Absentee landowners near a military installation in Texas: Use, motivation, and emotional tie to their land

by

Amber L. Preston Dankert, B.S., M.S.

A Dissertation

In

AGRICULTURAL EDUCATION

Submitted to the Graduate Faculty of Texas Tech University in Partial Fulfillment of the Requirements for the Degree of

DOCTOR OF EDUCATION

Approved

Erica Irlbeck
Chair of Committee

Theresa Murphrey

Matt Baker

Kim Dooley

Dominick Casadonte
Interim Dean of the Graduate School

December, 2012
Copyright 2012, Amber L. Preston Dankert
ACKNOWLEDGEMENTS

As I complete the final stages of my academic career, I reflect on the words of Clay P. Bedford: “You can teach a student a lesson for a day; but if you can teach him to learn by creating curiosity, he will continue the learning process as long as he lives.”

As a student at both Texas Tech University and Texas A&M University, I have been truly blessed to have met professors who have a passion for teaching as well as for learning. Those individuals have become my mentors, my inspiration to perform better, and most importantly, my friends.

There are so many individuals to mention, yet I have little room to do so in this dissertation. So, I will limit my personal addresses to the members of my committee and those closest to my work, though I hope that each faculty and staff member who has guided me, spoken with me, and believed in me understands my inexplicable gratitude toward them.

The chair of my committee, Dr. Erica Irlbeck, is the calm to my storm. She has been a friend and mentor since the beginning of my class work. She has calmed my fears, been a sounding board for my frustrations, and held a guiding light for my path forward toward my degree. I simply would not be where I am today without her unwavering support.

The co-chair of my committee, Dr. Theresa Murphrey, is my innovator and creator. She understands that I am passionate about my work, but always offers a perspective that I have not yet considered. She is so innovative, and I am blessed to have such a great mind on my committee.

My committee member, Dr. Matt Baker, is my thinker and observer. He has explained theories, statistics, and research methods in a way that is truly unbelievable, and has helped me to understand a fog of ideas and concepts that I never thought would be clear. Dr. Baker, quite frankly, believes in me and has given me so much confidence to succeed. Without him, I would not have the confidence I have today.
My committee member, Dr. Kim Dooley, is my task monitor. She keeps me focused on the task at hand and offers interesting perspectives and concepts to integrate into my research. Dr. Dooley guides me toward the light at the end of the tunnel, and always challenges me with new information. Her upbeat, positive attitude helps me see that research should be fun, not just a job. And her passion for qualitative research was an inspiration for this dissertation.

My friends and family have ultimately brought me to where I am today. My dearest Will, you have filled in when I have needed you, and taken care of life’s daily challenges so that I could focus on my research. My sweet son Maxton, I’ve missed so much with you while pursuing my dreams. You have taught me the meaning of unconditional love and patience. I hope you know that I have done this for you, so that we can all have a better future. Thank you for not giving up on me. And to my parents, John and Juana Preston, grandparents, and extended family, you have supported me both emotionally and financially. Thank you for believing in me and supporting me every step of the way.

Last but not least, the Lenis family has been an inspiration to me over the years. Dr. Lenis, without your magical hands and incredible skill as a surgeon, I would not have made it this far in my education. Albeit challenging, you gave me the gift of hearing in a world of silence. You are like a second father to me, and I contribute and dedicate my academic success to you.
# TABLE OF CONTENTS

**ACKNOWLEDGEMENTS** ........................................................................................................... ii

**ABSTRACT** ................................................................................................................................. viii

**LIST OF FIGURES** .................................................................................................................... ix

**I. INTRODUCTION** .................................................................................................................... 1  
  Statement of the Problem ........................................................................................................... 7  
  Purpose and Research Questions ............................................................................................... 8  
  Significance of the Study ............................................................................................................ 8  
  Definition of Terms .................................................................................................................... 10  
  Assumptions ............................................................................................................................... 11  
  Limitations .................................................................................................................................. 11  
  Delimitations ............................................................................................................................... 12  
  References to Military Installations ............................................................................................ 13  
  Framework for the Study ............................................................................................................ 13  
    Conceptual framework .............................................................................................................. 13  
    Theoretical framework ................................................................................................................ 15  
  Summary of Importance ............................................................................................................ 16

**II. REVIEW OF LITERATURE** .................................................................................................. 17  
  Introduction .................................................................................................................................. 17  
  Military at a Glance ....................................................................................................................... 18  
  Urban Sprawl and Land Use ........................................................................................................ 19  
  Agriculture in Texas ...................................................................................................................... 22  
  Agriculture and the Army ............................................................................................................. 23  
  Encroachment and the Military Mission ....................................................................................... 24  
    Encroachment near Army installations ....................................................................................... 26
Theoretical Framework: Motivation Theory ................................................................. 27
Agricultural Landowner Motivation.............................................................................. 32
Absentee Landowner Motivation.................................................................................... 39
  Absentee landowner demographics.............................................................................. 39
  Absentee landowners and economic motivators......................................................... 40
Factors Affecting the Research ....................................................................................... 42
Conclusion ...................................................................................................................... 43

III. RESEARCH METHODS ............................................................................................... 44
   Introduction .................................................................................................................. 44
   Context of the study. ..................................................................................................... 44
Phenomenological Design ............................................................................................... 45
Ethics ............................................................................................................................... 46
Research Participants ...................................................................................................... 46
Data Collection ............................................................................................................... 49
  Identifying participants................................................................................................. 49
  Bracketing...................................................................................................................... 50
  Interview process. ......................................................................................................... 51
Phenomenological Data Analysis Process .................................................................... 54
Data Analysis for This Study .......................................................................................... 55
Research Rigor ................................................................................................................ 58
  Credibility...................................................................................................................... 59
  Transferability. ............................................................................................................... 60
  Dependability. ............................................................................................................... 61
  Confirmability. ............................................................................................................... 62
  Researcher bias. ............................................................................................................. 62
Conclusion ...................................................................................................................... 63

IV. FINDINGS .................................................................................................................. 65
   Phenomenological Research - Bracketing .................................................................. 65
   The Researcher’s Story ................................................................................................. 66
   Participant Stories ........................................................................................................ 69
ABSTRACT

The purpose of this dissertation was to examine the motivation of absentee landowners located around a military installation in Texas to maintain their land in agriculture. Urban encroachment around military installations has become problematic, primarily as a result of many years of incompatible development due to the transfer of lands from agricultural use to urban use. Maintaining the land in agriculture increases military training capabilities, thus increasing military readiness both stateside and abroad.

Absentee landowners are of particular interest, since their detachment from the land could be perceived as a disinterest in what occurs there. The determination of landowner motivations may allow programs to be developed which can appeal to the landowners’ motivations and allow the landowners to maintain their land in agriculture.

Four research questions sought to identify landowner motivation. The research questions targeted current land use, the phenomena motivating absentee landowners to maintain their land in agriculture, change in land use over time, and whether a landowner’s emotional tie to the land affects land management decisions. Both the intrinsic motivation of family and the extrinsic motivation of money were identified as general motivating factors, and 15 specific motivating factors were identified within the four overarching themes. Recommendations were made based on applicability of the research to the Army, cooperative extension, legislators and government agencies, financial planners, tax appraisal offices, and estate planners.
LIST OF FIGURES

Figure 1. Transformation of rural to urban population between the years 1790 and 2000................................................................. 1

Figure 2. Examples of urban encroachment near three different military installations in Texas............................................................... 3

Figure 3. Representation of conceptual framework........................................ 14

Figure 4. The Hierarchical Model........................................................................ 28

Figure 5. The self-determination continuum showing types of motivation with their regulatory styles, loci of causality, and corresponding processes. ................................................................. 31
CHAPTER I

INTRODUCTION

In the 19th and 20th centuries, the industrial revolution transformed the United States from an agrarian economy into a country dominated by cities. However, the remainder of the 20th century witnessed an accelerated growth of suburbs. Elwood (2008) noted that the distinction between rural and urban populations has diminished considerably since World War II. The study identified that a decrease in mobility and communication costs relative to family income has allowed populations to migrate out from city cores. Figure 1 documents the dramatic transformation of a primarily rural population in 1790 to one that is increasingly urban (Nechyba & Walsh, 2004).

Urban sprawl is a phenomenon with wide-ranging implications for urban and suburban populations (Santicola, 2006). According to Nechyba and Walsh (2004), urban sprawl may take on various forms, from low-density residential developments (i.e., “edge cities”) to planned communities or even individual homes across a rural landscape.

Development of rural land is not without consequence. Depletion of the country’s natural resources and dependence on automobiles for transportation can drive up both fuel consumption and traffic congestion (Sullivan, 2001). Loss of open space, urban decay, unsightly development, urban air and water pollution, traffic congestion, low-density housing developments, loss of a sense of community, patchwork development, and the spread of urban development across the landscape (Nechyba & Walsh, 2004) are all concerns related to urban sprawl as well. The effect of urban sprawl is the loss of secondary beneficial functions such as land conservation and maintenance, natural resource availability, biodiversity, and socioeconomic variability (Wiltshire et al., 2011).

A more specific problem related to urban development is that it has become a source of concern for military trainers as they prepare their soldiers. The Department of Defense uses the term “encroachment” to describe urban sprawl around military installations (Santicola, 2006). The Army Environmental Command (2011) noted that the U.S. government originally placed military installations in rural areas far from population centers; however, urban sprawl has begun to threaten the military's ability to train. The same study identified that noise, dust, and smoke from weapons, vehicles, and aircraft prompt citizen complaints about military training. Therefore, the military is forced to choose between being a good neighbor and effectively training troops. Lieutenant
Colonel Joe Knott (2005) defined encroachment as a cumulative result of any and all outside influences that inhibit normal military training and testing. Satellite imagery provides a pictorial view of the severity of encroachment along the boundary of a military installation (Figure 2).

*Figure 2.* Examples of urban encroachment near three different military installations in Texas. Images acquired from open access repository.
One example of the impact of urban encroachment came from the State of Washington (2005), which determined that incompatible development of land close to a military installation reduced the ability of the military to complete its mission or to undertake new missions and increases operating costs.

The Department of Defense, under which all military branches are included, released its newest Sustainable Ranges Report in 2012. The Sustainable Ranges Report is an annual report to Congress that details how the Department of Defense increases the long-term sustainability of its ranges where troops train and prepare for conflicts both foreign and domestic. Although the report recognizes that measuring the impact of encroachment on mission readiness can be difficult, it noted that encroachment causes troops who are using the training ranges to find workarounds to complete required training. Although some adaptation can be expected, excessive workarounds due to encroachment can increase mission risk due to unrealistic, segmented, or irrelevant training, and may result in a deterioration of training content and/or quality (Department of Defense, 2012).

The Department of Defense tasked the military service branches to assess the impacts of 12 encroachment factors: threatened and endangered species, munitions restrictions, spectrum, maritime sustainability, airspace, air quality, noise restrictions, adjacent land use, cultural resources, water quality/supply, wetlands, and range transients. Each of these encroachment factors were rated on a scaled red, yellow, and green, with red representing severe effects to the mission, yellow representing a moderate effect, and green representing a minimal effect. Although all the military services were included in
the report, the Army specifically included 15 range complex land areas across the U.S. It is interesting to note that seven training ranges from the two installations studied in Texas were listed as yellow due to encroachment concerns (Department of Defense, 2012).

Robert Gregory, executive director for the Compatible Lands Foundation, a nonprofit land conservation organization, (personal communication, February 10, 2009) suggested that compatible development near a military installation includes agricultural uses, such as farming and ranching, as well as non-intensive industrial uses and passive outdoor, low-intensity recreation, such as hunting and fishing activities. Incompatible development includes, but is not limited to, commercial or housing developments, mining and quarry activities, dump sites, erection of tall structures (e.g., power lines, radio towers, or wind turbines), and public or commercial recreational facilities (e.g., golf courses or ball fields). He notes that agriculture is specifically compatible, since fewer city lights make night training easier on the Army, and fewer homes in the area means fewer complaints due to noise, dust, smoke, and other training issues.

One particular military installation was studied for this dissertation. Encroachment around this installation has been the result of many years of incompatible development due to the transfer of lands from agricultural to urban use (Steve Bonner, personal communication, July 19, 2012). This migration away from agriculture has posed a serious training threat. The installation observed is one of the largest military installations in the free world. At more than 200,000 acres, the installation is more than five times the size of the District of Columbia. The installation is home to more than 50,000 Army soldiers, and when combined with civilian workers and family members,
the installation hosts more than 200,000 people at any given time (Department of the Army, 2011).

The primary incompatible development concerns around this specific installation are the restrictions that could be imposed on training. These restrictions could result from noise, night training, use of pyrotechnics, and air quality degradation. Training that currently occurs on the installation that may be impacted includes maneuver exercises (using both tracked and wheeled vehicles), live weapon training, and aviation training. Maintaining the ability to train realistically is key, since the installation trains more than 90,000 soldiers annually for conflicts both foreign and domestic (Department of the Army, 2011).

Elwood (2008) stated that any attempt to influence land-use decisions outside military property must consider what drives those decisions, identify who cares, and determine why. In the context of land use near the military installations in Texas, influencing land-use decisions would include identifying compatible land uses and developing methods to help landowners achieve those compatible uses on their land. Although there is some research indicating that absentee landowner involvement in agricultural practices on their land, only limited research exists on the topic of why landowners maintain their land in agriculture. In order to understand the transfer of agricultural lands to urban lands, one must understand what motivates landowners to retain their land in agriculture.

Absentee landowners were of particular interest for this study. Their detachment could be perceived as a disinterest in what occurs on the land. Steve Bonner, the former
special assistant for compatible use to the Secretary of Defense, and current subject matter expert on military encroachment and base realignment and closure, indicated that absentee landowners are a key player in understanding land use because these individuals are not regularly present on the property, and are also often not connected to the military mission. His observations are that this group had no personal stake in economic development, other than to sell their land. Therefore, the closure of a military installation due to the inability to work around encroachment issues would not impact them (personal communication, July 19, 2012). Thus, the action of determining absentee landowners’ motivations for maintaining their land in agriculture can allow a better picture of how agricultural land around installations could be preserved.

**Statement of the Problem**

Land use changes that are occurring across the U.S. are contributing to urban encroachment into rural areas around military installations. Urban encroachment leads to development, which is often incompatible to military training. The identification of key factors that motivate absentee landowners to maintain their land in agriculture can allow researchers to identify ways to assist these landowners in retaining land in its current land use, which is a compatible use to military training. Through the investigation of motivation, programs may be developed that encourage absentee landowners to maintain a compatible land use to military training.
Purpose and Research Questions

The purpose of this study was to examine what motivates absentee landowners around a military installation in Texas to maintain their land in agriculture, which is a compatible land use to military training.

The following research questions guided the study:

1. How are absentee landowners currently using their land?
2. What phenomena are motivating absentee landowners to keep their land in agriculture?
3. How do the absentee landowners see their land use changing over time?
4. How does an absentee landowner's emotional tie to the land affect land management decisions?

Significance of the Study

There are two major benefits for conducting this study: understanding absentee landowner motivations and fostering a positive working relationship among landowners, the military, and local agencies. The primary purpose of this research was to increase understanding of motivation to preserve land in agriculture of absentee landowners, so that local groups (i.e., the military installation, Natural Resources Conservation Service (NRCS), or county extension offices) could target programs and training opportunities best suited to the motivations of those landowners.

Research by Petzelka, Ma, and Malin (2012) noted that the shift in rangeland ownership to individuals not living on or near the land presents challenges to natural
resource personnel regarding effective communication with the absentee landowners. Gosnell, Haggerty, and Byorth (2007) identified that research is needed on the motivations, constraints, and challenges of these new landowners in order to understand why they are or are not participating in certain conservation practices. Petrzelka et al. (2012) specifically recommended that future research be directed at understanding conservation and absentee landownership. Research should be broadened beyond the narrow set of management decisions and involvement regarding absentee landowners, to include reaching out to absentee landowners to ask for their participation.

The present study also strived to identify opportunities that could foster a positive relationship and encourage communication among the military, local landowners, and other county, state, and federal organizations. Several studies found that, in comparison to owner-operators, absentee landowners appear to be much less likely to have contact with extension and local natural resource agency program staff (Redmon et al., 2004; Petrzelka, Buman & Ridgely, 2009). Therefore, there is an open opportunity to develop a positive relationship among the military, landowners, and other organizations.

The National Research Agenda (AAAE, 2011), "serves as our profession’s internal compass focusing our collaborative efforts and resources in the light of recent change and a future laced with opportunities and challenges," (p. 5). There are six research priority areas in the agenda. The current research study is encompassed in Priority 4: Meaningful, Engaged Learning in All Environments, as it examines the role of motivation in developing learning experiences across all agricultural education contexts.
Definition of Terms

The following is a list of key terms, which are defined operationally for the purpose of this study.

*Absentee landowner* - An individual who owns 10 or more acres of land within five miles of the military installation’s boundary, whose primary residence is located outside of the counties where the military installation is located.

*Agriculture* – Land that is used for farming or ranching; or hunting, camping, or other outdoor recreation that does not include the addition or construction of any incompatible development.

*Encroachment* – Urban sprawl that occurs near the boundary of a military installation which impedes training due to incompatible development.

*Incompatible development* - Development in the vicinity of the military installation that is incompatible with the installation's ability to carry out its mission requirements. Uses include, but are not limited to, commercial or housing developments, mining and quarry activities, dump sites, erection of tall structures (e.g., power lines, radio towers, or wind turbines), and public or commercial recreational facilities (e.g., golf courses or ball fields).

*Ranchette* - small-scale ranches generally characterized by upscale homes on fewer acres than traditional ranches (Sorice et al., 2012).

*Urban Sprawl* – the migration of urban development from cities to rural areas.
Assumptions

This study was conducted under the assumption that all participants participated willingly and their answers were forthcoming and honest. It was also assumed that the participants had no relationship with the researcher prior to the interviews, and that the participants could read and understand English. It was also assumed that participants had a working knowledge of the land they owned adjacent to the military installation.

The ability of the researcher to set aside biases and objectively complete this phenomenological study was also an important assumption in this study.

Finally, it was assumed that the researcher served as the human instrument during the interview process, and that the researcher interacted with each research participant. Therefore, additional questions were asked during the interviews if the researcher felt that additional clarification or investigation into an answer was warranted. Therefore, the interview itself was a fluid process and was not limited to the questions listed on the question guide.

Limitations

The study was limited to absentee landowners who owned 10 or more acres of land within five miles of a particular military installation’s boundary, whose primary residence was located outside of the counties where the military installation is located. Landowners chosen to participate in interviews were further reduced to those landowners who resided less than 60 miles from the researcher’s home location, thus minimizing travel expenses to and from interviews.
The researcher traveled to each participant's residence or office to conduct the interviews. The landowners do not reside on the property, so visits to their land were not possible. Therefore, the researcher relied on the absentee landowner's description of his or her property.

It is recognized that the size of the geographic area is small, and that landowners may know one another and therefore may discover that one another had participated in the study and openly discuss their answers with other potential subjects. This limitation is not expected to have a major impact on the study since limited follow-up interviews were needed, and all interviews took place within a short time frame.

Participants were chosen purposively. The frame used to identify the population consisted of obtaining land ownership data from county tax records. It was possible that some landowners could have recently purchased land, and were therefore not included in the obtained tax records. This limitation was not anticipated to have impacted the study.

A final limitation to the study was that the question guide was created by the researcher and could be viewed as biased because of the researcher's employment at the military installation. As a phenomenological study, researcher assumptions were bracketed prior to completion of interviews. However, protecting against researcher bias is difficult nonetheless, and was constantly monitored and re-visited by the researcher.

**Delimitations**

This research is delimited to the group of absentee landowners—chosen from county tax records and the local Council of Governments—that own property within five
miles of the installation boundary, but do not live in the counties where the military installation is located. Interview transcripts and interviewer observations conducted from these absentee landowners in 2012 was the basis for the findings.

**References to Military Installations**

It is recognized that there are multiple branches of the U.S. Military, including the Army, Navy, Air Force, Marines, and Coast Guard, as well as various Reserve and National Guard units. Each of these military branches have encroachment concerns specific to their branch. Thus, the researcher felt it was prudent to choose a specific branch to study. Therefore, this study focused specifically on encroachment around an Army installation in Texas. Study findings add to the knowledge base of landowner motivations and have the potential to add to programming efforts across the state.

**Framework for the Study**

The research for this study was guided by a framework comprised of both a conceptual and a theoretical base. The review of literature guided the formation of concepts, which led to the formation of the research questions, while existing theory formed a solid theoretical base for the research design.

**Conceptual framework.**

The conceptual framework for this study included a number of elements. Figure 3 is a pictorial representation of this conceptual framework. The representation identifies the two primary types of land use, and depicts a migration from urban to rural living. The selling of agricultural lands can encourage incompatible uses, such as business and
residential development and encroachment into these rural areas. These activities in turn cause problems such as, but not limited to, loss of production land and open space, unsightly developments, increased air and water pollution, traffic congestion back into urban areas, and loss of the military's ability to train in some areas.

An increased understanding of landowner motivation to maintain land in agriculture can allow the creation of programs to enable landowners to retain their land instead of selling to developers. The minimization of the sale of agricultural land has the potential to minimize encroachment.

Figure 3. Representation of conceptual framework
Theoretical framework.

The theoretical framework of this study was based on theories of motivation. Self Determination Theory (SDT) was selected as the most relevant motivational theory for the study. In SDT, motivation is conceptualized as a continuum ranging from a motivation that is autonomous, originating within the self, to one which is controlled and stems from outside pressure (Deci & Ryan, 2008). The theory identifies three basic psychological needs of all individuals to be motivated: the need for competence, relatedness, and autonomy (Ryan & Deci, 2004).

SDT also establishes four categories of internalization of regulation ranging from extrinsic motivation to intrinsic motivation. An external (extrinsic) motivation is one that comes from outside the person, while an internal (intrinsic) motivation is one that comes from inside the person. According to SDT, when an individual has an internal PLOC, that person will exert greater effort and experience greater satisfaction in performing the behavior than if they have a more external PLOC (Ryan & Deci, 2000).

Needs operate by influencing motivation, which in turn influences specific outcomes (Vallerand, 1997; Milyavskaya & Koestner, 2010). Therefore, by moving past the outcome of a decision and determining the underlying motivations of absentee landowners’ land decisions will result in a better understanding of applicability of SDT across agricultural and natural resources domains. This research contributes to the SDT by demonstrating that agricultural landowner motivation is derived from the three basic psychological needs (i.e., competence, relatedness, and autonomy) outlined in the theory,
thus making SDT a valid theory upon which to base future landowner motivation research.

**Summary of Importance**

Only limited research related to absentee landowners adjacent to military installations has been conducted. Absentee landowners are a critical part of understanding encroachment and land use. Understanding the motivations of absentee landowners to maintain their land in agriculture can enable the creation of programs targeting absentee landowners’ ability to maintain their land in agriculture, as well as foster a positive relationship among the military, landowners, and outside agencies.

Urban development near military installations’ once-rural borders threatens the Army's ability to adequately train soldiers for battle. Documentation of the motivations of absentee landowners to leave their land in a use that it compatible to military training can allow urban encroachment to be minimized and national security to be increased.
CHAPTER II

REVIEW OF LITERATURE

Introduction

The review of literature served as the foundation for the conceptual and theoretical foundations for this study, and subsequently shaped the research questions. The research questions that guided the study were as follows:

1. How are absentee landowners currently using the land?
2. What phenomena are motivating absentee landowners to keep their land in agriculture?
3. How do the absentee landowners see their land use changing over time?
4. How does an absentee landowner's emotional tie to the land affect land management decisions?

Several concepts below formed the framework for this study. The concepts included aspects related to both the entity of the military and aspects related to the individuals. These concepts and themes are summarized below.

The Military at a Glance section describes the major military branches and training needs. Urban Sprawl and Land Use describes the phenomenon of landowner migration from cities to rural areas. Agriculture in Texas specifically describes the land use in Texas, and its migration from strictly agriculture to other uses. Agriculture and the Army seeks to explain how agricultural practices are also occurring on Army lands, and how it benefits both landowners and the military mission. Encroachment and the Military Mission speaks generally about the encroachment concerns facing the Department of
Defense today as urban encroachment surrounds military installations, while *Encroachment Around Army Installations* more narrowly describes encroachment concerns specific to the Army.

*Motivation Theory* discusses the theories behind what motivates humans in general, while *Agricultural Landowner Motivation* explains motivations of traditional landowners and *Absentee Landowner Motivation* further distinguishes motivators specifically tied to absentee landowners. *Absentee Landowner Demographics* describes the characteristics of the absentee landowner group, and *Absentee Landowners and Economic Motivators* documents cost share and tax break information as it relates to the absentee landowner group. Finally, *Current Absentee Landowner Programs* describes an existing resource for absentee landowners who have landownership questions.

