

VISIT MOTIVATIONS AND PERCEIVED BENEFITS OF FARMS, PRIVATE
FORESTS AND STATE/NATIONAL PARKS IN MISSOURI

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS	ii
LIST OF TABLES	v
LIST OF FIGURES	vi
ABSTRACT	vii
Chapter	
1. INTRODUCTION	1
Study Aim and Objectives	2
Study Justification	3
Definitions	5
2. LITERATURE REVIEW	7
Outdoor Recreation in Public and Private Settings.....	7
Motivations in Recreation and Tourism Studies	12
Benefits Associated with Outdoor Recreation and Agritourism.....	17
3. RESEARCH METHODS	22
Research Design.....	22
Study Population and Sampling Procedures	23
Survey Instrument and Measurements	23
Survey Procedures.....	25
Response Rate and Data Preparation	26
Statistical Analysis	27
4. RESULTS	29
Socio-economic Profile of Respondents	29

Respondent’s Engagement on Various Recreational Activities.....	32
Preferences and Behavior for Visiting Natural Settings	33
Motivations for Visiting Farms, Private Forests and State/National Parks	36
Perceived Benefits from Farms, Private Forests and State/National Parks	42
5. CONCLUSIONS.....	50
Discussion of Key Findings	50
Study Implications	54
Study Limitations	57
Recommendations for Future Research	58
REFERENCES	60
APPENDIX.....	70
A. Questionnaire.....	71

LIST OF TABLES

Table	Page
Table 1. Recreation Experience Preference (REP) domains and scales	14
Table 2. Gender, age and education level of respondents.....	30
Table 3. Composition and economic indicators of responding households.....	31
Table 4. Residence location and relationship to the land of responding households.....	32
Table 5. Respondent's rate of engagement on various recreational activities	33
Table 6. Past visitation and willingness to visit an agritourism farm, a private forest and a state/national park in the future	34
Table 7. Types of activities engaged during respondent's visits to an agritourism farm, a private forest and a state/national park	35
Table 8. Importance of motivations for visiting a farm for recreation purposes	37
Table 9. Importance of motivations for visiting a private forest for recreation purposes	38
Table 10. Importance of motivations for visiting a state/national park	39
Table 11. A comparison of importance of motivations for visiting a farm, a private forest and a state/national park for recreation purposes.....	40
Table 12. Perceived socio-cultural, environmental and economic benefits perceived to be derived from farms offering agritourism activities	43
Table 13. Perceived socio-cultural, environmental and economic benefits perceived to be derived from private forests	44
Table 14. Perceived socio-cultural, environmental and economic benefits perceived to be derived from state/national parks	45
Table 15. A comparison of the importance of benefits perceived to produced by agritourism farms, private forests and a state/national parks.....	46

LIST OF FIGURES

Figure	Page
Figure 1. Research design and theoretical frameworks.....	22

ABSTRACT

This study explored the variability in visit motivations and perceived benefits of Missouri households from three natural settings: (1) Farms; (2) Private Forests; and (3) State/National Parks. Specific goals of this study were: (1) To describe outdoor recreation preferences and behavior among Missouri residents; (2) to contrast motivations for visiting farms offering recreational activities, private forests providing recreational opportunities, and state/national parks; and (3) to compare the perceived benefits among those three natural settings. Data were collected in 2010 using a mailed self-administered questionnaire from a random sample of 5,000 Missouri households. The survey produced 969 responses representing a 19.6% adjusted response rate. Results show that “Do something with their family”, “View the scenic beauty”, and “Enjoy the smells and sounds of nature” were the three most important motivations for visiting all three natural settings. Repeated Measures ANOVA showed that the 15 motivation items were perceived to be significantly more important to visit a state/national park as compared to a farm or a private forest. Post-hoc paired *t*-tests showed that only seven motivational items (i.e., “Use their equipment”; “Give their mind a rest”; “Experience new and different things; “Enjoy the smells and sounds of nature”; “Have a change from their daily routing”; “Share their agritourism/outdoor skills”; and “Experience solitude”) were significantly different across the three natural settings. Overall, respondents also considered significantly more important state/national parks for providing several environmental, socio-cultural, and economic benefits to society as compared to farms and private forests. Planning and managing implications of study results are discussed.

CHAPTER I:
INTRODUCTION

Over the years, the countryside has been appreciated as a place for relaxation and reflection, especially because of its largely romanticized lifestyle in contrast to the hustle of urban settings (Nilsson, 2002). Agritourism, defined as recreation-related services and activities provided in a working farm or other agricultural settings such as private forests (Barbieri & Mahoney, 2009; Che, Veeck, & Veeck, 2005; Lobo, 2001), is one form of recreational option capitalizing on the commodification of the countryside. That is, the countryside setting is being sold in a more privatized way, through the offer of organized recreation, leisure and tourism (Cloke & Goodwin, 1992). Although agritourism is an emerging and growing segment of the American tourism industry (Che, 2007), this recreation activity is not a new phenomenon elsewhere, especially in Europe, where its existence goes back for over a hundred years (Busby & Rendle, 2000).

Farmers, especially from non-corporated family firms, usually develop agritourism as a means of entrepreneurial diversification to adjust to the challenging agricultural context they are facing originated by large-scale commodity production, reduced government support, and market changes (e.g., increased competition, price reduction), among others (Barbieri, Mahoney, & Butler, 2008; Che et al., 2005; Nickerson, Black, & McCool, 2001; Veeck, Che, & Veeck, 2006). Thus, agritourism is another consumptive use of the farmland that may help to preserve farms (Che et al., 2005; McGehee & Kim, 2004).

Although agritourism has been primarily developed for its economic benefits (i.e., generate additional income for landowners), it is also suggested to bring multiple non-economic benefits for landowners, and for visitors and local communities (McGehee & Kim, 2004; Nickerson et al., 2001). However, these benefits have been mostly researched from the provider (i.e., landowner) side, being scarce the literature on the visit motivations and perceived benefits of agritourism settings from the consumer (i.e., potential and actual visitors) perspective. Therefore, this study explores the perceived benefits of state/national parks, an outdoor recreation setting that have been highly researched, and two agritourism settings (i.e., farms and private forests), by potential and current visitors in Missouri. This study also explores the motivations for visiting these three different natural settings as a proxy of the perceived personal benefits of agritourism from the consumer perspective.

Study Aim and Objectives

The aim of this study is to explore the variability in visit motivations and perceived benefits from three natural settings: (1) Farms; (2) Private Forests; and (3) State/National Parks among Missouri residents. The reason for choosing these three settings is that the latter are well known, recognized, and visited as compared to the two agritourism settings.

Research objectives, rather than non-directional hypothesis, were used to guide this study given its exploratory and non experimental nature (Ary, Jacobs, Razavieh, & Sorensen, 2006; Patten, 2009). According to the study purpose, this study addressed three objectives:

- 1) To describe outdoor recreation preferences and behavior among Missouri residents.
- 2) To contrast the motivations for visiting farms offering recreational activities, private forests offering recreational activities, and state/national parks.
- 3) To compare the perceived economic, environmental and socio-cultural benefits produced by farms offering recreational activities, private forests offering recreational activities, and state/national parks.

Study Justification

Results of this study will fill a gap in the agritourism literature. Although agritourism is an activity that in the last 10 years has gained popularity throughout the United States, rigorous academic research is still limited. Most existing research is focused on the supply side of this activity; especially examining the various economic and non-economic benefits that agritourism can bring to the farm household and business (Che, 2007; Ilbery, Bowler, Clark, Crockett, & Shaw, 1998; McGehee & Kim, 2004; Nickerson et al., 2001; Tew & Barbieri, 2011) and likely applicable to private forests as another agritourism setting. It is also suggested that agritourism can produce environmental, economic and socio-cultural benefits to surrounding communities such as generating additional direct revenue for local businesses, stimulating the upgrade of local facilities and services, and helping diversify and stabilize the local economy (Bernardo, Valentin, & Leatherman, 2004). Benefits also include holding amenity values, especially for urban residents who may not have frequent access to open space (Jolly & Reynolds, 2005). However, the array of benefits that agritourism can produce are still not fully understood. Especially, little is known about the perceptions of potential and current

agritourists about agritourism-related benefits. Undertaking empirical research on the perceived benefits derived from recreation is needed as results can improve our understanding of human interactions with the natural environment, increase the number of management options, and enhance the quality of managerial actions (Anderson, Nickerson, Stein, & Lee, 2000).

Examining the motivations associated with participation in agritourism is also critical. Understanding what people seek through recreation can provide useful guidance to a variety of planning and management tasks, such as measuring recreation supply and demand, developing management objectives, and preventing or managing user conflicts (Graefe, Thapa, Confer, & Absher, 2000; Thapa, Confer, & Mendelsohn, 2004).

Delivering services based on visitors' needs and desires can provide better recreational experiences (Beh & Bruyere, 2007), thus, optimizing their satisfaction (Graefe et al., 2000). On this regard, with the exception of the work of Jolly and Reynolds (2005), there is no previous research on the motivations of visitors and potential visitors for attending an agritourism setting. Furthermore, to the extent of our knowledge, there is no study contrasting the motivations for visiting different agritourism settings to other types of natural areas.

This study is also important for marketing, policy, and management purposes. The psychographic profile of current and potential agritourists in Missouri can assist providers to develop more accurate advertising strategies to capture new markets and to encourage repeat visitation. Furthermore, the agritourists' profile should be integrated into policies encouraging the development and/or reinforcement of agritourism in Missouri as suggested in relation to other natural settings (McCool & Reilly, 1993;

Kemperman & Timmermans, 2006). Examining visitors' perceived benefits of agritourism as compared to state/national parks is important as the latter settings are well known, recognized and visited as compared to the emerging market of agritourism in the U.S. (Che, 2007). Although society is aware of the role and importance of National and State Parks in protecting natural and cultural values (McCool & Reilly, 1993), it is yet to be unveiled what types of benefits agritourism settings are perceived to produce. Perceived benefits of agritourism can assist agritourism managers to evaluate potential improvements, plan agritourism developments, and promote these activities (Kemperman & Timmermans, 2006; McCool, & Reilly, 1993).

Definitions

Agritourism: Recreation-related services and/or activities incorporated into a working farm or other agricultural setting (Lobo, 2001; Barbieri & Mahoney, 2009; Che et al., 2005). In specific, this study included two agritourism settings: farms and private forests offering a diversity of recreational activities, including, but not limited to, pick-your own apples, hay rides, corn mazes, for hunting, hiking, and bird watching. The survey instrument defined both agritourism settings as follows: (1) *Agritourism farms* provide recreational activities for visitors besides agriculture production. Typical agritourism activities are pick-your own apples, hay rides, corn mazes, etc. (2) *Private forests* are managed by private individuals or organizations. Many of them are opened to the public for recreational use, such as for hunting, hiking, bird-watching, etc.

Benefits: An advantageous change, a condition improvement, the prevention of a worse condition, or a gain to an individual, group, society or even a nonhuman organism (Driver, Nash, & Haas, 1987; Shin, Jaakson, & Kim, 2001).

Motivations: Internal factors that arouse and direct human behaviors (Iso-Ahola, 1999) and that are seen as likely to bring satisfaction (Moutinho, 2000).

State/National Park: Generally a *National Park* contains a variety of resources and encompasses large land or water areas to help provide adequate protection of the resources at the national level (Ibrahim & Cordes, 2002). In turn, *State Parks* are areas that contain a number of coordinated programs for the preservation of natural and/or cultural resources and provision of a variety of outdoor recreation opportunities at the state level (McLean, 1998). In order to capture both types of public lands, this study defined a state/national park as “large land or water areas set to protect natural resources and to provide recreational opportunities for visitors, such as camping, fishing, boating, biking, etc.”

CHAPTER II:
LITERATURE REVIEW

This chapter presents an overview of recent literature on recreation in natural settings, especially related to agritourism activities in farms and private forests as well as recreation in State and National Parks. Specifically, this chapter introduces previous studies on visitors' motivations and perceived benefits focusing on their application to recreation and tourism.

