it as rapidly as they want to, that is their prerogative to do. And there's nothing we can do about it.*

Urban development and neighbors' land-management decisions were among the most frequently discussed challenges related to the maintaining the integrity of the privately-owned landscape. Participants were conscious of the potential threats to the well-being of their properties originating from the land fragmentation and development processes. These

ongoing land-use dynamics were strongly criticized as a factor decreasing the quality of life, changing the peaceful character of the rural communities, and endangering the longevity and prosperity of the natural resources unique to the countryside. The unpredictability and lack of control over the land use changes were a cause of psychological distress for all respondents in this study.

#### Sub-theme 4b: Natural events

During the interviews, participants mentioned natural disasters as a present and future threat to their land. Such events as droughts and floods alter the biophysical features of the property to which the landowners develop an emotional connection. The threat of losing these valuable attributes of the land to natural disasters emerged as a concern in several interviews.

The landowners shared their past experiences with natural events, often focusing on a land feature that was either destroyed or significantly damaged by the destructive force of nature. For example, Jason and Susan discussed how “the highlighted gem” of their place by the river was destroyed in the flooding several years ago:

*We lost so many beautiful granddaddy, giant, as big as this room, cypress trees in that 2015 flood... And it was so horrible hearing those trees cracking... And the next day just seeing what used to be a dense shady different ecosystem on the riverine bottom changed. Now it's sunny and it's hardly any shade; it's very different... The loss of those trees was probably the biggest heartbreak so far... It was just a beautiful place to be before the flood killed it.*

Jason and Susan were not the only couple who talked emotionally about the consequences of natural disasters. Matt and Barbara, who expressed a strong attachment to

the trees and plants found on their property, described the drought season of 2011 as a very challenging time for themselves and the flora of their land. The quote from the interview with this couple illustrates their emotional state when the drought impacted their land:

*The drought affected the trees and the grasses, and it affected us. I guess that was an emotional thing for us too when we had droughts, because you just hated to see the plants struggling though you knew they'd come back, because they always do. But it was hard, 2011 was hard.*

Knowing that droughts represented an ongoing challenge for agricultural production in Texas, many landowners learned to prepare for this natural event in advance. Several landowners mentioned that they built tanks on their properties to ensure water availability in case of drought. Other landowners installed rainwater collection systems as part of their planning for drought. For Ron, the preparation for drought was incorporated into the land-management plan ever since his ranch was founded by his great-grandfather. Ron, who included the drought season as the fifth season in the book dedicated to the history of his ranch, shared that his planning for drought meant occasional adjustments of the cattle numbers to support the productivity of the pasture:

*[I plan for drought] by not having to feed. If it didn't rain then you have to sell some cattle. We can't sell all cattle. We can sell a few, but we can't sell the blood line.*

Participants' emotional connection to their properties became very apparent in their discussions of the implications of the past flooding and drought events. The landowners described the loss of their land's biophysical attributes to natural disasters as heartbreaking and sad experiences. Considering the unpredictability of natural disasters, the landowners expressed a significant concern regarding future impacts of these events on the well-being

of their properties and the quality of the private landscape in general. To alleviate the consequences of such uncontrolled factors as natural disasters, participants incorporated the possibility of these events occurring into their land-management decisions and plans to the extent possible.

#### Sub-theme 4c: Family-related concerns

Another concern that participants shared during the interviews represented a more personal issue related to the landowners' uncertainty whether their children would want to continue the landownership tradition in the family. This concern was mentioned in many interviews. While participants were happy to have potential heirs to whom they could pass their land, they were worried that their children or grandchildren might decide to sell the land in the future. For example, Don's quote illustrates this situation the following way:

*Well, the good news is that I have one sister, and she has four children, and I have two children. So, there's six in the next generation... And happily, they all have connections to the ranches and care about them, and want to be involved in some form or fashion. It may be that one or more will become interested in the work I've done... There's always the question whether the family will be interested long-term, will have the financial resources to manage the ranch.*

Ron's perspective was similar to Don's. For Ron, the manager of a ranch that dated over 130 years back, the preservation of the family tradition was very important. However, he shared that even with such long-established ranching tradition in the family, there was still an ongoing concern about the uncertainty of the heirs' choices in the future:

*Yes, that's a concern. There are going to be people in every generation that couldn't care less, and we have to figure out ways to overcome that.*

While many respondents had children and grandchildren to potentially take charge of the management of the land, others did not have any heirs. For example, Melinda stated that she did not know what would happen to her land in the future, because there were no heirs or other family members who would be interested in continuing the tradition:

*As far as my family is concerned, I'm the lone wolf. I'm the one who's really super connected to it [the land]. And since I don't have children, I'm not quite sure what's next.*

Participants shared that they would ideally want their children to assume the responsibility for the land, thus keeping it in the family. At the same time, however, the respondents realized that their heirs might not have the same degree of enthusiasm and devotion to land management and operation. This uncertainty gave rise to the concerns about the land's future that many landowners found challenging to address.

Several respondents mentioned that through their participation in PLC programs, CEs in particular, they ensured that the land was protected from future fragmentation should their children decide to do so. In this way, establishing a CE appeared one of the behavioral responses to the concern regarding the uncertainty of the communication with children. However, some landowners mentioned a more indirect approach that they took to protect the land from subdivision in the future. These interviewees indicated that a connection of their children to the land was essential for keeping the land protected and prosperous in the long run. By letting their children interact with the land from an early age, the landowners created favorable circumstances for development of the psychological bond between their children and the land. Participants believed that if their children felt emotionally connected to the land, they would not engage in behaviors potentially harmful for the land and its resources.



Cindy was one of the respondents who wanted her children to grow as emotionally connected to the land as herself:

*I made a big effort to make sure that I got my kids back to the ranch for them to grow up there. And they have it, they got it, the connection. You get it, a connection, from growing up on it [the land] and learning from it.*

Ron also shared that one goal of the current generation that oversees the family ranch management is to connect future generations to it. According to Ron, this is essential for the preservation of the family tradition of ranching and the land's future. Even though all the heirs lived in urban areas, Ron and his relatives found it their responsibility to bring the younger family members to the land:

*All of them [younger generations] live in the city... Most of my cousins that are in my generation and most of their children are in their 30s and 40s. And they all make concentrated, you know, diligent efforts to get their children, which are teenagers to early twenties, out into the country and to understand what the deal is.*

Knowing that their children loved the land and appreciated its resources to the extent their parents did led some landowners to feel successful as land managers. For example, Dan mentioned this aspect of landownership as follows:

*In terms of sort of the long-term management, I measure success by, you know, the increased engagement by other members of the family and by, you know, the number of people that we connect to the land in the ways that are meaningful to us and to them.*

The interview data revealed that allowing future heirs to experience the land was one of the landowners' tactics to protect the land in the long term. The interviewees strongly

believed that their children's emotional connection to the land would ensure the land stayed in the family and prevent future selling and subdivision. In this way, promoting children's connection to the land was one of the responsibilities associated with landownership.

*Textural theme 5: Perceived moral obligation*

Sub-theme 5a: Duty to steward the land

Personal enjoyment of the benefits supported by the land, love of nature, emotional connection to the properties' biophysical features, as well as concerns about the land's future, triggered the feelings of moral obligation among the landowners. Participants shared that proactive stewardship was a responsibility that came with landownership.

The desire to be a responsible steward was discussed in all interviews. Realizing that their time on the land could not go beyond their lifespan, the respondents felt committed to improving and taking care of the land for future generations. All landowners stated that they considered themselves primarily as stewards in their relationship to the land. For the agricultural landowners, stewardship activities involved rotational grazing, no supplemental feeding, no use of fertilizer, and close monitoring of the regeneration process of the land, among others. For those not involved in agriculture, such activities as reseeding with native grasses, underbrush clearing, and cedar eradication were among the most frequently mentioned stewardship practices. Other activities on the land included wildlife management, invasive plant species management, rainwater collection, and replanting after natural disasters, among many others. All respondents noted that the overarching goal of their stewardship practices was to manage the natural resources with no harm, and bring the land to the condition better than it was found. For example, Sam described the goal of his land-management practices the following way:

*Long-term sustainability is probably the guiding principle of what we're doing, I would say. It goes beyond us... We're here for a while to do what we can, and we want to leave the place where we've been better than we found it. And hopefully the next people would have the same attitude, but they might not.*

Even though participants had no way of knowing how the future owners would treat their land, the realization that they did all in their power to bring the land to a better state resulted in the feelings of personal satisfaction and self-fulfillment. The quote by Fred and Carol illustrates how they perceived their responsibility as stewards to their property:

*You know, our whole thing is to leave the land better than we found it... It's our responsibility as a landowner. God gave us the ability to have the land, to work the land, to use the land, but God didn't give it to us to destroy... Whoever does take it [after us], they'll have something to work with in whatever manner. Or not — that's their decisions, they'll own the land. But at least we'll think we've done our job, which is to be stewards of the land and improve it, and we just feel better doing that. I don't know why we feel that way, we just do.*

In this way, the respondents viewed stewardship as a privilege and an honorable responsibility that they were entitled with through landownership. These sentiments were apparent in the landowners' discussions about the disappearing features of the natural environment as a result of development or other land-use practices. Melinda was one of the interviewees who was very emotional when talking about her role as a steward:

*What does it mean to me? Without crying? It means everything. Wow. My love for it [the land]. I get to steward it, care for my animals, care for the wildlife. So, the opportunity to be a steward of all of that is everything. It's a great sense of pride,*

*responsibility. I take stewardship very seriously. It's just an honor... Especially now you see the natural features of the land disappearing due to farming practices or development, or whatever. And you can't ever get that back. You know, if the development comes through, you can never put it back, ever... It's a very visceral connection and responsibility that I feel.*

Similarly, Jason and Susan indicated that their stewardship practices were aimed at keeping their land in its natural state in the face of the wide-spreading environmental challenges. They regarded their property as a “nature preserve” that they maintained “to preserve the existing natural world and just let it be”. Through practicing stewardship, Jason and Susan felt empowered that they could inspire other landowners to take care of their land:

*The environmental problems in the world are great, and, you know, this is my little effort to do my little part, and hopefully other people will be inspired. We need to continue to expand the conservation of private lands throughout everywhere... Just because we've seen some bad actors do bad things to the planet, you know, and we don't like seeing that. So, we're kind of empowered in a way 'cause I can take care of my own place, we just wish it was larger. I wish I had a larger impact.*

The interview data showed that the landowners' feelings of responsibility were related to not only practicing active land stewardship, but also to doing it in the correct manner, with the best interest of the land in mind. This conservation ethic was apparent in the discussion with Matt and Barbara, for whom it was important to properly manage the ground cover and ensure that no harm was done to the land's resources:

*Our overriding goal was to be good stewards and not damage, but help... There's just so much juniper, and to decide how to take it down constructively for the benefit*

*of the land, because too many people get somebody to come in with the equipment and just rip it all down. And we knew we didn't want to do that.*

The landowners had a clear understanding of the long-term benefits of private land stewardship, and their own conservation practices in particular. For example, Jack and Katherine's words summarized it very well:

*It's very important to all people who own the land to practice really good stewardship. And it's not just about cutting cedar. It's really about creating land that's healthy and that makes us healthy. That's really what we're about.*

These data showed that the respondents understood stewardship as a necessary component of landownership. This recognized responsibility was tightly aligned with how the landowners viewed themselves in their relationship with the land. The interviews revealed that the identity as a steward was associated with owning land and reinforced through land-management activities aimed at improvement of its condition. All landowners agreed that stewarding natural resources was not an easy job to do. On the other hand, however, the landowners enjoyed the rewarding feeling of satisfaction from their realization that they had been managing the land correctly, for the benefit of its resources today and in the future.