**Military at a Glance**

There are five major branches of the U.S. Military Service: Army, Navy, Air Force, Marines, and Coast Guard. Aside from these five main branches, each branch has a reserve program, and the Army and Air Force have a National Guard (Department of Defense, n.d.).

According to the Department of Defense's Sustainable Range Report (2012), the U.S. military operates the largest and most diverse training enterprise in the world. Maintaining the ability to train in realistic environments directly affects current readiness and future mission success. Military service members require training that affords them the skills needed to safely deploy to countries around the world, achieve their mission, and arrive back to the mainland safely (Department of Defense, 2012).
Adequate preparation of military forces for a successful and safe mission requires the Department of Defense to train at ranges that have the types of natural conditions and battle settings that both personnel and their equipment may encounter during their deployments. Therefore, sustaining a diverse set of range and training resources is critical to ensuring personnel readiness and military effectiveness (Department of Defense, 2012).

The Department of Defense’s ability to deploy and support operational forces, perform realistic live-fire training, and conduct weapons system testing is vital to maintaining military readiness (OSD, 2012).

**Urban Sprawl and Land Use**

Urban sprawl is a phenomenon with wide-ranging implications for urban and suburban populations (Santicola, 2006). According to Nechyba and Walsh (2004), urban sprawl may take on various forms, from low-density residential developments (i.e., “edge cities”) to planned communities or even individual homes across a rural landscape. Characteristics of urban sprawl include low-density development, “leapfrog” development consisting of single-family residences, and the consumption of otherwise rural lands for development (Burchell & Shad, 1999).

In the 19th and 20th centuries, the industrial revolution transformed the U.S. from an agrarian economy into a country dominated by cities. However, the remainder of the 20th century witnessed an accelerated growth of suburbs (Nechyba & Walsh, 2004). In the early 1950s, approximately 65% of the urbanized population lived in cities, while the remaining 35% lived in suburbs. However, by 1990, these percentages had flipped, with
city populations at 35% (Nechyba & Walsh, 2004). In the late 1970s, there was a movement of families toward rural living due to economic factors such as the lower cost of rural property and comparably lower taxes, as well as socio-cultural considerations such as desire to live in a smaller community, raise children in the country, and the opportunity to have animals such as dogs and horses (Woronchak, 1979).

More recently, Milburn, Brown, and Mulley (2010) noted that these rural areas were especially appealing to retirees and wealthy young professionals. The perceived openness, safety, cleanliness, and healthiness appealed to older generations who may have grown up in a similar, rural area or owned a vacation home in the past, while the younger professionals considered the importance of raising children in a rural setting.

Similarly, a study by Kaetzel, Hodges, and Fly (2011) found that urban sprawl is increasing primarily due to an influx of retirees, who are motivated by three distinct categories for land ownership: privacy, heritage, and utility. Landowners with a utility motivation were most interested in owning the land for production purposes, collecting firewood, hunting and fishing, and as a long-term financial investment. Landowners with a privacy motivation were interested in having trees surrounding their property, ensuring privacy, and learning more from nature. Landowners with a heritage motivation were interested in owning the land because it was part of their family heritage and to pass on to their children or other heirs.

Blaine, Lichtkoppler, and Stanbro (2003) found that people living in the rural/urban fringe believe preservation of natural resources to be an important socioeconomic goal. Interestingly, people who live in urbanized areas are willing to pay
more than their rural counterparts to preserve natural areas, but are not more willing than their counterparts to pay for agricultural land preservation. The authors explain, noting that as communities continue to struggle with issues of land preservation, elected officials must consider their constituents' views on the use of public funds for the preservation of rural, natural, and agricultural lands. The authors note that this consideration is even more relevant now than in the past, because federal and state governments are increasingly requiring local matching funds for environmental programs.

A study by Sorice et al. (2012) found that the average size of land parcels has been steadily decreasing, as the land is sold to so-called “amenity buyers” who purchase the land primarily for recreation, aesthetic reasons, and to experience a rural lifestyle. Such a demographic shift is indicative of a cultural shift and change in the shared beliefs and knowledge of rural landowners as a group. Extension and outreach efforts to educate landowners having little or no land management background on the value of rangelands are needed. Therefore, the study noted that extension and outreach programs will most likely need to change from a traditional one focused primarily on agricultural production, so as not to alienate amenity buyers.

Landowners who are concerned about urban sprawl contribute many problems to the migration of families from city centers to city fringes. These landowners often complain about visual problems such as loss of open space, urban decay and unsightly development. These same landowners also voice concerns about urban air and water pollution and traffic congestion, which cause strain on the natural resources and
environment. They also identify low-density housing developments and patchwork development as a cause of the loss of a sense of community (Nechyba & Walsh, 2004).

One example of the effects of urban sprawl on agricultural land is the loss of secondary beneficial function. Although it is obvious that the loss of land decreases the amount of land available for production, there are other benefits that were also lost. Since 1992, pastureland and cow-calf operations have decreased due to urban sprawl, contributing to a loss of beneficial functions such as soil conservation, natural resource conservation, biodiversity, and socioeconomic viability. Agricultural landowners often utilize pasturelands to conserve and enrich soil. These pasturelands are home to a multitude of native species, ranging from birds to small mammals, increasing biodiversity. These healthy pasturelands, paired with the cow-calf operation, play a strategic role in household incomes across the region (Wiltshire et al., 2011).

**Agriculture in Texas**

Overall, agriculture in Texas is undergoing significant changes and many farms and ranches are confronting difficulties (Barbieri & Mahoney, 2009). Texas A&M University System and American Farmland Trust (2009) noted that native rangeland, with 92.6 million acres, is the predominant category of land use in Texas. Further, more than 2.1 million acres of farms, ranches and forestlands were converted to other uses from 1997 to 2007, and more than 40% of this land conversion was related to growth and development associated with population expansion in the state’s 25 highest-growth counties. As a function of population increase, that calculates into roughly 149 acres of agricultural lands consumed per 1,000 new residents.
Over a ten-year period between 1997 and 2007, in the center of Texas, known as the East Hill Country area, there has been a 237% increase in land value and a 28% increase in population. However, there was a 12% decrease in open space land use, and a 27% decrease in land parcel size (TAMU, 2009). This is consistent with nationwide data indicating a shift from large land parcels to ranchettes, as an influx of people migrate from urban to rural landscapes (Burke, 2004).

In central Texas, a study revealed that a majority of landowners were still involved in agricultural production. Almost two-thirds of landowners (61%) engaged in some farming or ranching activities, but only 24% focused explicitly on agricultural production. More than one-half of the 61% of landowners involved in agricultural production had multiple objectives for their land, however, including wildlife and financial investments, most likely reflecting the decreasing profitability of ranching and farming in that area (Sorice et al., 2012).

**Agriculture and the Army**

The Army Environmental Command (n.d.) noted that the Army operates under an ecosystem approach of land management. Ecosystem management is an integrated approach to managing natural systems and all their component parts: soil, water, wildlife, and vegetation. The policy supports multiple-use activities, including agriculture outleasing, when compatible with the mission and long-term ecosystem management goals.

Agricultural outleasing on Army installations allows open-range grazing on the grasslands of the installation, in both maneuver and live-fire training areas. Ranchers are
allowed access to the installation for regular care of the cattle, creating a positive working relationship with local landowners by increasing their grazing capacity. This program also reduces the fuel load for catastrophic wildfires as a result of grazing (AEC, n.d.).

**Encroachment and the Military Mission**

Although supportive of agriculture and rural areas, military installations are also impacted by urban sprawl directly. Encroachment, or urban sprawl, into areas traditionally used for agriculture and other natural uses, is accelerating in areas near military installations. Previous research indicated that the general public is aware of the negative effects of suburban sprawl, both on and off military installations. Legislatures and local elected officials have even indicated an interest in addressing the problem (Elwood, 2008).

Military installations often are the last open space in the middle of an expanse of suburban sprawl. They are important components to a region's ecosystem and critical to the preservation of the area's biodiversity, since they often harbor a wide variety of animal and plant species not found in the urban environment (Elwood, 2008). The Department of Defense uses the term “encroachment” to describe urban sprawl around its military installations (Santicola, 2006). These once-secluded military installations are now often found in the center of an urbanized area, due to the influx of the “cappuccino cowboys,” or landowners who demand proximity to urban amenities while trying to imitate rural life (Burke, 2004).

The U.S. government originally placed military installations in rural locations far from population centers; however, urban sprawl has begun to threaten the military's
ability to train. The noise, dust, and smoke from weapons, vehicles, and aircraft prompt citizen complaints about military training. Therefore, the military is forced to choose between being a good neighbor and effectively training troops (AEC, 2011).

Elwood (2008) stated that any attempt to influence land-use decisions outside military property must consider what drives those decisions, identify who cares, and determine why. There is a need to understand land use and identify compatible and incompatible development around military installations in Texas. Robert Gregory, Executive Director for the Compatible Lands Foundation, suggested that compatible development includes agricultural uses, such as farming and ranching, as well as non-intensive industrial uses and passive outdoor, low-intensity recreation, such as hunting and fishing activities (personal communication, February 10, 2009). Incompatible development includes, but is not limited to, commercial or housing developments, mining and quarry activities, dump sites, erection of tall structures (e.g., power lines, radio towers, or wind turbines), and public or commercial recreational facilities (e.g., golf courses or ball fields).

The Department of Defense released the most recent Sustainable Ranges Report in 2012. Although the report recognizes that measuring the impact of encroachment on mission readiness can be difficult, it noted that encroachment does cause range users to find alternative methods to complete required training. While some adaptation can be expected, excessive workarounds due to encroachment can increase mission risk due to unrealistic, segmented, or irrelevant training, and may in fact result in a deterioration of training content and/or quality.
The Department of Defense tasked the military service branches to assess the impacts of 12 encroachment factors: threatened and endangered species, munitions restrictions, joint training operations, maritime sustainability, airspace, air quality, noise restrictions, adjacent land use, cultural resources, water quality/supply, wetlands, and range transients. Each of these encroachment factors were rated on a red, yellow, or green scale, with red representing a severe effect to the mission, yellow representing a moderate effect, and green representing a minimal effect (Department of Defense, 2012). The results from the report were listed specifically by military branch. For this study, the researcher was most concerned with the effects of encroachment near Army installations. The Army data is presented in the *Encroachment near Army installations* section below.

Overall, increased deployments, specifically to support operations in Iraq and Afghanistan, have strained the ability of some existing range resources and infrastructures to continue supporting training at required levels. Together with increasing constraints on range activities resulting from expanding urban and rural communities and their associated economic development, sustaining range health and readiness pose very real concerns for the Military Services (Department of Defense, 2012).

*Encroachment near Army installations.*

The Sustainable Ranges Report included data from all the military services. Seven ranges located across two Army installations in Texas were listed as yellow due to encroachment concerns (Department of Defense, 2012).
The report specifically states:

Encroachment remains a challenge for the Army. The capacity of and accessibility to Army lands is decreasing while the requirement for training land grows. There are significant challenges that must continue to be addressed to sustain training on Army land. The Army is competing with its neighbors for access to land, airspace, and frequency spectrum. Urbanization and sprawl are encroaching on military lands. Urbanization has concentrated endangered species and their habitats on areas traditionally used for military training. Environmental restrictions tend to translate into reduced accessibility to training land. (Department of Defense, 2012, p. 31)

Theoretical Framework: Motivation Theory

Motivation has been a central and perennial issue in the field of psychology, for it is at the core of biological, cognitive, and social regulation. Although motivation is often perceived as a singular construct, reflection suggests that people are moved to act by very different types of factors, with highly varied experiences and consequences. Motivation has most commonly been divided into two categories: intrinsic and extrinsic (Ryan & Deci, 2000).

Intrinsic motivation is most commonly defined as doing something for its own sake. For example, a child plays baseball for no reason other than because that is what he or she wants to do. Extrinsic motivation refers to the pursuit of an instrumental goal, such as when a child plays baseball in order to please a parent or win a championship (Reiss, 2012).

The Hierarchical Model (see Figure 4) provides a multi-level framework for understanding and organizing intrinsic and extrinsic motivation (Vallerand, 1997; Vallerand & Lalande, 2011). The Hierarchical Model is made up of elements that are
organized both vertically (personality) and horizontally (social psychological), and leads to a number of novel predictions on motivation and outcomes.

**Figure 4.** The Hierarchical Model. Note. IM= Intrinsic Motivation; EM = Extrinsic Motivation; AM = Amotivation. From “The MPIC model: The perspective of the hierarchical model of intrinsic and extrinsic motivation,” by R. J. Vallerand and D. R. Lalande, 2011, *Psychological Inquiry*, 22, p. 46. Copyright 2011 by Psychological Inquiry. Reprinted with permission.

The vertical organization represents three levels of generality. The first element, or global element, is the most general and refers to the personality, or usual way of functioning. The contextual level represents specific life contexts, such as education, leisure, and interpersonal relationships. The final level, or the situational level, is the most specific and refers to the current state of motivation. That is, it is the specific motivational state that a person experiences when engaging in an activity at a single point.
in time. The hierarchy of the levels implies relationships among them (Vallerand & Lalande, 2011).

Horizontally, the Hierarchical Model suggests a causal sequence of events involving social factors, psychological needs, motivation, and outcomes. This sequence of events occurs at every level, and suggests that motivation results from social factors (beginning at the left of the model). Such factors exert an influence on motivation at all three levels of generality (Vallerand & Lalande, 2011).

The Hierarchical Model postulates that the influence of social factors on motivation occurs through basic psychological need satisfaction, which is also demonstrated in Ryan and Deci (2000). As such, need satisfaction is considered a mediator between social factors and motivation. At all levels of the Hierarchical Model, intrinsic motivation leads to the most positive outcomes, whereas certain types of extrinsic motivation (the least self-determined) produce the least positive consequences (Ryan & Deci, 2000; Vallerand & Lalande, 2011). This Hierarchical Model describing generality (ranging from stable to momentary), paired with the social psychological processes, confirms the crucial role that the psychological needs of competence, autonomy, and relatedness proposed by Ryan and Deci (2000) play in human behavior.

A key theory in studies of motivation is the Self Determination Theory (SDT). In SDT, motivation is conceptualized as a continuum ranging from a motivation that is autonomous, originating within the self, to one which is controlled and stems from outside pressure (Deci & Ryan, 2008). Although SDT was first conceptualized in the
1970s in the form of research conducted on internal and external motivating factors, it was not until 1985 that Deci and Ryan formalized SDT as a sound theory.

SDT, therefore, is an approach to human motivation and personality that investigates people's inherent growth tendencies and innate psychological needs that are the basis for their self-motivation and personality integration (Ryan & Deci, 2000). The theory identifies three basic psychological needs of all individuals to be motivated: the need for competence, relatedness, and autonomy. The need for competence indicates that individuals want to find an activity that they enjoy, and do it well (Ryan & Deci, 2004). Patrick, Knee, Canavello, and Lonsbary (2007) further describe competence as the need to feel effective in one's efforts and capable of achieving the desired outcomes. Ryan and Deci (2004) describe autonomy as the regulation of the self, by the self. The individual, therefore, regulates himself rather than some outside force. The authors also note that relatedness refers to having a sense of community, or connectivity with other individuals. These three needs are the basis for determining an environment that is either supportive or opposing an individual's pursuit of a more complex psyche.

SDT establishes four categories of internalization of regulation ranging from extrinsic motivation to intrinsic motivation. A key concept is the perceived locus of causality (PLOC), which is a measure of felt autonomy for behavior (Figure 5). The PLOC ranges along a continuum from internally motivated to externally motivated behavior (Herath, 2010).
Figure 5. The self-determination continuum showing types of motivation with their regulatory styles, loci of causality, and corresponding processes. From "Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being," by R. M. Ryan and E. L. Deci, 2000, American Psychologist, 55, p. 72. Copyright 2000 by the American Psychological Association, Inc. Reprinted with permission.

An external (extrinsic) motivation is one that comes from outside the person, while an internal (intrinsic) motivation is one that comes from inside the person.

According to SDT, when an individual has an internal PLOC, that person will exert greater effort and experience greater satisfaction in performing the behavior than if they have a more external PLOC (Ryan & Deci, 2000).

SDT further formulates that if the social contexts in which individuals are embedded are responsive to basic psychological needs, they provide an appropriate developmental framework for an individual to ascend. However, if there is excessive control of the situation, lack of connectedness, and non-optimal challenges, the natural psychology, initiative, and responsibility are interrupted (Ryan & Deci, 2000).
Sheldon and Schuler (2011) note that even highly affiliation-oriented people have the same need for competence, even if they do not orient their lives in that direction, just as highly achievement-oriented people still have the same need for relatedness, despite orienting their lives more toward competence. Thus, SDT applies to a wide range of individuals in innumerable situations.

**Agricultural Landowner Motivation**

Brown, Flavin, and French et al. (1990), when discussing a sustainable society, stated:

> In the end, individual values are what drive social change. Progress toward sustainability thus hinges on a collective deepening of our sense of responsibility to the earth and to future generations. Without a re-evaluation of our personal aspirations and motivations, we will never achieve an environmentally sound global community. (p. 175)

Landowner motivation, therefore, is pivotal in achieving a sustainable society. Currently, little is known about how environmental changes influence landowners' attachment to their rural property, and subsequently, their decisions to maintain their land as rural (Lai & Kreuter, 2012). Research has shown that financial and location-related benefits motivate land purchases, while social benefits and connection to nature, and qualities such as peace and quiet, are the key motivations for rural living (Milburn et al., 2010).

Erickson, Ryan, and De Young (2002) note that forestlands, like agricultural lands, provide ecological, economic, and aesthetic benefits. They are vital ecosystems, and thus need to be conserved. Forested lands no longer exist primarily for economic
reasons, but for recreation and quality of life. This is consistent with the literature in conservation behavior that explores intrinsic versus extrinsic motivations. People can see past their own economic interests and will do what makes sense for visual quality, environmental health, and recreation potential.

Bengston, Butler, and Asah (2008) identified six broad categories of motivation for owning land and maintaining it in agriculture: environmental values, recreation, investment/income, non-instrumental values, home/quality of life, and incidental ownership. Environmental values included environmental protection, minimize development, ecosystem services, and wildlife and wildlife habitat. Recreation included hunting, fishing, and other similar uses. Investment/income included development, cost share income, and other non-specific incomes. Non-instrumental values included aesthetic, solitude, love of land, and family heritage, while home/quality of life included topics such as rural lifestyle, retirement, seasonal home, farming and ranching, and other similar topics. Incidental ownership included the views that the woodland was simply part of the property and ownership was incidental, the landowner did not discuss their motivation, or the land had a negative connotation to the landowner.

In a 1989 study, Bliss and Martin identified two categories of factors, external and internal factors, which motivate landowners’ land management activities. According to their study, external factors included income, technical assistance, tax programs, and forestry incentive programs. Internal factors included manager identity and values regarding ethical use of forest resources. Family identity was noted as a contributor, as was personal identity. Implications are that variables such as ethnicity, family, personal
identity, recreational value, ownership and control should be recognized by policy
makers and program managers.

Wilshire, Delate, Flora, and Wiedenhoeft (2011) noted the importance of family,
implying that the decision to maintain the land in agricultural production is closely
associated with heritage or identity. That said, landowners were continuing long-held
family traditions. However, 33% of participants in the study were confident that the
operation would not continue after their retirement, and only one participant was
confident that the family farm would be continued into the future, suggesting that these
landowners had a tendency to believe that the operation itself was a lifestyle choice.

Respondents also stated that individuals who have money from hunting or
investment circles have a much better chance at purchasing the land than those who want
to use the land for agriculture. This causes difficulty when young people want to enter the
cattle business, because the land costs too much to rent (Wiltshire et al., 2011).

Baen (1997) found that in Texas, hunting lease income far exceeds agricultural
income on most properties. The 2007 U.S. Department of Agriculture's (USDA) Census
of Agriculture notes that landowners across Texas commonly lease their land to others.
Landowners who own residential/lifestyle farms, characterized as making less than
$250,000 in income and the landowner having a primary occupation other than farming,
leased nearly 2.3 million acres in 2007. Further, retirement farms, characterized as
making less than $250,000 in income and the landowner being retired, leased 2.5 million
acres that same year.
Additionally, the 2002 USDA's Census of Agriculture identified more than 2,800 farms that received income from recreational services, which are characterized as hunting or fishing. Henderson and Moore (2006) found that as wildlife recreation expenditures had risen between 1991 and 2001, land leases are impacting farmland values in Texas. Texas has a large market for hunting leases, and few public access lands to hunt wildlife, making hunting on private lands a necessity for hunters (Pope et al., 1984). In fact, Baen (1997) noted that the value of harvesting a mature trophy deer can range from $1,400 to $6,500, based solely on the size of the deer’s antlers. This income is increasingly appealing to agricultural landowners. He also noted that pricing structures are inconsistent and confusing for landowners and tenants, suggesting that more research is needed in this area.

Agricultural landowners are leasing their land to build an additional revenue stream into their operation. Although it may provide a positive net income to landowners, it may also alter the cost of agricultural production. Wildlife recreation may increase costs associated with crop loss or damage to vegetation and structures by both the wildlife and those hunting it. Carrying additional liability insurance also increases costs (Henderson & Moore, 2006).

Sorice, Kreuter, Wilcox, and Fox (2012) conducted a study in Texas which identified three distinct categories of landowner motivations for land ownership: agricultural production, lifestyle, and financial investment. Landowners motivated by agricultural production were more likely to be employed by the agricultural industry, derive income from activities on their land, and reside on the land. The landowners
motivated by lifestyle were the least likely to be employed by the agricultural industry and the least likely to reside on the property full-time (noted as absentee landowners in the study).

Because many of these studies noted a motivating factor as fiscal incentives, it is important to understand programs currently available to assist landowners. Williams, Gottfried, and Brockett et al., (2004) noted that every state in the U.S. has some type of preferential property tax program available to agricultural landowners, motivating landowners to maintain their land in agriculture by taxing the land by its use value rather than market value.

Aside from property tax incentives, there are also incentives from other local, state, and federal entities to maintain the land in a specific condition. These conservation programs address a wide range of land management and conservation goals, including topics such as soil erosion, water quality, wildlife habitat, and open space (NRCS, 2012).

One such program identified was the Conservation Reserve Program (CRP). Gerlach (2009) noted that the CRP, which is a program administered through the United USDA Farm Service Agency (FSA), allowed landowners to receive fiscal incentives in exchange for entering into 10- to 15- year contracts to establish long-term resource conservation on eligible farmland. This program has been, and will continue to be, significant for those agricultural producers who are motivated by the economic aspects of their property.

A USDA study completed by Nickerson, Morehart, Kuethe, Beckman, Ifft, and Williams (2012) found that these government program payments increase total income
from agricultural production, and these payments result in an increase in land value, since there is an expectation of a future government income stream.

Aside from cost share programs, landowners also have the opportunity to other agricultural protection, land trust, and land acquisition programs. A recent study in Massachusetts found that landowners were most supportive of cost share programs when working through a land trust, and when preserving and acquiring land for recreation. There appeared to be more support for private (non-profit) organizational efforts than exists for public acquisition of rural land (Lokocz et al., 2011).

As changes in the landscape (more ranchettes and land tracts with fewer acres) arise, it is possible that marginally profitable ranchers and farmers may be driven out of business as increased demand for real estate leads to increases in land prices and property taxes (Sorice et al., 2012).

The same study points out a need for understanding how individual decision-making leads to large-scale changes in land use:

More research is needed to understand the dynamics of rural communities and how land-ownership motivations yield the land-use planning, policy, and education that will enhance the resiliency of these communities and ultimately the sustainability of dryland systems. (p. 63)

Hay (1998) noted that meaning or sentiment ascribed to a place is cultivated through direct and/or indirect interaction with a place over a period of time, which supports a study conducted by Lai and Kreuter (2012) in Texas, where place attachment was found to be high by landowners who noted a past history with the land. Although place attachment was high, few landowners seemed to realize the drastic change that had
occurred across the nearby landscape. The cause was attributed to the fact that change occurs gradually, and so the changes may not be realized until they reach a threshold level.

Similarly, a study by Lokocz, Ryan, and Sadler (2011) indicated that long-term residents of an area were more acutely aware of changes that were happening on the landscape (such as decreasing farms and fields) than short-term residents. The same study asked participants to indicate their support for planning options to manage new development. Although responses showed strong support for protection of agricultural lands, woodlands, and natural resources, concentrating new development around the existing town centers showed the least support. Surprisingly, short-term residents were more likely to support protection of woodlands and natural resources than long-term residents.