Outdoor Recreation in Public and Private Settings

The natural environment has always been important in the U.S., especially from the late 1800's when national attention focused on natural heritage as a recreation resource (Cordell, Bergstrom, Hartmann, & English, 1990). For example, in 2009, nearly 50% of Americans (137.8 million) ages six and older participated in outdoor recreation; proportion that was higher than the previous year (Outdoor Foundation, 2010). However, there is an existing concern regarding the downward slide in participation among youth in recent years because of several factors, including the development of indoor technologies, time management issues, poor parental influence, and lack of transportation (Outdoor Foundation, n.d.). Although in 2009, participation among children aged six to 12 dropped from 64% to 62% and dropped from 61% to 60% among 13 to 17 year olds, the trend appears to be less steep than in previous years (Outdoor Foundation, 2010).

Trends in outdoor recreation preferences among Americans are also changing; for example, some forms of hunting and fishing are declining (Cordell, 2008; Cordell, Betz,

& Green, 2008; Walls, Darley, & Siikamäki, 2009), camping and swimming have paced their growth, and activities such as mountain biking, rafting, and horseback riding on trails have declined in popularity (Cordell, 2008; Cordell, Betz, & Green, 2008).

Conversely, between 2000 and 2007, some of the fastest-growing outdoor recreation activities were: viewing or photographing flowers and trees, viewing or photographing natural scenery, driving off-road, viewing or photographing other wildlife and viewing or photographing birds (Cordell, 2008). According to the Outdoor Foundation (2010), currently the most popular outdoor activities among Americans ages six and older are: freshwater, saltwater and fly fishing (17%; 48.0 million participants), running, jogging and trail running (16%; 44.7 million participants), car, backyard and recreation vehicle camping (16%; 44.0 million participants), road biking, mountain biking and bicycle motocross (15%; 43.3 million participants), and hiking (12% - 2.6 million participants).

Ninety-one percent of the continental United States is cropland, pasture, or forest, and when Alaska and Hawaii are included, the percentage is even higher (Walls, Darley, & Siikamäki, 2009). Most of these areas, in both public (e.g., State and National parks) as well as private (e.g., farms and private forests) lands, is suitable for outdoor recreation. The following paragraphs describe outdoor recreation in both public and private settings.

Outdoor Recreation in Public Settings

The demand for outdoor recreation in public spaces increased rapidly during the 1960's and early 1970's influenced by several factors including increased population, personal incomes and urbanization, as well as advances in transportation technology (Burt & Brewer, 1971; Cordell et al., 1990; Knetsch, 1963). All those factors encouraged

the proliferation of many outdoor recreation options provided by public bodies (Burt & Brewer, 1971; Knetsch, 1963). At that time, a major concern was the establishment and/or preservation of open spaces areas for recreation, such as parks, inside and nearby expanding urban areas (Knetsch, 1963). Currently, national parks (391 sites in total) are considered the preeminent outdoor recreation destinations in the U.S.¹; additionally, the more than 6,600 state park sites across the U.S. provide a wide range of recreation opportunities (Walls, Darley, & Siikamäki, 2009).

In the early 60's, the establishment of public spaces for recreation (e.g., state parks and national parks) was associated with its economic benefits. Recreation resources were viewed as an economic product in the sense that they could offer goods and services for which people were willing to pay (Knetsch, 1963). In this sense, state parks were viewed as the nuclei of attraction economies, with the capacity to promote local tourism, provide jobs, and enhance rural economies (Hollenhorst, Olson, & Fortney, 1992). Several studies during the 1970's developed economic models for measuring social benefits associated with newly developed recreation sites or for estimating the economic impacts of recreational visits to state parks (Bergstrom, Cordell, Watson, & Ashley, 1990; Burt & Brewer, 1971). Later studies began recognizing that outdoor recreation in public spaces produced other benefits beyond economic ones. For example, Cordell et al. (1990) mentioned that, besides creating jobs and enhancing local economies, outdoor recreation brings many other positive outcomes. It contributes to personal health and family cohesion, can help to prevent crime, as well as stimulates public interest in environmental quality and the preservation of land, water, and wildlife.

¹ The total area from the land of the US that is covered by the National Park System is 84 million acres while the state park sites cover 14 million acres of land.

In more recent years, studies on public natural settings for recreation uses have prioritized managerial and marketing issues, especially regarding the examination of visitor satisfaction (e.g., Tarrant & Smith, 2002). On these regards, the importance-performance analysis (IPA) has been frequently used to evaluate visitors' satisfaction related to specific recreation resources (e.g., cabins in West Virginia state parks) as well as the overall setting (e.g., Hollenhorst, Olson, & Fortney, 1992; Tarrant & Smith, 2002). IPA is a technique that examines two essential elements of satisfaction into one model: the importance or perceive worth of a particular attribute and the performance or perceived condition of the attributes of the experience (Tarrant & Smith, 2002).

Outdoor Recreation in Private Settings

Access to private lands especially in rural areas is also instrumental for outdoor recreation opportunities in the U.S. (Cordell et al., 1990)². However, the available information on the recreational use of private lands is limited, most likely because only a small portion of this land is open for recreation without restrictions (Cordell et al., 1999). According to Cordell et al. (1999), main motivations for landowners to provide access to their land for recreation purposes are maintaining good relations with their neighbors and others, and increasing revenues either to maximize incomes or to help to pay property taxes.

The role of private forests in providing recreation and leisure activities besides their typical economic role (e.g., timber production, financial return) is also recognized by Bernath and Roschewitz (2008). Kurtz and Lewis (1981) found that recreation use was an important motivation among non-industrial private forest owners in the Ozark

² Around 60% of all land in the US is privately owned (Cordell et al., 1999).

Mountains of Missouri, besides timber production, grazing and preservation. Similar results were obtained in Finland by Karppinen (1998), who developed a typology of private-forest owners based on owners' forest values and long-term objectives. Among other segments, Karppinen (1998) identified a group of forest owners, named the "recreationist", mostly driven by the recreational consumption of their lands.

Agritourism, is one type of recreational use that occurs in private lands (i.e., farms and private forests). Also named as "agricultural tourism" (Veeck et al., 2006), "country hospitality" (Nickerson et al., 2001), "farm tourism" (Busby & Rendle, 2000; Che, 2007; Nilsson, 2002) or "farm-based tourism" (Ilbery et al., 1998), agritourism has not yet clearly defined (Roziar Riche et al., 2010). Busby and Rendle (2000) state that much of this confusion is because agritourism can comprise a range of activities including those purely recreational as well as those traditionally classified within the hospitality sector such as accommodation, food and beverage services, and event programming. The most common understanding of agritourism is visiting farms for observing or participating in an agricultural process for the purposes of on-site retail purchases, enjoyment, and education (Fleischer & Tchetchik, 2005; Ilbery et al., 1998; Veeck et al., 2006).

Furthermore, some authors had expanded the term as the act of visiting not only working farms but any working agricultural, horticultural, or agribusiness operation (Barbieri & Mahoney, 2009; Che et al., 2005; Lobo, 2001), while other definitions even include non-working farms providing an agricultural setting (Phillip, Hunter, & Blackstock, 2010).

Taking into consideration its objectives, this study understands agritourism as *any recreational or educational activity or service programmed on a working agricultural setting for the purpose of providing entertainment, recreation, relaxation or education to*

their visitors. Thus, within this argument, agritourism includes visiting a (1) working farm or a (2) private forest for recreation, education or entertainment purposes.

Along with its scope ambiguity, few studies have attempted to develop a classification or taxonomy of agritourism. An exception is the recent work of Phillip, Hunter, and Blackstock (2010) who have developed a classification of agritourism in Europe based on three discriminators: (1) whether the activity is based on a *working farm*; (2) whether the nature of the *contact* between the visitor and *the agricultural activity* is direct or indirect; and (3) whether the visitor experience is an *authentic agricultural activity*. From those three criteria, the authors identified five types of agritourism scenarios that could concurrently co-exist on a single setting: (1) Non working farm (e.g., accommodation in ex-farmhouse property); (2) Working farm, passive contact (e.g., accommodation in farmhouse); (3) Working farm, indirect contact (e.g., farm produce served in tourist meals); (4) Working farm, direct contact, staged (e.g., farming demonstrations); and (5) Working farm, direct contact, authentic (e.g., participation in farm tasks). However, it is also worth mentioning that the above conceptual classification has not been empirically tested and its validity is yet to be tested among agritourism operations. While Phillip et al (2010)'s definition of agritourism solely focused on the working farm, we argue that it can also be applicable to working private forests.

Motivations in Recreation and Tourism Studies

Understanding motivations is important because they are determinants of the decision making process for visiting a recreational setting (Jackson, 2005). According to the “balance” proposition developed by Jackson, Crawford, and Godbey (1993), actual

participation in recreation depends on the interaction between individual's motivations and how they overcome (i.e., negotiate) their constraints.

Motivations are the underlying forces or internal factors (e.g., a purpose or a desire) that arouse and direct human behaviors (Iso-Ahola, 1999). Although natural environments seems to provide humans with a variety of desired psychological, social, and physiological outcomes, investigators have not agreed upon the origins of people recreational preferences for those natural environments (Kyle, Mowen, & Tarrant, 2004). Thus, many studies have attempted to examine the underlying motivations for recreation participation, especially due to the dramatic increase of outdoor recreation over the past few decades in the U.S. and its projected growth in the future (Graefe et al., 2000; Kyle et al., 2004; 2006; Thapa et al., 2004).

Most of the current research in recreation motivations has built on Driver's (1983) conceptual and empirical work dealing with Recreation Experience Preference (REP) Scales (Graefe et al., 2000; Kyle et al., 2004; 2006; Walker, Deng, & Dieser, 2001). REP is composed of a series of items designed to capture the psychological, social, and perceived physiological outcomes that take place from engaging in outdoor recreation (Kyle et al., 2004). Although REP was developed to measure the desired goal states that are attained through participation in leisure, it is also commonly used to assess perceived recreational benefits or outcomes (Manfredo, Driver, & Tarrant, 1996). In specific, REP is composed by 44 possible outcomes (i.e., items) organized in 21 domains (Table 1).

Table 1. Recreation Experience Preference Domains and Scales

Domains	Scales
Achievement/Stimulation	Reinforcing self-image; Social recognition; Skill development; Competence testing; Excitement; endurance; Telling others
Autonomy/Leadership	Independence; Autonomy; Control-power
Risk Taking	Risk taking
Equipment	Equipment
Family Togetherness	Family togetherness
Similar People	Being with friends; Being with similar people
New People	Meeting new people; Observing other people
Learning	General learning; Exploration; Geography of area; Learn about nature
Enjoy Nature	Scenery; General nature experience
Introspection	Spiritual; Introspection
Creativity	Creativity
Nostalgia	Nostalgia
Physical Fitness	Exercise-physical fitness
Physical Rest	Physical rest
Escape Personal-Social Pressures	Tension release; Slow down mentally; Escape role overloads; Escape daily routine
Escape Physical Pressure	Tranquility; Privacy; Escape crowds; Escape physical stressors
Social Security	Social security
Escape Family	Escape family
Teaching – Leading Others	Teaching-sharing skills (sharing knowledge/directing others); Leading others (sharing knowledge/directing others)
Risk Reduction	Risk moderation; Risk avoidance
Temperature	Temperature

Source: Driver (1983).

REP scales have been tested for validity across multiple studies and have proven to be a consistent indicator of recreation motivations and benefits (Manfredo et al., 1996). As Hall, Seekamp, and Cole (2010) points out, “The REP scales provide a well tested, reliable set of measures that encompass the types of experiences offered in wilderness” (p.112). It is worth mentioning that, although REP scales are commonly employed in recreation studies (Thapa et al., 2004), they are not usually used in their full extent.

Mostly due to the length of the REP scales, researchers typically employ shortened versions by selecting sets of items or certain domains pertinent to their research interest and focus (Graefe et al., 2000; Thapa et al., 2004).

Motivations Associated with Outdoor Recreation and Agritourism

The examination of visitors' motivations has been primarily conducted in outdoor recreation and nature-tourism studies. In these studies, the motivations that appear as more prevalent are related with the overall enjoyment of nature and escaping personal-social pressures (Beh & Bruyere, 2007; Geide, Harmon, & Baker, 2008; Graefe et al., 2000; Hall et al., 2010; Kyle et al., 2004; 2006; Stein, Denny, & Pennisi, 2003). Specifically regarding agritourism, Jolly and Reynolds (2005) found that purchasing fresh/homemade products, purchasing directly from farmers, experiencing nature, and vacation/relaxation were the most prevalent motivations for visiting a farm or ranch among potential agritourists in Sacramento and Yolo Counties (California).