#### Sub-theme 5b: Provision of recreation and education

While the landowners felt very protective and territorial in response to the encroaching urban development, they believed that allowing public access to their land would be beneficial for the future of natural resources. The respondents viewed public access as a tool to allow others interact with the natural environment as well as educate them about nature. By inviting people to their properties, the landowners were able to promote outdoor

recreation while improving the visitors' natural resource knowledge. The respondents considered public access essential to fulfill their moral responsibility as stewards of their land.

When discussing public access on the land, the landowners explained that they offered limited access, usually arranged individually in advance. For example, Ron was among the landowners who offered his property for people to visit, but indicated that public access to his land was limited and required an approval:

*There's all sorts of access, but it is controlled access. It's not like a state park, where you just come and go, mainly because of the liability considerations – everybody needs to sign the release, otherwise our insurance is not in effect. So, it's public access, but it's by, not necessarily by invitation, but by approval.*

The landowners opened their land to groups of visitors as well as individual guests. Participants hosted church retreats, herbalists' field trips, youth camps, indigenous ceremonies, meetings, and others. Such recreation activities as bird watching, hunting, camping and hiking were among the reasons for the public visiting participants' properties, as well. The landowners also mentioned hosting individual artists, writers, and nature photographers. Some respondents preferred hosting groups exclusively, while others invited both organized group visitors as well as individual guests. For example, Cindy explained why she preferred groups over individual visitors the following way:

*We do not focus on individuals—that would take a lot of management. We host established groups, they take care of themselves... Groups usually have insurance, groups usually have some structure. There's somebody in charge of expectations. Individuals, you know, it's a commercial, but our operation is very non-commercial.*

The respondents invited others to experience the land to foster people's appreciation for nature. For example, for Fred and Carol, it was important to share their land to let others feel the country atmosphere and spend some time in nature:

*They [visitors] enjoy the peacefulness of being out there, so we're able to share with them what it's like to be remote and just have the animals and cool breeze and not to have the sounds of traffic and the city around... People who come out to our B&B, they're tense. But by the time they leave on Sunday, they're like: I'm not so sure I want to leave this place. They don't wanna leave, and we can see the tension just leaving their body, we can watch it going away. We feel blessed that we can share it [the land]. We are blessed.*

The landowners understood that people who lived in urban areas needed a peaceful place outside the city to stay for some period of time. As Fred and Carol's words show, participants were very happy to provide a quiet and peaceful place to visitors from city centers. For Melinda, the positive impact that the land and natural environment had on her and others was the primary driver for inviting people to her ranch. She further elaborated that most people needed a place to rejuvenate, and was happy to offer them her B&B for those purposes:

*I had a person who came out just this weekend. She just needed to slow down and decompress. And she spent time in the guest house, and because of where it is and the location, and the bird flying, she got to see the cows, horses, and dogs. She left feeling rejuvenated and inspired. That is really the main reason [for sharing the land] — the effect it [the land] has on people, and allowing to decompress and mainly find some inspiration.*

Similarly, Jack and Katherine emphasized the psychological and physical health benefits of being on the land. However, another reason Jack and Katherine wanted to share the land was to allow people to experience its healing qualities. This couple was looking forward to an opportunity to build a retreat center on their land and invite people to expand their knowledge about the healing properties of the land. Jack and Katherine shared:

*And we wanna build a nice simple little structure out there that we're referring to as a lodge to hold events, to do some training, and to teach people about the land and regeneration of the land, and the healing that comes from having the relationship with the land... We'd like to teach people how to grow their own local food, how to harvest and prepare it for consumption... It helps people develop intimate relationship with the land that they may never have had before growing their own food... So, we'd like to teach how to enjoy it [food] and eat it, and other healthful practices, lifestyle practices to go with the diet practices... That's really kind of what pushes us about the land — the wellness of people.*

The realization that many environmental problems, including land fragmentation and development, come from metropolitan centers motivated the landowners to invite visitors to their land for educational purposes. Participants believed that through the interaction with the land, visitors would be able to expand their knowledge about the natural world and develop an appreciation for natural resources. One of such participants was Ron, who shared that inviting people from urban centers was one of his goals as a land manager. Ron used his land for education and raising awareness among the urban public about the resources found in the private landscape:



*We have a voting public that virtually everyone, maybe not everyone, but I bet ninety percent of the voting public can't find the North Star and don't know what this name is. They don't know the difference between the pintail and the cottontail, and which one is a duck... And they don't know about drought, they don't know about spring flow, and they don't know about creeks, and they don't realize that when they water their carpet grass and wash their Labrador retriever's muddy paw prints off the driveway, that they are harming our livelihood by taking our water away for purposes that we don't think there should be... So, that's why the outreach and education.*

Another reason for allowing public access to the land was personal learning and community building. The landowners shared that they enjoyed interacting with and learning from their visitors. For example, Cindy found it beneficial for herself to have people on her land:

*We began to see that it would help us learn from other people and get other viewpoints. I have learned so much from the bird watchers, and I've learned a lot from herbalist and medicinal plant people. We learn from the visitors, plus it's a way of giving back to the community ensuring that there's some longevity and the appreciation of the land.*

The ability to share the land with others for various purposes was very important for participants. Allowing others to experience the land and its natural qualities made the landowners feel happy and proud. For example, Fred and Carol enjoyed running their B&B and found it rewarding when they could see the impact that the stay on their land had on

visitors. Additionally, this couple mentioned that building relationships was another significant benefit of inviting people to their land. They shared:

*We've met some wonderful people. We have some people coming in right this minute. They've been here several times. It's that kind of relationship that we form with some people... We wouldn't have known them without the bed and breakfast... People would come back, because they enjoyed the peace, the solitude of the land.*

The desire to let others experience the benefits of being on the land was a topic discussed in almost all interviews. The landowners felt happy that they were able to provide the unique experiences to people who otherwise could not have access to the public benefits of private land. Recreation and education were the top reasons behind opening the land to public. The respondents saw public access beneficial not only for the visitors, but for themselves as well. By inviting people to their land, participants had opportunities for interaction, thus building relationships and expanding their personal knowledge.

#### Sub-theme 5c: Participation in PLC programs

The decline in the environmental quality in areas around participants' properties, and in the world in general, led them to seek the most efficient approaches to land management. In many instances, the landowners sought professional guidance, which they were often able to receive through their participation in PLC programs. Among the people interviewed, seven landowners indicated that they were part of a PLC program. These programs included government and non-government initiatives striving to assist landowners with management of their land. Among the government programs, participants mentioned such initiatives as the USDA Farm Service Agency Program for riparian grazing and TPWD Managed Lands Deer Program for wildlife management, and others. The majority of the landowners who

participated in PLC programs indicated that they were part of some initiatives operated by the local NGOs (n = 6). Those often included the programs promoting holistic management of natural resources and conservation easements (CE). Four landowners mentioned that they followed holistic land-management practices that involved the identification of land-management goals, priorities, and their relationship to other variables such as finances and environmental problems.

Participants mentioned a variety of reasons behind their decisions to join PLC programs. Among those who took part in such programs, urban development was the most frequently discussed motivation for joining a PLC initiative. The most popular behavioral response to the development pressure was establishing a CE on the property. For example, Sam, who enrolled into a CE nearly twenty years ago, explained his motives in the following words:

*We want a wide range of flora and fauna on our place... and just to make it healthier for that. For other species to grow up, so one doesn't take over, including people... And knowing that this area of the country is growing and developing, and how much pressure there is to divide up our land and put, you know, home sites around and stuff. We thought we didn't want this happen to this place.*

Some landowners, like Sam, had a CE for several years, while others were in process of completing all the steps necessary for setting it up on their land. As is apparent from Sam's quote above, one of the reasons he and his wife chose to put their land into a CE was to retain control over the land by not allowing any changes in land use in perpetuity. Similar sentiments surfaced in the interviews with other landowners who had CEs on their land. The aspect of perpetuity of a CE as a conservation tool seemed appealing to many participants.

Those landowners who had converted their land into a CE shared that they no longer had any concerns about the future use of the land, as it was protected forever. They appeared to like the idea of imposing personal conservation views on the present and future of the land, thus retaining control over the land use indefinitely. For example, Jack and Katherine shared that they were very happy about their decision to establish a CE, which they both found a viable solution for any land-related concerns they might have:

*Because it's so well-defined in the conservation easement agreement what's allowed and what's not allowed, I don't have any concerns at all about the future use of the land. I feel pretty confident with it, it's protected. It's very protected... I feel really good about that move. Huge relief.*

Even though it was often an expensive process to establish a CE, participants indicated that they had no regrets about spending the money if it benefited the land. One of the couples who discussed the financial aspect of this process was Matt and Barbara, whose property was devalued by almost \$500,000 after establishing the CE:

*So, you know, there were people who wanted to come in and build several homes on the property, and there probably would have been people who wanted to subdivide it... If we had left it without the conservation easement, those things would have been possible. And so, we took the financial hit, and our kids took the financial hit, but we believed in it so strongly and emotionally that we did it. You know, it would have been nice to have that extra money, but we don't regret it.*

Besides such reasons as urbanization and development, the uncertainty of communication with potential heirs was another reason some landowners put CEs on their land. Participants noted that they were not sure if their children would want to continue the

landownership tradition. In circumstances where participants' heirs would want to sell the land, a CE in place would restrict that land from subdivision and development at any point in the future. In this way, the landowners found CEs to be a dependable conservation strategy that would ensure the security of the land in a long run. For example, the uncertainty of the communication with the children was part of Sam's reasoning for setting up a CE on his land:

*We didn't want our children or anybody who came after us to mess up all that we've been trying to do all our lives. That's why we have a conservation easement... Just the uncertainty of communication with our children and whether they'd be of the same mindset that we are. That spurred us on some.*

While a CE was discussed as one of the most practical options to protect the land in perpetuity, the landowners also mentioned participation in PLC programs other than CEs. In these conversations, participants shared that the needs of the land often drove them to join PLC initiatives. For example, Ron was one of the interviewees whose incentive for participation in the TPWD Managed Lands Deer Program arose from the overpopulation of white-tailed deer in the region where his property was located. Ron and his siblings who managed the family ranch followed the TPWD's recommendations for the number of harvested deer per year:

*We also have a wildlife management plan, [which] depends on the conditions... We have what we call a Managed Lands Deer Program from the Parks and Wildlife Department, which sets our harvest ratio each year based on the survey of the population. I mean, one of the greatest competitors of plants and the environment is*

*white-tailed deer... They change the landscape completely! ... So, we harvest deer based on what Parks and Wildlife recommends.*

The needs of the land were accounted for in Sam's decision to participate in a wildlife management program, as well. Sam formerly ran some cattle on his land until he realized the scarcity of the native grasses on his property due to its topography. Sam's experience represents another example of the land's needs being advanced through participation in PLC programs:

*We did that [ran cattle] until about three or four years ago, when I decided that the cattle were too much for our land, which is really rocky and not much grass on it. And I needed to go for the wildlife valuation, so we switched over. I haven't had any cows, I got the cattle off then.*