Landowners are often so tied to the land, that in the face of unavoidable changes, they experience psychological stress. As one participant in the study (Lai & Kreuter, 2012) states:

Sometimes when it becomes necessary or unavoidable, when a family loses a place like this, it can be devastating. It could truly destabilize the whole family just as much as a major death in the family. (p. 327)

Landowners may be empowered to maintain their land in its current state, if program planners are dedicated to identifying landowner motivations, encouraging landowners to maintain a relationship with other landowners, and encouraging landowners to participate in events (such as public hearings) to express their concerns of potential threats (Lai & Kreuter, 2012).
Absentee Landowner Motivation

A specific group of interest when considering landowner motivations is absentee landowners. There has been an increase in absentee landowners across the U.S. (Petrzelka et al., 2012). The western U.S. has seen an unprecedented level of absentee landownership of rangelands over the latter part of the 20th century (Haggerty & Travis, 2006). Further, Redmon et al. (2004) noted that since 1994, urban absentee landowners dominated rural landownership in Texas. Despite this growth in absentee landowners, little is known about this group and their conservation attitudes and land management behavior (Petrzelka et al., 2012).

Rather, Kendra, and Hull (2005) acknowledged that the absentee landowner demographic can be a challenge. The study found that it can be difficult to locate and contact them, since they do not reside on the land. Because they are surprisingly uninterested in managing their land, motivating them is also difficult.

Absentee landowner demographics.

Understanding the demographics of absentee landowners provides context for understanding this group. The various studies found the demographics of absentee landowners varied greatly. Kendra and Hull (2005) found that absentee landowners tend to be older and have less education than other types of landowner groups, and they own the largest tracts of land. The authors found that almost one-fourth inherited the land, and more than one-third planned to sell it in fewer than seven years. These individuals were the least likely to actively manage their lands, but the most likely to work with federal programs.
Conversely, Kluender and Walkingstick (2000) found that the absentee landowners, called affluent weekenders, tended to be well educated, had high incomes, were working full time and had come from an urban background. Estate planning was found to be important to this group, suggesting that forest estate planning might be an appropriate mechanism to encourage forest management. The study also found that absentee landowners were the only group to select owning a second home as a primary reason for land ownership. They were interested in preserving the natural beauty, wildlife, and natural values, but would occasionally make sales of forest products as long as it enhanced the value of the property.

Lifestyle and amenity concerns were also found to be much more important motivators than timber production and economic concerns. Absentee investors were the only group to rate economics-related motivations (i.e., personal finance, estate building), as more important than other motivators, and they seemed slightly more likely than other groups to believe private property rights should supersede public interest (Kendra & Hull, 2005).

In a study conducted in the Great Lakes Basin area of the U.S., it was found that the primary method of land acquisition was purchase by the landowner, with inheritance as the second most common method. This study also found that a majority of the landowners visit their land several times throughout the year (Petrzelka et al., 2009).

Absentee landowners and economic motivators.

Given that the literature indicated that absentee landowners, similar to traditional agricultural landowners, seem to be economically-motivated, it was paramount to identify
whether absentee landowners were participating in cost share programs. Nationwide, absentee landowners do not participate in cost share programs as often as landowners who live on the land and participate in agricultural operations (Petrzelka et al., 2009).

Petrzelka, Buman, and Ridgely (2009) found that absentee landowners lag behind owner-operator enrollment in conservation reserve program (CRP) and the wetland reserve program (WRP) by 64%. The authors noted that while these cost share programs may be beneficial to absentee landowners, none of the programs use language that specifically target the needs and concerns of their group (Petrzelka et al., 2012).

Petrzelka, Ma, and Malin (2012) pointed out that very few policies or programs exist at the state or federal level that have an explicit impact on absentee landowners. Although there are many conservation programs available to absentee landowners, most of the programs fail to recognize that absentee landowners are a distinct group that have distinct needs and concerns that differ from other groups. Furthermore, although tax incentives are important to most agricultural landowners (Petrzelka et al., 2012; Williams et al., 2004), many absentee landowners do not own land for production purposes and are often less engaged in land management activities on the land. Therefore, some absentee landowners, especially those living out of state, do not qualify for these special tax incentives (Petrzelka et al., 2012).

Although absentee landowners were found to participate less in conservation and cost share programs, it was also found that conservation and concern for the environment were the largest influence when making land management decisions, while recreational and wildlife value was second and water conservation was third (Petrzelka et al., 2009).
This could be due to the fact that most absentee landowners are not dependent upon the income on the land and have limited farming background (Petrzelka et al., 2012). Additionally, landowners who allow tenants to operate the land were less likely to be involved in any land management decisions (Petrzelka, 2012; NASS-USDA, 1999).

While researching absentee landowners, it was discovered that the Center for Absentee Landowners was established to work with landowners who own agricultural property in the U.S., but do not reside on the land. Although there is not currently a pilot project in the research area, the website (www.absenteelandowners.org) includes a brief survey that helps absentee landowners to determine which available programs will most benefit their specific situation (Buman, 2007).

**Factors Affecting the Research**

Individuals who work in the area of land use have observed changes in land ownership and reported a steady increase in the absentee landowner population. Yet, a concerted focus on absentee landowners and associated conservation implications has been minimally discussed in the research (Petrzelka et al., 2012).

Absentee landowners can prove to be a difficult group to research due to the complexity in locating them. This group was of particular interest in this study, since their detachment from the land could be perceived as a disinterest in what occurs on the land. The determination of absentee landowner motivations for maintaining their land in agriculture can provide valuable insight into the larger picture of preserving agricultural land around the installation.
Conclusion

This review of literature provided background information on the military, urban encroachment, agriculture, motivation, and absentee landowners. These topics form the foundation for the study. The inclusion of the Self-Determination Theory (SDT) provided context and explanation as the interviews were examined. Awareness of absentee landowner motivations for land use is lacking in the applicability of SDT to current literature. This study sought to meet that need.
CHAPTER III

RESEARCH METHODS

Introduction

The purpose of this study was to examine the motivation of absentee landowners around a military installation in Texas to maintain their land in agriculture, which is a compatible land use to military training. The following research questions were developed to guide the study:

1. How are absentee landowners currently using the land?

2. What phenomena are motivating absentee landowners to keep their land in agriculture?

3. How do the absentee landowners see their land use changing over time?

4. How does an absentee landowner’s emotional tie to the land affect land management decisions?

Context of the study.

Understanding the context in which the study took place is essential to qualitative research, because it establishes transferability, which is the equivalent of generalizability in a quantitative study (Guba, 1981). The context of this study is the agricultural land located within five miles of one particular military installation in Texas, which was also termed the study site. One may also consider the context in terms of the motivation of the identified absentee landowners who own land near a specific military installation in
Texas during the time that they were interviewed in 2012, and the subsequent information that was obtained from the interviews.

The goal of conducting research on this particular set of participants was to understand the motivations of why they maintain their land in agriculture. As the land use surrounding military installations changes from rural to urban, incompatible development often inhibits full-spectrum military training. The identification of landowner motivations for maintaining land as a rural, agricultural use can allow programs to be created that might encourage landowners to continue to maintain the land in agriculture into the future.

**Phenomenological Design**

Moustakas (1994) explains that the primary target of phenomenological knowledge is the “understanding of meaningful concrete relations implicit in the original description of experience in the context of a particular situation” (p. 14). This qualitative research method was chosen due to the richness of responses that thoroughly describe the phenomenon, as opposed to a more structured, quantitative approach. Van Kaam (1966) argued that an experimental design imposed on the “subjects,” and statistical methods, “may distort rather than disclose a given behavior through an imposition of restricted theoretical constructs on the full meaning and richness of human behavior” (p. 14).

Unlike other qualitative methods that may only consider a single person or event, phenomenology considers several individuals and their experiences with a single phenomenon (Creswell, 1998). Van Manen (1990) explained that phenomenological research seeks to describe basic lived experience. As a research method, it is the study of
essences. Research using phenomenology seeks to uncover the meanings in our everyday existence, and its ultimate aim is the fulfillment of our human nature: to become more fully who we are. Phenomenology tries to "ward off any tendency toward constructing a predetermined set of fixed procedures, techniques and concepts that would rule-govern the research project" (p. 29). This study was based on the phenomenological design because it was concerned with the lived experience of the people whom the study is about, while ignoring any pre-conceived notions.

**Ethics**


Prior to conducting this research, the researcher submitted an application to the Texas Tech University IRB Protection of Human Subjects Committee for an exemption (Appendix A). Exemption was granted because the research consisted of interviewing adults, who cannot be directly or indirectly identified in the research. Confidentiality was ensured and there was little or no risk of harm to the subjects as a result of the research.

**Research Participants**

An appropriate sample for a qualitative research design is one that adequately answers the research question, and the actual number usually becomes obvious as the study progresses, when no new categories or themes emerge from the data (Marshall, 1996). In phenomenological research, the essential criteria to selecting participants is that
the participant has experienced the phenomenon, is interested in understanding the phenomena, is willing to participate in an interview, and will allow the data collected to be published (Moustakas, 2004).

Achieving data saturation requires a flexible approach to sampling, data collection, analysis, and interpretation (Marshall, 1996). Although there is no exact number of required participants to be interviewed in a phenomenological study, several recommendations have been made by well-known phenomenologists. Polkinghorne (1989) suggested that five to 25 in-depth interviews be conducted, which should be augmented with researcher self-reflection. Creswell (1994) noted that no more than 10 interviews should be conducted, while Morse (1994) suggested approximately six interviews, as long as the researcher felt that saturation had been reached.

The goal of purposive sampling is to select individuals who are able to provide in-depth information about a particular topic rather than a representative sample of a given population (Creswell, 1998). After receiving IRB exemption (Appendix A), and following the guidance of these phenomenologists, the researcher selected eight landowners through purposive sampling by reviewing county tax records acquired from public records provided by both the county tax appraisal office and the local Council of Governments.

The heterogeneous sample included two women, three men, and three married couples who participated in the study. For the purposes of the study, the married couples were considered as one participant unit. Although specific demographic information was not collected, observational data related to their demographics was noted at the time of
the interview. Specific demographic information was not collected because the purpose of the study was to understand a specific phenomenon and not correlational or causal associations.

Pseudonyms, or false names, were assigned to participants in the study. The use of pseudonyms protected research participants from breaches in confidentiality. Therefore, if a name used in the study is the actual name of an absentee landowner within the study area, it is a coincidence and does not represent that individual or family.

The women in the study, whose pseudonyms were Ms. Murphy and Ms. Richards, were very different from one another. Neither woman indicated whether they were currently married. One of the women was retired, while the other was a business professional. The three men, whose pseudonyms were Mr. Law, Mr. Wood, and Mr. West, were each in a different life stage as well. One man was in his 80s, but still worked as a business professional in the city, one man was described as middle-aged, and was also a business professional, and the third man was a middle-aged agricultural producer.

The three couples, whose pseudonyms were Mr. and Mrs. Garmin, Mr. and Mrs. Oak, and Mr. and Mrs. Moriah, also varied greatly. One couple was in their late 20s, and both individuals maintained full-time employment. Another couple was middle-aged, and the husband worked while the wife stayed at home. The third husband and wife were both in their 80s and retired, though the husband remained active in agricultural production.
Data Collection

The phenomenological study begins with the collection of data from sources such as interviews and existing documents (Creswell, 1998).

Identifying participants.

A list of all landowners within the counties surrounding the military installation was obtained, and a map was created on ArcGIS, a computer-based geographic mapping program, that assigned the correct name and mailing address to the corresponding parcel identification number within the attribute table of the document.

After the initial map was created, the researcher was able to create a file that identified only parcels within five miles of the installation's boundary. Within this delimited map, the researcher was able to extract a list of names whose primary mailing address resided outside the counties in which the installation was located, thus identifying these individuals as absentee landowners.

The identified names were then placed into a Microsoft Excel worksheet and included the primary point of contact's name, address, city, state, zip code, and telephone number. The spreadsheet was further sorted to identify landowners who resided less than 60 miles from the researcher’s home location, thus minimizing travel expenses to and from interviews.

The search process described above resulted in a total of 18 potential candidates. An individual was considered a candidate if he or she had been determined as a potential absentee landowner, had a complete address and phone number on file (enabling contact
by the researcher) and lived within 60 miles of the researcher's location. From the 18 candidates, six participants were contacted and agreed to participate in the study.

An additional two individuals outside the original pool of 18 potential candidates were identified and asked to participate due to their proximity to Texas A&M University and Texas Tech University. These two landowners were also chosen to participate so that data from the 60-mile radius could be compared to landowners living outside this small region, which further confirmed the researcher's results.

Identified absentee landowners were initially contacted by telephone to discuss their participation in the study and their willingness to complete a face-to-face interview. While on the phone, identifying questions were asked to ensure that the landowner met the criteria for the study prior to scheduling a face-to-face interview. The complete interview guide can be found at Appendix B of this document.

The researcher determined a neutral location for each interview by asking each participant where they would be most comfortable meeting. At each interview, the participant was handed a copy of the research study information sheet (Appendix C). The information sheet described the study, provided information about privacy, and also provided contact information should the participant wish to contact the researcher following the interview.

**Bracketing.**

Phenomenological research requires that the researcher set aside biases and preconceptions prior to the collection of data so that he or she may understand the
essence of the phenomenon being studied (Creswell, 1998; Moustakas, 1994; Van Manen, 1990). This process, known as bracketing or epoche, suspends the researcher’s beliefs in the reality of the natural world, and sets aside subjective feelings, preferences, inclinations, and expectations that would prevent the researcher from understanding a phenomena as it is lived through (Van Manen, 1990).

Although there are many suggestions from various phenomenologists about how to bracket the researcher’s beliefs, there is no obvious or correct way of fully achieving this process. Streubert and Carpenter (1995) suggested postponing the review of relevant literature until after the interviews are conducted and analyzed, while Creswell (1998) recommended writing a personal narrative to externalize potential biases.

For the purpose of this study, the researcher chose to create a personal narrative which briefly described personal experiences and interests that led up to the point of deciding on the particular research topic. Once the narrative was written, the researcher was better able to understand her own experiences, and therefore was able to bracket those subjective ideas, opening her mind to the lived experiences of others. This narrative is located in Chapter IV of this dissertation.

**Interview process.**

Van Manen (1990) noted that although every question to be asked during an interview cannot be identified, some structure should be available to guide the interviewer so that the fundamental question to be answered is not lost in the process. Moustakas (1994) agreed that a set of informal, interactive, open-ended questions should be developed as a guide, but that the questions may be altered or not used at all as the
participant's story unfolds. He also suggested that the interview begin with a social conversation aimed at creating a relaxed atmosphere, and using questions that seek to elicit recall of the experience, in order to maximize the delivery of the full story.

Asking clear questions that are free of technical jargon are important to make the participant feel comfortable about answering questions (Merriam, 2009). Patton (2002) recommended asking “why” questions, while Strauss, Schatzman, Bucher, and Sabshin (1981) identify four major categories of questions to include in an interview: hypothetical, devil’s advocate, ideal position, and interpretive. Hypothetical questions ask respondents to speculate, using words such as “what if” or “suppose” in the question. Devil’s advocate questions are typically used with a controversial topic, when the interviewer wants to elicit opinions and feelings. Ideal position questions elicit opinions and information, asking the respondent to describe an ideal situation. When the researcher asks an interpretive question, he or she is advancing a tentative explanation and explain what the researcher “thinks” he or she understands. Merriam (2009) suggested that good research questions are open-ended and yield descriptive data about the phenomenon.

A question guide was developed by the researcher taking the above recommendations into consideration. The goal of the guide was to gain insight into absentee landowners’ motivation to maintain their land in agriculture. The interviews consisted of questions related to participants’ motivation for keeping their land in agriculture. As recommended by Merriam (2009), the questions were written to be easily
understood. “Why” questions (Patton, 2002) and ideal and hypothetical questions (Strauss et al., 1981) were utilized to elicit further description.

The first few questions asked during the interview sought to elicit recall of the history of the land and personal experiences on the land. By asking participants to describe the land’s history, how they came to own the land, and personal experiences that were particularly memorable, the researcher hoped to understand, to feel and believe, the personal connection that the landowner had with the land.

The next few questions were directed more at land use. The researcher not only sought to understand the current land use, and why the landowner was using the land in that way, but to understand the motivations of why the land was being utilized in this way. By uncovering the motivations of why the participant maintained their land in agriculture, there was a potential to identify methods to assist that person in maintaining the land in agriculture into the future.

The final questions were aimed at long-term land use. Questions transitioned from current land use to what the landowner could see, or hoped to see, in the future. These questions attempted to elicit more than current knowledge. The landowner was asked to predict beyond his or her lifespan. This area is where the dreamer could come to life, and offer the researcher thoughtful insights beyond the present state. Understanding who would own the land after the landowner was gone, and asking the landowner to verbalize his or her wishes, helped to predict the future of the land.

Although a question guide was created, the researcher served as the human instrument for each face-to-face interview. Questions were modified based on responses
as the situation dictated. IRB approval was received to tape record interviews. However, it was determined that participants would be more comfortable without the recording process, and thus, no recordings were made.

**Phenomenological Data Analysis Process**

The data analysis was completed using a modification of the Van Kaam (1959, 1966) method of analysis of phenomenological data (Moustakas, 1994). This process dictated that the researcher complete the following steps for each set of interview notes:

1. List every expression relative to the experience (known as horizontalization).
2. Test each expression for two requirements in order to determine the invariant constituents, or the horizons that point to the unique qualities of an experience:
   a. Does the statement contain a moment of the experience that might be necessary to fully understand the experience?
   b. Is it possible to abstract and label the experience? If so, it is a horizon of the experience. Expressions not meeting the above requirements are eliminated. Vague, overlapping, and repetitive expressions are also eliminated. The horizons that remain are the invariant constituents of the experience.
3. Cluster the invariant constituents that are related into a thematic label. The clustered and labeled constituents are the core themes of the experience.
4. Check the invariant constituents and their themes against the complete record of the research participant.
a. Are they expressed explicitly in the complete transcription?

b. Are they compatible if not explicitly expressed?

c. If they are not explicit or compatible, they are not relevant to the experience and should be deleted.

5. Using the relevant, validated invariant constituents, tell the participants’ stories of the experience, using actual examples from the transcripts.

6. From individual descriptions, develop a composite description of the meanings and essences of the experience, representing the group as a whole.

(Moustakas, 1994, p. 120-121)

Although most steps are self-explanatory, and will be described in the Data Analysis for This Study section of this chapter, further description of Bullet Six above is warranted. As outlined by Todres (2007), the composite description is more than a definition or series of statements about a phenomenon; rather, it tells something that connects with universal human qualities so that the reader can relate personally to the themes. Wertz, Nosek, McNiesh, and Marlow (2011) recommended that the composite description begin with the statement of the phenomena, and then following with a description of the essence of the experience of the participants. The individual participant stories and composite descriptions, by research question, are located in Chapter IV.

Data Analysis for This Study

All analysis and coding were performed solely by the researcher. No computer software was used for this part of the research study. Interview notes were listed in a Microsoft Word document. Each individual expression was analyzed and compared to
the experience being studied, and the researcher chose which statements were related to the experience, and which statements were unrelated. Because the interviews were open-ended, participants were allowed to deviate from the original question in order to create a comfortable conversation, which improved the researcher-participant relationship. However, some statements were not relevant to the study and were subsequently removed.

Each experience determined to be relevant was highlighted within the text. Themes such as family, leasing land, hunting, agricultural use, recreational use, minimization of development, and funding emerged within each interview.

Using the constant comparative method, the researcher analyzed and coded transcripts at the end of each interview so that invariant constituents were determined as each interview was conducted. According to Merriam (2009), the constant comparative method involves comparing one segment of data with another, simultaneously with the data collection process, to determine similarities and differences. After the third interview, the researcher began to group the invariant constituents into themes.

After the sixth interview, the researcher began to form categories as themes began to emerge. After the statements were grouped by theme, four categories emerged. These categories were absentee landowner perceptions of land use, phenomena motivating absentee landowners to maintain land in agriculture, emotional ties to the land affecting land management decisions, and changes in land use over time. A peer debriefing memorandum was sent to the researcher’s dissertation committee members, describing the current status of the research, emerging categories, and future plans. Feedback from
the peer debriefing allowed the researcher to gain insight and recommendations from the committee, ensuring that initial categories and research direction was agreeable with all parties.

Based on feedback from the peer review process, the researcher determined that, although all information had been consistent at this time and data saturation was beginning to occur in the categories, at least two more interviews should occur to ensure that no new themes emerged. After the final two interviews, and no new invariant constituents or themes emerged, the researcher considered that data saturation had been reached, and no additional interviews were necessary.

All invariant constituents were confirmed one final time by comparing interview notes one statement at a time. This confirmation process was used to ensure that each invariant constituent were expressed explicitly or compatibly in the transcripts, thus removing any potential researcher bias that may have inadvertently been inserted during the process due to misinterpretation of landowner comments during the writing process.

The final step involved the researcher creating individual stories based off the information received in each transcript. The stories serve as a thick description of the actual interview as it occurred. Actual quotes from the participants, paired with researcher observations, create each participant’s story. The stories can be found in Chapter IV of this document.

Detailed notes were written by the researcher regarding comparisons between individuals, how the researcher arrived at the comparison, and how categories emerged
during data analysis. A reflection log was used to record the researcher's thoughts and ideas, while an audit trail tracked notes and information related to the data.

**Research Rigor**

Lincoln and Guba (1985) proposed four criteria for judging trustworthiness, or the soundness of qualitative research. The four criteria that reflect the underlying assumptions involved in qualitative research include: credibility, transferability, dependability, and confirmability. Frankel and Wallen (2009) suggested several general methods to promote trustworthiness, including:

- Checking one informant's descriptions of a subject against another informant's descriptions of the same thing,
- Learning to understand and speak the vocabulary of the group being studied,
- Writing down the questions asked (in addition to the answers received),
- Recording personal thoughts while conducting interviews,
- Asking participants in the study to review the accuracy of the research report (member checking),
- Obtaining an individual outside of the study to review and evaluate the report (external audit),
- Documenting the sources of remarks when appropriate,
- Describing the context in which questions are asked and situations are observed (thick description), and
- Interviewing individuals more than once when appropriate.
An in depth discussion of the trustworthiness criteria used in this dissertation is discussed further in the following sections.

*Credibility.*

Credibility refers to the accuracy with which the researcher has represented the views of the participants. That is, how correct is your constructed reality (Denzin & Lincoln, 1994)? For this study, credibility was achieved by using member checks, peer debriefing, and thick description.

Member checking, or allowing the participants to confirm the accuracy of the collected information, was performed at the conclusion of each interview. Throughout the interview, the researcher asked questions such as, "If I understand you correctly, you are saying that...," or, "Let me read this back to you to make sure I've understood correctly." At the conclusion of the interview, the researcher provided a final brief description to the participant for clarification and approval.

The researcher then used peer debriefing by sharing the results of the study with two individuals who were subject matter experts in the field of encroachment, but who were not directly related to the study. Peer debriefing was also conducted by the dissertation committee. A copy of the peer debriefing memorandum can be found at Appendix D of this document.

Thick description was used to capture the essence of each interview in order to capture the real-life situations. The thick description went beyond simply relaying
conversations verbatim, but rather richly describing the setting of the interview and the participants.

Credibility was confirmed when the results were determined to be credible, or believable, from the standpoint of the participants and the subject matter experts. If the researcher has gathered enough data (including both interviewing enough participants and gathering enough information from each participant individually), then the research will naturally become credible.

Transferability.

Transferability, or the applicability of the findings to other similar situations, was enhanced by thoroughly describing the research context and the assumptions that were central to the research. It is recognized that the individual who wishes to transfer the results to a different context is responsible for making the judgment of the sensibility of the transfer. However, the researcher strove to use thick description to describe the context of the study accurately to better enable this judgment.

Purposive sampling increased the potential for transfer of findings to other stories related to absentee landowner motivations near military installations. The researcher compared county tax data and local Council of Government data to the names chosen by the researcher. By choosing each landowner and confirming that they met the desired landowner characteristics, transferability to similar situations was increased.

Transferability of this study is limited to situations similar to those presented in this dissertation. Qualitative research involves a small, purposive sample because the
researcher wishes to understand a particular situation in depth, not find out what is generally true of the many (Merriam, 2009). It is not possible for the researcher to know to which situations the study may be transferred. However, the researcher has provided sufficient descriptive data to make transferability possible (Lincoln & Guba, 1985). To assist in this transferability, the researcher ensured that the study was well-grounded in both prior research and theory, and used rich, thick description in order to ensure the opportunity for the reader to fully understand the context and essence of the study.

**Dependability.**

Dependability refers to the extent to which another person not involved in the research study could track the research process and determine which raw data were used to reach conclusions. It is the responsibility of the researcher to account for the ever-changing context within which the research occurs. The resulting study must thoroughly describe the changes that occur in the setting and how these changes affected the way the researcher approached the study.