Motivations have also been examined as foundations to better understand other issues and constructs related to rural tourism. For example, Park and Yoon (2009) developed a motivation-based segmentation of the rural tourism market in the Korean countryside, identifying four distinct segments: (1) those seeking for family togetherness experiences; (2) those tourists mostly searching for sports and games as leisure activities; (3) those who were seeking for a variety of experiences; and (4) those mostly in search for learning and excitement. In a study among visitors at a rural destination in Spain, Devesa, Laguna, and Palacios (2010) found that visiting motivations are associated to tourists' evaluation of the destination elements in terms of overall experience and satisfaction levels. Other studies have examined visitor motivations to explain place

attachment (Halpenny, 2006; Kyle et al., 2004; McEwen, 2010), enduring involvement (Chen, 2008; Kyle et al., 2006; Ritchie, Tkaczynski, & Faulks, 2010), environmental attitudes (Kim, Borges, & Chon, 2006; Luo & Deng, 2008; Smith, 2008), wilderness involvement (Hall et al., 2010), and learning experiences (Packer & Ballantyne, 2002; Stein et al., 2003), among others.

Few studies have also examined motivations across different natural settings. Vogelsong et al. (1998) examined the relationship between activities, settings, and visitor expectations within the Delaware State Park System. Their results demonstrated that there is a relationship between park visitors' activity preferences, their motives for visiting a park, and the setting attributes which are available. Yuan and McEwen (1989) investigated differences across campers' experience preferences in three different campground setting classes as categorized by the Recreation Opportunity Spectrum (ROS): rural, roaded natural, and semi-primitive motorized. They found that visitors' preferences differed less between ROS classes than expected.

The examination of motivations within recreation and tourism has served several practical purposes. First, these studies have helped to develop market segmentations of potential and current visitors (Devesa et al., 2010; Geide et al., 2008; Hall et al., 2010; Park & Yoon, 2009). Employing a factor-cluster combined analysis over visit motivations, Beh and Bruyere (2007) identified and profiled three visitor segments (Escapists, Learners and Spiritualists) among visitors of three national reserves in north central Kenya, providing key information for marketing purposes. Another motivation-based segmentation of agritourists conducted in an agricultural event in Missouri showed

that different types of agritourists not only differ on their socio-economic characteristics, but also on their leisure and tourism preferences (Barbieri, Katsube, & Tew, 2009).

Benefits Associated with Outdoor Recreation and Agritourism

Within the random utility framework, understanding perceived benefits is important because these are determinant of participating in a certain recreational activity (Lancaster, 1966). That is, users and visitors will choose to participate in the recreational activity they perceive as most beneficial (Loomis & Walsh, 1996).

Benefits refer to the group of outcomes resulting from the purchase of a product or service, including a recreational engagement (McCool & Reilly, 1993). However, most recreation and tourism studies focus on the positive outcomes of these. In this sense, a benefit refers to an advantageous change, a condition improvement, the prevention of a worse condition, or a gain to an individual, group, society or even a nonhuman organism (Driver, Nash, & Haas, 1987; Shin et al., 2001; Anderson et al., 2008).

The Benefits Approach to Leisure (BAL), early called Benefits-Based Management (BBM) because its managerial focus, emerged in the late nineties as a framework to emphasize on the positive outcomes derived from engaging in recreational experiences (Borrie & Roggenbuck, 1995; Driver & Bruns, 1999). Specifically, BAL is a system for directing leisure research, instruction, policy, development and management (Driver & Bruns, 1999), used extensively by scientists, educators, policy makers, and managers alike. BAL recognizes that: (1) visitors' desires and needs are very diverse; (2) these needs are related to specific outdoor recreation-related experiences; (3) recreation-related benefits extends beyond those obtained on-site; and (4) those benefits reach

individuals, society, the economy and the environment (Anderson et al., 2000; Besculides, Lee, & McCormick, 2002; Leahy, Shugrue, Daigle, & Daniel, 2009; Pierskalla, Lee, Stein, Anderson, & Nickerson, 2004; Shin et al., 2001; Stein & Anderson, 2002; Stein & Lee, 1995). Four specific types or general categories of benefits have been attributed to leisure: Personal (psychological and psycho-physiological), socio-cultural, economic, and environmental benefits (Driver, 2008).

The Perceived Benefits of Tourism

Several studies have been conducted to understand the benefits of tourism as perceived by local residents and visitors. Literature suggests that local residents perceive both: positive (i.e., benefits) and negative (i.e., disbenefits) outcomes of tourism activities and especially nature-based tourism (Andereck & Vogt, 2000; Besculides et al., 2002). While analyzed the recreation benefits at two heavily-visited wilderness sites in Arizona, Behan, Richards, and Lee (2000) found that the four most valued benefit types were: restorative, relationships with nature, physical fitness and spiritual benefits. However, they also concluded that the attainment of these benefits was negatively affected by increment in visitor density.

Borrie and Roggenbuck (1995) helped two lower-income suburban communities of Portland, where local people are committed to the outdoors and are proud of their park heritage, to identify their needs for implementing a benefits-based management approach. Information gathered from general community members, community leaders and those involved in community planning efforts suggested that benefits-based management and community-based research are ideal for empowering and keeping informed the clients of

our park and recreation services. Andereck and Vogt (2000) examined the relationship between resident attitudes toward tourism and its support for the development of parks and outdoor recreation opportunities as options for rural tourism development in Arizona; they found that local residents perceive tourism positively and tend to support it as a community development strategy. However, differences found in this study between communities' residents in regards to their preferences for new tourism products and expansion of existing products suggest that communities must be treated independently.

Whereas the REP scale is usually employed to examine personal (psychological and psycho-physiological) benefits associated with tourism and recreation activities, the Sustainable Development Framework is frequently used to assess the socio-cultural, economic and environmental benefits associated with tourism activities. Although the concept of sustainable tourism is still an evolving one (Clarke, 1997), its use in research has increased in popularity during the last two decades (Buttler, 1999; Liu, 2003). It has been suggested that global tourism development during such period of time has increased the attainment of environmental quality and the protection of environmental assets at the forefront of central policy issues (Erkus-Öztürk & Eraydın, 2010). In 2004 the World Tourism Organization established a conceptual definition of sustainable tourism as a goal that all forms of tourism must strive to achieve. According to their definition, "Sustainability principles refer to the environmental, economic and socio-cultural aspects of tourism development, and a suitable balance must be established between these three dimensions to guarantee its long-term sustainability" (WTO, 2004, p. 7). Since then, the three sustainable dimensions (environmental, economic and socio-cultural) are well

recognized and used on different studies examining the impacts (benefits and disbenefits) of tourism development (Logar, 2010).

A large diversity of benefits derived from tourism has been identified within the sustainability framework. *Socio-cultural benefits* most frequently cited in the literature are the preservation of cultural identity, local culture, and heritage (Andereck & Vogt, 2000; McGehee & Andereck, 2004; Todd & Anderson, 2005); encouragement of a variety of cultural activities by local people (Andereck & Vogt, 2000; Andriotis & Vaughan, 2003; McGehee & Andereck, 2004); improvement of the understanding among locals and the external image of the local community (Andereck & Vogt, 2000; Besculides et al., 2002; Chin Yang & Chen, 2008; McGehee & Andereck, 2004); and the diversification of recreational opportunities for locals and visitors (Andereck & Vogt, 2000; McGehee & Andereck, 2004; Todd & Anderson, 2005). *Environmental benefits* most frequently identified are the preservation of natural resources (Andriotis & Vaughan, 2003), ecosystems (Chin Yang & Chen, 2008) and scenic views (Todd & Anderson, 2005); increase of local residents' awareness of the importance of maintaining natural amenities (Chin Yang & Chen, 2008); environmental and natural conservation (Todd & Anderson, 2005); and the provision of cleaner air (Tarrant & Cordell, 2002). *Economic benefits* most frequently identified include improvements on the appearance of an area and incentives for restoration of historic buildings (Andereck & Vogt, 2000; McGehee & Andereck, 2004; Andriotis & Vaughan, 2003; Chin Yang & Chen, 2008); enhancement of scenic quality (Tarrant & Cordell, 2002); revitalization of local economies (Andereck & Vogt, 2000; McGehee & Andereck, 2004; Chin Yang & Chen,

2008; Todd & Anderson, 2005), and enhancement of the quality of life of local people (Andereck & Vogt, 2000; McGehee & Andereck, 2004; Todd & Anderson, 2005).

Few studies have examined the benefits associated with agritourism development, being most of them centered on the impact of this activity in the farm household and business, as a way to increase revenues or maximize the use of business resources or to serve various entrepreneurial goals (Barbieri & Mahoney, 2009; Fleischer & Tchetchik, 2005; Nilsson, 2002; Tew & Barbieri, 2011). From an economic perspective, agritourism is frequently viewed as a means for local economic diversification and rural economic development as visitors usually engage in recreation and shopping activities outside the natural destinations (Busby & Rendle, 2000; Che et al., 2005; Fleischer & Pizam, 1997; Oppermann, 1995). Some studies have also identified socio-cultural and environmental benefits associated with agritourism, including landscape preservation in agricultural regions (Che et al., 2005), increase of recreational and amenity opportunities on the countryside (Che et al., 2005; Nickerson et al., 2001), preservation of local cultural patrimony and traditions (e.g., crafts and arts), as well as a growing awareness amongst the residents of the importance of their cultural heritage (Sharpley, 2002). However, to the extent of our knowledge, no studies are found examining the perceived benefits of agritourism from the consumer (current or potential visitors) side, nor compared between agritourism settings and more traditional outdoor recreation settings.

CHAPTER III:
RESEARCH METHODS

This chapter describes the methods and procedures that were used for the examination of the perceived benefits of agritourism in Missouri. It details the research design, sampling procedures, instrument content and statistical analyses used in this study.

Research Design

This study was designed to collect quantitative data from Missouri households about their perceived motivations and benefits associated with visiting working farms, private forests and state/national parks for recreational purposes. Data were collected using a mailed self-administered questionnaire following the modified Tailored Design Method (Dillman, 2000). Figure 1 displays the study research design including the theoretical frameworks used to address study objectives.

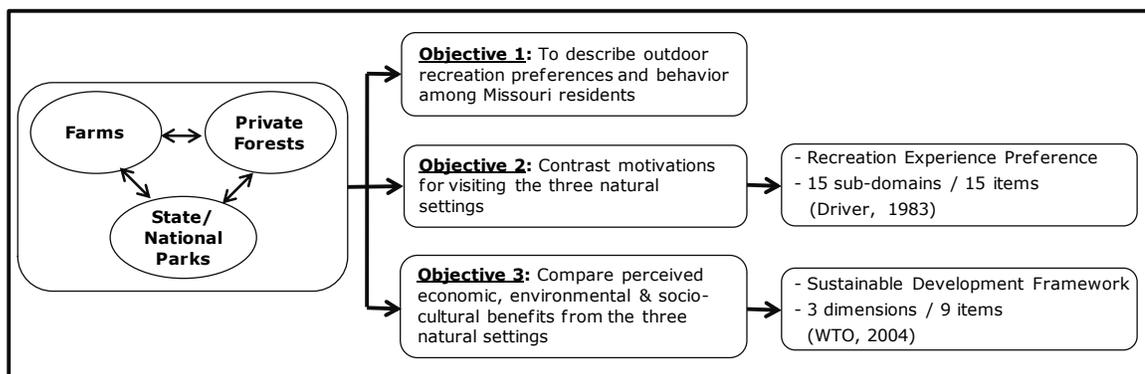


Figure 1. Research design and theoretical frameworks.

Study Population and Sampling Procedures

The population as defined for this study represents the universe of Missouri residents. The sample size for this study was calculated as 5,000 households³. The sample was stratified to mimic the urban-rural county distribution of Missouri (USDA: ERS, 2004) composed by 70% of metropolitan counties and 30% on non-metropolitan counties. Random samples (names and addresses) of Missouri households from metropolitan (n = 3500) and non-metropolitan (n = 1500) counties were purchased from a Marketing Agency.