Furthermore, participants shared that they carefully chose what specific program would best fit the land considering its resources, location, and other contextual factors. Additionally, the landowners indicated that they would prefer a program that they found reliable, transparent, and flexible in implementation. For example, Dan described how he selected the programs he enrolled his land in:

*Part of it was getting to know the organizations and the extent that I felt like they would be reliable partners, understanding the programs well enough to feel like we were willing to accept the risks or the obligations that were with the funding... I think some of the programs allow some flexibility in terms of how you implement the programs. And that's helpful just because of all the variables at play... If we could have some latitude as to how we implement to get the desired result, then that's nice.*

Furthermore, the ability to generate income from participation appeared important, as well. For example, even though Jason and Susan set up a CE primarily for protection of their land from development, the financial aspect of having the land under a CE seemed influential:

*There was a financial incentive for that as well, because I get a tax benefit, because it says you're gifting a lesser value to your conservation organization. And so, I enjoy that tax benefit. That was part of the reason, but mostly it was just because I wanted to really preserve the land as is.*

Participants appreciated the financial compensation associated with enrollment PLC programs, and some appropriated it as part of the budget to continue supporting the land operation. Dan, who was in process of reducing the livestock numbers on his land at the time of the interview, shared his opinion regarding financial incentives of PLC programs:

*Part of my strategy has been to be able to have a less intensive livestock operation and to use basically the development of ecosystem services as a revenue source of offset the loss of ag income. So, that's been kind of an approach that we've used. And sometimes that's just income, and another time, the amounts are large enough that they function almost a little bit like an endowment, you know, where the money can generate income to offset the yearly operating expenses.*

Finally, while the respondents indicated that they were part of both government and non-government PLC initiatives, they predominantly preferred working with the latter. Even though some landowners participated in PLC programs run by government agencies, the general attitude towards working with government was largely negative. For example, Cindy, who was employed in the government sector, did not consider government a suitable

partner in private land management. Over the last fifteen years, she had been enrolled in the Conservation Reserve Program with the USDA Farm Service Agency. She described her experience with this program as follows:

*The governmental programs are really messed up, and I sure don't trust them. There's been several occasions over these fifteen years, it's a lease after the fact, so you don't graze for a year, and then they pay you... There's been three or four occasions when they didn't pay at the end of the year until months later, because the federal budget this and that. I don't know what the reason was, but it's not ethical, and it doesn't really align with our ethics.*

Cindy was not the only landowner who expressed mistrust in government. Ron also shared that he could not trust government in the land-management aspects related to agriculture. Ron's overarching message was that the government lacked the representation of people who were raised in the country, and therefore could not know and appreciate the abundance and significance of the natural resources for human well-being. He explained:

*What we've found with government plans is government involvement is a hindrance, they don't really help... because the regulations are put together by the people who can't find the North Star. So, you end up doing things that you'd rather not do in order to comply with the government program, because you'll get in trouble if you don't comply with it.*

In contrast, the landowners enjoyed working with the non-government PLC initiatives. For example, Jason and Susan shared their experiences working with the Texas Land Conservancy:



*They [the Texas Land Conservancy] are terrific people, and it's always fun to get them out [on the land] because we could go and explore, see things we hadn't noticed before... It's been very nice to work with them, and it's very nice to have a partner in the land conservation.*

The majority of participants were enrolled in PLC programs. The interview data showed that the landowners' participation in such programs was driven by multiple factors, among them were development pressures, personal circumstances such as the uncertainty about the heirs' plans for the land, and the pressing needs of the land. Such program attributes as dependability, transparency, flexibility, and financial compensation for conservation activities constituted the characteristics that would make a program appealing to the landowners. While both government and non-government programs were mentioned, participants favored the latter often due to general government mistrust.

## CHAPTER V

### DISCUSSION AND CONCLUSIONS

#### **Introduction**

The recent land use trends indicate a significant increase in the loss of privately-owned open space to land fragmentation and development nationwide, and in Texas in particular (USDA, 2015; Wilkins et al., 2003). Given the growing rate of private land conversion and the role of landowners as the main decision makers in privately-owned landscape, it was important to investigate the underlying processes contributing to existing land use dynamics. I conducted the present study to address the need for a better understanding of the socio-psychological factors associated with landownership by constructing a shared essence of participants' lived experiences as landowners. Specifically, I sought to explore what relationship these individuals have with their properties and how they make decisions to join PLC programs. Furthermore, the purpose of this phenomenological research was to provide an in-depth understanding of landownership as a socio-psychological phenomenon. This was accomplished by investigating two research questions: (1) What relationship do landowners have with their land? and (2) How do landowners make decisions regarding their participation in PLC programs? The results presented have been interpreted through the framework provided by the theory of psychological ownership (Pierce et al., 2001).

This study expands the understanding of the socio-psychological factors associated with landownership and management of private landscapes. The findings demonstrate a profound emotional connection that landowners feel towards their properties and the importance of this affective tie in their land-management decisions. The application of the

theory of psychological ownership provided a sensible framework to explore landowners' possessiveness towards their properties: however, this theory has been shown to be limited in its ability to capture the full complexity of the landowners' feelings and experiences. Specifically, it appears insufficient to account for and explain the landowners' environmental philosophies underlying their relationship with the land.

The findings indicate that landownership as a socio-psychological phenomenon refers to the continual cycle of the reciprocal owner–land relationship that exists at the intersection of ecocentric and anthropocentric views of the land and nature. Based on these findings, I further propose a definitional model of landownership as a socio-psychological phenomenon.

### **Landowners' profile**

The results of this study show that Texas landowners come from diverse backgrounds and have differing motives for owning land. The socio-demographic traits of participants in this research were somewhat similar to the ones of lifestyle-oriented landowners from past studies (e.g., Mendham & Curtis, 2010). Most respondents were married, held a 4-year college degree or higher, and owned from 112 to 250 acres, with the range in property size from 35 to 35,000 acres. However, the respondents in this study appeared generally older than lifestyle-oriented landowners as defined in the existing literature, being on average 68 years old (e.g., Sorice et al., 2012a). Six out of the nine landowners reported practicing some form of agriculture on their land, with none operating their property mainly for agricultural production purposes. Like lifestyle-oriented landowners, participants in this study reported a relatively high income, starting at \$100,000 a year, that originated from sources outside the land.

Even though the present socio-demographic profile has much in common with the characteristics of lifestyle-oriented landowners from the past research, the drivers for landownership recorded in this study were found to resemble a combination of lifestyle-oriented motivations (Sorice, 2012b; Gosnell et al., 2006) and agricultural motivations (Liffmann et al., 2000). While an ability to lead a rural lifestyle remained important, several landowners in this study (n = 6) were engaged in some sort of agriculture, primarily as a continuation of the family tradition, as a hobby, or to qualify for agricultural tax exemption. In their research, Sorice and colleagues (2014) used the term “multiple-objective landowners” to describe a similar group of people who were distinguished by an array of motivations for owning land, including lifestyle aspirations, agricultural production, and financial reasons. Even though the multiple-objective landowners in their study were not as profit-driven as compared to agricultural producers, the ability to generate income from agricultural production remained an important consideration for the former group of individuals (Sorice et al., 2014). In the present research, however, profit motivation has not distinctively emerged as a driver for owning land.

The landowners in this study held strong environmental views and were actively involved in stewardship of their properties. As part of their conservation efforts, several respondents (n = 8) reported following a land management plan, often composed with help from natural resource professionals. The land management plan outlined a baseline inventory and detailed management actions necessary to meet the goals set for the land. Additionally, it served as a tool to evaluate the outcomes of particular management actions and the general progress towards the desired land management goals.

Many participants considered collaboration with PLC entities essential for the effectiveness of their stewardship practices and the well-being of their land. The majority of the interviewees (n = 7) stated that they were part of one or more PLC programs, on both government- and non-government levels. A CE represented the most popular conservation initiative discussed during the interviews. Four landowners reported that they already had placed a CE on their land, and three were in the process of establishing a CE on their properties.

Participants shared that their land had been in their family an average of 29 years. The existing quantitative studies reported an inverse correlation between years of landownership and an increased interest in environmental stewardship (e.g., Kabii & Horwitz, 2006). According to these studies, short-term landowners exhibit higher interest in environmental conservation comparing to those who owned the land for a significant period of time. Even though establishing this type of relationship was not the goal of the current research, the interviews with the landowners revealed that all participants had been intensively involved in conservation of their properties throughout the term of their ownership.

The interview data show that participants share respect for their properties and a strong sense of responsibility to protect the integrity of their land and privately-owned landscape overall. Consistent with the past work, I conclude that landowners experience an emotional connection to their properties and the natural resources found on their land (e.g., Cearley-Sanders, 2005; Lai, 2007).

## **Landowners' lived experiences with the land**

With the first research question, I sought to explore the nature of the owner–land relationship. The results of the data analysis indicate that Texas landowners experience a deep emotional connection to their properties that evolved over the course of time. However, the circumstances under which this emotional bond began to develop substantially differ between inheritors and purchasers. For the former, who had access to their land when growing up, the relationship with that specific piece of geography began during their childhood years, long before they officially became in charge of the property. Whereas, for the purchasers in this study, the relationship with the land began with physically acquiring the property. With the passage of time, positive experiences on the land and interaction with its resources contributed to the formation of the buyers' affective connection to the property.

In regards to the first research question, two themes emerged from the interview data analysis: a respect for the land, and a sense of responsibility.

### ***Respect for the land***

The results show that feelings of respect for the land are closely tied to perceived benefits of landownership. The ability to maintain a desired quality of life, feel connected to the natural world, as well as feel connected to the history of the land are among the benefits of owning land. The continuous interaction with the land and positive experiences on the property are essential for the formation of the feelings of deep appreciation and respect for the land.

### ***Land as a supporter of the quality of life***

Regardless of the length of ownership and method of land acquisition, the landowners shared a feeling of deep respect for the land. This emotional state, in part,

originated from the perceptions of the land as a supporter of a desired quality of life. Maintaining a rural lifestyle, facilitated by landownership, appeared an important consideration for Texas landowners. The ability to lead a desired lifestyle was identified as an important motivation for landownership in previous research (Gill et al., 2010; Gosnell & Travis, 2005). Moreover, Sorice et al. (2012a) observed a shift from traditional to lifestyle-driven motivations for landownership in the privately-owned landscape. Using a quantitative approach, these authors examined landowners' reasons for owning land, and further profiled their participants based on the importance of each motivation. The present study expands the understanding of lifestyle-related reasons for landownership by providing in-depth knowledge in regards to the experiences that constitute a preferred way of living for landowners. Through landownership, the respondents in this research sought peacefulness, privacy and security. The attributes of the preferred lifestyle included independence, "freedom to move around", growing their own food, participating in their favorite outdoor activities, and not having close neighbors or hearing traffic noises.

The interaction with the land continued playing an important role in the owner-land relationship over time. The majority of participants (n = 8) used their properties as their primary residence, which offered numerous valuable opportunities to interact with their land and resources daily. Considering it a privilege to call their land "home", the interviewees described living on the land as a life "in paradise", full of natural wonders and exciting discoveries. Similar to the conclusions of Lai and Lyons (2011), I found that continuous interactions with the natural landscape surrounding the landowners' homes intensified the feelings of belongingness to the place they owned. Living on the land allowed autonomy, freedom, and control over their own space, which represented essential components of the

quality of life for the landowners in the present research. With the multitude of lifestyle-related benefits that the land could provide, Texas landowners could not imagine living anywhere else but on their own piece of land out in the country.