Both a reflexive journal and an audit trail were maintained throughout the research process to ensure dependability of the findings. The reflexive journal served as a diary to log the researcher's schedules, insights, and methodological decisions. The audit trail maintained raw data, the reduction and analysis process, and coding information. The audit trail may be found at Appendix E of this document.
Confirmability.

Confirmability refers to the degree to which the results could be confirmed or corroborated by others, and whether the researcher's interpretations and conclusions are plausible.

First, the natural flow and progression of the study was analyzed by the researcher to ensure that it made sense. Any outstanding questions and concerns were then thoroughly addressed. Established data analysis recommendations for phenomenological data (Moustakas, 1994; Van Kaam 1959, 1966) were followed to reach valid conclusions and interpretations.

Peer debriefing was the final stage of the process of ensuring confirmability. Both subject matter experts and the dissertation committee reviewed the data and conclusions, and both parties were provided with ample time to complete a thorough review.

Researcher bias.

Researcher bias was minimized to the greatest extent possible. However, the possibility still remains that researcher bias had some effect on the study. Observer bias was possible due to subconscious, personal characteristics of the researcher. This bias was minimized by maintaining a positive attitude toward the research and toward the participants. The researcher also recorded notes during the meeting and immediately following the meeting so that the researcher's memory was not affected by personal beliefs.
It is recognized that the researcher is involved in programs aimed at preserving agricultural lands near the military installation. Thus, it is possible for observer contamination to occur. Although the researcher maintained an open mind regarding the use of other programs as a viable option for agricultural land preservation, significant knowledge of this one program could have caused the researcher to focus on particular aspects which may benefit that program. As a result, the researcher used peer debriefing and member checking to minimize this bias.

Procedural bias was avoided by scheduling sufficient time for each interview. Follow-up phone calls were utilized as the researcher felt necessary in order to ensure correct information was obtained and recorded.

Conclusion

This chapter explained why a phenomenological study was the appropriate method due to the rich description needed to answer the research questions. This phenomenological study utilized interviews with absentee landowners near a military installation in Texas.

The format recommended by Moustakas (1994) was followed in the report of findings. The researcher bracketed her own ideas and perceptions related to landowner motivation, and then proceeded to conduct interviews with eight absentee landowners who owned land within five miles of the military installation's boundary, but did not live within the counties where the installation is located.
The interviews were hand recorded by the researcher. The phenomenological method (Moustakas, 1994), was followed as invariable constituents were identified, themes were confirmed, and participant stories were written. The participant stories and results of the study can be found in Chapter IV.
CHAPTER IV

FINDINGS

This chapter includes a description of the findings of this study. The findings were derived from four research questions. Those questions were:

1. How are absentee landowners currently using the land?
2. What phenomena are motivating absentee landowners to keep their land in agriculture?
3. How do the absentee landowners see their land use changing over time?
4. How does an absentee landowner's emotional tie to the land affect land management decisions?

Phenomenological Research - Bracketing

Phenomenological research requires that the researcher first understand his or her own lived experiences before fully understanding the lived experiences of others (Van Manen, 1990; Moustakas, 1994). For the purpose of this study, the researcher chose to create a personal narrative which briefly described experiences and interests that led up to the point of deciding on the particular research topic. The narrative occurred in two sections. First, the researcher described her background and experiences, up to the point of choosing this topic as her dissertation. Second, although she is not a landowner, the researcher described how she would have answered the interview questions if she were an absentee landowner. Bracketing her pre-conceived ideas allowed the researcher to recognize anticipated responses and ensure that those ideas did not impact the Participant.
Stories or Composite Story found in Chapter III or the subsequent findings and conclusions found in Chapter V.

The Researcher’s Story

I have been around farming and ranching since birth. Some days, I think I may have been born with boots on my feet. My mother’s family managed a 10,000-acre working ranch and game preserve. On the weekends, you would be hard-pressed to find me indoors. We traveled to the ranch, where I was a fisherman, a hunter, a horseman, a cattleman, and an aspiring scientist, toting in an array of insects and flowers for my grandmother to identify. As I write, I can still smell the fragrance of my grandmother as we sat, side by side, fishing or shelling pecans by the creek.

On my father’s side of the family, things were not much different. My father’s parents owned a considerably smaller tract of land, closer to 150 acres, but still enough land to have a successful Limousin cattle business. It was there that my desire to enter the stock show arena grew into a reality.

As I grew older, I became interested in showing cattle at fairs across the state of Texas. I was almost always successful, winning many blue ribbons, trophies, and belt buckles throughout the 10 years that I practically called that stock barn home. Showing cattle was something the whole family was a part of. We hauled the steers and heifers to a different show nearly every weekend. It was more than a hobby, it was a lifestyle. Some of my closest friends came into my life during my showing career, and it was a time I would not change for anything.
As a senior in high school, I already had my eyes set toward higher education. As I read my college acceptance letter, I literally screamed for joy. I knew from early in my education that I wanted to write and I wanted to remain heavily involved in agriculture, so agricultural journalism was the field for me. I graduated with a bachelor’s degree in three years, and immediately entered into a master’s program at the same university. In a total of five years, I was ready to take on the world.

After leaving college, I held a variety of positions that directly impacted farmers and ranchers. I worked primarily with conservation programs for the State of Texas during my early years after graduating, and transitioned into a program working with wildlife and conservation for the Department of Defense.

My background, education, and work experience led me to the topic of this dissertation. I found it interesting that the Army and landowners near military installations in Texas had such a love/hate relationship. The Army seemed to appreciate the rural landowners and obliged them to maintain a relatively large herd on the installation itself, yet landowners had quite a distrust of the Army after the military installations were created through eminent domain, taking private lands to enlarge the size of the base.

I could not help but wonder if the Army was somehow missing something. Although there was a program that allowed landowners to encumber their land with a perpetual conservation/preservation easement in return for a payment for the development rights, landowners were still not participating at the same rate in Texas as they were near other military installations outside the state. I asked myself, “Where is the
disconnect?” “What am I missing here?” and “If this is not motivating the landowners, what will?”

This series of questions led me to the development of the research question framing this dissertation. As I developed the question into an actual study, I wanted to ask myself the same questions that I planned to ask the landowners, so that I would know my thoughts, ideas, and beliefs. By identifying those beliefs, I could set them aside, or bracket them, and concentrate on exactly what the landowners were telling me. Although I could not answer each question because I did not, and still do not, own land in the area, I focused on the following questions:

1. What are your reasons for maintaining your land in agriculture?

This is my history. It is my way of life that I learned from my grandparents and my parents, and it is a quality I hope to pass down to my children and grandchildren someday. Land is an asset, both financially and environmentally. As fewer and fewer acres are devoted to growing the world’s food supply, food costs are continuing to rise. In addition, being a good steward of the land is important, because we need to sustain the land for generations after we are gone.

2. How important is it to maintain the land in agriculture?

I believe that maintaining land in agriculture is dire. As stated earlier, food supply shortages are ahead, and in times of environmental crisis, maintaining the ability to produce food and sustain your family is very important.

3. Do you participate in cost share programs on the land, and why/why not?
I think that participating in these programs is often cumbersome. The paperwork is endless, and even finding a suitable program to use on your land is difficult. I know I would participate in programs if I was aware of them, so long as they were simple to implement and economically advantageous.

4. Do you hope to leave your property to heirs?

Absolutely. Passing down land is so important. As land prices continue to increase, my heirs may not be able to afford large tracts of land in the future. Even if my family decided not to actively manage the land, even possessing it for a possible need in the future is important.

5. What are your future plans for the land?

Other than leaving the land to my heirs, I think continuing to manage it in a sustainable manner is the most important thing we could do for the land. Minimizing development, increasing water and soil quality, and outright improving it for future generations is the direction I’d like to go.

Participant Stories

*Mr. Law’s story.*

As I waited quietly in the lobby of Mr. Law’s sterile high-rise law office, my eyes slowly moved from painting to painting, each of a different agricultural scene. There were paintings and photographs of cowboys, cattle, and horses scattered among the filing cabinets and reception desks.
I turned to see a frail looking gentleman with a warm smile slowly motion me toward his office. As we made our way to his office, it was clear by the nods and glances that this was a man who was well respected there.

Mr. Law offered me a seat in a cool, leather chair across the desk from him, in a corner office lined with floor-to-ceiling windows. Like his smile, the place was bright and welcoming.

He told me that he had owned the property near the installation since 1978, though he had purchased other land in Texas much earlier in his life. Owning land had been instilled in Mr. Law since he was a small child. His mother, a Czechoslovakian by birth, immigrated to the U.S. as a young child, yet her beliefs on land ownership and stewardship followed her into adulthood, and was passed on to her children.

This family tie to the land remained important to Mr. Law over the years. He said that he enjoyed the hard work of clearing land, and watching his wife and children spend the weekends fishing and enjoying nature. The proximity to his home made the property an ideal place to spend birthdays, holidays, and family reunions. He talked about how he loved the large creek that flowed through the property, and how he enjoyed hunting the large expanse of open land.

Although the land was inexpensive at the time, Mr. Law expressed the importance of family over money. "Land is an investment," he said.

Mr. Law looked out the great windows in his office over the expanse of city many stories below. He sat there silently a moment to take in the sights. He smiled and looked
back at me, and waved his hand toward the window as he spoke. "When I was in high school," he said, "all the area around here was cotton fields. It's changed a lot since then."

He also spoke about the nearby military installation, and the Army’s plan to expand. “They were going to take all my land on the west side of the road, but people there didn’t want to sell, so the installation backed off.” He softly placed his hands back on the desk, and looked me in the eye. “Land is a great investment, and it is never going to get any cheaper,” he reiterated.

He turned back toward me and clasped his experienced hands in front of him. He laughed as he spoke of the different lifestyle his children, grandchildren, and great grandchildren had. He understood that children these days are more digitally-minded, preferring video games and television to hard work on the farm. "Someday, my kids may sell it," he said. "But land is a great investment, and it's never going to get any cheaper. Someone would have to offer me a hell of a lot of money for that place because I've worked my butt off out there!"

Although he realizes the differences in generations, Mr. Law still plans to leave the land to his children. He laughed heartily as he thought about it a moment. "Right now, I'm the king and I manage it like I want to," he said. "When the king and queen are alive, it's ok, but once they're gone, it get's sold."

When asked about participation in cost share programs on the land, Mr. Law acknowledged the lack of program availability for his type of land use. “I worked a little with the soil bank program, but mostly, those programs are for people with crops. They don’t fit what I’m doing here,” he said.
Motioning toward the window again, this time toward an open area that appears to be just past the city's edge, Mr. Law tells me more about how the land is being used. Although the land we could see was not Mr. Law’s property, it was obvious that he was naturally drawn to open spaces. Mr. Law said that his family grows hay on part of the property, though much of it is natural and open for cattle grazing. "I make more leasing it than I ever did in the cattle business," he chuckles.

His demeanor changed more serious as he leans back in his chair and rubs his thin hair. He tells me how the last year's drought had been hard on the land, and many of the cows had to be removed. "Wasn't nothing but dirt, and cows don't eat dirt," he said.

Although he will leave his land to heirs, he says that in 50 years, he imagines the land will all be developed. Preparing for that scenario, he has set up the land to have both lake and creek front property. Ideally, he wants to see a nice development. "You have to have high hopes for your land, but you never know what is going to happen when you start breaking it up," he says.

As I start to collect my paperwork to leave, I stand and shake his hand. In his mid-80's, he has a firm, confident handshake, but as I turn to leave, he places his hand gently on my shoulder. He reminds me of the importance land stewardship plays in the future of agriculture. He speaks reminiscently about recent fires and tornadoes wiping towns, and even counties, off the map. "Out in areas like West Texas, there's no telling what's going to happen out there. You just have to hope people will be good stewards of the land."
With that, he pats me on the shoulder and sends me on my way. And as I walk past the same agricultural paintings on the wall, I cannot help but feel that I have a much greater understanding of the man who placed them there.

**Ms. Murphy’s story.**

I was greeted by a soft-spoken, sweet voiced, “Hello,” as I introduced myself to Ms. Murphy. She was hesitant at first, almost timid, and I worried that I would have a difficult time communicating with her. Her voice cracked, and she seemed uncomfortable. As a single, elderly woman, she was guarded to strangers. However, as we got to know one another, I uncovered a humorous, interesting, and incredibly knowledgeable woman inside. I discovered quickly that this delicate woman had quite a story to be told.

Ms. Murphy told me that the land had been in her family for two generations. “My dad bought it in the 1950s,” she said, but the history of the land went much further back in time. She told me of the land’s history as a boy’s ranch before her father purchased it. She noted that a famous movie actor from the World War II era filmed a movie on the land. “Many of the boys from the boy’s ranch still come out there to the land for an anniversary get-together” she said with a grin.

Aside from this rich history, Ms. Murphy also has other fond memories of the land. Her father, who owned a small meat business in a nearby town, stayed very involved in the land. “It was something that was really important to him. Friends and relatives used to go out there in the spring and hunt for arrowheads and have family get-togethers too.”
Ms. Murphy drew in a deep breath and smiled. “You know, I remember going out there as a little girl with my elementary school classes for little parties,” she giggled. I could tell that she was warming up to the idea of sharing her memories with me.

Then, her face drew a little more somber as she remembered a great fire on the ranch. “When I was very young, my parents had an anniversary party out there. They left the fire burning and thought it was out, but it caught the house on fire and the main house burned down.” She sighed a regretful sigh, and told me that because they had no insurance, the family was unable to rebuild the house. “At least the slab is still there,” she said.

Ms. Murphy seemed to snap out of that memory sharply, and spryly noted that her sister now lives on the land. Though, that was not always the plan. “My dad said he was going to sell the land, but we asked him to leave it to us, so he did,” she said proudly.

This thought brought a broad grin to her face, as she told me that her primary reason for keeping the land in its natural state was so that she could pass it down to her children. Though, money has also been a motivator as well. “Everyone that has land should keep it in [agriculture],” she said, “and it keeps the taxes down, too.”

As she talked more about land use, she noted that leasing the land was also a way that the land makes income. “We lease the land to someone else who runs cattle on a big part of the land,” she said.

Although the land has been in her family for generations, she notes that there have been thoughts of selling it. “People are always calling and asking to buy small parts, and
asking to break it up to build houses, but we want to keep it in big areas. We sold some of
the land to another rancher so that he could expand his ranch,” she said. However, some
of the land will remain in the hands of the family members. “We plan to keep at least 100
acres per person. The land is split up between all four of us, and we keep all the mineral
rights,” she said.

As she brought up the mineral rights, it seemed to strike a nerve. She smiled and
giggled softly. “We even started to drill,” she laughed, “but it was such a hassle that we
quit. But, if anything is ever found, all four of us will share the mineral rights.”

This talk of mineral rights brought up conversation on cost share programs on the
land. Ms. Murphy said that, about five years ago, Texas A&M University asked to come
out to the land and interview her, and talk to her about a program to keep her land in
agriculture. She had denied talking to anyone at that time. I smiled, thinking how
privileged I was to be speaking to her now.

As far as the future of the land is concerned, it seems that it will remain in
agriculture for years to come. “We’re going to hang on to this land we have for now,
maybe sell a little, but hang on to the rest,” she said. When asked about how she hopes
the land looks 50 years from now, she smiled her biggest smile and laughed even louder.
“I’m in my 70s, so I don’t think I’ll be here that long,” she said. And as the big smile
slowly faded, she seemed to sincerely reflect on the question. She drew in a big breath
and blew it out slowly, intentionally. “Well, I hate it, but it will probably be all built up,
full of houses and buildings. That is what it looks like it is all going to now,” she said
coldly. As the conversation ended, I could not help but think of the rich history I had
been privileged to hear, and I felt even more fortunate to have received the history first-hand from Ms. Murphy.

Mr. and Mrs. Garmin's story.

As I watched Mr. and Mrs. Garmin walk across the parking lot toward the conference room I had secured for our meeting, I could already see an air of confidence moving toward me. Though he was man of tall, stout stature, Mr. Garmin walked with airiness in his step, chest out, and head high.

In contrast, Mrs. Garmin flowed along slightly behind him, a sweet, timid woman of much smaller stature. She was a simple woman with a warm countenance. Her eyes squinted as she smiled and opened the door. As I shook their hands, their firm grip and jovial attitude told me that I was in for quite a story.

Mr. Garmin told me that he was a third generation landowner, as the land had been purchased in the early 1880 by his great grandparents, who had come to this county from Georgia. "They acquired the land to farm, and they lived there, and my grandfather was born there," he said.

"My grandparents received it [from my great grandparents] in 1900, and my parents inherited the land in 1962," he said. Looking at his wife for confirmation, he then recalled that he inherited half the land in 1992, after his father's passing, and the rest of the land as a gift from his mother in 1998. "The land was left to us three kids: me, my brother, and my sister," he said. Though, I could sense there was tension in that comment.
"My brother doesn't exactly get along with the rest of us," he said gruffly, his eyes full of sadness. "He lives out there but doesn't contribute at all. He's going to make us have to get rid of that land," he said.

Though family tension is a current problem, there have been many fond memories as well. Mr. Garmin took a deep breath, seeming to recall better times on the land. "We have a picnic area on our property along a creek," he reminisced. "I went there when I was a child, and later we went as a family. My wife and I fixed up the area with furniture and a barbeque pit. We cook hamburgers and hot dogs around there, wade in the creek, and target shoot. We spend a lot of family time together there," he said.

When asked why he continues to keep his land in agriculture, he said, "It isn't time to develop it now." He leaned back and pondered the question further. Grabbing the armrests of the chair, he spoke about the landscape. "Development would cost a lot because the land is so rugged. That whole area is very natural," he said. Then, a big grin crossed his lips. "I'm getting on up in age, and I don't want to spend the next 10 years getting it ready to develop before seeing any money come out of it," he said.

Remembering the conflict with his brother, and the possible sale of the land, he added, "And, I like to see it maintained in agriculture. We're going to buy another place, and we'll have chickens, goats, cattle, cats, and dogs on it."

"You know, an agricultural exemption on the land is so important," he added, "It's the ag exemption and the peacefulness." He explained how the agricultural exemption allows his family to maintain the land in agriculture. "The ag exemption allows us to stay out there. If we had to pay land taxes, there's no way we could survive," he said. "We also
make income by leasing to hunters, we have some cattle out there, we lease a field to a farmer, and we trade for hay as part of the lease."

As he spoke about the monetary aspects of the land, he also mentioned cost share programs in which he has participated. "We've dug two wells and done some land clearing through those programs," he said. The wells have helped the family better utilize the sections of the ranch, so that livestock has access to water sources. "The wells help us better utilize the land for grazing. If we didn't have those, some of those cattle would have to walk a mile or two just to get water, and in the drought, that wouldn't be good," he said.

Then, remembering the cedar clearing program, he had to laugh. Mr. Garmin said, "We also were trying to get rid of some of the cedar." Then, with a quick glance to Mrs. Garmin, the two giggled like children. "We have these feral dogs out here," he chuckled, "and the darn things killed all the goats that were a part of that program, so we can't continue that program anymore," he said. He explained how homeowners had abandoned their dogs over time near their property, and the dogs had become wild, formed packs, and reproduced to form a feral population in the area.

As we continued the conversation, the topic of the future of the land arose. He sighed a heavy sigh, and had looks of regret as he spoke. He talked about trying to get along with his brother for the sake of the property, and even searching for possible solutions to allow the family to keep the land. When it was decided that keeping the land in one single tract would not work, other plans had to be made. "We were going to try to divide the property equally among the three family members. But an appraiser we hired
determined that the three parts would be worth a lot less than the whole place if we left it intact, so we're going to sell the whole place as one large ranch," he said sadly.

"You know, in an ideal world, if we were able to hang on to the land, I'd like to see the brush gone," he said, changing the subject to happier times, "And, I'd like to see some improved furniture down at the creek." He said that he would also like to see crops planted, and the land improved for cattle grazing. "Where the soil is good, I'd like to see some good fields put in. Right now, we can only run one cow per every 10-12 acres. If the brush was cleared out, we could double that," he said excitedly.

Managing for wildlife, he said, he would leave cover on the hillsides where the soil is not ideal. This would allow animals like deer and other wildlife to maintain a home on the land, too. "That way, you have a mixed habitat," he said.

We laughed often during the course of the evening, and I glanced at my watch in shock. Our meeting, scheduled for only a half-hour, had continued nearly two hours. The pink haze of the setting sun gleamed down through the small conference room window, urging our meeting to close. As we stood to leave, all shook hands and promised to keep in touch. I had met more that night than research participants, I had met friends.

Mr. Wood's story.

As I drove down the tree-lined driveway to the stately home before me, I checked the address again on my notebook. I was at the correct home, though it looked nothing like the others I had visited for my research. The home was grand, with towering pillars and castle-like doors before me.
During our first conversation, Mr. Wood had sounded slightly skeptical of my research study, and was almost hesitant in agreeing to meet, but as he came to the door, the small, fit, middle-aged man I faced was far from what I had expected. He quickly guided me through the home and into the kitchen so that we could sit and talk at the breakfast table. He was reserved and quiet as he showed me a seat and took one opposite me.

Mr. Wood told me that he had owned the land for 27 years, and that it was purchased as a recreational property for his family to enjoy. "We manage it mostly for wildlife and outdoor experiences and camping," he said.

Unlike many of the other families I had spoken to, Mr. Wood seemed uninterested in the typical farming and ranching that is common in the areas surrounding the military installation. Instead, he and the family enjoy activities such as hunting, fishing, camping, campfires, and hiking.

He glanced out the kitchen window into the expansive back yard beyond. "We love to be outdoors," he said. "In business, we spend all our time indoors. Our family likes to get outdoors, see the bluebonnets and wildlife. We also get out and clear cedar, things like that. We enjoy working and playing outside."

I could tell that Mr. Wood was truly in love with the beauty of nature. He continued to stare out into the yard, where birds and squirrels could be seen flitting among the various landscapes. He expressed how important he felt it was to maintain the land in a natural state, rather than developing it. Turning his gaze back to me, he said, "The more we turn into parking lots, the less there is to enjoy."
He continued to explain how cost share programs had helped maintain the land the way he wanted it to stay - natural. He said that he had participated in two separate programs aimed at enhancing the property while preserving its rich natural atmosphere. "We used cost share in building a tank with the soil conservation service about 26 years ago. We paid half of building the dam and they paid the research costs in where to locate it," he said.

Additionally, he noted that cedar trees have posed a problem in maintaining water quantity on the land. He said that keeping the cedar controlled is a constant struggle on property in this area. "The Leon River Watershed group came and did an 85/15 split on helping with cedar clearing about seven or eight years ago," he said. "The programs were an attractive cost benefit and the work needed to be done on the property," he said, noting his satisfaction with the programs on his land.

As we spoke about the future of the land, Mr. Wood seemed to open up slightly as he spoke about his hopes for the property. In the short term, Mr. Wood hopes to maintain the current state of the land, and make minor improvements as he is able. "We built a little cabin last year," he said. "We have a project right now to clear cedar around the cabin. We just got a new tractor, too, and we'll clear and plant food plots this fall, and we'll do general upkeep on the roads," he said. In addition to these new additions, Mr. Wood said that he put in a high fence about three years ago for managing wildlife, and he traps feral hogs on the land.

Although many of his long term goals are similar to the short term goals, such as managing for wildlife and improving the landscape, he also has high hopes for bringing
back a long-gone species to the area. "We'd like to investigate with a biologist on how to bring the quail back," he said excitedly. He also hopes to lease the land to deer hunters. "Maybe we'll do hunting leases after the deer start to grow from the protein feed," he said.

Although there has been much hard work put into managing the land naturally, Mr. Wood doubts that he will leave the land to his heirs. "My son has allergies and asthma. We enjoy it, but it's getting harder to go out there. Our daughter likes it, but her husband is not interested. I doubt there's any hope to leave it to them," he says matter-of-factly.

But although he is unsure of the land’s future ownership, he does hope that the land remains natural. "In 50 years, we'd like it to look like it looked 100 years ago. We'd like to see increased habitat diversity for sure. It had been overgrazed before we bought it, so it's overgrown with cedar now." And as he hesitated one last time, he looked again to his back yard. "We want it to be undeveloped," he said.

Though short, the interview had broadened my understanding of the viewpoints of surrounding landowners. As I thanked him for his time and we walked toward the door, I smiled. It made my heart happy to know that there was such an avid conservationist among the landowners near the installation, who planned on making sure that, on his watch, the land would remain natural.
Ms. Richards’ story.

On a warm summer day, I walked into Ms. Richards’ office. Her receptionist greeted me with a bright smile, and another staff member quipped cheerfully, "Oh, yes ma'am, she was expecting you!" It was refreshing to be in such a joyful environment.