Survey Instrument and Measurements

The survey instrument was formatted in an eight-page booklet. The instrument included 39 questions organized in five sections: (1) Visiting an Agritourism Farm; (2) Visiting a Private Forest; (3) Visiting a National or State Park; (4) Outdoor Recreation Preferences; and (5) Socio-demographic Information. The first three sections included similar questions aimed to gather information on motivations for visiting, perceived benefits, and visitation preferences of the three natural settings examined. Section IV collected information on several attributes preferences (i.e., type of recreation, distance willing to travel) of those three types of natural areas, information that is not included in this study. The last section collected demographic (i.e., age, gender, education level, marital and employment status, household composition and income), lifestyle (e.g., how often they engage in various recreational activities), and residential (i.e., residence distance from a 50,000 pop. area) information of respondents. A copy of the survey is

³ Sample size estimated based on Missouri population (5'987,580) as the 2009 Census, representing a 95% Confidence Level and 1.4 Confidence Interval.

included in Appendix A. The University of Missouri Institutional Review Board reviewed and approved the survey instrument within the “Exempt” category on November 17th, 2009.

Motivations for visiting natural settings (i.e., farms; private forests; state/national parks) were examined through 15 motivational items and sub-domains using a five-point Likert scale anchored in “Very Unimportant” (1) and “Very Important” (5). These motivational items were selected from the REP scale (Driver, 1983; see Table 1) to represent a diversity of experiences that visitors might have when visiting each of the three natural settings (e.g., to experience excitement; to use your equipment; to learn more about nature; to recall good times from the past; to view the scenic beauty).

Perceived benefits of farms, private forests and state/national parks were examined through nine statements representing the socio-cultural, economic and environmental dimensions from the sustainable development framework. Each dimension was represented by three items measured in a five-point Likert-type scale anchored in “Very Unimportant” (1) and “Very Important (5) as follows. The *Socio-cultural* dimension was represented by: to preserve rural heritage and traditions, to provide recreational activities for visitors, and to share cultural heritage with visitors; the *Environmental* dimension was defined by: to preserve natural resources and ecosystems, to educate visitors about agriculture or nature, and to provide scenic beauty and landscapes; while the *Economic* dimension statements included: to enhance the tourism appeal of rural areas, to revitalize local economies, and to enhance the quality of life of local people.

Survey Procedures

Survey development and implementation followed a modified Tailored Design Method (Dillman, 2000). Two versions of the survey (short and long) were pre-tested between March 18th and 22nd, 2010 among students from the Department of Parks, Recreation and Tourism at the University of Missouri. A total of five graduate and 16 undergraduate students completed the long version while 10 undergraduate students completed the short one. Comments and suggestions from both versions were analyzed and it was concluded to use the short version because the length of the long one raised several operational issues (e.g., confusing instructions). Additionally, small changes were introduced in the short version for increasing readability and some wording typos identified during the pre-test were addressed as well. A last pre-test was conducted on March 24th, 2010 among five undergraduate students. Minor wording changes were included for the final version.

On April 13th, 2010, an announcement postcard was mailed to participating households stating that they were randomly selected to participate in the study. The postcard described the study purpose and indicated that participants would be receiving the questionnaire in the following days. Shortly after the announcement (about five days), participants received a printed questionnaire through postal service along with a prepaid envelope and a cover letter. The cover letter explained the study objectives and its importance, protocol on confidentiality and privacy, complete contact information of the principal investigators, as well as detailed instructions (e.g., approximate time to complete, key definitions) for completing the questionnaire. A drawing for the chance to win one of four \$50 gift cards was offered as incentive for participation.

Non-respondents were identified and sent a reminder postcard on May 23rd, 2010. Additional surveys were sent to 10 participants who indicated that they didn't have the survey instrument. As a last attempt to increase participation, a second round of questionnaires was sent to non-respondents on June 29th, 2010, about two months and a half after the first mailing. The survey was closed on August 31st, 2010, approximately four months after being launched.

Response Rate and Data Preparation

The survey produced 969 completed questionnaires. A total of 61 surveys were undeliverable and 27 ineligible (i.e., refused to participate or were blank). This represents a 19.62% adjusted response rate, which falls within ranges in similar studies (Jolly & Reynolds, 2005; Gursoy, Chi, & Dyer, 2010; Huh & Vogt, 2008).

Non-response bias was evaluated by comparing mean responses received from the initial mailing to those returned in a second mailing in key demographic variables (Armstrong & Overton, 1977). Independent *t* and chi-square tests ($p < .001$) showed no significant differences on the age ($t = -.128$; $p = .898$), gender ($\chi^2 = 4.557$; $p = .036$), residence location ($\chi^2 = 4.294$; $p = .508$), and income ($\chi^2 = 9.283$; $p = .233$) between first and second wave respondents. In addition, *t* tests were conducted to compare mean responses on the perceived benefits from state/national parks between first and second wave respondents. Benefits perceptions of state/national parks was selected for examining non-response bias as this setting is well known and very popular in the U.S. for outdoor-recreation. Once more, no significant differences were found between both

groups on their perceived socio-economic ($t = 1.353$; $p = .177$), economic ($t = .532$; $p = .595$) and environmental ($t = 1.870$; $p = .062$) benefits.

Data collected were coded and entered into a Predictive Analytics Software – PASW database (formerly Statistical Package for the Social Sciences – SPSS), version 18.0 for statistical analysis.

Statistical Analysis

First, a series of descriptive analysis (i.e., frequencies, means and standard deviation) were conducted to develop a basic profile of respondents based on their socio-demographic, lifestyle, and residential attributes. While descriptive analyses were used to address the first study objective (i.e., describe outdoor recreation preferences and behavior), inferential statistics were employed to address the second and third study objectives. Significance levels for all statistical tests were measured at the .05 alpha level ($p < .05$).

A series of repeated measures ANOVA was conducted to contrast 15 visitation motivations among farms, private forests and state/national parks (Study Objective 2). Mauchly's test was conducted to validate similar variances in each motivation across different settings (i.e., assumption of sphericity), and pertinent correction measures were applied when applicable. Post-hoc paired t -tests were then conducted to compare all pairs of levels of the independent variable in each significant ANOVA results. Bonferroni correction ($0.05 / 3 = p < 0.017$) was used to reduce type II statistical error.

A three-stage analysis was conducted to compare the perceived benefits among the three natural settings (Study Objective 3). First, Cronbach's alpha was obtained to test

for internal reliability within each sustainable dimension (i.e., socio-cultural, economic, and environmental). Then, a composite mean was calculated with the importance ratings of the variables comprising each dimension. Finally, repeated measures ANOVA were used to compare the three composite means among the three study settings. As with motivations, Mauchly's sphericity test was also conducted, and significant ANOVA's were followed by a series of post-hoc *t*-tests using Bonferroni corrective measures.

CHAPTER IV:

RESULTS

Results of statistical analyses are reported in this chapter. These results include descriptive statistics of demographic information of respondents, their visit motivations and perceived benefits from the three natural settings. This section also reports the results from repeated measures ANOVA contrasting 15 visit motivational items as well as perceived socio-cultural, economic and environmental benefits among Farms, Private Forests and State/National Parks.

Socio-economic Profile of Respondents

The gender distribution among respondents who answered to the survey was close to be evenly distributed with a slight majority of males (51.6%) as shown in table 2. A fifth (21.0%) of respondents were young adults between 18 and 40 years old, 44.0% were between 41 and 60 years old, and 35.0% were senior citizens at least 61 years old. On average, respondents were 53.9 years old ($SD = 15.51$). Over one-quarter (29.0%) of respondents were high school graduates, and one-third (33.6%) had some college studies or a two-year college degree. Over one-third (37.4%) of respondents had a four-year college or higher degree.

Table 2. Gender, age and education level of respondents

	n	%
Gender (n=954)		
Male	492	51.6%
Female	462	48.4%
Age (n=960)		
18 – 30 years old	81	8.4%
31 – 40 years old	121	12.6%
41 – 50 years old	186	19.4%
51 – 60 years old	236	24.6%
61 – 70 years old	201	20.9%
71 years old or older	135	14.1%
Mean		(53.87)
Standard Deviation		(15.51)
Highest Level of Education (n=945)^a		
High school graduate	274	29.0%
Some college	210	22.2%
Two-year college degree	108	11.4%
Four-year college degree	192	20.3%
Post-graduate studies	161	17.1%
Mean		(2.74)
Standard Deviation		(1.48)

^a Measured on a five-point scale ranging from 1 (=High school graduate) to 5 (=Post-graduate studies).

The majority (78.9%) of respondents live with at least one person at home (Table 3). From this group, the majority (84.0%) live with their spouse, partner or significant other, about a half (46.5%) live with child(ren) 17 years old or younger, and a small portion (12.7%) live with other relatives or friends. A third of respondents (34.7%) reported a gross annual household income less than \$35,000; 37.4% between \$35,000 and \$75,000; and 27.9% reported a gross annual household income of at least \$75,000 ($M = 3.44$; $SD = 1.81$). About one-half of respondents (49.3%) were full-time employees and about a third (30.1%) were retired from a previous job or profession.

Table 3. Composition and economic indicators of responding households

	n	%
Household Composition (n=959)		
Live alone	202	21.1%
Live with at least one person	757	78.9%
With spouse, partner or significant other	636	84.0% ^a
With child(ren) 6 years old or younger	112	14.8%
With child(ren) 7-12 years old	118	15.6%
With child(ren) 13-17 years old	122	16.1%
With other relatives or friends	96	12.7%
Annual Household Income before Taxes (n=895)^b		
Less than \$25,000	160	17.9%
\$25,000 - \$34,999	150	16.8%
\$35,000 - \$49,999	171	19.0%
\$50,000 - \$74,999	165	18.4%
\$75,000 - \$99,999	104	11.6%
\$100,000 - \$149,999	100	11.2%
\$150,000 - \$199,999	31	3.5%
\$200,000 or more	14	1.6%
Mean		(3.44)
Standard Deviation		(1.81)
Respondents Employment Status (n=950)^c		
Full-time employee	468	49.3%
Part-time employee	93	9.8%
Retired	286	30.1%
Homemaker	102	10.7%
Student	34	3.6%
Unemployed	64	6.7%

^a Percentages sum to more than 100%, as respondents were able to select multiple categories. This only includes those who live with at least one person (n=757; 78.9%).

^b Measured on a eight-point scale ranging from 1 (=Less than \$25,000) to 8 (=\$200,000 or more).

^c Percentages sum to more than 100%, as respondents were able to select multiple categories.

Not including those respondents who chose not to indicate their geographic residence ($n = 233$, 24.0%), two thirds (67.7%) live in a metropolitan counties and the other third (32.3%) live in non-metropolitan counties (Table 4). More than a third (36.7%) of respondents live within an urban area of at least 50,000 people; over one-quarter (26.6%) less than 30 miles away, but not within, an urban area; and another third

(36.7%) at least 30 miles away ($M = 3.30$; $SD = 2.02$). The majority (72.8%) of respondents does not have any type of relationship with farms or forested lands. Within the group that does have at least one type of relationship (27.2%), more than two thirds (70.7%) live on a farm or forested land and a half (53.3%) own or lease a farm or forested land.

Table 4. Residence location and relationship to the land of responding households

	n	%
Residence Location (n=736)		
Metropolitan area ^a	498	67.7%
Non-metropolitan area	238	32.3%
Residence Proximity to an Urban Area (n=949)^b		
Live in a 50,000 pop. city	348	36.7%
Less than 5 miles	65	6.8%
5 - 9 miles	31	3.4%
10 - 29 miles	156	16.4%
30 - 59 miles	157	16.5%
60 miles or more	192	20.2%
Mean		(3.30)
Standard Deviation		(2.02)
Household Relationship with Farms or Forested Lands (n=953)		
Does not have any type of relationship	694	72.8%
Have at least one type of relationship	259	27.2%
Live on a farm land or forested land	183	70.7% ^c
Own or lease a farm land or forested land	138	53.3%
Is a full time farmer	28	10.8%
Is a part time farmer	63	24.3%

^a Metropolitan and non-metropolitan areas were defined following the Rural-Urban Continuum Codes (USDA: ERS, 2004).