In addition to the enjoyment of their preferred way of life, respondents respected the land for its sustaining functionality, and tended to perceive it as a caretaker or parent who provided for their livelihood. Fresh food, clean water, and an additional income constituted some of the tangible benefits that the landowners derived from their land. Furthermore, participants strongly believed in healing properties of the land, thus valuing it as a supporter of physical and psychological health. The Texas landowners enjoyed the physical exercise that came with maintaining the property, and viewed working on the land as a very desirable way to keep physically fit. Living on the land surrounded by the natural environment was favorable for their psychological well-being as well. Interaction with nature, facilitated by landownership, was often associated with such mental health benefits as inspiration, rejuvenation, and spiritual wellness. These results are consistent with the findings of the study by Quinn and Halfacre (2014), who investigated South Carolina farmers' experiences that facilitated the formation of place attachment. In their study, feelings of place attachment were found to develop through the land's functionality as a supporter of farmers' physical and psychological health. The application of the construct of psychological ownership in the present study resulted in similar findings. This may be due to the conceptual similarity between place attachment and psychological ownership, as both constructs can be used to understand the relationship between the self and a place (Matilainen et al., 2017).



*Land as a connection to the natural world*

Participants recounted that the ability to remain in close touch with the natural world through landownership was another reason for respecting the land and its resources. They were endlessly fascinated and curious about wild animals, native plants, and topographic features of their properties. These individuals had a distinctive environmental ethic, considering themselves an integral part of a larger ecological family of living and non-living organisms. The landowners' environmental views were, in part, based on the belief that humans needed to find a way to coexist with nature to ensure the mutual survival of humanity and the natural world. Therefore, exploring and learning about nature was an important part of participants' relationship with their land. In their research, Quinn and Halfacre (2014) found that the unique knowledge acquired through farm exploration was the driver for the formation of the landowners' feelings of attachment to their land. Participants of the present study were able to gain the intimate knowledge of their land and its resources through continuous exploration, which appeared to strengthen their emotional tie to their properties. Over time, the landowners learned about the wildlife species inhabiting their property, the needs of their land, and what land-management challenges to expect throughout the year. I further found that the personal knowledge unique to their own piece of land allowed the landowners to manage their properties responsibly, with the land's needs and benefits in mind. In this way, participants perceived the land as a teacher who offered lessons in an outdoor classroom, and themselves as students who were responsible for learning and applying the knowledge in practice.

### *Land as a link between the past and present*

The landowners, both inheritors and buyers, also respected the land for its power to bridge the past and present. They became very informed about what happened on their land before they assumed the responsibility to manage it. The inheritors perceived the land as the means to preserve the family tradition as well as maintain their connection to the history of the land and late family members. This finding supports the results of the study by Lai (2007), who, using the place meaning construct, investigated the meanings that landowners had about their properties. Her findings suggested that landowners experienced a sense of connection to the people and events that were historically associated with the land in their ownership.

Interestingly, the buyers in this study, who had no ties to the land until they acquired it, appeared to be very educated about the events that took place on the property throughout history before their time. Ownership of a parcel of land allowed them to develop a very apparent self-association with the historical events on the land. Additionally, during the term of their ownership some landowners designated special places on their properties to commemorate significant events in personal lives. The existence of such places contributed to the uniqueness and symbolism of the land and its relevance to the landowner's life. The land's functionality as a link between the past and present allowed the respondents to feel a part of history, which further formed the perceptions of their presence on the land as more historically significant.

### *Sense of responsibility*

The landowners in this study were highly aware of the present and potential threats to the well-being of their properties. Participants spoke about these concerns in terms of

many factors and processes that they could not influence or control. These included encroaching development, fragmentation, natural disasters, and succession-related challenges. It was apparent from the interviewees' words that all of these out-of-control factors represented emotional issues for them, specifically because these people had no power to improve the situation. However, according to the respondents, their principal goal as landowners was to protect their land and leave it in a better state. Therefore, they considered it their moral obligation to enhance the condition of their properties while their lifetime allowed.

The existing literature has shown that private landowners exhibit a relatively high interest in environmental stewardship (Lai, 2007; Cearley-Sanders, 2005; Quinn & Halfacre, 2014). Following this line of research, I have found that, while enjoying the benefits supported by the land, the Texas landowners share a sense of responsibility to protect their land from the ongoing and future challenges compromising the integrity of their properties.

#### *Awareness of threats*

Landownership involves many challenges related to land management and operation. The main, and possibly insurmountable, challenge is encroaching development, which Wilkins and colleagues (2003) conclude is the main driving force behind the land fragmentation and conversion in the Hill Country. For participants in this study, urban development represented "the major threat" to the well-being of their land. The respondents criticized developers for "stealing the value" of living in the country by bringing new subdivisions, light pollution, noise pollution, increased traffic, and increased trespass. The interviewees tended to link these problems to more global issues such as overpopulation and environmental illiteracy. According to the respondents, these issues were especially apparent

among the urban public, who they largely viewed as detached from nature. The landowners, who enjoyed independence and freedom supported by landownership, predominantly described development in terms of an infringement on their rights as a landowner. Feeling in control of what happened on and to their property was an important part of being a landowner. Therefore, participants grew territorial and protective when they felt that the approaching development might affect their land. Perceived vulnerability, fear, and stress were among the complexity of emotions that the respondents associated with urban development.

Furthermore, the landowners voiced concern that their neighbors might decide to take advantage of the high market value of the land in the area and sell their properties to developers. Due to its proximity to Austin and San Antonio and its richness in natural amenities, the land in the Hill Country has recently been in high demand (Hill Country Planning Studio, 2015). A desire for additional income represents one of the factors contributing to the increasing number of sale transactions and the appearance of smaller ownerships in amenity-rich areas nationwide (Gruver, 2010). In the present study, the potential loss of the rural character of the Hill Country to the development processes was a very emotional concern. Similar to encroaching development, participants considered this challenge insurmountable as they had no control over decisions of other people in the area.

Natural disasters, such as drought and flooding, represented an additional concern associated with owning land. While losing the land's biophysical features to destructive natural forces was always heartbreaking for the landowners in this study, it did not seem to change how these individuals felt for their properties. They were empathetic and compassionate towards their land after it suffered the impacts of natural disasters. The

landowners considered it their moral obligation to help the land recover, and to minimize the impacts of future disasters by incorporating the possibility of such destructive events into their land management plans.

During the interviews, all respondents shared that they wanted the landownership tradition to remain in the family forever. When discussing the land's future, all landowners, except for one who did not have children, mentioned passing down the property to their heirs as the most desirable succession option. Even though inheritance is a popular type of land transfer in the U.S. (Kaplan et al., 2009), family communication is often problematic when it comes to the intergenerational succession (Earls & Hall, 2018). Likewise, in the present study, participants expressed concern that their heirs might not share the same enthusiasm and devotion to the land. The uncertainty regarding the land succession and heirs' future plans was among the most pressing and challenging concerns that the respondents had for the future of their properties. This lack of communication in the context of the intergenerational land transfer has previously been discussed in research. Kaplan et al. (2009) studied succession decisions among farmland families and concluded that the unclear communication represented an obstacle to the efficient succession planning. Gruver (2010) reached a similar conclusion in his exploration of the succession decision processes among forest owners in Pennsylvania. The lack of knowing whether heirs would want to continue the forest ownership tradition was identified as a major factor impeding succession decision-making among some landowners in Gruver's (2010) research. The findings of past research, and those in the present study, show that family relationships and a lack of communication about a property's future are common issues experienced by rural landowners.

Notably, purchasers expressed more concern about the lack of potential heirs than inheritors. This could be due to the novelty of the landownership practice in the purchasers' families. Participants who bought the land predominantly did it at a later stage in life, usually with retirement plans in mind. Their children, therefore, did not grow up in a rural setting, which might explain their unwillingness or hesitation regarding the continuation of the landownership tradition. Whereas the inheritors, who manage multi-generational land, allowed their children to interact with the property and form their relationship with it throughout life. To maximize the possibility of their children's desire to continue the landownership tradition, these landowners fostered the love for the land in their future heirs from a young age. As a result, this group of respondents was generally confident that their children and grandchildren would have an interest to continue the family tradition.

#### *Perceived moral obligation*

The landowners described themselves as being profoundly attached to their land. Such feelings inspired them to take responsibility for the protection of the natural resources found on their properties for future generations. While they owned the title for the land, they perceived landownership primarily as a privilege that came with an honorable responsibility to steward the landscape while their lifetime allowed. By taking care of the land, these individuals felt empowered, honored, and proud, striving to inspire others through setting an example of responsible stewardship. In this way, the landowners assumed the role of stewards of their properties. A desire to manage the land with no harm to its resources constituted the main principle that the respondents followed in their stewardship practices. Active stewardship, therefore, was a necessary aspect of landownership. These results are consistent with the conclusions of Cearley-Sanders (2005), who in her investigation of the

relationship between Texas landowners and their land, established that the stewardship identity was prominent among the landowners with a strong land ethic. In contrast, those who owned the land as an investment and perceived it mainly as a tool to generate profit held the “frontier hero” attitude (Cearley-Sanders, 2005). The sample of the present study does not include commercial producers, which makes it impossible to determine if these individuals display the stewardship identity. Future research should investigate self-perceptions of commercial producers in their relationship with their land.

Even though responsible land management was a physically demanding job, the landowners associated it with feelings of joy, self-fulfillment, and satisfaction from the realization that they were helping nature. They regarded stewardship as a gratifying activity because the land always reciprocated, rewarding the landowners for the resources invested into its well-being. For example, in exchange for stewardship, the landowners could enjoy the tangible benefits that the land provided, such as extra income or fresh food. Additionally, the landowners appreciated the ability to observe the changes of the land cover as a result of such land management practices as tree eradication or underbrush clearing. The land, in this way, visually reflected the progress of the respondents’ land-management activities, which these people found rewarding. In their study of Texas ranchers’ connection to the land, Peterson and Horton (1995) arrived to similar conclusions arguing that ranchers’ felt interdependency with the natural world, which guided their stewardship decisions and practices. The ability to receive back from the land and observe the progress of their own work motivated participants to continue improving the land’s condition, further reinforcing their identities as stewards, guardians, and caretakers of their properties.

As part of their stewardship, many participants considered it their moral obligation to educate others about natural resources. The landowners in this study set themselves apart from the urban population, considering the latter “raised in captivity” due to the limited space and access to natural settings in city areas. Participants agreed that living in the city deprived people of opportunities to learn about the critical importance of the natural resources found in the private landscape. Therefore, they perceived it as their moral obligation to improve the natural resource knowledge among people who did not otherwise have access to natural settings. Allowing limited public access was a common practice among participants in this study. Enhancing education about natural resources and facilitating opportunities for recreation and personal interaction with nature were the overarching reasons for inviting the public to the land. Through allowing public access, the landowners in this study were also able to share the health-related benefits of being in nature. The respondents felt very happy and proud to provide their visitors with unique experiences in natural settings. They found it enjoyable to observe the impact that their land had on visitors, expand their personal knowledge by learning from their guests, and build new relationships.