It was no surprise that, as Ms. Richards approached, she too, was incredibly jovial. A small woman, she shuffled me back to a cluttered office, where she laughed and told me to excuse her mess. It was clear to see that she was people-oriented and cared little about the organization of a space so quiet and lonely.

I sat in the chair across from her, and she looked rather small sitting behind her large wooden desk. She was comfortable about sharing her story with a stranger, and she was one of those individuals that had a knack for making anyone feel like a close friend.

Ms. Richards told me that she had purchased the land eight years ago as a recreational getaway for her and her four children. And, she explained that even finding the land had been a challenge. After looking in surrounding communities, but finding those properties to be cost-prohibitive, she started expanding her search to lands near the military installation. "We were looking for about 100 acres with a livable existing structure, a barn, and those types of facilities. We looked at land that was within an hour of here. We looked at [other areas nearby], but land was too expensive. So, we settled on this property instead," she said.

She folded her arms and placed them on her desk. She pursed her lips, in deep thought about what she was about to say. She smiled as one could almost see the
memories filling her mind. She spoke of the joyous times she and her family had spent on the land. "Usually, we spend fall holidays like Thanksgiving and Christmas out there. It is a place where we can be outside, away from stores and the hustle-bustle of town. We can just be together as a family. It is very peaceful and quiet out there. Our extended family comes, too," she said.

Her desire to keep the land in its current state is a priority to her and her family. She said that, too often, people "chew up" the land, and that it should remain in a natural state for people to enjoy. She also noted that the property was purchased for recreational use for the family. "We wanted 'raw' land," she said. "We've never had the intention of developing it, we want to keep it as-is. My kids were able to get away and run around outside - you can't do that in the city."

When asked about using cost share programs on the land, Ms. Murphy noted that she knows very little about them. And from her experience, securing funding proved to be a challenge. She furrowed her eyebrows as she thought longer on the subject of these programs. "I was interested in a pond program, but the county ran out of funds for the program," she said. Then, as she looked directly at me, she asked, "How do you know when money is available? It really seems like a 'good ol' boy' system if you ask me." And then, she spoke about the nearby Army installation, and a desire to participate in a program that is offered through them. “I'm also interested in the Army's buffer zone program. I made a lot of calls, but no one ever called me back," she said, frowning.

Quickly changing topics to something better fitting of her personality, she spoke of the land's future. Although the land had been an enjoyable retreat for the family, it was
time to move on. "The house is currently on the market. And, we’d like to sell the land as well. Our oldest two girls are graduated, and the younger two are about to graduate and go off to school. The land is no longer serving its purpose for our family," she said.

Because she seemed so enthusiastic about ensuring the land remained natural, I asked whether she would try to ensure the next owner shared her same sentiment. "The location of where the property is really is prohibitive to development. It is down a long dirt road," she said, happy that the land would most likely be maintained in its current use. "And in 50 years, I hope the land looks exactly the same as it does today," she said with a broad smile across her face.

But until the land is sold, it is currently leased by a local landowner who runs cattle on the land. "We have an agreement with a local landowner. We run about 12 head of cattle on the land, because that is what the local extension agent recommended. The landowner shreds and fertilizes for us, and checks on the place too," she said. And, she added, the agreement ensures that the landowner follows her land management requirements. "We have a very specific written agreement with the rancher. He can't change anything or use the land for anything other than the stated purpose. Last year, we were more lenient with the number of head of cattle out there because of the drought," she assured me.

As the conversation drew to a close, I thought about how much I hated hearing that such a wonderful steward of the land would be leaving the area. Though I am sure the land will be missed, I somehow doubt that the sale will bring such an enjoyable woman down.
Mr. and Mrs. Oak's story.

Pushing my way through the doors of the small sandwich and coffee shop, I did not have to look long to recognize Mr. and Mrs. Oak. At a tiny round table, they beamed a hearty welcome and motioned me toward their table. Having only spoken on the phone, I had never seen either of them. Yet, they had an air about them that made me know in an instant this was the couple I was set to meet with.

A young couple, Mr. and Mrs. Oak reminded me so much of what I would have imagined Mr. and Mrs. Garmin as being like in their younger days. Mr. Oak was a tall, stout man with a firm handshake and Mrs. Oak, quiet and reserved, was much more petite. They both had warm eyes and a quick smile, and were the kind of people who make conversation flow easily over a glass of sweet tea.

Although Mr. Oak was not the owner of the ranch, his involvement from the ranch's inception made him an ideal individual to speak with. And with the permission of the owner, his father, we proceeded on with the conversation.

He told me that his father, and his father's best friend, had purchased the property seven or eight years ago in order to lease it out, and Mr. Oak had been instrumental in locating the parcel itself. "My dad got to a financial point to buy some land, so he asked me to find some good land for them," he said.

I could sense Mr. Oak's excitement about the land. He explained how it had been his father's dream to own land in Texas. "We had always leased hunting land in East, South, and West Texas," he said. "Now we can use this land to hunt, take the dogs to run,
camp, and take family trips."

He was eager to tell me an interesting story about the land. "The house that is on
the property was built during the depression. It was built from stone on the ranch, through
a government program that employed people during the depression. The house is no
longer habitable, but we still like to tell people the story about it," he said.

When asked about any special memories they had about the land, Mr. and Mrs.
Oak looked at one another and laughed. Mrs. Oak said, "Well, you could tell her about all
the injuries we've had out there!" We all giggled. "We've had burns, knee injuries, and
even the dog broke his leg out there," Mr. Oak added.

As the conversation continued, it was easy to observe that Mr. Oak felt that the
good memories outweighed the bad ones. "Well, there was also an odd story," Mr. Oak
noted. He told the story of a man from Oklahoma that contacted them and said that he
had lived on the ranch as a young boy. The man said that his father had been a cattle
foreman there and that he had subsequently grown up there and wanted to see it one last
time. "He was probably in his 60s," said Mr. Oak. "He came with his daughter. He
brought several mason jars and a cardboard box, and then he asked if he could fill the jars
up with the well water, and then he filled the box up with prickly pear fruits." At this
point, Mr. Oak said he was rather skeptical. The man told the Oak family that they eat the
prickly pear fruits, and they taste just like green beans. "And, the man said that the water
was the best he'd ever tasted," Mr. Oak added. He said that the two stayed about two to
three hours, and left. "It was odd, but interesting," said Mrs. Oak.
Then, the conversation easily transitioned toward the use of the land. "We keep our land in agriculture because it just has to do with our motivation," Mr. Oak said as he patted his wife's leg under the table. "The property was never bought for financial gain. We would rather see the land natural versus developed because it is harder to hunt with businesses and homes butting up against the fence," he said.

But when asked if cost share programs help them to maintain their land in agriculture, Mr. Oak said, "No, not really. They just don't fit our intentions. There are already a lot of natural water sources." I wondered if he was aware of the other various programs available within his reach.

"In the short term, we're just going to continue our battle with the cedar trees," he said. "We will continue exploring the best way for cedar removal." And then he added with a grin, "And of course, my father and I will keep looking for the best stand locations for hunting."

When asked about the long-term goals of the land, Mr. Oak paused a moment to think. "Build a place to stay," Mrs. Oak said quickly. Mr. Oak chuckled, and said, "Oh, yeah, probably that's our main goal. We want to build a permanent structure with indoor plumbing to allow us to stay for an extended period, or bring friends and family out that aren't as 'outdoorsy'."

The location of the land is also an ideal place for Mr. Oak's parents to retire when the time comes. "My parents are retiring soon," he said. "This location will be a day trip, so Dad can work more on the land when he retires. It will give him something to keep him busy."
While speaking of his father's retirement, I asked whether he hoped to inherit the land someday. "My dad speaks frequently about leaving [the land] to his children and leaving it so that it isn't a burden to us kids. He doesn't want it to be split up. It is written into the landowner agreement that the other partner has the first right to buy out," he said anxiously.

Mr. Oak talked openly about his father's retirement, and spending more time with him on the land once he lives closer. "We'll do a lot of hunting," he said happily.

We talked more about the cattle lease, and how it affects the land and the hunting. "We lease the land for cattle right now, just to maintain the ag exemption," he said. "They have a minimum number of cattle, about 40 head, because the cattle can ruin the land. We all communicate well. The ranch is sectioned off with fences, and he'll keep the cattle in the front half (about 400 acres) and we hunt the back half (about 400 acres)."

Aside from the current land use, Mr. Oak sees a bright future for the land. Although his main hope is that, in 50 years, the land be cedar free, he said that he would also like to eliminate the cactus, too. And though minor improvements to the land, such as improving the road, would be beneficial, his main hope is that the land remains undeveloped.

As we smelled the coffee percolating in the machine behind us, and the lunch crowd roared at nearby tables, I could not help but feel the stark contrast between Mr. and Mrs. Oak and the other landowners I had interviewed. Their youthfulness, like this sandwich shop, was overflowing. It was such a good feeling to know that another generation of landowners was prepared to leave the land as they had found it.
Mr. and Mrs. Moriah's story.

Morning had arrived early today. After a brief stop at a coffee shop to erase my bleary-eyed countenance, I made my way down the highway, past the railroad tracks, the miles of green roadsides, silos, farms, and ranches. As I checked the GPS again, there was yet again another turn down a winding country road. The drive to the small, rock house seemed to take hours.

As I turned onto the gravel road toward the house, flashbacks of my own grandparents' house crossed my mind. A quaint rock house, metal barn, and towering silo greeted me, as a mother cat and her new kittens played in the grass beside the road.

My boots kicked up a trail of dust as I made my way, coffee and briefcase in hand, to the front door. I was greeted by Mr. Moriah, an elderly gentleman with a warm smile and leathery hands. We made our way to the dining room, where Mrs. Moriah was waiting. "Can I get you something to drink?" she said cheerfully.

As we began to speak, I knew that this couple had quite a history together. In their eighties now, Mr. and Mrs. Moriah absolutely thrived off one another. They glanced and grinned at one another, speaking in a code of emotion that comes from years of living with one another. I was thoroughly enjoying this time with them.

Mr. Moriah told me that he had purchased the land near the military installation, which was approximately 365 acres, as a cattle ranch in 1948. At that time, a cattlemen's association was formed and local farmers were able to run cattle on the military
installation, which was open range. However, Mr. Moriah said that he and his father had given up rights to graze cattle on the installation years ago.

Then, Mr. Moriah mentioned that the purchase of the land was much easier back in the 1940s. "My dad sold real estate. He saw an opportunity to buy it quickly through the veteran payout program," he said.

Taking a moment to remember, he rubbed his forehead and motioned toward the window. "We bought the land cheap," he said. He smiled, and said, "Everything was cheap back then, but paying for it was still a struggle." Hearing that, Mrs. Moriah nodded in agreement.

"There was seven to eight percent interest back then. We could sell the land today for four times what we paid for it, but we couldn’t buy any new land for that money, either," he said.

When asked about any special memories they recalled on the land, Mrs. Moriah first giggled, and then laughed heartily. Mr. Moriah smiled and it was clear they both had many enjoyable memories together at the land. Mr. Moriah dusted invisible crumbs from the table, and then smoothed the tablecloth with his palms.

"You see, I had three brothers. Now, two of them have died," he said, memories swirling in his mind. "But, there are probably 30 people with interest in it, including all the kids and grandkids," he said.
He recalled the enjoyable activities that the entire family participated in each year. "We hunt during deer season, spend family reunions and Thanksgiving out there every year. There’s tanks and creeks, and lots of fun."

"Oh, goodness, Thanksgiving," Mrs. Moriah repeated. She was grinning broadly.

Mr. Moriah laughed, his eyes still toward the table. "When people come for Thanksgiving, they come down to that bungalow and people bring tents, travel trailers, all sorts of things. There are 30 to 40 people out there. It is crazy out there," he said.

"It's a lot of fun though," Mrs. Moriah adds.

As we spoke, I realized there were many reasons for maintaining land in agriculture. "You know, that land has been a good hedge against inflation. It’s better than buying gold. And, it’s family land," he said.

"I have to say, the price to sell is appealing," he said, leaning back in his chair and laughing toward Mrs. Moriah. "Across the road from us, someone bought land and put in a road, and is selling three-acre tracts for $30,000 each!"

Aside from monetary incentive, he explains that there are other family reasons to maintain the land in agriculture. "Our family enjoys it out there. I lease it from the rest of the family and run cattle on it. And, it’s recreational. We lease it to four deer hunters, and that pays the taxes." Then, laughing so hard that tears came to his eyes, he said, "We ran goats and cattle out there for a while, but the coyotes ate all the goats!"
When asked how important leaving the land in agriculture is to him and his family, he wiped the happy tears away and looked back at me. Serious now, he said, "Well if it makes you a living, it's damn important." Then, thoughtfully, he added, "This country is having a problem producing enough food to feed the country, so [agriculture] really is in its heyday."

As we spoke more, we talked about the many cost share programs Mr. and Mrs. Moriah had participated in over the years. "We worked with PL 319 and paid half the cost of clearing cedar out there," he said. The PL 319 program to which he was referring is a watershed protection program in Texas aimed at flood prevention, watershed protection, water management, and groundwater recharge. Additionally, the family had used the environmental quality incentives program (EQIP), a cost share program that provides technical and financial assistance, and support through a private restoration group. This assistance allowed the family to continue clearing cedar from the land, increasing water quantity on the land. And a water supply near the installation has plans to install a water line near the property. "They’d put in half the cost of putting a water line across the front of the property," he said.

As he thought more about the programs, he said, "These programs just work for us, and they benefit the land and the family. We all save money."

Having been up since dawn feeding cattle and working the land, Mr. Moriah stretched deliberately. He explained his plans for the land. "In the short term, we need to clear cedar, build fences, improve on the house, build that water line, and spray the cactus and weeds," he said.
As far as the long term is concerned, the family is at the center of the plans. "We have to see which family members want in or out," he said. "The long range plan is to keep the land. We’re going to have more inflation, and it’s better than buying gold. The kids may want to divide it or sell it though."

Re-visiting the land use, I asked Mr. Moriah to talk a bit more about the lease on the land. He spoke with his hands, as he said that four deer hunters lease part of the land. He said that the family does have rules regarding the lease, so that the land is properly cared for. "The four guys just hunt out there," he said. "They may bring a travel trailer, shred the land with the tractor, and feed the deer."

He thought further about the land, and drew a deep breath before continuing. "They want to keep the rights to hunt, so they take care of it. And, we keep liability insurance out there, so no one gets hurt. We even have a waiver for people to sign," he said thoughtfully.

The lease is an integral part to maintaining the land in its current condition. "This is the revenue that the place makes," he said. Then, he looked out the window, seeming to imagine the land as he spoke. He motioned with his hand, and said, "This year we leveled the house and put a new roof on it. The hunt lease and cattle lease money pays the taxes and other expenses."

He turned back to me, a serious look crossing his face. "In 50 years, I would hope that the property would be fenced, in good shape, with lots of grass," he said. "But, there will probably be a lot of $300,000 homes."
A sobering thought, I could tell that he had reflected heavily on this topic before. Mrs. Moriah pursed her lips, and her soft eyes tenderly hung on those last words he spoke. A couple who had built their whole lives around living off the land, they worried that it would all go away after their passing. This concern, a valid reality, hung in the air like a heavy smoke as I walked toward the door. The bright sky and green croplands greeted us on the front porch, a bright new day ahead for us all.

**Mr. West's story.**

A man of few words, Mr. West was almost hesitant in answering questions with much detail. Although Mr. West had spent his younger years on the land near the installation, he moved away to go to school in the 1960s. “I wore out a pair of shoes and couldn’t leave,” he laughs.

Mr. West owns a manufactured home business in the Texas Panhandle. We met in his office, which was housed on the same location where the houses are built. The office was dark and had probably not changed much since the business opened. Political cartoons lined the office doors, and it was apparent that he was an avid supporter of a political group.

He was a friendly person, but it was difficult to tell if he did not want to talk because he was shy, or if talking about his land and his family made him emotional. He smiled a lot when he talked about his land, however, and it was easy to see that he had no intention of selling the property.
He had met with a customer just before the interview. He said last year’s drought had really hurt his business, and he was hoping that 2012 would be a better year. The interview took place on a windy day, and he commented that he was not very fond of days like that.

Although he had lived away from this property for nearly 50 years, he still shares a connection with it. “I’m still connected down there,” he said, speaking of the land near the military installation. “Home is where your folks are, and my folks live down there.”

Mr. West continued by mentioning that he had owned the land for three years, though it has been in his family for generations. “It’s part of my grandparents’ land. We inherited part of it, and bought part of it,” he said.

Because the land had been in his family for generations, there were many endearing memories on the land. “It’s lots of fun, lots of running around, and we enjoy being there,” he said.

The natural features on the land are attractive to the family. “On this part, there’s not much water. There’s a creek that runs nearby that was part of the original plot, and it waters the horses and cattle and stuff out of it,” he said.

A simple man who had farmed for generations, Mr. West explained the importance of maintaining land in agriculture. “That’s just what you do when you grow up that way,” he said. He said that maintaining the land in agriculture is very important on all their properties across the state, adding, “Well, this part has been in the family. It’s
not to be divided up in plots or any residential or anything. It is just part of what we do. It’s just a goal, it needs to stay in agriculture.”

Although he does not participate in cost share programs, Mr. West does have family members that live on the land and help manage the property in his absence.

The future of the property seems very much the same as the present-day management. Though he is unsure whether he will leave the property to his heirs, the current land use should be maintained for the foreseeable future. “We’ll just use it for agricultural land,” he said, “and graze it, use it for livestock.”

When looking further into the future, Mr. West laughs. He notes that he would like to see the land, “better than it is now.” “You wish it would be clean and pretty,” he said, “but down there, the cedar and mesquite, if you don’t tend to it, it grows up and doesn’t look very well. It’s been cleaned pretty well now, but there’s new growth already coming up now. It’s always something you have to tend to,” he said.

**Composite Description for Research Question 1**

Research Question 1 asked how absentee landowners are currently using the land. To answer this question, the researcher asked a series of questions in the interview. The questions asked how long the landowners had owned the land, requested a brief history of the land and how it is currently being used (including leases on the land), and questioned the history and use of cost share programs on the land.

Themes emerged as the researcher closely inspected and reviewed the landowner interviews. As individual invariant constituents were confirmed as relating to the essence
of the study, they were grouped into themes. The final four themes that emerged from the interviews included *family land, leasing land, hunting on land, and retention of land as natural/recreational.* 

Each theme was defined operationally, as it related to the study. The *family land* theme indicated that the land was used in some manner that impacted the family, either currently or at some point in the past. *Leasing land* indicated the land is currently leased for agricultural or recreational purposes. The *hunting on land* theme specified that the land was being used for recreational hunting, while the *retention of land as natural/recreational* use pointed toward the landowner’s intent to leave the land natural, or use it for a minimally invasive recreational use such as camping, fishing, or hiking.

**Family land.**

In terms of *family land*, the majority of the participants made a statement that fit into this theme. Ms. Murphy said that her father had purchased the land when she was a small child, and she had fond memories of going to the land for her elementary class parties. Mr. Law spoke about how he enjoyed the hard work on the land such as clearing cedar trees, and how much his wife and children loved fishing on the land. Although he shared fond memories of family reunions and birthdays held there, his land ownership ideals were inherited from his mother, a Czechoslovakian, who was adamant in owning land and being a good steward of the land. Ms. Richards and Mr. and Mrs. Oak both commented that they simply enjoyed being outdoors, and how the land was a peaceful place to be with the family. Mr. and Mrs. Garmin, on the other hand, liked to spend time barbequing and target shooting with the family alongside a creek that runs through the
property. Similarly, Mr. and Mrs. Moriah reported that they have spent decades there with family on the land. Mr. Moriah said that there are about 30 people (children, grandchildren, nieces, nephews, etc.) who spend time there on holidays. Mr. West noted that although he lives a considerable distance from the land, he is still tied to it through family. The land once belonged to his grandparents, and it is where he grew up.

*Leasing land.*

Leasing land was a consistent theme for landowners. The importance of having a cattle or hunting lease on the land was noted. Mr. Law told the researcher that he “makes more leasing [the land] than I ever did in the cattle business.” Although Ms. Richards does not have a formal agreement, she allows a local landowner to run a few head of cattle on the land in exchange for maintaining the land in her absence. Mr. and Mrs. Oak noted that they fear cattle may destroy the landscape so they only allow a cattle lease on one-half of the property, which allows for an agricultural exemption. Mr. and Mrs. Garmin were the only landowners to mention that they currently have a hunting lease on the land, as well as a cattle lease. Mr. Wood noted that he hoped to have a deer lease on his land in the near future. Mr. Moriah stated that he leased the land from the rest of his family to allow for a successful cattle operation. He also indicated having a hunting lease on the land.

*Hunting on land.*

In addition to allowing hunting leases, some landowners in the *hunting on land* theme enjoyed hunting themselves. Mr. Wood and Mr. and Mrs. Oak are all avid hunters, and enjoy hunting on their land for the outdoor experience. Mr. Wood said, “I hunt a lot,
and we manage the land mostly for wildlife and outdoor experiences like camping.” Mr. and Mrs. Oak also have the land primarily so that they have a place to hunt and camp. “We’d rather see the land natural versus developed because it is harder to hunt with businesses and homes butting up against the fence,” Mr. Oak said.

Retention of land as natural/recreational.

Many of the landowners also made statements that supported the theme related to retention of land as natural/recreational. Mr. Law, Mr. Wood, Ms. Richards, and Mr. and Mrs. Oak all spoke to the researcher about the importance of leaving the land in its current, natural state. While Mr. Wood and Mr. and Mrs. Oak appreciated leaving the land natural so that they may camp and enjoy the wildlife, Mrs. Richards noted that she simply appreciates the “raw” land, and has always intended to keep it “as-is.”

Composite Description for Research Question 2

Research Question 2 focused on the phenomena that are motivating absentee landowners to keep their land in agriculture. The answers to this research question were drawn from nearly all questions in the interview. Because motivation may be drawn from many sources, each question in the interview had the potential to impact this research question. The five themes that emerged from the invariant constituents included family/heirs, minimization of development, cost share programs, financial gain, and environmental factors.

Each of these themes was defined operationally, as it related to the study. The family/heirs theme demonstrated that motivation was due to the use of the land for family activities, or that the landowner hoped to leave the land to his heirs. Landowners who
maintained their land in agriculture due to the desire to leave the land natural with the purpose of hindering urban growth and development in the area were grouped under the minimization of development theme. Landowners who were motivated to maintain their land in agriculture due to the incentive of cost share programs fell in the cost share programs theme. The theme titled financial gain encompassed those landowners who maintained their land in agriculture because of some type of financial gain, such as a tax incentive or production of additional income, while those in the environmental factors theme maintained their land in agriculture due to stewardship of natural resources or increase of biodiversity.

*Family/heirs.*

In the family/heirs theme, the landowners overwhelmingly spoke of the importance of retaining their land for their children and/or grandchildren. Mr. and Mrs. Oak noted how important it is to his father to maintain the land in a way that it is an asset, not a burden, to his family. Mr. Law and Ms. Murphy both emphasized the importance of having the land to pass down to their children. Mr. Law mentioned that he would never sell any of his land, and Ms. Murphy echoed that not only will she pass the land to her children, but that she believed everyone that has land should keep it in agriculture. Mr. and Mrs. Garmin note that they are motivated by both the past and future of the land. He is a third generation landowner, as the property has been in his family since before 1900. Now, they spend quality time with their children there. Mr. and Mrs. Moriah noted that the land will be divided among their heirs, who all currently enjoy the land. Although Mr. Moriah realized the heirs may sell the land someday, he hoped that they will keep
some of the land to enjoy. Mr. West was not sure if his heirs would want the land that once belonged to his grandparents, though it is currently in agricultural production.

**Minimization of development.**

Landowners that made statements in the *minimization of development* theme noted that they maintained the land in its current state in order to minimize the expansion of urban development. Mr. and Mrs. Oak noted, “We would rather see the land natural versus developed because it is harder to hunt with businesses and homes butting up against the fence.” Mr. Wood noted that his land was overgrazed when he purchased it, but he hoped to increase the habitat diversity and natural look of the land. His love of the outdoors is prevalent in his management actions. “The more we turn [the land] into parking lots, the less there is to enjoy,” he said. While Mr. Garmin noted that his land is too costly to be developed due to the ruggedness of the landscape, Ms. Murphy mentioned that developers have recently contacted her to develop her land. “People are always calling and asking to buy small parts, and asking to break it up to build houses, but we want to keep it in a big area,” she said. Similarly, Mr. West firmly stated, “It’s not to be divided up in plots or residential or anything.”