^b Measured on a six-point scale ranging from 1 (=I live in a 50,000 pop. City) to 6 (=60 miles or more). An urban area was defined as having at least 50,000 people.

^c Percentages sum to more than 100%, as respondents were able to select multiple categories. This only includes those who have some type of relationship with farms or forested lands (n=259; 27.2%).

Respondent's Engagement on Various Recreational Activities

Results show that respondents engaged in various leisure and recreational activities (Table 5). The majority of respondents stated that they watch TV or movies at

home (69.1%; $M = 3.86$; $SD = 0.95$) and read for pleasure (56.1%; $M = 3.60$; $SD = 1.12$) often or very often. The following most popular leisure/recreation activities among respondents are “hanging out with friends” ($M = 3.25$; $SD = 0.94$) and “doing exercises or participating in a sport” ($M = 3.15$; $SD = 1.16$). The least popular activity is “surfing the internet for fun” ($M = 2.64$; $SD = 1.32$).

Table 5. Respondent’s rate of engagement on various recreational activities

Recreational Activities	n	Very Rarely	Rarely	Occasionally	Often	Very Often	M^a	SD
Watching TV or movies at home	956	2.9%	3.8%	24.3%	42.5%	26.6%	3.86	0.95
Reading for pleasure	956	5.2%	10.3%	28.5%	31.8%	24.3%	3.60	1.12
Hanging out with friends	952	4.2%	13.3%	44.0%	29.7%	8.7%	3.25	0.94
Doing exercises or participating in a sport	947	9.8%	18.0%	33.9%	24.3%	14.0%	3.15	1.16
Surfing the internet for fun	941	28.3%	16.9%	27.0%	18.1%	9.8%	2.64	1.32

^a Measured on a five-point scale ranging from 1 (=Very Rarely) to 5 (=Very Often).

Preferences and Behavior for Visiting Natural Settings

Around one half of respondents have previously visited a farm (48.1%) or a private forest (51.2%) for recreation purposes, which is a much lower proportion than those who have visited a state/national park (86.7%; Table 6). A large proportion of respondents who have visited all three natural settings in the past went for the first time at least 10 years ago (44.4%, 50.1%, and 56.2% respectively). The majority used to visit private forests and state/national parks at least occasionally when they were 16 years or younger (62.2%, and 67.4% respectively); while also a majority indicated when they were 16 years or younger they never or rarely visited farms (46.4%). About a half of respondents are either likely or very likely to visit a farm (43.1%; $M = 3.14$; $SD = 1.19$)

or a private forest (44.8%; $M = 3.17$; $SD = 1.23$) in the next 12 months, while a larger proportion of respondents (71.4%; $M = 3.88$; $SD = 1.16$) reported to be either likely or very likely to visit a state/national park in the same period of time.

Table 6. Past visitation and willingness to visit an agritourism farm, a private forest and a state/national park in the future

	Farm		Private Forest		State/National Park	
	n	%	n	%	n	%
Past Visitation for Recreation Purposes						
Did visit	433	48.1%	464	51.2%	812	86.7%
Did not visit	467	51.9%	443	48.8%	125	13.3%
First Visit for Recreation Purposes^a						
Last year	29	6.8%	45	9.8%	76	9.5%
2-4 years ago	69	16.1%	41	8.9%	51	6.4%
5-9 years ago	74	17.3%	48	10.4%	50	6.2%
At least 10 years ago	190	44.4%	231	50.1%	451	56.2%
Do not recall	66	15.4%	96	20.8%	175	21.8%
Frequency of Visit during Childhood^b						
Never	115	26.7%	55	11.9%	79	9.8%
Rarely	85	19.7%	76	16.4%	125	15.5%
Occasionally	132	30.6%	130	27.9%	229	28.3%
Often	49	11.4%	123	26.5%	244	30.2%
Always	14	3.2%	36	7.8%	72	8.9%
Do not recall	36	8.4%	44	9.5%	59	7.3%
Likelihood to Visit in the Next 12 Months^c						
Very unlikely	116	12.3%	111	11.8%	60	6.3%
Unlikely	152	16.1%	178	18.7%	68	7.1%
Undecided	269	28.5%	235	24.7%	145	15.2%
Likely	294	31.1%	289	30.4%	337	35.4%
Very likely	113	12.0%	137	14.4%	343	36.0%
Mean	(3.14)		(3.17)		(3.88)	
Standard Deviation	(1.19)		(1.23)		(1.16)	

^a Measured on a five-point scale ranging from 0 (=Do not recall) to 4 (=At least 10 years ago). This only includes those who have visited farms (n=433; 48.1%), private forests (n=464; 51.2%) and state/national parks (n=812; 86.7%) in the past.

^b Measured on a six-point scale ranging from 0 (=Do not recall) to 5 (=Always). This only includes those who have visited farms (n=433; 48.1%), private forests (n=464; 51.2%) and state/national parks (n=812; 86.7%) in the past. Childhood was defined as 16 years old or younger.

^c Measured on a five-point scale ranging from 1 (=Very Unlikely) to 5 (=Very Likely).

Table 7. Types of activities engaged during respondent’s visits to an agritourism farm, a private forest and a state/national park

	Farm		Private Forest		State/National Park	
	n	%	n	%	n	%
Recreation/leisure Activities^a						
Attend a festival or event	303	70.3%	134	28.9%	307	38.1%
Attend a private party	90	20.9%	111	24.0%	245	30.4%
Drive motorized RVs	39	9.0%	109	23.5%	113	14.0%
Hiking, biking or cross-country	146	33.9%	269	58.1%	498	61.8%
Pick-your-own fruit or vegetable	327	75.9%	115	24.8%	97	12.0%
Wildlife observation	166	38.5%	259	55.9%	489	60.7%
Boating, canoeing or sailing	111	25.8%	173	37.4%	445	55.2%
Fishing	145	33.6%	237	51.2%	469	58.2%
Horseback riding	59	13.7%	79	17.1%	130	16.1%
Hunting	56	13.0%	150	32.4%	144	17.9%
Swimming	85	19.7%	112	24.2%	350	43.4%
Other recreational activity	133	30.9%	134	28.9%	371	46.0%
Overnight Stay (last 5 years)^b						
Did not overnight	339	78.7%	275	59.3%	417	51.5%
Did overnight for free	13	3.0%	74	15.9%	68	8.4%
Did overnight for a fee	77	17.9%	97	20.9%	287	35.5%
Did overnight for free & for a fee	2	0.5%	18	3.9%	37	4.6%
Visitation for the Sole Purpose of Enjoying a Meal (last 5 years)^b						
Did not visit	311	71.8%	300	64.8%	452	56.3%
Did visit for free	69	15.9%	118	25.5%	234	29.1%
Did visit for a fee	46	10.6%	34	7.3%	86	10.7%
Did visit for free and for a fee	7	1.6%	11	2.4%	31	3.9%

^a Percentages sum to more than 100%, as respondents were able to select multiple categories. This only includes those who have visited farms (n=433; 48.1%), private forests (n=464; 51.2%) and state/national parks (n=812; 86.7%) in the past.

^b This only includes those who have visited farms (n=433; 48.1%), private forests (n=464; 51.2%) and state/national parks (n=812; 86.7%) in the past.

As it would be expected, the most popular recreational activities varied depending on the natural setting visited (Table 7). The most frequent activities in which respondents participate when visiting a farm are “pick-your-own fruit or vegetable” (75.9%), “attend a festival or event” (70.3%) and “wildlife observation” (38.5%). The most popular activities when visiting both, a private forest and a state/national park, are “hiking, biking

or cross-country” (58.1% and 61.8% respectively), “wildlife observation” (55.9% and 60.7% respectively) and “fishing” (51.2% and 58.2% respectively). In turn, the least frequent activities are “drive motorized recreational vehicles” when visiting a farm (9.0%), “horseback riding” when visiting a private forest (17.1%), and “pick-your-own fruit or vegetable” when visiting a state/national park (12.0%). The use of these three natural settings for hospitality related services does not appear to be predominant. Most of the respondents have not stayed overnight in farms (78.7%), private forests (59.3%) or even state/national parks (51.5%) during the last 5 years. Similarly, the vast majority of the respondents have not visited any of these natural settings for the sole purpose of enjoying a meal in the last 5 years (71.8%, 64.8% and 56.3% respectively).

Motivations for Visiting Farms, Private Forests and State/National Parks

Motivations for Visiting Farms

The majority of respondents stated that “doing something with their family” (86.8%; $M = 4.26$; $SD = 0.90$), “viewing the scenic beauty” (89.2%; $M = 4.24$; $SD = 0.81$), and “enjoying the smells and sounds of nature” (84.1%; $M = 4.05$; $SD = 0.82$) are important or very important motivations for visiting a farm (Table 8). The following most important motivations are “learn more about nature” ($M = 3.98$; $SD = 0.87$), “experience new and different things” ($M = 3.96$; $SD = 0.84$), and “have a change from their daily routine” ($M = 3.88$; $SD = 0.83$). In turn, the least important motivations are “share their agritourism skills” ($M = 3.06$; $SD = 0.98$), “think about their personal values” ($M = 3.42$; $SD = 0.99$), and “be with people having similar values” ($M = 3.58$; $SD = 0.98$).

Table 8. Importance of motivations for visiting a farm for recreation purposes

Motivations	n	Very Unimportant	Unimportant	Neutral	Important	Very Important	M^a	SD
Do something with their family	935	3.0%	1.4%	8.8%	40.2%	46.6%	4.26	0.90
View the scenic beauty	949	2.0%	1.6%	7.2%	49.1%	40.1%	4.24	0.81
Enjoy the smells and sounds of nature	952	2.1%	2.4%	11.4%	56.5%	27.6%	4.05	0.82
Learn more about nature	952	3.1%	1.9%	15.1%	54.0%	25.9%	3.98	0.87
Experience new and different things	949	2.7%	2.6%	13.4%	58.4%	22.9%	3.96	0.84
Have a change from their daily routine	949	2.5%	2.8%	18.3%	56.9%	19.5%	3.88	0.83
Get exercise	944	2.5%	4.2%	21.6%	51.0%	20.7%	3.83	0.89
Give their mind a rest	950	3.2%	7.7%	27.5%	40.0%	21.6%	3.69	0.99
Experience excitement	935	4.1%	6.2%	26.4%	44.6%	18.7%	3.68	0.98
Use their equipment	933	4.6%	8.5%	26.5%	40.6%	19.8%	3.63	1.04
Experience solitude	945	3.6%	9.3%	31.2%	37.4%	18.5%	3.58	1.01
Recall good times from the past	948	4.2%	7.8%	29.6%	43.0%	15.4%	3.58	0.98
Be with people having similar values	940	4.4%	9.7%	34.5%	38.1%	13.3%	3.46	0.99
Think about their personal values	946	4.7%	9.9%	37.8%	33.9%	13.7%	3.42	0.99
Share their agritourism skills	941	7.1%	16.3%	47.5%	21.9%	7.2%	3.06	0.98

^a Measured on a five-point scale ranging from 1 (Very Unimportant) to 5 (Very Important).

Motivations for Visiting Private Forests

“Viewing the scenic beauty” (91.5%; $M = 4.26$; $SD = 0.78$), “doing something with their family” (84.0%; $M = 4.11$; $SD = 0.88$), and “enjoying the smells and sounds of nature” (86.1%; $M = 4.11$; $SD = 0.84$) also appeared as important or very important motivations for visiting a private forest (Table 9). Those motivations were closely followed, regarding their importance, by “learn more about nature” ($M = 3.97$; $SD = 0.85$), “get exercise” ($M = 3.89$; $SD = 0.87$), “have a change from their daily routine” ($M = 3.97$; $SD = 0.78$), and “experience new and different things” ($M = 3.87$; $SD = 0.83$). The least important motivation for visiting a privately own forest is to “share their outdoor skills” ($M = 3.32$; $SD = 0.99$).