Personal environmental views and perceptions related to human–nature interaction were essential for maintaining the owner–land relationship. Managing the land with no harm for future generations constituted the foundation of the landowners’ conservation ethic. In participants’ perspectives, humans needed to learn how to coexist with nature rather than dominate it. Therefore, maintaining an intimate relationship with nature was considered essential for human well-being and prosperity in the future. This environmental philosophy had a profound effect on how the landowners understood their role in the owner–land relationship. To them, being a landowner primarily meant being a responsible steward of the



land in their possession. Many respondents found landownership empowering in a sense that it enabled them to practice stewardship on their properties. Moreover, stewardship was necessary for remaining in balance with other members of the natural community. In participants' views, once they became legally in charge of the land, they assumed the responsibility for its well-being forevermore. Responsible stewardship was understood in terms of doing what was best for the land, which included the efforts to protect natural resources, preserve the landownership tradition in the family, educate the urban population about nature, as well as incorporate professional opinion in land-management decisions.

### **Decisions to participate in PLC programs**

The second research question explored how landowners made decisions to participate in PLC programs. The findings indicate that the landowners in this research collaborated with professionals through participation in PLC initiatives to ensure responsible land management. While some interviewees stayed informed regarding the available PLC programs, others had only limited knowledge about those initiatives. Seven out of nine landowners shared that they were enrolled in one or more PLC programs. In general, the respondents treated their participation in such initiatives not only as extra encouragement to practice conservation on the land, but also as a way to receive assurance from natural resource professionals that their management practices were sustainable and beneficial for their particular piece of land.

When choosing a program in which to participate, the landowners carefully weighed the costs and benefits of their potential enrollment. The foremost aspect they looked at was whether the program addressed the urgent needs of the land. For the majority, the protection of the land from the impacts of the encroaching development was of the utmost importance.

The respondents in this study predominantly considered a CE the best method to preserve their land in the current condition. These results are in line with the case study by Horton and colleagues (2017), who found that growing development was one of the motivators to enter a CE among landowners in Colorado. Likewise, the present study found that a CE, with its promise to protect the land from human-driven forces in perpetuity, represented the most viable and widely preferred conservation tool among Texas landowners.

The landowners in this research were willing to financially invest into the establishment of a CE on their land even though it often involved a significant expenditure. The monetary aspect associated with placing the land into a CE typically did not represent a concern, as participants were positive that the immediate and long-term benefits of this conservation tool far outweighed its costs. Once a CE has been established, the landowners felt relieved and assured that the land would permanently stay as it was, regardless of the development pressures or heirs' decisions to sell it in the future. These results are contrary to the findings of Miller et al. (2011), who investigated the factors influencing agricultural landowners' preferences for setting a CE among landowners in Colorado and Wyoming. The authors observed that participants in their study did not favor an agreement in perpetuity, as it would limit the land-management options of their successors. In contrast, I have found that the aspect of permanent land protection seemed appealing to the respondents, as it closely aligned with their conservation ethic. These people strongly believe in CEs because they not only protect the land from development, but also promote their conservation views forevermore. The evidence from the current research highlights that, by enrolling their properties into a CE, the Texas landowners seek to retain perpetuate control over the land. Gruver et al. (2010) reached a similar conclusion, finding that a desire to have control over

future land uses was among the most influencing factors affecting decisions of forest owners to enroll in a CE.

Besides CEs, the respondents were involved in a variety of PLC initiatives selected primarily based on the needs of their land. Holistic resource management, invasive species management, grazing programs, and riparian zone regeneration initiatives were among the most popular types of PLC programs in which the landowners engaged. It was important for participants to protect the resources found on their land in a correct and responsible manner, and therefore, they valued the opportunity to receive professional guidance through their participation. Furthermore, the respondents regarded their participation in PLC programs as an educational experience. Being part of a PLC program allowed the interviewees the opportunity to expand their knowledge on the land-management practices suitable for their specific piece of geography.

Reliability, transparency, and flexibility of implementation were among the characteristics that the landowners considered when choosing a program. Participants partnered with government and non-government programs to receive guidance regarding proper land management. However, they generally preferred the latter, criticizing the former for the inefficiency of delivery and implementation of PLC programs. Mistrust in government and a fear of losing managerial control of their properties as a result of participation in government-level PLC programs has been documented in the existing literature (e.g., Miller et al., 2010; Sorice et al., 2013; Brook et al., 2003; Reading et al., 1994). In this study, I have found that personal experiences working with government agencies on projects related to private land stewardship play an integral role in the formation of the landowners' opinions of government as a conservation partner.

Additionally, it was important for the respondents to be financially compensated for their participation in PLC programs. All interviewees discussed the importance of the financial aspect of PLC participation, which was predominantly necessary for further support of land operation and continuation of stewardship practices. These results somewhat replicated the past research investigating private landowners' motivations for joining PLC initiatives. For example, in their mixed-methods analysis, Ernst and Wallace (2008) established that financial compensation was a desirable, although not the most important, incentive to join PLC programs among the landowners in Colorado. Similar to the present research, these authors found that the income from conservation was chiefly viewed as a necessity for future stewardship practices.

Generally, conversations about the respondents' participation in PLC programs were much shorter comparing to the length of discussions about their emotional tie to the land. While participants answered all questions asked during the interviews, they did not seem to be willing to share extra information or detail regarding their participation in PLC initiatives. This could be due to a strong sense of independence and property rights that are common among private landowners (Gruver, 2010). These data show that Texas landowners are interested in PLC programs if such initiatives meet certain expectations and management priorities that these individuals set for their properties. These findings also indicate that landowners in the Hill Country value professional opinion as a reliable resource to guide their land management practices.

## **Theoretical implications**

### *Psychological ownership in the landownership context*

In the present study, I offer significant advancements towards the understanding of landownership in its socio-psychological sense. I do so by demonstrating that landownership is a psychologically experienced phenomenon, the meaning of which goes beyond the understanding of it as a land title. In the socio-psychological sense, landownership encompasses a complexity of individuals' worldviews, experiences, emotions, and the resulting land-management behaviors. The application of the theory of psychological ownership to investigate the landowners' connection to their properties reveals certain psychological aspects of this relationship. In particular, all intraindividual motives indicative of the feelings of possessiveness – efficacy and effectance, self-identity, and having a place (Pierce et al., 2001) – have surfaced in participants' lived experiences as landowners.

### *Efficacy and effectance*

Landownership facilitated the feelings of psychological ownership in a sense that it provided the respondents with a territory of their own, empowering them as the primary decision makers over the space in their possession. Autonomy allowed the landowners to protect the valuable benefits associated with landownership, safeguard desired identities, and steward the land in accordance with their personal environmental ethic.

In participants' lived experiences, the land represented a source of tangible and intangible benefits related to the preferred quality of life. Managerial control over the land was necessary to preserve the land's functionality as the provider of these important benefits. In addition, through the power of control the landowners were able to protect their identities, which were deeply engrained in the land they owned. In this way, spatial control enabled the

landowners to ensure the security of their personal well-being on the land. Any threat to the landownership-related benefits and personal identities brought by unpreventable factors, such as urban development, resulted in the feelings of helplessness, vulnerability, and a perceived loss of security.

While independence and control were important attributes of the landowners' self-image and quality of life, they also served as essential means to engage in efficient stewardship practices on the land. According to the theory of psychological ownership, competent use of the target of ownership is required for the development of one's feelings of possessiveness. Competence is achieved through the exploration of one's environment and acquisition of the in-depth knowledge necessary for effective interaction with that environment (Pierce et al., 2003). This aspect of psychological ownership was very relevant to the landowners' experiences, in which independent personal choice was essential to ensure proper stewardship. The landowners in this study strongly believed in the significance of their unique experiences on the land and the resulting intimate knowledge acquired through continued interaction with their properties. Similar to the ranchers in the study by Peterson and Horton (1995), the landowners in this research maintained that land-management knowledge was limited to individual experiences on the land. In other words, those who do not stay in close touch with the land have no way of knowing its needs and, consequently, cannot provide the required care to the land and its resources. Therefore, the landowners' extensive interaction with their property gave rise to their self-perceptions as the most suitable and knowledgeable stewards on their specific piece of land. Even though they often relied on professional advice in certain aspects of land-management, they never favored conservation initiatives that potentially threatened their autonomy.

### *Self-identity*

This study provides evidence that landowners' self-concepts were closely interwoven with owning land. In their lived experiences, participants viewed themselves through the lens of their relationship to their properties. These results are in line with previous research suggesting a link between self-identity and landownership (e.g., Cearley-Sanders, 2005; Lai, 2007; Lähdesmäki & Matilainen, 2014). For the landowners in this study, the land represented the fundamental symbol of self, and without the land in their possession, participants' self-image would be lost completely. The self-identity dimension of psychological ownership was apparent in the landowners' references to their land as "it's my everything", "it's who I am", "it's my life", and "it's my family heritage".

Both inheritors and buyers had their self-images rooted in their land. The inheritors, viewing the land primarily as the family tradition, considered themselves as a link in the chain of generations who were carrying the family legacy through time. They described their connection to the land in terms of the land's past, the historical importance of certain land-based activities, and their childhood experiences on the land. In this light, they spoke of the land reverently, proudly referring to themselves as guardians of the multi-generational family tradition. For those who purchased their properties, the land mainly represented a means to realize their lifestyle aspirations and stewardship identities. They were passionate about stewardship and believed that their presence on the land was essential to protect its resources for future generations. Regular interaction with the land allowed these landowners to gain an intimate knowledge about their properties, and thus further embrace their land as a part of their self.

These findings confirm that the land exists as a symbolic expression of self in the participants lived experiences. Pierce and Jussila (2011) explain the connection between the self and possessions in the following way: “We are what we possess and what we possess is an important part of our sense of self” (p. 15). In the lived experiences of participants in this study, the presence of the close link between the self and the land shaped the landowners’ self-definitions. To safeguard this sense of connection, the respondents engaged in ecologically sound practices on their properties. Active and responsible stewardship was necessary not only for the longevity of natural resources, but also for the communication and continuity of the landowners’ identities through time (Pierce et al., 2003).

#### *Having a place*

Having a place, the third dimension of psychological ownership, was closely tied to the landowners’ strong sense of self-identification with the land. This dimension emerged as the landowners’ desire to manage and improve the land in accordance with their environmental ethic. All participants in this study held distinctive, although not always similar, environmental views, and utilized their land to communicate their conservation position to others. For example, the landowners who found open space more beneficial to the land’s health removed cedar trees to create the environment that they considered more aligned with their stewardship ethic. By manipulating the land, participants were able to create a desired space that supported their basic territorial needs by providing security, stability, and a place to dwell (Pierce et al., 2003).

Living and performing routine activities on the land daily also intensified the connection to the land as a place to belong. Several landowners built houses after purchasing their land that they designed themselves in accordance with their preferences and desires.



Having a dream house on the land and using it as the primary residence further contributed to the perception of the land as “home”. In addition, feeling connected to the land’s history and enriching it during their term of ownership also facilitated feelings of belongingness. For example, making the land a preferred place involved the creation of unique features special to the land’s history and the landowners’ personal histories with the property.

Landownership, therefore, satisfied the landowners’ need to possess a space of their own, which they customized and managed as they saw fit. In participants’ lived experiences, the land was a significant place where they spent quality time with family, escaped the city, connected with nature, relaxed and rejuvenated, and engaged in the activities they found positive and pleasing. Psychological experiences of the land as a place to belong included the feelings of security, comfort, freedom, and personal fulfillment.