**Cost share programs.**

Several of the landowners mentioned the importance of cost share programs on their land, thus forming the *cost share programs* theme. Mr. Wood, Mr. and Mrs. Garmin, and Mr. and Mrs. Moriah had positive experiences with cost share programs on their land. Mr. Wood was able to build a pond through the soil conservation service 26 years ago, and more recently, he was able to clear cedar through the Leon River
Watershed program. Mr. and Mrs. Garmin also cleared brush through the cost share programs and dug two water wells. Mr. Garmin noted that the programs helped them better utilize the land. “If we didn’t have those wells, some of the cattle would have to walk a mile or two just to get water, and in a drought, that wouldn’t be good,” he said. Mr. and Mrs. Moriah cleared cedar through the Leon River Restoration group and participated in the EQIP.

Ms. Richards, on the other hand, did not have such a positive experience. Although she had hoped to participate in a cost share program to construct a pond, the program ran out of funds. “How do you know when money is available?” she asked. “It really seems like a good ‘ol boy system.” She is hopeful, however, and does not give up on the programs. “I’m also interested in the Army’s buffer zone program,” she said, noting she hoped to receive a call back.

Financial gain.

Landowners who made statements that formed the financial gain theme were interested in tax benefits and making a profit on the land. Mr. Law was primarily interested in the investment aspect of the land. Though he paid a minimal amount of money for the land when he purchased it, he’s recently turned down several million dollars for the land. He said, “Land is a great investment, and it is never going to get any cheaper.” Mr. and Mrs. Oak said that they maintain the cattle on the land for the agricultural exemption, and to help with taxes. Mr. and Mrs. Garmin note that the agricultural exemption allows them to stay on the land. “If we had to pay land taxes, there’s no way we could survive in agriculture,” Mr. Garmin said, noting that they even
make a profit on the land due to a lease on the land. Mr. and Mrs. Moriah noted that the land has been a good hedge against inflation. “It’s better than buying gold,” Mr. Moriah said.

**Environmental factors.**

A majority of landowners felt motivated by land stewardship, and shared comments that created a theme called *environmental factors*. Noting that he would like to see the land revert back to how it looked 100 years ago, Mr. Wood focused on increasing habitat diversity and maintaining the land as an undeveloped escape. Mr. Law echoed the importance of stewardship. “…you have to factor in how fires, droughts, and tornadoes in the future will [impact] agriculture. These disasters can wipe out towns.” Mr. Garmin, however, simply noted that stewardship starts at the individual level. “I leave some cover for wildlife on the hillsides where there’s no good soil anyways. That way you have a mixed habitat,” he said.

**Composite Description for Research Question 3**

Research Question 3 focused on how absentee landowners see their land use changing over time. Questions during the interview that specifically addressed the change in land use requested landowners to share with the researcher what their long- and short-term plans were for the land, if the landowners planned on leaving the land to heirs, how important it was to the landowner that the land remain in agriculture, and what the landowner hoped the land would look like in 50 years.

Two major themes emerged as a result of the interviews: *development* and *natural*. Landowners in the *development* theme felt that their land would most likely be
developed within the next 50 years, while landowners in the *natural* theme felt that their land would most likely be left natural, or have a similar land use as the current land use.

**Development.**

Several landowners made comments toward the *development* theme, noting that they felt that their land would succumb to urban development, no matter if they wanted the land developed or not. Ms. Murphy said that, though she hated it, she thought the land would be developed and full of houses and buildings, because of the rapid development in the area. Similarly, Mr. and Mrs. Moriah foresee development on the land. “I’d like to see it fenced, in good shape, with lots of grass. But, there’ll probably be a lot of $300,000 homes,” Mr. Moriah said. Mr. Law, however, had planned for development of the land. Although he noted that he would never personally sell the land, as a man in his 80s, he understood that his heirs may not want to keep the land in agriculture. He said that, ideally, he wanted to see a nice development with large lot sizes and high-value homes. “I hope it doesn’t turn into a bunch of slums. You have to have high hopes for your land, but you never know what is going to happen after you start breaking it up,” he said.

It is interesting to note that the landowners in this theme speak about what others will do to the land. Landowners stated that other individuals would most likely develop the land after the landowner was gone, but no landowners had plans to develop the land themselves. This may be due to landowner age, situation, or other unknown factors.

**Natural.**

Landowners who made comments toward the *natural* theme felt that their land would remain undeveloped in the future. Every landowner in the *natural* theme noted that
they would like to see the cedar trees eradicated. Mr. Wood indicated that he wanted the land to look exactly like it did 100 years ago, undeveloped with increased habitat diversity. Similarly, Mr. West stated that he hoped the land looked better than it does now, clear of cedar and mesquite trees, but still undeveloped. When asked how she hoped her land would look in the next 50 years, Ms. Richards simply stated, “Exactly like it looks today.”

**Composite Description for Research Question 4**

Research Question 4 asked how an absentee landowner's emotional tie to the land affected their land management decisions. Questions during the interview that specifically addressed the landowner’s emotional tie to the land discussed the landowner’s feelings. Questions about the history of the land, special memories on the land, and their hopes to leave the property to heirs contributed to responses regarding the emotional connection.

Although all four themes that emerged dealt with family members, two of the categories represented the landowners’ past (parents), and two of the categories represented the landowners’ future (children). The categories that emerged were *children – natural/recreational*, *children – hunting*, *parents – natural/recreational*, and *parents – agricultural*. The *children – natural/recreational* theme recognized that landowners were tied emotionally to the land because their children enjoy natural uses of the land, or enjoy using the land recreationally (i.e., fishing, camping, hiking, or family reunions). The *children – hunting* theme specified that the landowner’s emotional tie was due to their children’s love of hunting. The landowners who were tied to their land because they
remembered experiencing natural or recreational activities on the land with their parents fell in the \textit{parents – natural/recreational} theme, while those who remember their parents being heavily involved in agricultural activities on the land were placed in the \textit{parents – agricultural} theme.

\textbf{Children – natural/recreational.}

Landowners who made statements regarding the importance of making nature a part of their family tradition on the land were grouped into the theme \textit{children – natural/recreational}. Mr. Law and Ms. Richards both made similar statements regarding bringing their children back to nature. Mr. Law understood that his children, grandchildren, and even great-grandchildren had never farmed or ranched. “They sit in front of the [television] all day. This is a great thing for them,” he said. Similarly, Ms. Richards wanted a natural escape for her family. “It is a place where we can be outside, away from stores. We can just be together as a family. It is very peaceful and quiet out there,” she said. Mr. Wood was tied to the land for its recreational benefits with the family. Aside from looking at the bluebonnets and wildlife, the family reported enjoying fishing, camping, hiking, and building campfires together. Mr. Oak’s father purchased the land as a place where the family can come together for recreation, camping, and family trips, while Mr. and Mrs. Garmin spend family time barbequing and target shooting. Mr. and Mrs. Moriah believe that some of the family members will want to remain involved in the land, especially since so many family members come to the ranch on holidays. “When people come for Thanksgiving, people come to that bungalow, and people bring tents, travel trailers, all sorts of things. There’s 30 to 40 people out there,” Mr. Moriah
said. These landowners’ comments lead one to believe that they are emotionally tied to the land because of the experiences there with their children.

**Children – hunting.**

The landowners in the *children – hunting* theme made specific statements related to their emotional tie to the land due to hunting activities with their children. Mr. Wood felt the importance of managing the land for wildlife and hunting the land, and noted that it is something he can do with his children. Mr. and Mrs. Moriah noted that the family hunts together during deer season. Mr. and Mrs. Oaks’ land was primarily purchased for hunting. Mr. Oak grew up hunting with his family across Texas, and this land was purchased as a place where the entire family could hunt together. Hunting is a family tradition for Mr. and Mrs. Oak.

**Parents – natural/recreational.**

In this study, a majority of the landowners had owned the land for many years. Two landowners had owned the land less than a decade, while all the others had owned the land for several decades. The *parents – natural/recreational* theme emerged based on comments from landowners who noted the importance of spending time on the land with their parents. The landowners in this category were landowners who had owned the land for generations, and had a close tie to the history of the land. Ms. Murphy noted that the land was very important to her father, and therefore was very important to her. Mr. Garmin, a third generation landowner, recalled fond memories of visiting the property as a child, and then later as a family.
Parents – agricultural.

The parents – agricultural theme emerged from statements made by long-time landowners. Mr. Law inherited his emotional tie to the land from his mother, a Czechoslovakian woman, who came to the U.S. as a young child. “She was very big on owning land, because it was a status thing over there [in Czechoslovakia],” he said, “so she was very big on land stewardship, and we were too.” Mr. and Mrs. Garmin also came from a background of agriculture. “My grandparents came from Georgia and settled here as tenants,” Mr. Garmin said. “They acquired the land to farm, and my grandfather was born there.” Because of the land’s rich history, Mr. Garmin was closely tied to the land. Mr. and Mrs. Moriah also remarked that their family had a history of agriculture. Mr. Moriah’s father purchased the land through a veteran payout program, and ran cattle on the land for years. Mr. West’s property was once ranchland that belonged to his grandparents, and he intends to maintain the land in agriculture.

Synthesis of Findings

Table 1 reveals the responses of each landowner during the interview process. The four categories (“L” for land use, “M” for motivating factors, “U” for change in land use over time, and “E” for emotional tie to the land) emerged through a series of steps. Through the analysis of the invariant constituents, or individual statements made by the landowners, themes began to emerge. Those themes seen in Table 1 created the framework upon which the conclusions were founded. Conclusions and recommendations may be found in Chapter V of this study.
Table 1

*Data Synthesis from Landowner Transcripts*

<table>
<thead>
<tr>
<th>Landowners</th>
<th>Current land use</th>
<th>Motivating phenomena of landowners</th>
<th>Change in use (U)</th>
<th>Emotional tie to the land (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(L)</td>
<td>(M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ms. Murphy</td>
<td>L1(^a) L2(^b) L3(^c) L4(^d)</td>
<td>M1(^e) M2(^f) M3(^g) M4(^h) M5(^i)</td>
<td>U1(^j) U2(^k)</td>
<td>E1(^l) E2(^m) E3(^n) E4(^o)</td>
</tr>
<tr>
<td>Mr. Law</td>
<td>X</td>
<td>X X</td>
<td>X</td>
<td>X X</td>
</tr>
<tr>
<td>Mr. Wood</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
</tr>
<tr>
<td>Ms. Richards</td>
<td>X X X</td>
<td>X X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mr. West</td>
<td>X X X</td>
<td>X X</td>
<td>X X</td>
<td>X</td>
</tr>
<tr>
<td>Mr. &amp; Mrs. Oak</td>
<td>X X X X</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
</tr>
<tr>
<td>Mr. &amp; Mrs. Garmin</td>
<td>X X</td>
<td>X X X X X X</td>
<td>X X X X</td>
<td>X X X X</td>
</tr>
<tr>
<td>Mr. &amp; Mrs. Moriah</td>
<td>X X X</td>
<td>X X X X X</td>
<td>X X X</td>
<td>X X X</td>
</tr>
</tbody>
</table>

Note. The letters L, M, U, and E, represent the four main categories of data. L = How are absentee landowners currently using the land? M = What phenomena are motivating absentee landowners to keep their land in agriculture? U = How do absentee landowners see their land use changing over time? E = How does a landowner’s emotional tie to the land affect land management decisions? Within these four categories, themes emerged during the data collection process. These themes are represented by superscripted lowercase letters, which are defined below.

\(^a\)Family land. \(^b\)Leasing land. \(^c\)Hunting on land. \(^d\)Retainment of land as natural/recreational. \(^e\)Family/heirs. \(^f\)Minimization of development. \(^g\)Cost share programs. \(^h\)Financial gain. \(^i\)Environmental factors. \(^j\)Development. \(^k\)Natural. \(^l\)Children - natural/recreational. \(^m\)Children - hunting. \(^n\)Parents - natural/recreational. \(^o\)Parents - agricultural.

Close analysis of the table above allows the reader to easily identify recurring themes, as well as themes that were rarely mentioned. Although the results of the study
were described in detail in the preceding sections of Chapter IV, this table serves as a quick reference for individual responses. The family land theme was the most common theme mentioned among the absentee landowners interviewed, as seven of the eight landowners made statements that were in this theme. Six out of eight participants made statements in the family/heirs, natural, and children - natural/recreational themes. These findings demonstrate that absentee landowners were most often motivated by their family and leaving their land natural for their family to enjoy. Landowners were least motivated by allowing their children to hunt on the land (children - hunting), although half the participants noted that having the ability to hunt on the land was important (hunting on land). Landowners were also less motivated by leaving the land natural or recreational because their parents did so (parents - natural/recreational), though one-half the participants noted that they were motivated to leave the land in agriculture because their parents were involved in agriculture (parents - agricultural).

Summary

The analysis of interviews revealed the motivations of absentee landowners near a particular military installation in Texas to maintain their land in agriculture. Landowners described their current land use, projected land use, and future plans for the land, in terms of what motivates them to make these land-use decisions. The composite descriptions related to each research question are a result of synthesizing the findings in a format to enable conclusions to be drawn to build upon existing research. The interviews yielded detailed findings that may be helpful to individuals seeking to develop programs directed
toward incentivizing absentee landowners to maintain their land in agriculture, which is a compatible land use to military training.
CHAPTER V
SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Summary

The purpose of this study was to examine the motivation of absentee landowners around a military installation in Texas to maintain their land in agriculture, which is a compatible land use to military training. As a means of accomplishing this purpose, answers to the following guiding questions were sought:

1. How are absentee landowners currently using the land?

2. What phenomena are motivating absentee landowners to keep their land in agriculture?

3. How do the absentee landowners see their land use changing over time?

4. How does an absentee landowner's emotional tie to the land affect land management decisions?

Phenomenological methodology was used to analyze interview responses from eight absentee landowners who owned land near a particular military installation in Texas, but did not reside in the counties where the military installation is located. Guiding questions encouraged detailed responses and evolved as the primary categories in which the data were categorized. A total of 15 themes emerged through the data analysis process. A comparison of the themes with the existing literature revealed consistent findings. Self-Determination Theory (SDT) was the primary theory that guided the research. Categories and themes resulting from data analysis are revealed in Figure 6.
Figure 6. Summary of the categories and themes that emerged through data analysis of interviews with absentee landowners located near a military installation in Texas.

The study revealed that landowners were using the land in four ways. First, the family land theme indicated that the land was used by the landowners and their families currently, or that the landowners had fond memories of enjoying the land with their family as children. The leasing land theme showed that families were leasing the land for agricultural or recreational purposes. The hunting on land theme specified that the land was being used for recreational hunting by the family, while the retention of land as natural/recreational use pointed toward the landowner’s intent to leave the land natural, or use it for a minimally invasive recreational use such as camping, fishing, or hiking.
The study found that there were five primary phenomena motivating absentee landowners to maintain their land in agriculture. Those motivated by the *family/heirs* theme either used the land for family activities, or intended to leave the land to heirs. Landowners who maintained their land in agriculture due to the desire to leave the land natural with the purpose of hindering urban growth and development in the area were grouped under the *minimization of development* theme. Landowners who were motivated by the incentive of cost share programs were grouped in the *cost share programs* theme, while *financial gain* encompassed landowners who were motivated by tax incentives or the production of additional income. The *environmental factors* theme included landowners who maintained their land in agriculture due to stewardship of natural resources or desire to increase biodiversity.

Two themes emerged when landowners were asked how they perceived their land use changing over time: *development* and *natural*. Landowners in the *development* theme felt that their land would eventually be developed. Although not all landowners wanted their land developed, they reported that it was inevitable. Landowners in the *natural* theme felt that their land would remain undeveloped. Although some of these landowners hoped to make minor improvements to the land, such as improving roads or eradicating undesirable plant species, they believed that the land would remain relatively unchanged, and undeveloped, into the future.

Finally, four themes emerged related to a landowner’s emotional tie to the land affects land management decisions. Although all four themes related to the landowner’s family, two themes were tied to the landowners’ children (*children – natural/
recreational and children – hunting) and two were tied to the landowners’ parents (parents – natural/ recreational and parents – agricultural). The children – natural/recreational theme recognized that landowners were tied emotionally to the land because their children enjoy natural uses of the land, or enjoy using the land recreationally (e.g., fishing, camping, hiking, or family reunions). The children – hunting theme specified that the landowner’s emotional tie was due to their children’s love of hunting. The landowners who were tied to their land because they remembered experiencing natural or recreational activities on the land with their parents were placed in the parents – natural/recreational theme, while those who remember their parents being heavily involved in agricultural activities on the land were placed in the parents – agricultural theme.

These findings indicate that landowners were motivated to maintain their land in agriculture by a variety of factors, which are often influenced by the landowner’s background and current family and financial status. Conclusions based on these findings are located in the following sections of Chapter V.

Conclusions: Research Question 1

Research Question 1 asked how absentee landowners are currently using the land. Themes that emerged in this category included family land, leasing land, hunting on land, and retention of land as natural/recreational.

Each theme was defined operationally, as it related to the study. The family land use indicated that the land was used in some manner that impacted the family either through past memories or current family activities on the land. Leasing land indicated the
land was currently leased for agricultural or recreational purposes. The *hunting on land* theme specified that the land was being used for recreational hunting, while the *retention of land as natural/recreational* use pointed toward the landowner’s intent to leave the land natural, or use it for a minimally invasive recreational use such as camping, fishing, or hiking.

**Family land.**

The *family land* theme was the most widely mentioned theme across all landowners, as all but one landowner mentioned that their land was used by family members. Landowners in this theme either remembered family events occurring on the land when they were children, or they currently host their own family events on the land. These landowners appeared to be motivated by heritage, explained in Kaetzel et al. (2011) as landowners who were motivated to own the land because it was a part of their family heritage, and to pass on to children or other heirs.

Although Sorice et al. (2012) noted that land parcel size had been steadily decreasing as amenity buyers purchase land for recreation, aesthetics, and the experience of a rural lifestyle, all but two participants in this study had owned the land for more than 30 years. This indicated that landowners in the study area had not sold or purchased the land for these purposes specifically, but indicated that they did feel having family land was important.

The findings of this study are consistent with the findings of Hay (1998), who noted that an individual grows attached to a place through interaction with that place over time. This was demonstrated by the landowners who spoke fondly of the time spent on
the land over the years with their family. As the landowners watched their families grow, the need to maintain the land as a getaway for the family grew even more important.

A study conducted by Lai and Kreuter (2012) in Texas found that place attachment was found to be high by landowners who noted a past history with the land. This sentiment was echoed in the present study, as landowners who were directly involved in family activities on the land seemed to be most attached to the land. Landowners in the study often recollected family history, remembering class parties as a child or echoing the sentiment of the way their father did things on the land. Given that the family land theme was the most prevalent across all themes, it was determined that the use of the land for family activities is a highly motivating factor in maintaining land in agriculture.

*Leasing land.*

The 2007 U.S. Department of Agriculture's Census of Agriculture noted that landowners across Texas commonly lease their land to others, which is consistent with the findings of this study. More than one-half of the landowners interviewed lease their land for either cattle grazing or hunting. Although four of the landowners lease their land for additional income, one landowner has a more informal agreement. In lieu of payment, the tenant maintained the land in the landowner's absence. Ms. Richards said:

> We have an agreement with a local landowner. We run about 12 head of cattle on the land, because that is what the local extension agent recommended. The landowner shreds and fertilizes for us and checks on the place too.

Although some studies reported that absentee landowners who allow tenants to operate the land are less likely to be involved in any land management decisions
(Petrzelka, 2012; NASS-USDA, 1999), the results of this study indicated otherwise. Most of the landowners who indicated that they lease the land to others stated that they have at least some control over the activities of their tenants. Mr. Law said that he had the tenant remove many of the cattle during the drought. "Wasn't nothing but dirt, and cows don't eat dirt," he said. Ms. Richards noted that she, too, asked her tenant to have fewer cattle on the land during the drought. She added, "He can't change anything or use the land for anything other than the stated purpose."

**Hunting on land.**

Although hunting on the land was the least common current land use among the participants, a majority of the participants still indicated that the land is used for hunting at least part of the time. This is consistent with the findings of Sorice et al. (2012), who stated that more than 61% of landowners had multiple objectives on the land. Although this study indicated that having multiple objectives on the land reflected a decreasing profitability of ranching or farming in the area, it was made clear from at least two landowners in the present study that hunting on the land was a recreational, family activity rather than an additional income. Purchasing the land primarily for recreational hunting, Mr. Oak noted the importance of hunting to his family:

My father had a dream of owning land in Texas. The family had always leased hunting land in East, South, and West Texas. [My father] got to a financial point to buy the land, so he asked us to find some good land for them. We found the ranch and loved it. We all use the land to hunt, for recreation, to take the dogs to run, for going camping, and for family trips. But, the primary purpose is hunting.

Although several landowners indicated that they leased out a part of their land for hunting, it was unclear if there was a need for additional income, or if they simply desired
to make a profit. Texas has few areas of public lands available for large game hunting. Thus, hunting on private lands has become a necessity for hunters in Texas (Pope et al., 1984). Hunters who own land may hunt on their own property, while others may be forced to obtain a hunting lease on private property. This split is evident in the results of this study, as roughly one-half of the landowners who indicated that hunting occurred on their land said that they hunt on their own land, while the other one-half said they lease their land out for others to hunt.

Henderson and Moore (2006) found that wildlife recreation might increase costs associated with liability insurance costs, crop loss, or damage to vegetation and structures by both the wildlife and those hunting it. However, none of the landowners in this study noted increased cost as a concern. The research did not indicate whether the landowner incurred an increased cost, whether the increased cost was a burden, or if the income from the lease offset the increased cost.

Retainment of land as natural/recreational.

More than one-half the landowners in the study either left their land natural or used the land for unobtrusive recreational activities, which echoes a study by Blaine et al., (2003) that indicated landowners believed that the preservation of natural resources is an important goal.

In the present study, Ms. Richards noted that her family was "outdoorsy," and that they preferred to leave the land natural. Similar to Kluender and Walkingstick's (2000) study, Ms. Richards’ statements demonstrated that landowners were interested in the
preservation of natural beauty, wildlife, and natural values. Ms. Richards said, "People 'chew up' the land too often, so we want to keep it as natural as we can."

One study (Bengston et al., 2008) noted that respondents in the aesthetic category attributed value on a scale from mild (e.g., “like to look at it,” “nice setting”) to deeply emotional (e.g., “of all the land on earth, it’s the most beautiful”). Other typical participant responses included statements such as “raw beauty,” or, “I enjoy the beauty of nature.” Interestingly, landowners in the present study also used this language. Ms. Richards stated, “We wanted ‘raw’ land. We've never had the intention of developing it.”

Although Milburn et al. (2010) found that social benefits and connection to nature, and qualities such as peace and quiet, are key motivations for rural living, the study did not specifically take into account absentee landowners who did not live on the land. However, findings were consistent with the findings of this study, which found that landowners desired a connection to the land and desired a retreat from urban life.

Kaetzel, et al. (2011) found that urban sprawl was increasing primarily due to an influx of retirees, who were motivated by three categories for land ownership: privacy, heritage, and utility. Landowners in the retention of land as natural/recreational theme have a utility motivation, according to the study, and are interested in owning the land for its value to the landowner. Utility motivations include production on the land and financial investment, but also include motivations related to the retention of land as natural/recreational theme such as collecting firewood and fishing. In this study, Mr. Wood told the researcher how important leaving the land natural was to his family:
We love to be outdoors. In business, we spend all our time indoors. Our family likes to get outdoors, see the bluebonnets, the wildlife. We also get out and clear cedar, things like that. The more we turn into parking lots, the less there is to enjoy.

Conclusions: Research Question 2

Research Question 2 asked what phenomena are motivating absentee landowners to keep their land in agriculture. The five themes that emerged from the invariant constituents were family/heirs, minimization of development, cost share programs, financial gain, and environmental factors.

Each of these themes was defined operationally, as it related to the study. The family/heirs theme demonstrated that motivation was due to the use of the land for family activities, or that the landowner hoped to leave the land to heirs. Landowners who maintained their land in agriculture due to the desire to leave the land natural with the purpose of hindering urban growth and development in the area were grouped under the minimization of development theme. Landowners who were motivated to maintain their land in agriculture due to the incentive of cost share programs fell in the cost share programs theme. The theme titled financial gain encompassed those landowners who maintained their land in agriculture because of some type of financial gain, such as a tax incentive or production of additional income, while those in the environmental factors theme maintained their land in agriculture due to stewardship of natural resources or increase of biodiversity.

Family/heirs.

Similar to the family land theme found under research question one, family/heirs was the most common theme in this category. Landowners in this theme were motivated
to maintain their land in agriculture because they either currently used the land for family activities, or they desired to leave the land to their heirs. These landowners appeared to be motivated by heritage, explained in Kaetzel et al., (2011) as landowners who were motivated to own the land because it was a part of their family heritage, and to pass on to children or other heirs.