Table 9. Importance of motivations for visiting a private forest for recreation purposes

Motivations	n	Very Unimportant	Unimportant	Neutral	Important	Very Important	M^a	SD
View the scenic beauty	926	2.4%	0.3%	5.8%	51.0%	40.5%	4.26	0.78
Do something with their family	919	3.0%	1.5%	11.5%	49.9%	34.1%	4.11	0.88
Enjoy the smells and sounds of nature	927	2.8%	1.1%	10.0%	54.4%	31.7%	4.11	0.84
Learn more about nature	925	2.9%	1.6%	15.0%	56.4%	24.1%	3.97	0.85
Get exercise	916	2.7%	3.2%	18.4%	53.8%	21.9%	3.89	0.87
Have a change from their daily routine	924	2.4%	1.6%	13.6%	61.7%	20.7%	3.97	0.78
Experience new and different things	924	2.8%	2.2%	18.0%	58.8%	18.2%	3.87	0.83
Use their equipment	923	4.8%	4.6%	21.2%	46.4%	23.0%	3.78	1.00
Give their mind a rest	924	3.2%	5.2%	22.2%	48.5%	20.9%	3.79	0.94
Experience solitude	921	3.5%	5.9%	27.3%	41.7%	21.6%	3.72	0.98
Recall good time from the past	924	4.2%	7.4%	28.9%	43.7%	15.8%	3.60	0.98
Experience excitement	919	3.7%	6.3%	30.1%	44.2%	15.7%	3.62	0.95
Think about their personal values	919	4.6%	7.5%	37.2%	37.3%	13.4%	3.47	0.97
Be with people having similar values	917	4.8%	8.9%	34.6%	39.4%	12.3%	3.45	0.98
Share their outdoor skills	923	5.5%	10.9%	40.6%	31.9%	11.1%	3.32	0.99

^a Measured on a five-point scale ranging from 1 (Very Unimportant) to 5 (Very Important).

Motivations for Visiting State/National Parks

For the majority of respondents the most prevalent motivations for visiting a state/national park are also viewing the scenic beauty (93.6%; $M = 4.41$; $SD = 0.72$), doing something with their family (91.0%; $M = 4.35$; $SD = 0.80$), and enjoying the smells and sounds of nature (87.8%; $M = 4.23$; $SD = 0.80$). Those motivations are closely followed by “learn more about nature” ($M = 4.13$; $SD = 0.80$), and “have a change from their daily routine” ($M = 4.11$; $SD = 0.78$). The least important motivation also relates to “share their outdoor skills ($M = 3.43$; $SD = 1.00$).

Table 10. Importance of motivations for visiting a state/national park

Motivations	n	Very Unimportant	Unimportant	Neutral	Important	Very Important	M^a	SD
View the scenic beauty	942	1.4%	0.4%	4.6%	43.2%	50.4%	4.41	0.72
Do something with their family	935	2.0%	0.7%	6.3%	42.2%	48.8%	4.35	0.80
Enjoy the smells and sounds of nature	942	1.6%	1.4%	9.2%	48.5%	39.3%	4.23	0.80
Learn more about nature	944	1.9%	0.9%	12.3%	52.1%	32.8%	4.13	0.80
Have a change from their daily routine	940	1.7%	1.3%	11.1%	55.9%	30.0%	4.11	0.78
Use their equipment	939	3.1%	3.1%	15.9%	44.6%	33.3%	4.02	0.95
Experience new and different things	947	2.0%	1.6%	13.5%	55.4%	27.5%	4.05	0.81
Get exercise	933	2.2%	2.8%	15.6%	49.8%	29.6%	4.02	0.87
Experience excitement	936	2.9%	3.4%	19.3%	45.9%	28.5%	3.94	0.93
Give their mind a rest	939	2.8%	4.9%	20.8%	43.4%	28.1%	3.89	0.96
Experience solitude	938	2.7%	6.8%	24.8%	38.2%	27.5%	3.81	1.00
Recall good time from the past	943	3.3%	4.7%	26.9%	42.9%	22.2%	3.76	0.96
Be with people having similar values	938	4.0%	7.1%	33.3%	37.5%	18.1%	3.59	0.99
Think about their personal values	935	3.5%	7.6%	37.5%	33.3%	18.1%	3.55	0.99
Share their outdoor skills	938	4.4%	9.7%	39.2%	31.6%	15.1%	3.43	1.00

^a Measured on a five-point scale ranging from 1 (Very Unimportant) to 5 (Very Important).

Differences in Motivations across Settings

Mauchly's test showed that in all 15 motivation items, sphericity assumption was violated ($p < 0.05$). Given that high sphericity estimates ($\epsilon > 0.75$) were obtained in all cases, degrees of freedom were adjusted using Huynh-Feldt estimates, thus producing a valid F -ratio (Table 11). Repeated measures ANOVA showed that the importance level of the 15 motivations for visiting natural areas significantly differ whether these are for visiting a farm, a private forests or a state/national park: Experience excitement ($F = 77.204$; $df = 1.93$; $p < .001$), use their equipment ($F = 90.885$; $df = 1.95$; $p < .001$), do something with their family ($F = 60.090$; $df = 1.99$; $p < .001$), learn more about nature ($F = 26.779$; $df = 1.96$; $p < .001$), get exercise ($F = 34.194$; $df = 1.92$; $p < .001$), be with

people having similar values ($F = 14.306$; $df = 1.92$; $p < .001$), give their mind a rest ($F = 27.476$; $df = 1.88$; $p < .001$), experience new and different things ($F = 26.463$; $df = 1.96$; $p < .001$), think about their personal values ($F = 11.498$; $df = 1.89$; $p < .001$), recall good time from the past ($F = 32.706$; $df = 1.95$; $p < .001$), enjoy the smells and sounds of nature ($F = 31.798$; $df = 1.96$; $p < .001$), share their agritourism/outdoor skills ($F = 94.846$; $df = 1.89$; $p < .001$), have a change from their daily routine ($F = 47.671$; $df = 1.95$; $p < .001$), view the scenic beauty ($F = 34.151$; $df = 1.97$; $p < .001$) and experience solitude ($F = 43.091$; $df = 1.92$; $p < .001$).

Table 11. A comparison of importance of motivations for visiting a farm, a private forest and a state/national park for recreation purposes (Repeated Measures ANOVA)

Motivations	Importance Mean ^a			<i>F</i>	<i>df</i> ^b	<i>p</i> -value
	Farm	Forest	Park			
Experience excitement	3.69	3.63	3.95	77.204	1.928	$p < 0.001$ ^c
Use their equipment	3.65	3.81	4.03	90.885	1.949	$p < 0.001$ ^d
Do something with their family	4.28	4.12	4.36	60.090	1.987	$p < 0.001$ ^d
Learn more about nature	3.98	3.98	4.14	26.779	1.958	$p < 0.001$ ^c
Get exercise	3.84	3.90	4.03	34.194	1.921	$p < 0.001$ ^c
Be with people having similar values	3.49	3.46	3.59	14.306	1.921	$p < 0.001$ ^c
Give their mind a rest	3.70	3.79	3.89	27.476	1.876	$p < 0.001$ ^d
Experience new and different things	3.98	3.88	4.06	26.463	1.960	$p < 0.001$ ^d
Think about their personal values	3.43	3.47	3.55	11.498	1.888	$p < 0.001$ ^c
Recall good times from the past	3.59	3.60	3.76	32.706	1.945	$p < 0.001$ ^c
Enjoy the smells and sounds of nature	4.06	4.13	4.23	31.798	1.955	$p < 0.001$ ^d
Share their agritourism/outdoor skills	3.07	3.33	3.44	94.846	1.887	$p < 0.001$ ^d
Have a change from their daily routine	3.90	3.98	4.12	47.671	1.949	$p < 0.001$ ^d
View the scenic beauty	4.25	4.28	4.42	34.151	1.969	$p < 0.001$ ^c
Experience solitude	3.57	3.73	3.81	43.091	1.920	$p < 0.001$ ^d

^a Measured on a five-point scale ranging from 1 (=Very Unimportant) to 5 (=Very Important).

^b Huynh-Feldt adjusted degrees of freedom

^c Post-hoc Bonferroni adjusted ($p < 0.017$) paired *t*-tests showed that state/national park is different from the other two settings

^d Post-hoc Bonferroni adjusted ($p < 0.017$) paired *t*-tests showed differences among the three settings

Post-hoc Bonferroni adjusted paired *t*-tests showed that respondents consider significantly more important to visit a state/national park as compared to a farm for the following seven motivations: experience excitement ($M_{park} = 3.95$; $M_{farm} = 3.69$; $p < .001$); learn more about nature ($M_{park} = 4.14$; $M_{farm} = 3.98$; $p < .001$); get exercise ($M_{park} = 4.03$; $M_{farm} = 3.84$; $p < .001$); be with people having similar values ($M_{park} = 3.59$; $M_{farm} = 3.49$; $p = .001$); think about their personal values ($M_{park} = 3.55$; $M_{farm} = 3.43$; $p < .001$); recall good time from the past ($M_{park} = 3.76$; $M_{farm} = 3.59$; $p < .001$); and view the scenic beauty ($M_{park} = 4.42$; $M_{farm} = 4.25$; $p < .001$). Similarly for those seven motivations, significant greater importance resulted to visit a state/national park as compared to a private forest as follows: experience excitement ($M_{park} = 3.95$; $M_{forest} = 3.63$; $p < .001$); learn more about nature ($M_{park} = 4.14$; $M_{forest} = 3.98$; $p < .001$); get exercise ($M_{park} = 4.03$; $M_{forest} = 3.90$; $p < .001$); be with people having similar values ($M_{park} = 3.59$; $M_{forest} = 3.46$; $p < .001$); think about their personal values ($M_{park} = 3.55$; $M_{forest} = 3.47$; $p = .001$); recall good time from the past ($M_{park} = 3.76$; $M_{forest} = 3.60$; $p < .001$); and view the scenic beauty ($M_{park} = 4.42$; $M_{forest} = 4.28$; $p < .001$). However, no significant differences were found on the importance of those seven motivations between visiting a farm and a private forest.

In addition, Bonferroni adjusted post-hoc paired *t*-tests revealed significant differences across three natural settings on the importance of the remaining eight visiting motivations: “Use their equipment” ($M_{park} = 4.03$; $M_{forest} = 3.81$; $M_{farm} = 3.65$; $p < .001$); “Do something with their family” ($M_{park} = 4.36$; $M_{farm} = 4.28$; $M_{forest} = 4.12$; $p \leq .002$); “Give their mind a rest” ($M_{park} = 3.89$; $M_{forest} = 3.79$; $M_{farm} = 3.70$; $p \leq .003$); “Experience new and different things” ($M_{park} = 4.06$; $M_{forest} = 3.88$; $M_{farm} = 3.98$; $p \leq .005$); “Enjoy the

smells and sounds of nature” ($M_{park} = 4.23$; $M_{forest} = 4.13$; $M_{farm} = 4.06$; $p \leq .004$); “Share their agritourism/outdoor skills” ($M_{park} = 3.44$; $M_{forest} = 3.33$; $M_{farm} = 3.07$; $p < .001$); “Have a change from their daily routine” ($M_{park} = 4.12$; $M_{forest} = 3.98$; $M_{farm} = 3.90$; $p < .001$); “Experience solitude” ($M_{park} = 3.81$; $M_{forest} = 3.73$; $M_{farm} = 3.57$; $p \leq .004$).

Perceived Benefits from Farms, Private Forests and State/National Parks

Perceived Benefits from Farms

Cronbach’s tests show high internal reliability in the socio-cultural ($\alpha = 0.801$), environmental ($\alpha = 0.839$), and economic ($\alpha = 0.823$) benefits dimensions associated with farms offering agritourism (Table 12). Organized by those three dimensions, respondents perceive that the most important benefits that farms provide are environmental benefits ($M = 4.19$; $SD = 0.74$). Respondents rate very similarly the importance to economic ($M = 4.03$; $SD = 0.76$) and socio-cultural ($M = 4.03$; $SD = 0.73$) benefits produced by agritourism farms.

The majority of respondents perceive that “preserving natural resources and ecosystems” (87.2%; $M = 4.29$; $SD = 0.87$), “preserving rural heritage and traditions” (85.1%; $M = 4.18$; $SD = 0.87$), and “providing scenic beauty and landscapes” (87.2%; $M = 4.21$; $SD = 0.82$) are important or very important benefits that farms offering agritourism provide to society. On the other hand, the least important benefits that respondents perceive derived from farms are “enhance the tourism appeal of rural areas” ($M = 3.92$; $SD = 0.89$), “provide recreational activities for visitors” ($M = 3.96$; $SD = 0.83$), and “share cultural heritage with visitors” ($M = 3.97$; $SD = 0.84$).