### ***Landownership as a socio-psychological phenomenon***

Pierce et al. (2003) discussed that the theory of psychological ownership may not be universally applicable in explaining relationships between humans and various targets of ownership. They suggested that multiple contextual factors might affect psychological ownership. Even though the results of this study illustrate the existence of feelings of possessiveness among the landowners, the theory of psychological ownership appears to be insufficient to fully capture the complexity of their lived experiences with the properties. Specifically, this theory does not account for the presence of the environmental philosophies – ecocentrism and anthropocentrism – that shape individuals’ views of the land and humans in relation to the natural world. The present study contributes to the body of knowledge by indicating that the relationship between landowners and their land embraces both human-centered and nature-centered philosophies.

### *Ecocentrism and kincentric views of nature*

Psychological ownership restricts the existence of the target of ownership to its instrumental value for the owner. The utilitarian approach at the basis of this theory cannot fully reveal the essence of the owner–land relationship due to its strong focus on the instrumental value of an *object* (Pierce et al., 2003). However, according to the interview data, owning land does not equal possessing an object because the land is a living being, valuable in its own right. In the landowners' lived experiences, this sentiment becomes evident when they compare the land with a teacher, family member, nurturer, and a business partner. Therefore, the land, as any living organism, deserves moral consideration. The environmental ethic grounded in the idea that all life forms, human and nonhuman, have intrinsic value and the right to existence aside from their utility to humans is known as ecocentrism (Shoreman-Ouimet & Kopnina, 2016). This ecocentric ethic shapes the landowners' understanding of the land and themselves as equal parts of a larger ecological family, which bears significant implications on how these individuals perceive their relationship with the land.

The landowners share the belief that humans cannot rightfully dominate nature and subdue it to their needs. On the contrary, human well-being as a species depends on their ability to maintain an ecological balance with nature. Living harmoniously with the natural world means coexistence with all its elements, including the land and the resources found on it (Bujis, 2009; Peterson & Horton, 1995). The ecocentric view of the land as a fellow organism creates a sense of kinship that the landowners feel towards their land. Sharing this kinship with the land is essential for the survival of all organisms—including humans—in the complex natural environment.

The term *kincentric ecology* was introduced in 1994 by Dennis Martinez to explain the relationship between indigenous people and the natural places they consider sacred (Martinez & Hall, 2008). The environmental philosophy of indigenous populations is centered around the belief that humans should live interdependently with all forms of life (Salmón, 2000). A sense of kinship with animals, plants, mountains, and water implies that humans are not in control of nature, but rather are an integral part of the balanced natural community.

A very similar belief system was apparent in the landowners' lived experiences with their properties. The landowners believed that they were sent to their land by God, who entrusted them with the mission to ensure the longevity of the land and all living and non-living organisms found on it. For the landowners, the land is a sacred place, a sanctuary, where they can find refuge, security, spirituality, and live in harmony with nature. In the landowners' consciousness, the land is alive, dynamic, and responsive to human actions. This relationship to the natural world, supported through landownership, is based on the awareness that humans affect nature and nature, in turn, impacts the life of humans (Bhattacharyya & Slocombe, 2017). In other words, when humans harm nature they inevitably harm themselves. Mutual coexistence is essential for the preservation of the ecological balance in which humans are not superior, but equal to the other elements of the natural world. The landowners in this study believed that it was imperative for humans to find a way to coexist with nature for the mutual benefit of both. The land, in this way, provides a platform to maintain these mutual roles between humans and nature. Therefore, the owner-land relationship resembles a mutually-beneficial partnership in which the landowners and the land exist interdependently for the best interest of both. To secure this

reciprocal relationship, landowners engage in active stewardship, which is an essential component of owning land.

Based on the results of this study, I suggest further expanding the understanding of landownership as a socio-psychological phenomenon by demonstrating an existence of a sense of shared kinship with the land in the owner–land relationship. Viewing the land as kin is necessary for acknowledging the human–nature interdependence and understanding humanity’s place in the complexity of the natural world (Salmón, 2000). Mutual coexistence with the land, and the natural resources found on it, is a unique aspect of landownership. It extends beyond the scope of feelings of possessiveness formed under the condition when an object is subjected to the actions of its owner. Rather, landownership implies a two-directional relationship of coexistence with the land for the mutual benefit of both the land and the landowner. In the landownership context, the landowners’ managerial control over the land that they legally own does not assume their control over the natural world, of which their land is a part. Therefore, based on these findings, I maintain that the ecocentric view of the land is one of the two cornerstones of the owner–land relationship.

#### *Anthropocentrism and the future of human well-being*

The anthropocentric viewpoint regarding the human–nature interaction represents the other cornerstone of the relationship between landowners and their land. Anthropocentrism recognizes humans’ dominion over other forms of life and “sees humans as more important than nonhumans, valuing nature exclusively for its utilitarian use” (Shoreman-Ouimet & Kopnina, 2016, p. 7). The utilitarian understanding of the land is apparent in the landowners’ discussions about the land’s functionality as a provider of fresh food, clean air, income, and other benefits desired for personal well-being. However, in the

landowners' lived experiences, the anthropocentric view of the land always exists alongside the ecocentric philosophy. The extraction and enjoyment of land-based benefits must only occur in accordance with the ecological principals necessary to ensure no harm to the environment and the long-term availability of natural resources. In the landowners' perspectives, the optimal and ecologically sound use of the land is essential for the preservation of natural resources for future generations. The landowners believe that the land should be protected because people depend on the quality and availability of natural resources. In this way, the anthropocentric view of the land extends beyond the landowners' enjoyment of the personal benefits of landownership by embracing their concern for the well-being of future generations (Bourdeau, 2004). These findings add to the existing literature by highlighting the future-oriented focus of the owner-land relationship and its implications for their land management behaviors.

In their relationship with the land, the landowners' main goal is to steward it to conserve its resources for future generations. Land stewardship brings certain immediate personal benefits to the landowners, such as a visually appealing landscape, realization of stewardship identities, feelings of self-fulfillment and satisfaction. However, in the landowners' lived experiences, the primary focus of stewardship activities is on the well-being of people who will use natural resources in the future. Therefore, stewardship is essential so others may benefit from the use of the land in the years to come.

The focus on long-term human survival was apparent in the landowners' stewardship philosophy and land-management practices. The landowners in this study perceived stewardship as a duty they owed to future generations rather than an obligation they had to themselves. They defined stewardship in terms of responsible management that must lead to

the enhancement of the land's condition for the benefits of future generations. Part of this stewardship philosophy involved connection of their children to the land and developing the children's love for it to secure the land's future well-being. In addition, the landowners allowed public access to their properties in the form of B&B lodging, youth camps, consumptive recreation, and others. Inviting people to their land was a viable approach to educating those visitors about natural resources and the importance of natural resource protection. Participants believed that the more knowledge others had about nature, the higher the likelihood that they would learn to incorporate it into their daily behaviors. Finally, collaboration with natural resource professionals was also essential for stewardship practices to be effective and beneficial for the land's future. For example, partnerships with conservation organizations often led to the establishment of a CE on the land, to preserve the land in its current condition forever.

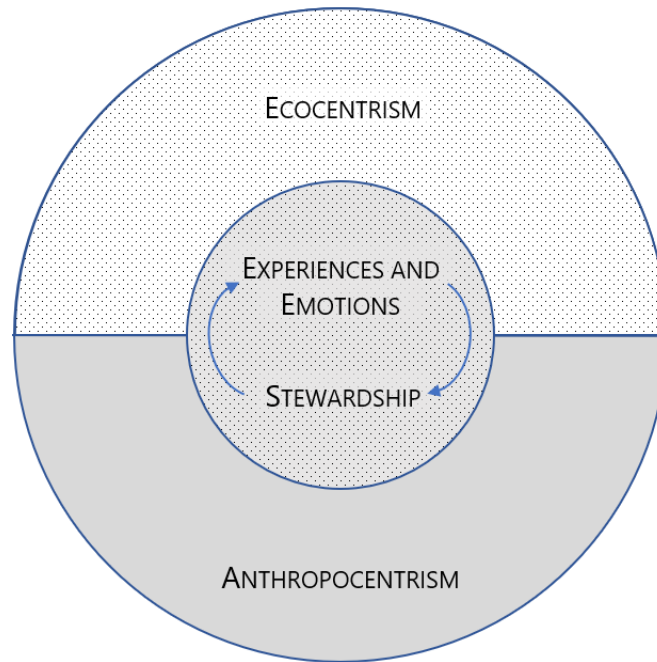
Furthermore, awareness of human-driven threats to the integrity of privately-owned landscape significantly impacted the landowners' land-management behaviors. They believed that the root of environmental degradation was in the widespread lack of natural resource knowledge. Observing the detrimental impact of human-driven factors on the well-being of natural resources, the landowners in this study felt as if nature needed their intervention, and assumed the role of caretakers and guardians of their land. The fulfillment of this role encompassed a wide diversity of land-management behaviors aimed at the protection of the longevity of the land for future generations. The respondents shared the belief that the best action they could take as landowners was to provide the land with proper care, to ensure the availability of natural resources for generations to come.

While the landowners receive personal benefits from stewardship, the ultimate goal of their conservation activities surpasses the scope of self. In the landowners' lived experiences, the anthropocentric view of the land revolves primarily around the belief that protection of the land is integral for the future well-being of humankind. In this way, it is the future generations that become the beneficiaries of the landowners' actions in the present.

*Definitional model of landownership as a socio-psychological phenomenon*

Multiple scholars have pointed to the need for a better understanding of landownership experiences and the relationship between landowners and their land (e.g., Cross, 2001; Quinn & Halfacre, 2014; Peterson & Horton, 1995). However, there still appears to be a lack of research focusing on socio-psychological aspects of landownership. I conducted the present study to address this knowledge gap through an in-depth investigation of landowners' lived experiences with their properties.

The findings of this research suggest that the meaning of landownership extends beyond the understanding of it as a set of rights and responsibilities for ownership of a particular piece of land. Specifically, based on these findings, I present evidence that landownership involves landowners' psychological connection to their properties, which has direct implications on how these individuals make land-management decisions. Synthesizing the results of this study, I propose the following definitional model of landownership as a socio-psychological phenomenon (Figure 2).



**Figure 2.** Definitional model of landownership as a socio-psychological phenomenon

According to this definitional model, landownership as a socio-psychological phenomenon occurs at the intersection of the two predominant environmental philosophies – ecocentrism and anthropocentrism. The overlap of these major belief systems constitutes the landowners’ environmental ethic, which is the core of the landowners’ relationship with their land. This environmental ethic shapes individuals’ perceptions of moral responsibility towards nature and their properties. Landowners’ environmental philosophies are dynamic and depend on multiple factors. For example, one’s understanding of stewardship may shift over time from increased education and experience.

Grounded in the combination of the ecocentric and anthropocentric viewpoints, landownership as a socio-psychological phenomenon encompasses individuals’ land-based experiences, emotions, and stewardship behaviors. The land-based experiences include living in the rural atmosphere, having access to fresh food and water, participation in favorite



outdoor activities, and preservation of memories of significant events and people associated with the land. The ability to receive these experiences brings the feelings of happiness, self-fulfillment, comfort, and pride. To secure the land's functionality as a long-term supporter of valuable land-based experiences and emotions, landowners practice responsible stewardship. Continuous interaction with the land is essential to sustain this dynamic and interdependent owner–land connection over time. Therefore, I conclude that from a socio-psychological perspective, landownership represents a continual cycle of the reciprocal relationship between landowners and the land, guided by the elements of ecocentrism and anthropocentrism.