The findings of this study were consistent with the findings of Hay (1998), who noted that an individual grows attached to a place through interaction with that place over time. This was demonstrated by the landowners who spoke fondly of the time spent on the land over the years with their family. As the landowners watched their families grow, the need to maintain the land as a getaway for the family grew even more important.

A study conducted by Lai and Kreuter (2012) in Texas found that place attachment was found to be high by landowners who noted a past history with the land. This sentiment was echoed in the present study, as landowners who were directly involved in family activities on the land seemed to be most attached. Landowners in the present study often recollected family history, remembering class parties as a child or echoing the sentiment of the way their father did things on the land.

However, not all studies were confident in the continuation of some land practices after the land was passed on to heirs. Although one study (Wiltshire et al., 2011) found that family was an important reason to maintain the land in agriculture, noting that the decision to maintain the land in agricultural production was closely associated with heritage or identity, nearly one-third of the landowners knew that the operation would not continue after their retirement and only one participant was confident that the family farm
would be continued into the future. This suggested that the agricultural operation itself was a lifestyle choice. In the present study, none of the landowners were confident in the future of their land. Some noted that the land would most definitely be sold for development, while others were unsure of what their heirs would do with the land. The lack of confidence in leaving the land natural agrees with the Wiltshire et al., (2011) study, indicating that land use is determined by the lifestyle choice of the landowner’s heirs.

A qualitative study by Bengston et al., (2008) found that family heritage and legacy were motivators for owning land. Specifically, family heritage, family legacy, family land use, and inherited were all themes that emerged from the study. Landowners made statements such as “original family homestead,” “pass down to children,” “part of family land,” “a family retreat,” and “it was part of the inheritance.” The study closely mirrored the present study, as landowners such as Mr. Garmin stated, “I’m a third generation landowner. The land was purchased before 1900, and was eventually left to the three kids,” and Ms. Richards noted that the land was “a family retreat.”

It was determined that the use of the land for family activities or passing the land to heirs were highly motivating factors in maintaining land in agriculture because the family/heirs theme was the most prevalent across all themes.

**Minimization of development.**

Landowners in this theme indicated they have observed the migration from urban to rural living, and have attempted to slow that progression. Kaetzel et al. (2011) found that landowners are motivated by three primary factors, one of which is privacy.
Similarly, Bengston et al. (2008) found that landowners had a desire to stop irresponsible or encroaching development, and to buffer themselves from nearby developed land. Landowners in that study made statements such as, “Much of the development in my area is irresponsible and I want to do my best to preserve natural habitat,” “Keep people from putting houses on it,” and “We like woodland and it makes us sad how it’s all being developed.”

The present study also indicated that a majority of the participants had a desire to minimize development near their land. For example, Mr. Oak said that undeveloped land was needed “because it is harder to hunt with businesses and homes butting up against the fence.”

Recent studies indicate that landowners are concerned with loss of open space, urban decay, unsightly development, air and water pollution, traffic congestion, and an overall loss of sense of community (Nechyba & Walsh, 2004), as well as decreased acreage for agricultural production, soil conservation, natural resource conservation, biodiversity, and socioeconomic viability (Wiltshire et al., 2011). Participants in the present study indicated concerns with unsightly development, natural resource conservation, and biodiversity, which are compatible with these recent findings.

**Cost share programs.**

Landowners in this theme were motivated to maintain their land in agriculture due to their participation in cost share programs. Conservation programs address a wide range of land management and conservation goals, including topics such as soil erosion, water quality, wildlife habitat, and open space (NRCS, 2012).
Studies show that absentee landowners lag behind owner-operator enrollment in cost share programs, possibly because none of the programs use language that specifically targets the needs and concerns of their group (Petrzelka et al., 2009) or because they do not specifically qualify because they do not actively manage the land (Petrzelka et al., 2012). However, approximately one-half of the landowners in the present study reported participating in some form of cost share programs on their land, from clearing cedar to installing water wells and stock ponds.

Other landowners reported not participating in cost share programs for specific reasons. Ms. Richards commented that she felt some of the cost share programs were based off a so-called "good 'ol boy" system. She stated that she had difficulty finding out about available programs, and that funding was rarely available once she found a program that would work for her land. The USDA’s Natural Resource Conservation Service (NRCS) must examine existing protocol in information dissemination, so that absentee landowners are equally involved in the process. The reference to a "good 'ol boy" system indicates a lack of information-sharing between the NRCS and non-resident landowners. This problem should be analyzed across the state offices to ensure that all populations are notified of available programs, and all populations are equal when competing for cost share funds.

Ms. Richards also mentioned that she was interested in the Army's Compatible Use Buffer Program, but was not able to receive a return call from installation officials. Department of Defense and Army officials must ensure good customer service by responding promptly to landowner inquiries. A buffer program is only successful when a
positive relationship exists with landowners surrounding an installation. More on the Army's Compatible Use Buffer program may be found in Appendix F.

**Financial gain.**

Landowners in this theme indicated that they maintained their land in agriculture at least in part because they either received tax incentives to do so, or they received some other type of payment for production on the land. This type of incentive is an external, or extrinsic, motivating factor according to a 1989 Bliss and Martin study.

Every state in the U.S. has some type of preferential property tax program available to agricultural landowners, motivating landowners to maintain their land in agriculture by taxing the land by its use value rather than market value (Williams et al., 2004). In the present study, three of the landowners specifically mentioned the importance of an agricultural tax exemption of the land, one of which noted that the exemption was critical in keeping the land in the family. Mr. Garmin said, “The [agricultural] exemption allows us to stay out there. If we had to pay land taxes, there’s no way we could survive in [agriculture].”

Several studies have identified that tax incentives are important to most agricultural landowners (Williams et al., 2004; Petrzelka et al., 2012), but mention that many absentee landowners do not own land for production purposes and are often less engaged in land management activities on the land (Petrzelka et al., 2012). Although it was not directly mentioned by some of the landowners, the fact that they did not have cattle themselves, or lease the land for agricultural purposes, begs the question of whether the landowners were aware of the tax incentives.
One study noted that one theme, nonspecific investment, closely mirrored the present study’s financial gain theme. Nonspecific investment included general expressions related to the importance of these lands as an investment. Participants in that study made statements such as, “safest place to put money,” “land is a good investment,” “hedge against inflation,” “college fund,” or “good nest egg for future,” (Bengston et al., 2008). Similarly, the present study found that participants made very comparable statements. Mr. Law said, “Land is a great investment, and it’s never going to get any cheaper,” while Mr. Moriah said, “It’s been a good hedge against inflation, and it’s better than buying gold.”

**Environmental factors.**

As this theme emerged, it was found to be very similar to the leave land natural/recreational theme in Research Question 1 and the subsequent findings regarding motivation were also very similar. Many recent studies found that preservation of natural resources is an important goal to landowners, and that conservation of the environment was the largest influence when making land management decisions (Petrzelka et al., 2009; Blaine, 2003; Kluender & Walkingstick, 2000). Similarly, the present study found that a majority of the landowners made mention to the importance of the environment or natural resources on the land.

Although Milburn et al. (2010) found that social benefits and connection to nature, and qualities such as peace and quiet, are key motivations for rural living, the study did not specifically take into account absentee landowners who did not live on the
land. However, findings were consistent with the findings of this study, which found that landowners desired a connection to the land and desired a retreat from urban life.

A study by Bengston et al. (2008) noted an environmental protection theme, which included expressions of the importance of environmental protection, preservation, conservation, or stewardship of the land. Examples stated by participants in that study included, “I am a steward of the land, not just an owner,” “to protect it from being destroyed,” “to help preserve America,” “holds world together,” and “reforestation, have planted 1800 seedlings.” The same study also found a wildlife and wildlife habitat theme, which included statements related to wildlife and the improvement of wildlife habitat. Examples of statements made by participants in that study included: “to provide homes for wildlife,” “like to save it for wildlife,” “wildlife enhancement,” “for birds and animals,” and, “give the birds and animals a safe haven – all creatures deserve a place in the world.”

The present study found that the two themes in the Bengston et al. (2008) study mirrored the findings of the environmental factors theme in the present study. Mr. Wood noted that one of his goals was "increased habitat diversity," while Mr. Garmin stated that he would leave a mixed habitat "for wildlife cover" on the land. Mr. Law simply stated that he hoped to be "a good steward of the land."

**Conclusions: Research Question 3**

Research Question 3 asked how absentee landowners see their land use changing over time. Two major themes emerged as a result of the interviews: development and natural. Landowners in the development theme felt their land would most likely be
developed within the next 50 years, while landowners in the natural theme felt their land would most likely be left natural, or have a similar land use as the current land use.

**Development.**

Participants in this theme felt their land would most likely be developed in the future. A 2011 study by Lokocz et al. found that landowners who had owned their land for a short time were more likely to support protection of woodlands and natural resources than residents who had lived in an area for a long period of time. Interestingly, the two residents who had owned the land the shortest amount of time, Ms. Richards and Mr. Wood, indicated they thought their land would remain undeveloped into the future. However, the landowners who had owned the land much longer, between 30 and 60 years, felt their land would most likely be developed.

A 2011 study by Wilshire et al. noted the decision to maintain the land in agricultural production is closely associated with heritage or identity. However, that study found that 33% of the participants were confident the operation would not continue after their retirement, and only one participant was confident that the family farm would be continued into the future, suggesting that these landowners had a tendency to believe that the operation itself was a lifestyle choice. In the present study, Mr. Law indicated he had already set his land up to be developed, since he felt that his children had little interest in the recreational and agricultural aspects of the land after he was gone. Mr. Moriah said he knew the land would be subdivided, at a minimum, among the children, understanding at least some of them would prefer to sell the land to developers. These findings are consistent with the Wilshire et al. (2011) study, which found that
maintaining the land in agriculture is a lifestyle choice that must be made by heirs after the initial landowner is gone.

_Natural._

Landowners wishing to maintain their land in its current, natural state have several options available to meet that goal. Lai and Kreuter (2012) found that landowners might be empowered to maintain the land in its current use. This empowerment may be driven by research that identifies landowner motivations, as well as by encouraging landowners to maintain a relationship with other landowners, and encouraging landowners to participate in events (such as public hearings) to express their concerns of potential threats. Every landowner in the present study except one expressed the desire to maintain their land in its current state into the future, though a few of the landowners felt the land would be developed anyway (see the Development theme above).

The NRCS provides conservation programs to address a wide range of land management and conservation goals, including topics such as soil erosion, water quality, wildlife habitat, and open space. Gerlach (2009) noted that cost share programs administered through organizations such as the USDA allowed landowners to receive fiscal incentives in exchange for entering into 10- to 15- year contracts to establish long-term resource conservation on eligible farmland. Although only one-half of the participants in the present study noted they currently utilize the assistance of cost share programs on their land, several others who did not participate in cost share programs indicated they were unaware of available programs for their land.
Aside from cost share programs, landowners also have the opportunity to participate in other agricultural protection, land trust, and land acquisition programs. According to Lokocz et al. (2011), it was found that support was highest for working with a land trust, as well as agricultural preservation and acquiring land for recreation. There appeared to be more support for private (non-profit) organizational efforts than exists for public acquisition of rural land. Only one landowner in the present study mentioned interest in this type of program. Ms. Richards noted that she had been interested in the Army's buffer program, yet had been unsuccessful at reaching anyone at the local installation for more information.

**Conclusions: Research Question 4**

Research Question 4 asked how an absentee landowner's emotional tie to the land affects their land management decisions. Although all four themes that emerged dealt with family members, two of the categories represented the landowners’ past (parents), and two of the categories represented the landowners’ future (children). The categories were *children – natural/recreational, children – hunting, parents – natural/recreational, and parents – agricultural.*

The *children – natural/recreational* theme recognized that landowners were tied emotionally to the land because their children enjoy natural uses of the land, or enjoy using the land recreationally (i.e. fishing, camping, hiking, or family reunions). The *children – hunting* theme specified that the landowner’s emotional tie was due to their children’s love of hunting. The landowners who were tied to their land because they remembered experiencing natural or recreational activities on the land with their parents...
fell in the parents – natural/recreational theme, while those who remember their parents being heavily involved in agricultural activities on the land were placed in the parents – agricultural theme.

**Children – natural/ recreational.**

In 1979, Woronchak found that families were moving toward rural living not only because of economic factors, but also due to socio-cultural considerations such as desire to raise their children in the country. Even more recent studies (Milburn et al., 2010) noted that these rural areas are especially appealing to retirees because they perceive it as safe and healthy, and to young professionals who are considering the importance of raising children in a rural setting.

All but two participants in the current research study indicated the importance of leaving the land in agriculture for the benefit of their children. Landowners with a heritage motivation, as noted in a Kaetzel et al. (2011) study, were interested in owning the land because it was part of their family heritage and to pass on to their children or other heirs. Mr. Law explained the importance beyond his children. "My kids, grandkids, and even great grandkids, have never done anything like farming. They sit in front of the TV all day. This is a great thing for them" he said.

Hay (1998) noted that meaning or sentiment ascribed to a place is cultivated through direct and/or indirect interaction with a place over a period of time. Similarly, the present study indicated that maintaining the land in agriculture became more important to the landowner as their children and grandchildren enjoyed the land. For instance, Ms.
Richards noted, "My kids were able to get away and run around outside - you can't do that in the city."

**Children – hunting.**

Although the researcher had considered grouping this theme into the *children - natural/recreational* theme, she later created the *children - hunting* theme because several landowners seemed to speak about hunting as a specifically separate topic. Although this was a considerably smaller group than *children - natural/recreational*, it was determined that a separate theme was warranted.

Baen (1997) noted that individuals who own rural “weekend places,” like the absentee landowners in the present research study, include hunting as one of the benefits of owning the land. Mr. Wood stated that his family uses the land to hunt, and the family may manage a deer hunting operation on the land at some point in the future, though the primary reason they purchased the land was for its recreational benefits such as camping and hiking. Mr. Oak, on the other hand, said that the primary reason that his family purchased their land was so that they would have a place to hunt together.

**Parents – natural/recreational.**

Lai and Kreuter (2012) conducted a study in Texas, which found that place attachment was highest among landowners who noted a past history with the land. That said, respondents in this theme identified that they were attached to the land because their parents felt that it was important to leave the land natural. Ms. Murphy noted that leaving the land natural was important to her father, while Mr. Garmin recalled participating in
the same recreational activities with his parents and grandparents as he now participates in with his children.

*Parents – agricultural.*

Similar to the *parents - natural/ recreational* theme, landowners in this theme are motivated to maintain the land in agriculture due to the agricultural practices of their parents. The landowner is thus emotionally tied to the land because of their parents' agricultural practices on that same land. For instance, Mr. Garmin's great grandparents came to the area as tenant farmers, and acquired the land to farm. Mr. Law remembered his mother's Czechoslovakian roots as an important reminder for land ownership and stewardship.

As found in the *parents - natural/ recreational* theme, although landowners specifically noted that they were tied to the land due to their family's previous agricultural activity on the land, current research is void of this topic. A review of current literature found no references to landowners being tied to the land due to their parents' farming or ranching on the same land. Additional research should be conducted on this topic.

**Implications**

It is a goal of qualitative researchers to create a research study that is transferable in similar situations and contributes to theory development. The transferability of both the phenomenon and the methodology is an implication that reaches far beyond mere replication of this study, since the study is context-dependent.
This study identified the characteristics of landowners who have either purchased or retained the land. By determining the characteristics and motivations of these absentee landowners, the study is able to provide a clearer picture of this group. Understanding the attitudes, perceptions, and beliefs of landowners as they watch development encroach on their agricultural lands is vital to establishing and maintaining a positive relationship among landowners, the military and other organizations. The researcher has a better understanding of the absentee landowners because of the vast amount of data obtained from those who participated in this study.

It is important to note that the absentee landowners and the land use near the study site were unique. These unique qualities should be considered when attempting to transfer the results of this study. The landowners resided close enough to the property to easily commute there for family or recreational events. It is possible, therefore, that this group found recreation and on the land as an important motivator due to their proximity to the land.

The land use surrounding the study site is also important. The land surrounding the Army installation is primarily used for grazing or hunting activities. None of the landowners maintained the land as crop production. Therefore, it makes sense that landowners would state that recreation, hunting, and leasing the land to hunters or cattle producers are important land uses, as they are compatible to the existing landscape.

Although the landowners and land use were unique, it is the researcher's opinion that the results are applicable beyond the area near a military installation in Texas. Although areas near military installations are often similar in land use, there may be
implications to encroachment near other public lands. State parks, forests, and preserves may be other areas of interest when considering transferability of this study.

Although there were many themes within the four identified research categories, the researcher noticed two overarching themes that emerged: intrinsic motivation was family and extrinsic motivation of money. A 1989 Bliss and Martin study identified two categories of factors, external and internal factors, which motivate landowners’ land management activities. According to their study, external factors included income, technical assistance, tax programs, and forestry incentive programs. Internal factors included manager identity and values regarding ethical use of forest resources, as well as family and personal identity.

This study found that landowners’ families played an integral part in land management decisions. Landowners reiterated several times throughout the interview process that they were either motivated by their family history of maintaining the land in agriculture, or they did so due to the current family use and desire to pass the land on to their heirs. The landowners and their families may hunt, camp, fish, or otherwise recreate on the land, and this is an important intrinsic motivator to the landowner. The themes family land, leave land natural/recreational, family/heirs, children - natural/recreational, children - hunting, parents - natural/recreational and parents - agricultural all directly note the importance of family in maintaining the land in agriculture. Even themes such as development, natural, environmental factors, hunting on land, and minimization of development have family implications, because decisions for each of these also impacted the landowner's family in some way.
The primary extrinsic landowner motivation was money. All but two landowners stated that they leased the land for cattle or hunting purposes, received a tax benefit, participated in cost share programs, or received some other type of income directly related to the land. The themes leasing land, hunting on land, cost share programs, and financial gain involve money as a motivating factor for maintaining the land in agriculture.

SDT also notes that there are three basic psychological needs that are the basis of motivation: competence, relatedness, and autonomy. This dissertation found that landowners partially demonstrated the psychological need of competence by recognizing an activity that they personally enjoy on the land, and performing that activity to the best of their ability. Landowners were very motivated by, and dedicated to, the chosen land use on their property. The research found that landowners used their land for a variety of purposes, including a place for family activities, leasing the land to hunters or to raise cattle, a place for the family to hunt, and a place to leave serene and natural. No matter the land use, landowners were involved in activities to ensure that the land use was protected, such as cost share programs and individual land management activities. Landowners were preserving a way of life on the land to which they were dedicated, and performing those activities to the best of their abilities. However, landowners also indicated that they felt as if they may not be able ensure the desired outcome of leaving the land in agriculture after their heirs take over the management of the land. Feeling capable of achieving desired outcomes on the land is an important component of competence, as it relates to SDT. Identifying landowner competence was not the purpose
of this research study; therefore, landowner competence was not analyzed or reported in this study.

This study found that landowners demonstrated relatedness by indicating the importance of family. Every landowner except one in the study mentioned the importance of owning the land and maintaining it in agriculture because they wanted their families to have the opportunity to enjoy it. The one landowner that did not mention his children indicated that the land had been in his family for generations. Landowners in the study did not merely make mention to family; they were compelled to manage the land in a way that involved what was best for the family, thus demonstrating relatedness.

Landowners in the current research were found to demonstrate autonomy by being in control and making their own decisions, rather than being controlled by an outside force. Although landowners often made decisions they felt were the best for their heirs, landowners were making decisions without the coercion of outside forces. Landowners in the study were very independent and knowledgeable, and they knew where they were headed in relation to land management decisions, thus demonstrating autonomy.

Because the majority of the landowners demonstrated they were motivated by both intrinsic and extrinsic factors, the use of the SDT model to frame the research was found to be a complementary decision. This study confirmed that landowners are motivated by both intrinsic (internal) and extrinsic (external) factors. This finding echoed the Bengston et al. (2008) study, which found that many respondents list multiple motivations. This suggests that landowners hold a variety of important values related to
their land and find it difficult identifying a single motivator as more important than the others. The diversity of land management values, ownership objectives, and management practices on the land must be embraced. Specifically, the authors note:

From a sustainability perspective, this broad outlook will help ensure a diverse and vibrant landscape. From a social perspective, this approach may hold one of the keys to helping Americans reconnect with nature. From an individual forest owner’s perspective, the multiple and diverse motivations for forest ownership are at the heart of her or his enjoyment and stewardship of the forest. (p. 66)

Gaining a deeper understanding of landowner motivations enables the transferability of this study to other similar situations. The study did not merely identify absentee landowner motivations. Rather, the study compared these motivations to other findings, analyzed the findings in relation to applicable theory, and synthesized the results into recommendations that are usable across a broad spectrum of disciplines.

**Recommendations**

The following recommendations are presented based on major findings and conclusions from the study. The recommendations are divided into themes based on the applicability to particular organizations. The themes include applications for the Army, cooperative extension, legislators and other governmental agencies, tax appraisal offices, financial planners, lending organizations, estate planners, and future research. The recommendations are then concluded with several overarching suggestions that enhance transferability, as well as a section on the author’s final thoughts.

**Applications for the Army.**

The U.S. Army, a branch of the Department of Defense, must understand what motivates landowners surrounding their installation in order to make land agreements that
work for both the landowner and the Army. Blaine et al. (2003) explained the political implications associated with recognizing these preservation goals. The author notes that officials must have information concerning their constituents' views on the use of public funds for the preservation of rural, natural, and agricultural lands. The branches of the Department of Defense, specifically the Army, could use information to make existing programs, such as the Compatible Use Buffer Program, more appealing to the interests and needs of absentee landowners.

It is also recommended that the Army expand its focus beyond the existing Compatible Use Buffer Program. Although this program is successful at many installations across the U.S., a different or modified program may be appropriate for installations in Texas due to land use rights, as well as motivations, opinions, and beliefs uncovered in this study. Therefore, the Army may consider creating new programs based on the absentee landowner motivations. The Army and the Department of Defense community must be proactive in understanding landowner motivations in order to make the best decisions for both the military and local landowners.

The Army installation in Texas may begin to expand its focus beyond existing programs by contacting these absentee landowners who own land near the installation and share available opportunities for encumbering the land with conservation easements, since the absentee landowners may not be aware of local programs. Seeking out landowners and educating them on available programs is a proactive step in establishing a positive relationship, and initiating the conversation may be the first step in finding new approaches that work for the Army and local landowners.
Applications for cooperative extension.

Absentee landowner motivation is a topic that has not been thoroughly studied in the past. However, determining landowner motivations for retaining land in agriculture has important implications for extension personnel who seek to create programs and opportunities target landowners. Extension agents need to be aware of the challenges associated specifically with absentee landowners, so that they may educate them on the options best suited for their practices. Programs should be developed to educate absentee landowners through education and outreach, both through local and online programs.

The results of the study indicate the importance of incorporating the idea of family land use into cooperative extension educational programs and outreach. Although the land may not be used specifically for agriculture, co-use of the property for sustainable land management practices may be warranted. By considering that some landowners prefer to maintain the land in a compatible use for family activities is an important concept for extension agents and cooperative extension personnel. Similarly, extension agents may benefit from hosting family meetings with landowners and their families as the landowners age. Hennessy (1999) noted that because people are living longer, one of the main reasons for agricultural resource immobility involves the reluctance of aging farmers to transfer ownership or control of the land to the younger generation. This may be due to distrust in what will occur on the land after the landowner's passing. Therefore, in these meetings, the landowners may express their desires in regard to future land management, heirs may discuss their concerns and fears in maintaining the land in agriculture, and the extension agent may offer support and resources to aid in the transition.
The study also indicates a need for county extension agents to assist landowners in understanding the importance of setting boundaries in lease agreements so that the land is managed in a sustainable way. Education and outreach targeted at absentee landowners who lease their land out may be warranted, as those landowners may not understand the importance of proper land management. For example, extension agents are available to provide advice on the number of cattle that should be located on a parcel of land to increase good rangeland management practices.

In terms of land use, findings indicate that there is a need for county extension agents to understand the multiple land uses, and specifically identify programs available to improve hunting land. Cost share programs are available to improve habitat on the land, build stock ponds, and plant food plots. Identifying these programs and marketing them to landowners with a desire to use their land for hunting will ensure the widest dissemination of these programs.

The study also found a need for county extension agents to advertise programs aimed at leaving the land natural, in lieu of having livestock or crops on the land. Programs to improve existing ponds or create new ponds, clearing cedar and mesquite trees, and increasing desirable vegetation are all areas in which leave land natural/recreational landowners may be interested. Educational opportunities may be warranted to explain the way that they are managing the land is beneficial to the surrounding landscape. Though the landowners in this theme understood the self-importance of leaving the land natural, few commented that they understood the broader implications, such as increasing habitat diversity and enhancing their sustainable footprint.
Cooperative extension may not be required to take these new responsibilities on alone. The Army and extension should work together to seek funding for joint programs that will benefit both organizations. Each organization should bring funds and new programming ideas forward to create new opportunities for absentee landowners near military installations.