Table 12. Perceived socio-cultural, environmental and economic benefits perceived to be derived from farms offering agritourism activities

Perceived Benefits	n	Very Unimportant	Unimportant	Neutral	Important	Very Important	M^a	SD
Socio-Cultural Benefits ($\alpha= 0.801$)	958						4.03	0.73
Preserve rural heritage and traditions	955	2.2%	2.1%	10.6%	45.6%	39.5%	4.18	0.87
Share cultural heritage with visitors	946	2.0%	2.1%	18.8%	51.2%	25.9%	3.97	0.84
Provide recreational activities for visitors	951	2.3%	2.1%	16.8%	55.1%	23.7%	3.96	0.83
Environmental Benefits ($\alpha= 0.839$)	959						4.19	0.74
Preserve natural resources and ecosystems	952	2.6%	0.7%	9.5%	39.8%	47.4%	4.29	0.87
Provide scenic beauty and landscapes	951	2.1%	0.8%	9.9%	48.6%	38.6%	4.21	0.82
Educate visitors about agriculture or nature	954	2.3%	1.9%	13.6%	50.4%	31.8%	4.07	0.86
Economic Benefits ($\alpha= 0.823$)	956						4.03	0.76
Revitalize local economies	951	2.0%	1.7%	15.2%	42.0%	39.1%	4.15	0.88
Enhance the quality of life of local people	946	2.4%	1.4%	16.8%	48.3%	31.1%	4.04	0.87
Enhance the tourism appeal of rural areas	952	2.9%	3.0%	18.6%	50.4%	25.1%	3.92	0.89

^a Measured on a five-point scale ranging from 1 (Very Unimportant) to 5 (Very Important).

Perceived Benefits from Private Forests

Cronbach's tests also show high internal reliability in the socio-cultural ($\alpha = 0.841$), environmental ($\alpha = 0.853$), and economic ($\alpha = 0.850$) benefits dimensions associated with private forests (Table 13). Overall, respondents perceive that the most important benefits associated with private forest provide are the environmental ones ($M = 4.23$; $SD = 0.74$), followed by socio-cultural ($M = 3.98$; $SD = 0.78$) and economic ($M = 3.96$; $SD = 0.80$) benefits.

Preserving natural resources and ecosystems (89.5%; $M = 4.35$; $SD = 0.85$), providing scenic beauty and landscapes (91.0%; $M = 4.35$; $SD = 0.81$), and preserve rural heritage and traditions (80.7%; $M = 4.12$; $SD = 0.90$) are also perceived as important or very important benefits derived from private forests. Those perceived benefits were closely followed, regarding their importance, by "enhance the quality of life of local

people” ($M = 4.02$; $SD = 0.88$). The least important benefit that respondents perceive from privately own forests is “share cultural heritage with visitors” ($M = 3.85$; $SD = 0.91$).

Table 13. Perceived socio-cultural, environmental and economic benefits perceived to be derived from private forests

Perceived Benefits	n	Very Unimportant	Unimportant	Neutral	Important	Very Important	M^a	SD
Socio-Cultural Benefits ($\alpha = 0.841$)	935						3.98	0.78
Preserve rural heritage and traditions	930	2.4%	2.2%	14.7%	42.6%	38.1%	4.12	0.90
Share cultural heritage with visitors	929	2.7%	3.3%	23.8%	46.9%	23.3%	3.85	0.91
Provide recreational activities for visitors	931	2.3%	2.5%	16.0%	52.1%	27.1%	3.99	0.86
Environmental Benefits ($\alpha = 0.853$)	936						4.23	0.74
Preserve natural resources and ecosystems	929	2.6%	0.9%	7.2%	37.6%	51.9%	4.35	0.85
Provide scenic beauty and landscapes	932	2.1%	0.8%	6.0%	41.8%	49.2%	4.35	0.81
Educate visitors about agriculture or nature	934	2.2%	2.6%	18.4%	47.6%	29.2%	3.99	0.88
Economic Benefits ($\alpha = 0.850$)	936						3.96	0.80
Revitalize local economies	932	2.8%	3.2%	21.9%	40.1%	32.0%	3.95	0.96
Enhance the quality of life of local people	928	2.3%	1.5%	19.1%	45.8%	31.3%	4.02	0.88
Enhance the tourism appeal of rural areas	931	2.9%	3.3%	19.4%	49.8%	24.6%	3.90	0.90

^a Measured on a five-point scale ranging from 1 (Very Unimportant) to 5 (Very Important).

Perceived Benefits from State/National Parks

Cronbach’s tests also show high internal reliability in the socio-cultural ($\alpha = 0.827$), environmental ($\alpha = 0.870$), and economic ($\alpha = 0.872$) benefits dimensions associated with state/national parks (Table 14). Again, in order, the most important perceived benefits associated with this type of natural setting are from the environmental dimension ($M = 4.39$; $SD = 0.69$), followed by the socio-cultural ($M = 4.18$; $SD = 0.74$) and economic ($M = 4.13$; $SD = 0.78$) dimensions.

For the majority of respondents the most prevalent benefits perceived from state/national parks are providing scenic beauty and landscapes (94.1%; $M = 4.52$; $SD = 0.71$), preserving natural resources and ecosystems (92.9%; $M = 4.50$; $SD = 0.74$), and preserving rural heritage and traditions (86.2%; $M = 4.29$; $SD = 0.86$). The next most important perceived benefits are “provide recreational activities for visitors” ($M = 4.20$; $SD = 0.83$), and “educate visitors about agriculture or nature” ($M = 4.17$; $SD = 0.85$). The least important perceived benefit also relates to “share cultural heritage with visitors” ($M = 4.05$; $SD = 0.88$).

Table 14. Perceived socio-cultural, environmental and economic benefits perceived to be derived from state/national parks

Perceived Benefits	n	Very Unimportant	Unimportant	Neutral	Important	Very Important	M^a	SD
Socio-Cultural Benefits ($\alpha = 0.827$)	954						4.18	0.74
Preserve rural heritage and traditions	952	1.7%	2.0%	10.1%	37.8%	48.4%	4.29	0.86
Share cultural heritage with visitors	946	1.7%	2.5%	18.4%	44.1%	33.3%	4.05	0.88
Provide recreational activities for visitors	949	1.9%	1.4%	10.9%	46.2%	39.6%	4.20	0.83
Environmental Benefits ($\alpha = 0.870$)	955						4.39	0.69
Preserve natural resources and ecosystems	950	1.4%	0.6%	5.1%	32.5%	60.4%	4.50	0.74
Provide scenic beauty and landscapes	950	1.3%	0.4%	4.2%	32.8%	61.3%	4.52	0.71
Educate visitors about agriculture or nature	950	1.8%	1.5%	13.8%	44.2%	38.7%	4.17	0.85
Economic Benefits ($\alpha = 0.872$)	955						4.13	0.78
Revitalize local economies	950	1.6%	1.8%	17.4%	41.8%	37.4%	4.12	0.86
Enhance the quality of life of local people	946	1.6%	1.4%	17.5%	40.1%	39.4%	4.14	0.86
Enhance the tourism appeal of rural areas	951	2.0%	2.0%	13.6%	44.9%	37.5%	4.14	0.88

^a Measured on a five-point scale ranging from 1 (Very Unimportant) to 5 (Very Important).

Differences in Perceived Benefits across Settings

Similarly to the examined motivations, Mauchly's test show that the sphericity assumption was violated ($p < 0.05$) in all benefit dimensions and items, Also, given that high sphericity estimates ($\epsilon > 0.75$) resulted in all cases, degrees of freedom were adjusted using Huynh-Feldt estimates to produce a valid F -ratio.

Table 15. A comparison of the importance of benefits perceived to produced by agritourism farms, private forests and a state/national parks (Repeated Measures ANOVA)

Perceived Benefits	Importance Mean ^a			F	df ^b	p -value
	Farm	Forest	Park			
Environmental Benefits ($\alpha= 0.839$)	4.20	4.23	4.41	73.054	1.951	$p < 0.001^c$
Preserve natural resources and ecosystems	4.30	4.36	4.50	42.905	1.945	$p < 0.001^c$
Provide scenic beauty and landscapes	4.21	4.35	4.53	91.948	1.947	$p < 0.001^d$
Educate visitors about agriculture or nature	4.09	3.99	4.19	34.747	1.966	$p < 0.001^d$
Socio-Cultural Benefits ($\alpha= 0.801$)	4.04	3.98	4.19	64.611	1.981	$p < 0.001^d$
Provide recreational activities for visitors	3.97	3.99	4.22	65.253	1.967	$p < 0.001^c$
Share cultural heritage with visitors	3.97	3.84	4.06	40.252	2.000	$p < 0.001^d$
Preserve rural heritage and traditions	4.19	4.12	4.30	25.570	1.973	$p < 0.001^c$
Economic Benefits ($\alpha= 0.823$)	4.04	3.96	4.15	46.738	1.962	$p < 0.001^d$
Enhance the quality of life of local people	4.06	4.03	4.16	14.656	1.964	$p < 0.001^c$
Revitalize local economies	4.15	3.95	4.13	41.937	1.980	$p < 0.001^e$
Enhance the tourism appeal of rural areas	3.93	3.90	4.16	66.918	1.957	$p < 0.001^c$

^a Measured on a five-point scale ranging from 1 (Very Unimportant) to 5 (Very Important).

^b Huynh-Feldt adjusted degrees of freedom

^c Post-hoc paired t -tests showed that state/national park is different from the other two settings

^d Post-hoc Bonferroni adjusted ($p < 0.017$) paired t -tests showed differences among the three settings

^e Post-hoc Bonferroni adjusted ($p < 0.017$) paired t -tests showed that private forest is different from the other two settings

Environmental Benefits

Repeated measures ANOVA show that the perceived importance level of the overall environmental benefits ($F = 73.054$; $df = 1.95$; $p < .001$) and their three benefits significantly differ across agritourism farms, private forests or state/national parks:

“preserve natural resources and ecosystems ($F = 42.905$; $df = 1.95$; $p < .001$); provide scenic beauty and landscapes ($F = 91.948$; $df = 1.95$; $p < .001$); and educate visitors about agriculture or nature ($F = 34.747$; $df = 1.97$; $p < .001$) as displayed in table 15.

Post-hoc Bonferroni adjusted paired t -tests show that respondents consider significantly more important state/national parks for overall environmental benefits than farms ($M_{park} = 4.41$; $M_{farm} = 4.20$; $p < .001$) and private forests ($M_{park} = 4.41$; $M_{forest} = 4.23$; $p < .001$). Respondents also perceive that state/national parks are more important in preserving natural resources and ecosystems than farms ($M_{park} = 4.50$; $M_{farm} = 4.30$; $p < .001$) and forests ($M_{park} = 4.50$; $M_{forest} = 4.36$; $p < .001$). However, no significant differences were found on both items between farms and private forests. Bonferoni post-hoc adjusted paired t -tests show significant differences across the three natural settings on the perceived importance of the remaining two environmental benefits: “provide scenic beauty and landscapes” ($M_{park} = 4.53$; $M_{forest} = 4.35$; $M_{farm} = 4.21$; $p < .001$); and “educate visitors about agriculture or nature” ($M_{park} = 4.19$; $M_{farm} = 4.09$; $M_{forest} = 3.99$; $p < .001$).

Socio-Cultural Benefits

Repeated measures ANOVA show significant differences across the three natural settings (farms, private forests, national/state parks) on the importance level of the overall socio-cultural benefit dimensions ($F = 64.611$; $df = 1.98$; $p < .001$) as well as its three socio-cultural definitional benefits: “provide recreational activities for visitors” ($F = 65.253$; $df = 1.97$; $p < .001$); share cultural heritage with visitors ($F = 40.252$; $df = 2.00$; $p < .001$); and preserve rural heritage and traditions ($F = 25.570$; $df = 1.97$; $p < .001$).