### **Implications and recommendations for natural resource practitioners**

This study indicates the significance of the socio-psychological factors associated with owning land and their impacts on land-management decisions. Specifically, the findings of this research provide evidence supporting a wide array of unique experiences and emotions that individuals maintain and seek through landownership. To attain the long-term sustainability of the privately-owned landscape, natural resource practitioners should account for the psychological aspects of owning land and their behavioral outcomes in PLC promotion efforts.

### ***Fostering the owner–land relationship***

The landowners in this study understood their relationship with the land in terms of a mutually-beneficial partnership, considering the land and themselves equal parts of the larger natural community. The commonly shared perception of the land as kin motivated the landowners to treat their properties responsibly to preserve the ecological balance. In addition, active stewardship was essential for the long-term protection of the benefits

associated with landownership. Based on this conclusion, promotion of conservation practices on private land will be more efficient when developers of PLC initiatives recognize the mutually-beneficial and interdependent nature of the owner–land relationship. Landowners will be most likely to respond to programs that appeal to their sense of interdependence with the land. For instance, they might find attractive an initiative offering assistance with the identification of desired land-management goals and priorities, followed by the development of a competent strategy to meet these specific goals.

According to the findings of this study, programs promoting a holistic approach to land management might be of interest to landowners. Holistic management, or management of wholeness, is a value-based planning process and decision-making strategy that accounts for the relationship between the different aspects of a “whole” (Savory & Butterfield, 1999). At the core of this approach is the idea that altering one element of the whole will unavoidably affect other elements. By integrating “all aspects of planning for social, economic, and environmental considerations,” this relatively new land management philosophy aims to achieve socially responsible, economically viable, and ecologically regenerative outcomes (HMI, 2019). Considering the findings of this research, initiatives similar to the Whole Farm/Ranch Land Management program offered by the Holistic Management International (HMI) organization might increase landowners’ interest in participation. This program consists of a series of interactive training sessions, during which landowners receive professional assistance with the identification of their holistic goal, a detailed plan for its achievement, and the establishment of a mechanism to evaluate the progress.

### ***Reinforcing stewardship identities***

The results also indicate that the landowners primarily perceive themselves as stewards in their relationship with the land, whose responsibility is to protect their land from further degradation. In participants' perspectives, stewardship represents the top responsibility associated with landownership. This finding has important implications for conservation of privately-owned space, as well. PLC programs, which can stimulate and develop landowners' identities as stewards, will most likely receive an increased public response and interest in participation. In this respect, such initiatives as CEs and conservation banks protecting the land in perpetuity are among the viable options. In addition, acknowledgement of landowners' contribution to conservation of the private landscape can further enhance their stewardship identities. For example, the Lone Star Land Steward Awards Program held by the TPWD is a well-received initiative that exists "to recognize private landowners for excellence in habitat management and wildlife conservation on their lands" (TPWD, 2019). Empowering landowners as stewards should be among the priorities for natural resource practitioners tasked with the development and implementation of PLC programs.

### ***Promoting engagement and collaboration***

The landowners in this study expressed a desire to advance as stewards, and sought educational opportunities to gain the natural resource knowledge and skills. However, the interviews revealed that not all respondents were aware of existing workshops, seminars, and assistance programs available in the region. This finding indicates the inadequacy of the communication between natural resource practitioners and landowners. More efficient

communication strategies will lead to improved outreach and dissemination of information regarding PLC initiatives.

Furthermore, I identified that landowners found working with natural resource professionals enjoyable when they felt that the collaborative effort effectively addressed the land's needs. Receiving assurance as a responsible steward from professionals was important for the study respondents. For instance, the landowners found practitioners' annual visits to their properties beneficial, as they were able to receive context-specific feedback to their land management actions. Additionally, participants regarded these visits as opportunities to expand their knowledge about the biodiversity found on their land. Conservation professionals should incorporate regular in-person interactions with landowners to maintain the latter's satisfaction and retention in PLC programs.

### ***Building resilience in the face of development and change***

All landowners in this study expressed concern regarding encroaching development and the fast rate of land fragmentation in the region. Having no control over the landscape change, and an inability to affect these land use dynamics, represented a major psychological stressor shared by all participants in this study. Researchers have shown that urban development can cause mixed behavioral responses, ranging from resistance through social activism, to decisions to sell the land (Stedman, 2012; Huntsinger & Hopkinson, 1996; Lai & Kreuter, 2012). Even though it was not the goal of this study to investigate the behavioral outcomes of urban development, the current psychological stress participants experience in relation to encroaching development might ultimately result in decisions to sell the land and relocate. To empower landowners in the face of landscape change, PLC practitioners should provide a face-to-face forum, such as public hearings, where landowners have an opportunity

to express their concerns, exchange experiences and knowledge, and develop a sense of community with like-minded individuals. To bring the landowners together and promote a psychological resilience to the ongoing landscape change, natural resource professionals should incorporate the psychological impacts of urban development into the program design and communication strategies.

### ***Responding to landowners' needs and desires***

The landowners in this study favored PLC programs that were reliable, transparent, and flexible in the implementation. Conservation professionals should take these preferences into consideration when developing and promoting PLC programs. When choosing a program in which to participate, the landowners in this study conducted thorough research, often using the internet as a source of information. To improve a program's enrollment and retention rates, conservation professionals need to ensure that information about the program is available, specific, and clearly outlining the risks and responsibilities for both program administrators and landowners. In addition, the landowners indicated a preference for monetary compensation in exchange for their participation in a program. Natural resource practitioners should account for this aspect in the design and promotion of PLC programs, as well. Through offering grants, scholarships, tax deductions, and other financial incentive mechanisms professionals can increase landowners' participation in PLC initiatives.

Finally, the results showed that the landowners held a strong view of property rights by considering autonomy and control as the crucial aspects of their identities as a landowner. Natural resource practitioners should account for this desire to retain control and incorporate it into the design, recruitment strategies, and implementation of PLC programs. For example,

voluntary programs are viewed more favorably, and yield higher participation, when compared to involuntary programs that typically deprive landowners of freedom of choice.

### **Study limitations and recommendations for future research**

The application of qualitative methodology in this research allowed new facets of landownership as a socio-psychological phenomenon to be examined. However, this research bears several limitations as outlined below.

#### ***Quality of the sample***

The findings of this research are limited by the use of purposive sampling strategies. Even though the combination of convenience and snowball sampling employed in this study is believed to improve the quality of the sample, reliance on participants' referrals could introduce participants' bias (Creswell, 2013). In the current study, the representativeness of the sample suffered because of the exclusive application of the purposive sampling strategies. In particular, the sample of this study does not include commercial producers, who operate the land predominantly for generating profit. Researchers have shown that commercial producers' relationship with their properties is significantly different from the findings of the present study. Since the profitability of the land is their primary concern, commercial producers feel justified in harvesting agriculture products and other natural resources for their economic needs (Burton, 2004; Walter, 1997; Primdahl, 1999). Future research should differentiate the perspectives of commercial producers to better understand the owner–land relationship. Incorporation of commercial producers' experiences with the land is necessary to further refine the definition of landownership as a socio-psychological phenomenon.

Furthermore, the application of purposive sampling restricted the geographical distribution of the sample. Three out of nine interviews that I conducted were with landowners holding properties in Hays County. Future research is encouraged to improve the geographic representation of the sample of the present study by encompassing perspectives of landowners with properties located in other areas of the Texas Hill Country.

### ***Interview setting***

Another limitation is related to the interview setting. Since human behavior is influenced by the setting in which it occurs, contextual variables such as the interview location might have impacted the results (Atieno, 2009). I conducted the interviews with participants at a public place rather than on their properties. This limited my ability to fully immerse in the research environment, and restricted participants' ability to act as they would when on their land. During the interviews, this issue was evident when participants found it necessary to utilize their smartphones to show me photos of specific features of their properties to better communicate their perspectives. Future studies should conduct interviews on the landowners' properties to fully capture individuals' perspectives and experiences, as well as the context in which they emerge.

### ***Limited nature of data collection***

To understand the nature of the owner–land relationship and landowners' participation in PLC programs, this study relied on self-reported behaviors of participants. Previous research suggests that even though self-reported behaviors might somewhat reflect the actual behaviors, they might also significantly differ from the latter (e.g., Silver et al., 2015; Chao & Lam, 2011). To address this problem, some scholars recommend utilization of multiple methods, such as observation or videotaping, to register individuals' actual

behaviors (Chao & Lam, 2011). However, this might be challenging to implement in the context of private landownership, and reliance on self-reported behaviors may be the best alternative for researchers who want to investigate the owner–land relationship and land-management decisions of private landowners.

### ***Trustworthiness***

In qualitative research, trustworthiness is established through meeting the four criteria: credibility, transferability, dependability, and confirmability (Lincoln and Guba, 1985). Credibility refers to the level of agreement between participants' statements and researchers' interpretation of the phenomenon of interest (Slevitch, 2011). I established this criterion through member checking, which allowed me to gather participants' input prior to drawing final conclusions. Transferability represents the extent to which the results can be applicable to other contexts and populations (Lincoln & Guba, 1985). In this study, I achieved transferability through rich descriptions of the setting, participants, time, and other context-specific factors.

To establish the remaining criteria – dependability and confirmability – it is necessary to perform inquiry audit. Dependability is concerned with consistency and replicability of the results, while confirmability accounts for neutrality of the data (Lincoln & Guba, 1985). Inquiry audit is a validation strategy which requires a researcher outside of the data collection and interpretation processes to examine the 'process' and 'product' of the inquiry to determine if the findings are grounded in the data (Lincoln & Guba, 1985). Due to it being a potentially expensive and very time-consuming process, I did not perform inquiry audit on the data in this study. Therefore, it is impossible to assert whether this study



will lead to similar interpretations and conclusions if conducted by another researcher in the same context with the same group of participants (Lincoln & Guba, 1985).

### ***Future refinement of the concept of kincentricity in the PLC context***

Finally, future research should further explore the aspect of kincentricity in the owner–land relationship and its effect on landowners’ land-management behaviors. The present study concluded that by viewing nature as kin, the landowners perceive their relationship with the land as a mutually-beneficial partnership in which they feel morally obligated to manage the land responsibly. However, the concept of kincentricity has not previously been linked to the private land management context even though the interdependence of the land and landowners in the owner–land relationship has been mentioned in past research (e.g., Peterson & Horton, 1995). Future work should examine landowners’ kincentric views of the land. For example, the following topics could be addressed to continue the discussion of kincentricity in the private land management domain: “Did landowners always hold the kincentric views of nature, or did they develop this philosophy through owning and managing their land?”, and “From where do kincentric views of nature and the land originate?” Finally, future studies should also evaluate the impact of the kincentric philosophy on individuals’ land-management decisions and behaviors.

### **Concluding remarks**

The major lesson learned from this study is that landownership represent a multidimensional phenomenon. The results have shown that the essence of landownership goes beyond its meaning as a land title. Rather, landownership encompasses a psychological owner–land connection grounded in individuals’ environmental ethic and personal

experiences with the land. This owner–land relationship is further interwoven in individuals’ land-management decisions and behaviors.