**Applications for legislators and other government agencies.**

The study found that while there is adequate data and information available for traditional owner-operator landowners, little information and programs exist for absentee landowners. Legislation needs to be reviewed to better encompass absentee landowners as a specific group.

As funds become available for cost share programs, organizations such as NRCS should attempt to contact these absentee landowners, since they live outside of the county and may be unaware of programs available to them each year. Partnering with cooperative extension, tax appraisal offices, and other organizations that have existing landowner data may expedite the process and make contacting the landowners an easier process.

**Applications for tax appraisal offices, financial planners, and lending organizations.**

In terms of professional and academic transference, the results indicate that some absentee landowners may not fully understand the tax implications of leaving the land natural, since agricultural production on the land may lead to a lesser tax burden. Local bankers, real estate agents, and even accountants must fully understand the landowners'
needs and desires, as well as the best financial solution for the family so that the tax burden does not cause the landowner to sell the land to developers. Absentee landowners may even be located through the same process that was used in the present research study, making many names and addresses available for mail outs from county extension offices with subject matter related to tax benefits and agricultural income.

Tax appraisal offices and lenders also must take into account that additional revenue from hunting leases when appraising lands. More data regarding hunting and hunting leases should be captured during the U.S. Department of Agriculture’s (USDA) Census of Agriculture so that a greater understanding of this type of land use may be available. The USDA should collect this information on questionnaires sent to landowners, but the need to collect this information should be identified and pushed forward by the tax and financial organizations.

**Applications for estate planners.**

The study by Kluender and Walkingstick (2000) suggested that estate planning was important to absentee landowners, indicating that estate planning might be an appropriate mechanism to encourage appropriate land management. The researcher agrees that estate planning is critical in ensuring that family and heirs are aware of the landowner’s wishes regarding land management before the land is transferred or inherited. Proper estate planning may lead to heirs agreeing to maintain the land in agriculture as well. Extension personnel should also be available to assist in the process as necessary.
Additionally, Hennessy (1999) suggested that capital gains taxes and estate taxes may affect the family's sale of the land, since waiting for the tax exemption may be a cumbersome or challenging process. Assisting these landowners through the process during this time may increase their likelihood to maintain the land in agriculture.

**Applications for future research.**

A comprehensive literature review and the results of this study uncovered gaps in the present research. Recommendations for future research should go beyond the research process itself and the publication of findings in journals. Findings should also be published in farm and ranch publications and even local newspapers, so that the widest dissemination is possible. Recommended future research should focus on the following subjects:

*Absentee landowners and leasing land to tenants.* Research should focus of land management decisions made by the tenant and subsequent oversight by the landowner.

*Hunting as a valid agricultural land use.* Further research is needed to uncover the number of landowners utilizing their property for hunting, and identifying their specific land needs. Further, although the research focuses on the recreational aspect and financial aspect of hunting leases, it fails to identify maintaining the land as a place for the landowner's children to hunt as a motivational factor to maintain the land in agriculture.
Consolidation of available programs for absentee landowners. Researchers need to uncover available assistance programs and publish the information so that it is readily available to these absentee landowners. The creation of a website or database may aid absentee landowners in selecting programs that benefit them. Having this information more readily available to the landowners will allow them to be more knowledgeable and better equipped to maintain the land in agriculture.

Landowners who are motivated to leave their land natural. Studies should be directed at recognizing why these landowners are motivated to maintain their land in agriculture, and how long the landowners plan to maintain their land in this natural state.

Land traditions across generations. Research is needed to uncover the connection between the landowner and their heirs, and understand the concerns of both the landowner and the heirs. By discovering the best and most successful methods for a smooth transition from landowner to future landowner, researchers may publish guidance to help extension agents and even financial planners and estate attorneys on the best path forward for all the interested parties.

Minimization of development as a motivator. Future research should focus on the minimization of development as a specific motivation for maintaining the land natural. Although there have been studies which indicate a wide variety of possible reasons, these have been only a small section of a larger study.

Cost benefit of agricultural tax exemption for absentee landowners. Research should focus on the benefits of agricultural tax exemptions, because this financial
assistance may be the answer for some landowners to maintain their land in agriculture.

Recurring motivations for absentee landowners. A need exists to better understand the recurring themes of environmental stewardship, natural resource management, and wildlife management on lands owned by absentee landowners. Research should aim at uncovering the motivations behind why these landowners chose this theme, and why preserving the land is so important to them.

Motivating factors of heirs. This research focused on landowner motivations. However, researchers should also focus on uncovering why heirs of the land do not maintain the land in agriculture, and what would be their motivating factors to maintain the land in agriculture.

Parental influence on absentee landowner motivation. A thorough review of existing literature found no existing research indicating that the landowner's parents' desire to leave the land natural caused them to have an emotional tie to also leave the land in a natural state. Research should be directed at the relationship between the landowners and their parents in regard to current land use practices.

Expanding on the current research. Having the ability to conduct a broader study to include additional military installations in Texas or even additional installations across the U.S. may have yielded different results. A broader study could indicate if the conclusions of the present study were based on regional attitudes, or whether similar motivations occurred in other locations.
Quantifying the findings of this study. The use of quantitative methods and the ability to procure additional software or hardware may have also yielded results that were more generalizable.

Overarching recommendations.

Although recommendations specific to each research question was discussed earlier in Chapter V, final recommendations seek to enhance transferability of the study and point out general recommendations drawn from the research. Overall, the method used to identify and locate absentee landowners in this study should be used more widely by other organizations so that a current list of absentee landowners may be maintained. There is a need to contact absentee landowners, because they may not be aware of programs due to the distance from the property. Although these landowners may be interested in local programs, they could be unaware of their availability. By targeting absentee landowners through phone calls and mailings, they will stay informed of current information, changes, and opportunities regarding their land and the surrounding land.

Additionally, Sorice et al. (2012) noted that the shift in demographics as urban encroachment inches closer and closer to these agricultural lands, there is also a cultural shift and change in the shared beliefs and knowledge of rural landowners as a group. There is an immediate need for outreach efforts to educate landowners having little or no land management background on the value of rangelands. Although some of the landowners in the present study had vast experience due to a family history on the land, others had little to no prior experience before purchasing the land. This indicates that while some landowners demonstrated the psychological factor of competence, as related
to the SDT model, other landowners did not. Absentee landowners are of particular interest, since not only are they potentially unaware of proper management practices, but the distance from the land often makes knowledge and attendance of training opportunities difficult.

Sorice et al. (2012) also noted that some programs will most likely need to change their focus, substantially broadening their scope from only traditional programs focused primarily on agricultural production, so as not to alienate amenity buyers. The current research study also recognizes that absentee landowners often have a variety of other land management goals than only agricultural production. As a matter of fact, every landowner interviewed identified multiple land uses, each with their own set of specific needs and objectives. Researchers must identify those needs and objectives, create programs, and seek out absentee landowners to participate in the programs.

Final thoughts.

Lai and Kreuter (2012) were wise when stating that landowner motivation is pivotal in achieving a sustainable society. Currently, little is known about how environmental, social, or other changes influence landowners' attachment to their rural property, and subsequently, their decisions to maintain their land as rural. Although this dissertation did not identify motivations that can be automatically transferred to a wide variety of situations beyond absentee landowners near a particular military installation in Texas, the first hurdle to opening the door to future research has been crossed.

All researchers should reflect on the limitations of their studies, and consider what could have been achieved with additional time and money. Without a doubt, having the
ability to conduct a broader study to include additional military installations in Texas or even additional installations across the U.S. may have yielded different results. The researcher could have determined whether the conclusions were based on regional attitudes, or whether similar motivations occurred in other locations. Additional researchers, the use of different methods, and the ability to procure additional software or hardware may have also yielded results that were more generalizable to other situations.

Although these thoughts are valid, the researcher concludes that the present study was a worthwhile endeavor, which resulted in the identification of absentee landowner motivations that can further be used to develop programming to assist the absentee landowners to maintain their land in agriculture. As one landowner, Mr. Law, so honestly stated:

Out in West Texas, there is no telling what’s going to happen out there. And you have to factor in [how] fires, droughts, and tornadoes in the future will have on agriculture. These disasters can wipe towns out. You hope people will be good stewards of the land.
REFERENCES


APPENDICES

Appendix A: Institutional Review Board (IRB) Exemption

Below is the Institutional Review Board (IRB) exemption for this research study. Original signatures have been removed from this document, but may be furnished upon request.

CLAIM FOR EXEMPTION

Notice:
Advertising, recruitment of subjects, mailing or distribution of surveys, and the collection of data may begin only after this claim has received approval (allow 10 working days for processing). The IRB may, upon review of this claim, deny the request for an exemption and route the proposal for expedited review.

PI’s Last Name: Lirbeck
Abbreviated Title: Agriculture and the military
First 4 words of proposal title

BASIS OF CLAIM FOR EXEMPTION. Federal regulations and/or University policy require that in order for research to be exempt from review at least one of the following blocks (1-4) must be checked. See 45 CFR 46.101.

Note: Limitations for exemptions for children: Exemptions cannot be granted for:
(a) projects with children as subjects that involve interview or survey procedures or (b) research where public behavior is observed and the investigator participates or interacts with the children. These projects require Expedited or Full Board review.

☐ 1. The research will be conducted only in established or commonly accepted educational settings (like classrooms) AND it involves normal educational practices such as research on regular and special educational instructional strategies, or research on the effectiveness of, or the comparison among, instructional techniques, curricula or classroom management methods.

☒ 2. The research involves the use of only the following techniques Check the applicable technique(s):
☐ a. educational tests (cognitive, diagnostic, aptitude, achievement), or
Authenticated
☐ b. survey or interview procedures, or
Authenticated
☐ c. observation of public behavior of subjects,

AND (one of the following must be checked):

☒ a. the information obtained will be recorded in such a manner that subjects cannot be identified directly or through identifiers linked to the subjects, or
Authenticated
☐ bb. if any disclosure of the subjects’ responses outside the research could not reasonably place the subject at risk of criminal or civil liability, or be damaging to the subjects’ financial standing, employability, or reputation (e.g., information regarding illegal or immoral conduct, drug or alcohol use, sexual behavior, mental illness, or other possibly personally embarrassing subjects), or
Authenticated
☐ cc. the subjects are elected officials or candidates for public office.

November 2011
3. The research is limited to the collection or study of existing data, documents, records, pathological or diagnostic specimens under one of the following conditions: (one of the following must be checked):

- a. they are available to the public or
- b. they recorded by the investigator in such a manner that subjects cannot be identified, directly or indirectly, through identifiers linked with the subjects.

4. Taste and food quality evaluation and consumer acceptance studies,

- a. if wholesome foods without additives are consumed or
- b. if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

5. Another provision of 45 CFR 46.101(2). Please identify the subsection and describe in detail how the category applies to the proposed research.

The research activities of this proposed study involve no more than minimal risks beyond those of everyday life.

__________________________  ________________________
Signature of TTU Principal Investigator            Date

__________________________  ________________________
Signature of Co-investigator                      Date

__________________________  ________________________
Signature of Co-investigator                      Date

November 2011
Appendix B: Interview Guide

Part 1: Telephone Information

Hello. My name is Amber Dankert, and I am graduate student at Texas Tech University. First, I’d like to tell you that I received your information from public county tax records in _____ county. From a map of the locations we received from the tax records, we identified you as an absentee landowner, which means you own land near the _____ Military Installation, but you do not live in _______ County. Is that correct?

If yes: [continue interview].

If no: I am sorry that I was mistaken. Thank you for your time, and have a nice day. [terminate interview]

Great! Do you have a moment to talk with me?

If yes: [continue interview].

If no: Is there a better time that I can reach you? [schedule follow-up interview]

Thank you so much for taking a moment to speak with me about my research at Texas Tech University. The reason I’m calling is that I would like to invite you to
participate in a research study that I am conducting. I am collecting data that will help us learn more about what has motivated you to maintain your land in agriculture.

I was hoping to schedule a face-to-face meeting with you so that I can sit down with you and ask you some questions about your feelings about maintaining your land in agriculture, what has motivated you, and your future plans for your land. Please understand that these questions would be completely voluntary. You will be allowed to skip a question or decide not to participate at all. And, you can stop the interview at any time. And because this is a confidential study, no one will see your answers to the questions, and your name, address, or any other identifying information will not be used. A tape recorder would be used so that I can make sure I get all the information you have told me. But, I will destroy the tapes after I get the information I need.

This survey may be done at your convenience, at your home or a location of your choosing, and will take approximately 30 to 45 minutes to complete. Are you willing to participate and set up an interview time?

If yes: [continue interview].

If no: Well thank you for speaking with me. You have a nice day.

Thank you so much, and I will see you on [Date/time agreed upon]. I will call you the day before to confirm our meeting. I look forward to meeting you soon!
Part 2: Face-to-Face Interview Question Guide

1. How long have you owned the land?

2. Can you tell me a little bit about the history of the land, and how it is connected to your family?

3. What are your personal experiences and memories of the land?

4. What are your reasons for keeping your land in agriculture?

5. How important is it for you to keep your land in agriculture?

6. Have you participated in any cost share programs (such as the Conservation Reserve Program [CRP] or the Environmental Quality Incentives Program [EQIP]) on your land?

7. Why did you [participate, not participate] in the programs?

8. What are your future plans, both long- and short-term, for the land?

9. Is it your hope to leave this property to heirs?

10. How are you currently using your land?

11. Do you rent or lease your land to someone else?

   If stated that others are using land, then ask:

   11a. Are you involved in their land management decisions?

12. If you could come back to the land in 50 years from now, how would you hope that the land looks?
Appendix C: Research Study Information Sheet

The following information was provided to the participants at the beginning of each interview:

What is this project studying?
The study examines what motivates absentee landowners to maintain their land in agriculture.

What would I do if I participate?
In this study, you will be asked a series of questions. Some questions will be about you. Some questions will be about your thoughts. Some will be about how you feel about specific topics.

Can I quit if I become uncomfortable?
Yes, absolutely. Dr. Irlbeck and Amber Dankert, and the Texas Tech University Institutional Review Board have reviewed the questions and think you can answer them comfortably. However, you can stop answering the questions and end the interview at any time. Participating is your choice.

How long will participation take?
We are asking for 30 to 45 minutes of your time.

How are you protecting privacy?
This is a confidential research study. The questions will not request any personal information to protect your privacy. All audio recordings will be destroyed after we have received the information we needed.

I have some questions about this study. Who can I ask?
• The study is being run by Dr. Erica Irlbeck and Amber Preston from the Department of Agricultural Education at Texas Tech University. If you have questions, you can call Dr. Irlbeck at 806-742-2816, or Amber Dankert at 254-760-5179.

• TTU also has a Board that protects the rights of people who participate in research. You can ask them questions at 806-742-2064. You can also mail them at Institutional Review Board for the Protection of Human Subjects, Office of the Vice President for Research, Texas Tech University, Lubbock, Texas 79409.

**How will I benefit from participating?**

To thank you for your help. There will be no physical or monetary benefits to participating. However, you will be assisting the researchers in furthering academic knowledge.
Appendix D: Peer Debriefing Memorandum

TO: DRS. ERICA IRLBECK, THERESA MURPHREY, KIM DOOLEY and MATT BAKER
FROM: AMBER PRESTON DANKERT
SUBJECT: EMERGING CATEGORIES
DATE: 4/30/2012

Drs. Irlebeck, Murphrey, Dooley, and Baker,

Please accept this document as the first in a series of peer debriefing memorandums for my dissertation research. In this memorandum, I will tell you where I am at in the research process, talk about emerging categories of data, and end with future plans.

Current Status of Research

To date, data has been collected from a total of six sources. However, information from one source, Mr. and Mrs. Garmin, has not been usable. In the first interview I only tape recorded the interview for later transcription and did not take notes. That interview was subsequently erased from my recording device prior to my transcribing it. I have called to re-schedule that interview, which should occur soon.

That said, the data from five of the six data sources has been compiled into temporary categories. That information is in the Emerging Categories section below. To design the emerging categories, I took the research questions in my proposal and listed them on a worksheet. Then, I went through each interview and decided which pieces of information fit under each of the research questions. After categories began to emerge, I grouped them into categories. Those categories are flexible, and may change after more data is collected.

Emerging Categories

Research Question 1: What are the Fort Hood-adjacent absentee landowners’ perceptions in terms of different types of land use?

Categories:

L1: Family Land – This category includes comments made by respondents who said they used the land in a manner consistent with family-oriented activities.

L2: Lease Land Out – This category includes comments made by respondents who said they leased the land to another party.
L3: Hunt on Land -- This category includes comments made by respondents who said that they hunt on the land, their family hunts on the land, or they lease the land for hunting activities.

L4: Leave Land Natural/Unobtrusive Recreation -- This category includes comments made by respondents who said that they either prefer to leave the land in its natural state, or they perform recreational activities such as hiking, camping, or fishing, which are unobtrusive to the landscape.

Research Question 2: How are demographics influencing Fort Hood-adjacent landowner decisions to keep their land in agriculture?

Categories have not emerged in this section, because I am not collecting demographic data. I will need to take one of two courses of action: 1) delete this question from my proposal, or 2) collect the information in another way.

Research Question 3: What phenomena are motivating Fort Hood-adjacent absentee landowners to maintain their land in agriculture?

P1: Family/Heirs -- This category includes comments made by respondents who said that they maintain their land in agriculture due to use of the land for family activities, or that they desire to leave the land to their heirs.

P2: Minimize Development -- This category includes comments made by respondents who said that they maintain their land in agriculture due to the desire to leave the landscape natural and hinder urban growth and development in the area.

P3: Cost Share Programs -- This category includes comments made by respondents who said that they maintain their land in agriculture due to the incentive of cost-share programs on the land.

P4: Personal Gain -- This category includes comments made by respondents who said that they maintain their land in agriculture due to factors enhancing personal gain, such as a tax incentive, production of additional income, or other similar factors.

P5: Environmental Factors -- This category includes comments made by respondents who said that they maintain their land in agriculture due to stewardship of natural resources, increase in biodiversity, and other environmental factors.

Research Question 4: How do the Fort Hood-adjacent landowners see their land use changing over time?

U1: Development -- This category includes comments made by respondents who said that they feel the land use will change from agriculture to urban land use at some point in the future.

U2: Natural -- This category includes comments made by respondents who said that they feel the land use will remain in agriculture or in a natural state.
Research Question 5: How does a Fort Hood-adjacent landowner’s emotional tie to the land affect land management decisions?

E1: Children-Natural/Recreational— This category includes comments made by respondents who said that they are emotionally tied to the land because they use the land in a natural or recreational use with their children, or for the benefit of their children.

E2: Children-Agricultural— This category includes comments made by respondents who said that they are emotionally tied to the land because the land is tied to agricultural use either with their children, or for the benefit of their children.

E3: Children-Hunting— This category includes comments made by respondents who said that they are emotionally tied to the land because the land is tied to hunting with their children.

E4: Parents-Natural/Recreational— This category includes comments made by respondents who said that they are emotionally tied to the land because they use the land in a natural or recreational use with their parents, or it was their parents’ wish to leave the land in a natural state, or for recreational use.

E5: Parents-Agricultural— This category includes comments made by respondents who said that they are emotionally tied to the land because their parents were involved in some kind of agricultural practice on the land.

E6: Parents-Hunting— This category includes comments made by respondents who said that they are emotionally tied to the land because their parents liked to hunt, or their parents hunted with them on the land.

Future Plans

In the next few days, I will be attempting to contact Mr. and Mrs. Garmin again for a second interview. If successful, I will add their responses to the categories, or create new categories where appropriate. Then, I will further synthesize the data and further narrow my data categories.

Additional memorandums will be sent as additional information is available.
Appendix E: Audit Trail

Part 1: Data Coding and Definitions

L. What are the absentee landowners’ perceptions in terms of different types of land use?

L1. Family Land - The land use includes family uses, either currently, or at some point in the past.

L2. Leasing land - The land is currently leased for agricultural or recreational purposes.

L3. Hunting on land - The land is used for recreational hunting.

L4. Leave Land Natural/ Recreational - The land is left natural, or is used recreationally to camp, fish, hike, and other similar uses.

M. What phenomena are motivating absentee landowners to keep their land in agriculture?

M1. Family/ Heirs – Landowners maintain their land in agriculture due to use of the land for family activities, or that they desire to leave the land to heirs.

M2. Minimization of development – Landowners maintain their land in agriculture due to the desire to leave the landscape natural, which hinders urban growth and development in the area.
M3. Cost share Programs – Landowners maintain their land in agriculture due to the incentive of cost share programs on the land, such as programs offered through the local county extension offices, the U.S. Department of Agriculture - Natural Resources Conservation Service, the Texas State Soil and Water Conservation Board, and other public and private entities.

M4. Financial Gain – Landowners maintain their land in agriculture because of some type of financial gain, such as a tax incentive, production of additional income, or other similar factors.

M5. Environmental Factors – Landowners maintain their land in agriculture due to stewardship of natural resources, increase in biodiversity, and other environmental factors.

U. How do absentee landowners see their land use changing over time?

U1. Development - Landowners feel that their land will most likely be developed within the next 50 years

U2. Natural - Landowners feel that their land will most likely be left natural, or have a similar land use as the current land use.

E. How does a landowner’s emotional tie to the land affect land management decisions?
E1. Children – Natural/Recreational - The landowner is tied emotionally to the land because their children enjoy natural uses of the land, or enjoy using the land recreationally (i.e. camping, hiking, fishing, or family reunions)

E2. Children – Hunting - The landowner is tied emotionally to the land because their children enjoy hunting on the land.

E3. Parents – Natural/Recreational - The landowner is tied emotionally to the land because they remember experiencing natural or recreational activities on the land with their parents.

E4. Parents – Agricultural - The landowner is tied emotionally to the land because they remember their parents being involved in agricultural activities on the land.

Part 2: Data Reduction and Synthesis

<table>
<thead>
<tr>
<th>Categories</th>
<th>L</th>
<th>M</th>
<th>U</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>L 1</td>
<td>L 2</td>
<td>L 3</td>
<td>M 1</td>
<td>M 2</td>
</tr>
<tr>
<td>Ms. Murphy</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mr. Law</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mr. Wood</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ms. Richards</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mr. West</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mr. &amp;</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Table 2: Data synthesis from landowner transcripts

<table>
<thead>
<tr>
<th></th>
<th>Mrs. Oak</th>
<th>Mr. &amp; Mrs. Garmin</th>
<th>Mr. &amp; Mrs. Moriah</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Part 3: Process Notes - Methods and Trustworthiness

Data was collected from a total of eight sources. However, information from one source, Mr. and Mrs. Garmin, was not initially usable. In the first interview, because I had never conducted an interview before, I only tape recorded the interview for later transcription and did not take notes. That interview was subsequently erased from my recording device prior to my transcribing it. The interview was re-scheduled, and Mr. and Mrs. Garmin were re-interviewed.

That said, the data was compiled into temporary categories. To design these emerging categories, I took the research questions in my proposal and listed them on a worksheet. Then, I went through each interview and decided which pieces of information fit under each of the research questions. After categories began to emerge, I grouped them into categories.

Next, I took each interview transcript and broke each statement into its own stand-alone topic. Once each horizon was identified, themes then emerged. Once themes were
complete, I compared them to the earlier categories that had been developed. Themes and categories were determined to match.
Appendix F: Army Compatible Use Buffer (ACUB) Program Overview

What is ACUB?

ACUB is a program that allows the Army to work with partners to encumber land to protect habitat and training (Knott & Natoli, 2004). Each installation works with a partner agency of their choosing (i.e., The Nature Conservancy, Trust for Public Lands, or Compatible Lands Foundation). The partner works with willing landowners to acquire conservation easements on the land (also known as purchase of development rights), which provide a natural buffer between military training lands and residential or commercial activities. The partner—not the Army—receives the deeded interest in the property and provides for long-term management.

Landowner Benefits

Landowners may receive financial payments and tax benefits from the easement while retaining ownership of the land. The land may be sold at any time, but the easement runs with the land and must be observed by the new owner.

Legal Authority

Title 10, United States Code, Section 2684a, “Agreements to Limit Encroachments and Other Constraints on Military Training, Testing, and Operations,” was enacted by Congress as Section 2811 of the National Defense Authorization Act for fiscal year 2003. It allows the Department of Defense to work in partnership with states, other governments, and public or private environmental and conservation groups to achieve a common goal of sustainability (Knott & Natoli, 2004).

Additional Resources

Compatible use buffers: A new weapon to battle encroachment:

U.S. Army Environmental Command's ACUB Web site:

U.S. Army Sustainability Web site:
http://www.sustainability.army.mil/tools/programtools_acub.cfm