Multiple factors influence the evolving dynamics of the owner–land relationship. Land fragmentation, urban development, climate change, succession and changes of ownership will continue affecting landowners’ emotional tie to their properties. Considering that the sustainability of America’s privately-owned landscapes in many ways depends on land-management decisions of landowners, it is essential to find efficient approaches to enhance landowners’ adaptive capacity to the ongoing challenges. Part of this strategy will necessitate recognition of the significance of the owner–land connection and incorporation of it into land-management policies and practices. Additionally, collaborative efforts by scholars, practitioners, and landowners are essential to increase landowners’ resilience and advance sustainability of American private lands.

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**APPENDIX A**  
**INTERVIEW PROTOCOL**

**Interview Protocol**

Project title: *Landowners' Relationship with Lands and Decisions to Participate in Private Land Conservation Programs: A Phenomenological Study in the Texas Hill Country.*

Principal Investigator: Michael A. Schuett, Associate Professor, Texas A&M University

Protocol Director: Evgenia Spears, Texas A&M University

Interview #: \_\_\_\_\_ Time: \_\_\_\_\_

County: \_\_\_\_\_ Date: \_\_\_\_\_

*Background:*

1. Please tell me about your land, its ownership history, and its biophysical features.
  - i. If answered *Purchased* to #1, what were the reasons for buying the land?
  - ii. If answered *Inherited* to #1, how long has the land been in your family? How has it traditionally been used?
2. Please briefly describe your land.
  - i. What landscape features does it contain?
  - ii. What animal and plant species are found there?

*Landownership experience:* Please tell me about your experience as a landowner.

3. What activities do you engage in on your property? What factors influence your choice of activities on your land?
4. What challenges related to management of your land have you faced?
5. What changes have you made on your land since the time you acquired it? What were the reasons for those changes?
6. Concerning the surrounding area, how have things changed over the term of your ownership? How have these changes affected you personally?

*Relationship with lands:* Please tell me about your relationship with your property.

7. If answered *Yes* to #2, what does it mean to you to live on your land?
8. If answered *No* to #2, why do you come to spend time on your land?
9. Please describe the emotional connection you feel towards your land.
  - i. What contributed to its formation?



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ii. Have these feelings changed over time? If so, in what way?

10. What is your favorite place on your land? Please describe this place. Why is it meaningful to you?

11. What concerns do you have regarding the future of your property?

*Land-management and participation in private land conservation programs:* Please reflect on your thought process when making land-management decisions and describe your participation in conservation programs.

12. If answered *Yes* to #4,

i. Please tell me about your land-management plan.

ii. What factors do you consider when making land-management decisions?

13. If answered *Yes* to #5,

i. What conservation program are you part of?

ii. What factors and/or people influenced your decision to participate in this program?

iii. What are the top three goals for your land that you are trying to achieve through participation in this conservation program?

14. If answered *No* to #5,

i. Are you engaged in any conservation-related activities on your land? If so, what do you do to protect the natural resource features of your land?

ii. What are the reasons for non-participation in conservation programs?

*Conclusion*

15. Is there anything else that we should have talked about but have not?

16. Can you suggest another person to be similarly interviewed?



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## APPENDIX B

### BACKGROUND QUESTIONNAIRE

#### Questionnaire

Project Title: *Landowners' Relationship with Lands and Decisions to Participate in Private Land Conservation Programs: A Phenomenological Study in the Texas Hill Country.*

Principal Investigator: Michael A. Schuett, Associate Professor, Texas A&M University

Protocol Director: Evgenia Spears, Texas A&M University

Interview #: \_\_\_\_\_

Time: \_\_\_\_\_

County: \_\_\_\_\_

Date: \_\_\_\_\_

1. How did you acquire your land? *(Please circle one)*
  - a. Inherited
  - b. Purchased
  - c. Other *(Please specify)* \_\_\_\_\_
2. Do you live on your land all year round? *(Please circle one)*
  - a. Yes
  - b. No
3. If no, approximately how many months per year do you spend on your land? *(Please circle one)*
  - a. Less than a month
  - b. 1 – 3 months
  - c. 3 -6 months
  - d. 6 – 9 months
  - e. More than 9 months
4. Do you have a land-management plan? *(Please circle one)*
  - a. Yes
  - b. No
5. Do you participate in any type of private land conservation program? *(Please circle one)*
  - a. Yes
  - b. No
6. What is your gender? *(Please circle one)*
  - a. Male
  - Female
7. What is your age? \_\_\_\_\_



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8. What is the highest level of education you have completed? *(Please circle one)*
- a. Less than a high school degree
  - b. High school graduate or GED
  - c. Some college/AA degree/Technical school training
  - d. 4-year college degree (BA or BS)
  - e. Advanced degree (Master's, Ph.D., JD, MD)
9. What is your current employment status? *(Please circle one)*
- a. Full-time
  - b. Part-time
  - c. Self-employed
  - d. Retired
  - e. Unemployed
  - f. Other *(Please specify)* \_\_\_\_\_
10. What is your marital status? *(Please circle one)*
- a. Married
  - b. Single
  - c. Divorced
  - d. Widowed
  - e. Other
11. How many children do you have? \_\_\_\_\_
12. Currently how many people, including yourself, live on your land? \_\_\_\_\_
13. How long have you lived in your present community? \_\_\_\_\_
14. What was the total income in your household (before taxes) last year? *(Please circle one)*
- a. \$0 - \$50,000
  - b. \$50,000 - \$100,000
  - c. \$100,000 - \$150,000
  - d. \$150,000 or more
15. What is the primary source of income in your household? *(Please circle one)*
- a. Land operation
  - b. Outside-land income
  - c. Other *(Please specify)* \_\_\_\_\_

**Thank you for taking your time to complete this questionnaire!**



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## APPENDIX C

### RECRUITMENT LETTER

#### Recruitment Letter

Dear Potential Participant,

Help to protect the beauty of American landscapes!

American continuous open space is rapidly declining due to the widespread fragmentation and conversion of private lands into other uses. Landowners as the ultimate decision-makers on their properties play a significant role in preservation of the valuable natural resources found in American private landscapes for future generations. The understanding of your experiences as a landowner is critically important for design and delivery of landowner-friendly conservation programs and protection of our nation's beauty and scenery.

You are invited to participate in this study conducted by Texas A&M University in order to understand the emotional connection landowners experience towards their lands and their decisions to participate in private conservation programs. The information gathered through interviews will provide data to improve design and implementation of landowner assistance programs and conservation initiatives on private lands.

Your participation in this study is absolutely voluntary. You may be assured of full confidentiality. All the private information (such as your name and email) will be kept in the encrypted form on a password-protected computer and available to the researcher only. This information will be destroyed once the researcher meets with you for an interview. Your participation in this study will take from one to two hours of your time. Your name will never be disclosed or linked to your responses at any point of conducting of this study. We WILL NOT sell or distribute your name and contact information to any other party. You are in no way obligated to participate if you do not feel comfortable doing so. However, your participation in this study will be greatly appreciated! Please see the attached consent form for more information regarding this study.

To schedule a face-to-face interview with the researcher, please respond to this email. For any questions, please contact the research team at 979-739-1097 or [evgenia@tamu.edu](mailto:evgenia@tamu.edu).

Thank you in advance for your help!

Sincerely,



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# APPENDIX D

## CONSENT FORM

(5/30/2017)

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### TEXAS A&M UNIVERSITY HUMAN RESEARCH PROTECTION PROGRAM INFORMED CONSENT DOCUMENT

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**Title of Research Study:** Landowners' relationship with lands and decisions to participate in private land conservation programs: a phenomenological study in the Texas Hill Country

**Investigator:** Michael Schuett

**Funded/Supported By:** This research is funded/supported by Texas A&M University.

#### **Why are you being invited to take part in a research study?**

You are being asked to participate because you are a landowner holding title for 25 or more acres in the Texas Hill Country.

#### **What should you know about a research study?**

- Someone will explain this research study to you.
- Whether or not you take part is up to you.
- You can choose not to take part.
- You can agree to take part and later change your mind.
- Your decision will not be held against you.
- You can ask all the questions you want before you decide.

#### **Who can I talk to?**

If you have questions, concerns, or complaints, or think the research has hurt you, talk to Evgenia Spears (Protocol Director) at 979-739-1097 or [evgenia@tamu.edu](mailto:evgenia@tamu.edu)

This research has been reviewed and approved by the Texas A&M Institutional Review Board (IRB). You may talk to them at 1-979-458-4067, toll free at 1-855-795-8636, or by email at [irb@tamu.edu](mailto:irb@tamu.edu), if

- You cannot reach the research team.
- Your questions, concerns, or complaints are not being answered by the research team.
- You want to talk to someone besides the research team.

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## **INFORMED CONSENT DOCUMENT**

- You have questions about your rights as a research participant.
- You want to get information or provide input about this research.

### ***Why is this research being done?***

The purpose of this study is to understand individuals' experiences related to owning lands and their decisions to participate in private land conservation programs. Specifically, this study will aim to understand the relationship landowners have with their properties and how this relationship is reflected in landowners' decisions to protect the natural features of their lands. The results of this study will help to promote stewardship on American private lands by informing conservation initiatives and landowner assistance programs.

### ***How long will the research last?***

We expect that you will be in this research study for approximately one hour.

### ***How many people will be studied?***

We expect to enroll 12 people in this research study.

### ***What happens if I say "Yes, I want to be in this research"?***

You will be invited for a meeting with Evgenia Spears (Protocol Director) at the Round Rock Public Library located at 216 E Main Street, Round Rock, TX 78664. First, you will be asked to fill out a questionnaire, which contains 15 multiple-choice questions to gather some socio-demographic and land-related information. This questionnaire should not take more than 5 minutes to fill out. Second, you will be asked to participate in a face-to-face interview with the researcher. The questions in the interview will be related to your experience as a landowner, emotional connection to your property and participation in conservation programs. You will be asked to provide the answers that best reflect your opinion regarding each question. The interview will be audio-recorded and is expected to take about 1 hour. No photos or videos will be taken. Your participation will end once the interview is over.

### ***What happens if I say "Yes", but I change my mind later?***

You can leave the research at any time and it will not be held against you.

### ***Is there any way being in this study could be bad for me?***

The things that you will be doing have no more risks than you would come across in everyday life. Taking part in this research study will involve a small commitment of your time. If you feel uncomfortable answering some questions, you do not have to respond. There is a minimal risk of private information breach. To minimize this risk, all of your personal information collected in the course of this study will be kept in the encrypted form on a password-protected computer located in the Principal Investigator's office at Texas A&M University.

**INFORMED CONSENT DOCUMENT**

***Will being in this study help me in any way?***

There are no direct benefits associated with your participation in this study. What the researchers find out from this study will be useful for design, delivery and implementation of conservation programs and policies.

***What happens to the information collected for the research?***

All information collected through this research will be stored in the encrypted form on a password-protected computer. Your name will never be linked to any collected information at any point of this study. Efforts will be made to limit the use and disclosure of your personal information, including research study and other records, to people who have a need to review this information. We cannot promise complete privacy. Organizations that may inspect and copy your information include the TAMU HRPP/IRB and other representatives of this institution.

**Your signature documents your permission to take part in this research.**

\_\_\_\_\_  
Signature of subject

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed name of subject

\_\_\_\_\_  
Signature of person obtaining consent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed name of person obtaining consent