Bonferroni post-hoc adjusted paired t -tests reveal significant differences among the three natural settings on the importance of the overall socio-cultural benefits dimension ($M_{park} = 4.19$; $M_{farm} = 4.04$; $M_{forest} = 3.98$; $p \leq .006$) and to “share cultural heritage with visitors” ($M_{park} = 4.06$; $M_{farm} = 3.97$; $M_{forest} = 3.84$; $p < .001$). Results also show that respondents consider state/national parks to be significantly more important to “provide recreational activities for visitors” as compared to farms ($M_{park} = 4.22$; $M_{farm} = 3.97$; $p < .001$) and private forests ($M_{park} = 4.22$; $M_{forest} = 3.99$; $p < .001$). Similarly, significant greater importance to “preserve rural heritage and traditions” is perceived from state/national parks than farms ($M_{park} = 4.30$; $M_{farm} = 4.19$; $p < .001$) and private forests ($M_{park} = 4.30$; $M_{forest} = 4.12$; $p < .001$). However, no significant differences were found on the importance of those two benefits (i.e., “provide recreational activities for visitors”; “preserve rural heritage and traditions”) between farms and private forests.

Economic Benefits

Repeated measures ANOVA show that the importance level of the perceived economic benefits from natural areas significantly differ across farms, private forests, and state/national parks on their overall economic benefit dimension ($F = 46.738$; $df = 1.96$; $p < .001$); and their three specific benefits: “enhance the quality of life of local people” ($F = 14.656$; $df = 1.96$; $p < .001$); revitalize local economies ($F = 41.937$; $df = 1.98$; $p < .001$); and “enhance the tourism appeal of rural areas” ($F = 66.918$; $df = 1.96$; $p < .001$) as table 15 displays.

Bonferroni post-hoc adjusted paired t -tests show significant differences among the three examined natural settings only on the overall economic benefit dimensions

($M_{park} = 4.15$; $M_{farm} = 4.04$; $M_{forest} = 3.96$; $p < .001$). Results also show that respondents consider significantly more important state/national parks to “enhance the quality of life of local people” than farms ($M_{park} = 4.16$; $M_{farm} = 4.06$; $p < .001$) and private forests ($M_{park} = 4.16$; $M_{forest} = 4.03$; $p < .001$). Similarly, state/national parks are also perceived more important to “enhance the tourism appeal of rural areas” than farms ($M_{park} = 4.16$; $M_{farm} = 3.93$; $p < .001$) and private forests ($M_{park} = 4.16$; $M_{forest} = 3.90$; $p < .001$). No significant differences were found on the importance between farms and private forests to “enhance the quality of life of local people” and “enhance the tourism appeal of rural areas”. Finally, results also show that respondents consider significantly less important private forests to “revitalize local economies” than farms ($M_{forest} = 3.95$; $M_{farm} = 4.15$; $p < .001$) and state/national parks ($M_{forest} = 3.95$; $M_{park} = 4.13$; $p < .001$), with no significant differences on that regards between farms offering recreation and state/national parks.

CHAPTER V: CONCLUSIONS

The purpose of this study was to explore the variability in visit motivations and perceived benefits from three natural settings among Missouri residents: (1) Farms; (2) Private Forests; and (3) State/National Parks. This chapter discusses main results related to the study purposes, and presents study conclusions, limitations and recommendations for future research. It is important to emphasize that most discussions are focused around agritourism, as the reason for including state/national parks in this study was mainly for comparison purposes.

Discussion of Key Findings

Not surprisingly, given the recent development of agritourism in the U.S., more respondents had visited at least once in the past a state/national park (86.7%) for recreational purposes than a farm (48.1%) or private forest (51.2%), supporting the preference of national parks as favorite outdoor recreation settings in the U.S. (Walls, Darley, & Siikamäki, 2009). But importantly, a relative large proportion of respondents would likely or very likely visit a farm (43.1%) or a private forest (44.8%) for recreation purposes in the next 12 months, suggesting a great potential for the development of this form of tourism in Missouri. These results confirm in Missouri, the increasing trend in agritourism that has been reported using national data (Cordell, 2008).

As it would be expected, most popular activities when visiting natural settings were those strongly linked to that setting's specific offerings, especially concerning farms

(i.e., “pick-your-own fruit or vegetable”, “attend a festival or event”). These results suggest that managers of natural settings, especially farms, should capitalize on their unique resources in their advertisement and marketing efforts as competitive advantages to capture visitors seeking for a unique outdoor recreation experience. Specifically, advertisement focused around “u-pick or u-harvest” and “festivals, events and shows” would be suggested as they not only were the most preferred activities by study respondents, but they have been reported as two of the most commonly offered ones by Missouri’s agritourism farms (Tew & Barbieri, 2011). On the other hand, “wildlife observation” appeared as one of the three preferred recreational activities when visiting any of the three settings, suggesting that private forests and farms could advertise their settings as an appropriate setting for this outdoor activity when competing with nearby state/national parks. Furthermore, the three top preferred recreational activities when visiting both private forests and state/national parks are “hiking, biking or cross-country”, “wildlife observation” and “fishing”, suggesting that private forests have the capacity to heavily position themselves as settings for those activities.

Overall, the small proportion of respondents that identified natural settings, especially farms, for hospitality-related services (e.g., overnight stay; visitation for the sole purpose of enjoying a meal) could be associated with the limited offer of lodging and accommodation facilities among Missouri agritourism farms as it has been previously reported (Tew & Barbieri, 2011). However, further research is needed regarding the importance of hospitality, especially food and beverage services, as a supplementary product of agritourism activities, and to examine its overall importance and potential within this type of tourism.

Results show that several motivations are important for the recreational visit of farms, privately owned forests, and state/national parks. Overall, the three most important motivations for visiting all three natural settings, with slight differences on the rankings among settings, are: “doing something with their family”, “viewing the scenic beauty”, and “enjoying the smells and sounds of nature”. These results confirm previous studies that found that enjoying and being close to nature were important visit motivations among National Forest visitors (Graefe et al., 2000) and residents surrounding a large urban park setting Kyle et al., (2004). Sharing quality time and doing something with family and friends has also been reported to be important motivations for visiting a national forest (Kyle et al., 2006).

Results from this study can be used to implement motivation-based marketing strategies, at the local and regional levels, specifically focusing on offering opportunities for visitors to spend time with their families while getting in contact with nature. On the other hand, the least important motivation for visiting all three natural settings is “to share their agricultural/outdoor skills with others”.

Overall, the 15 motivation items were found to be perceived as significantly more important when visiting a state/national park as compared to a farm or a private forest, which is consistent with the better positioning of national parks among Americans (Walls, Darley, & Siikamäki, 2009). However, what captures our attention, is that the importance of seven motivation items (i.e., experience excitement; learn more about nature; get exercise; be with people having similar values; think about their personal values; recall good time from the past; view the scenic beauty) were not perceived to be significantly different between visiting a farm or a private forest for recreational

purposes. These results suggest that current and potential agritourists may not be seeking a specific setting to satisfy some of their needs associated with enjoying a close contact with nature, which in turn may simplify regional agritourism marketing efforts. On the other hand, results showing significantly greater importance in the motivations for visiting private forests as compared to farms (i.e., use their equipment; do something with their family; give their mind a rest; experience new and different things; enjoy the smells and sounds of nature; share their agritourism/outdoor skills; have a change from their daily routine; experience solitude) suggest a competitive advantage of forest-owners offering or willing to offer recreational services as they may capture visitors seeking to satisfy a unique set of needs.

Study results show that respondents perceive that state/national parks, privately own forests, and farms have an important or very important role in providing an array of social, environmental, and economic benefits to society, especially to “preserve natural resources and ecosystems”, “preserve rural heritage and traditions” and “provide scenic beauty and landscapes”. These results differ from previous research suggesting that economic impacts (e.g., improvement of local economy) are the most important benefits perceived from tourism development (McGehee & Andereck, 2004). Overall, respondents considered that the three examined natural areas are especially important in providing environmental benefits, which is positive for overall outdoor recreation taking into account the growing concern of environment-related issues, such as protection of natural resources, habitat conservation, among others (Cordell, 2008).

The overall perceived better image, in terms of being more important in providing positive outcomes for society and the environment, of state/national parks as compared to

compared to farms and private forests is once more not surprising as it could be related with the familiarity of respondents with state/national parks while that the novelty of agritourism in the U.S. (Che, 2007). In terms of capitalizing residents' perceptions, operators should emphasize the role of their agritourism farms in preserving natural resources and ecosystems in their promotional efforts as results showed that respondents perceived that farms and private forests are particularly important in providing those benefits to society. In turn, the operators of forested lands may want to emphasize the scenic beauty and landscapes that their forests can provide to their recreational visitors. Interestingly, respondents perceived that private forests are significantly less important than farms and state/national parks to "revitalize local economies", results that deserve further exploration.

Study Implications

Study results provide a clear idea of the main motivations driving Missourians to visit three different natural settings (i.e., farms, private forests, and state/national parks), as well as the benefits they perceive these settings provide. Thus, motivations and benefits related results, along with the psychographic profile of potential/current agritourists, have important management and planning implications especially for agritourism businesses. Planning and managing agritourism activities in both farms and private forests within a customer-oriented philosophy (i.e., based on the needs and wants of current and potential agritourists) would help to increase visitors' satisfaction levels, which, in turn, can help to retain customers by promoting repeat visitation as well as

capturing new potential visitors (Alexandris, Dimitriadis, & Markata, 2002; Bigne, Sanchez, & Sanchez, 2001; Murphy, Pritchard, & Smith, 2000).

At the individual business level, the overall demographic and psychographic profile of respondents as well as main visit motivations and perceived benefits of private forest and farms, can serve landowners to set specific business and marketing objectives for their agritourism endeavors. For example, study results suggest that farms involved in agritourism should include some type of recreational self-harvest activity (Pick-your-own fruit or vegetable), as this activity seems to be very appealing to visitors. This is especially important for those farms that are willing to diversify their operations in the recreational sector and do not want to invest heavily in its development. In addition, forests who want to attract agritourists should make sure to provide access for hiking, biking or cross-country activities, as these were found to be important for respondents. Also, given that doing something with their family was considered in both cases, farms and private forests, as one of the most important visit motivations, landowners involved in agritourism should provide a variety of attractions to ensure an enjoyable experience for all family members.

Study results can also serve to craft or re-direct marketing strategies of those farms/forests offering or willing to offer recreational services just as benefits based marketing has been applied to public recreation (Anderson et. al, 2002). Specific marketing and advertisement campaigns could be design to attract those interested in spending some family time as well as those whose primary motivation is enjoying and appreciating the wildlife. Also special festivals or events could be organized to attract these two groups of visitors. Landowners might also consider results on the perceived

benefits of agritourism to reinforce the benefits that their farms/forests provide to society that currently are not being properly acknowledged (e.g., enhance the tourism appeal of rural areas, provide recreational activities for visitors, share cultural heritage with visitors). Benefit-based marketing strategies can help building the image of farm/forested lands, thus capturing the interest of customers socially and/or environmentally concerned.

Furthermore, study results provide valuable information for agencies and offices strengthening or encouraging agritourism development at the local, regional or state level (e.g., Missouri Department of Agriculture; Hermann winery region in Missouri). The information on visit motivations and perceive benefits of agritourism could help these agencies to provide a better guidance and advice to those farm/forest owners interested in agritourism so they can embark into this entrepreneurial venture with a solid knowledge about the market requirements. For example, landowners can better decide whether to offer agritourism activities based on their available resources (e.g., crops suitable for “picking-your-own fruit/vegetable”, extensive open spaces for festivals or events; trails for hiking, biking or cross-country). On the other hand, these agencies can stimulate visitation to agritourism settings (farms and private forests) in a given region through social-marketing, emphasizing the multiple benefits these setting can provide to society and capturing, as stated earlier, the social-environmental sensitive client.

Finally, it is worth mentioning that study results also enhanced our academic knowledge of agritourism. Although some studies define agritourism as visiting any working agricultural, horticultural, or agribusiness operation (Barbieri & Mahoney, 2009; Che et al., 2005; Lobo, 2001), most existing literature focuses on farms, with little information available on private forests. On this regards, the most prevalent finding of

this study is that little differences on the activities, motivations and perceived benefits between private forests and farms offering recreational activities suggest that both types of settings should be included when examining agritourism.

Study Limitations

Few limitations were encountered in this study. A first limitation relates to the study sample. Although the study confidence level and interval (1.4) makes possible to generalize to Missouri, it is pertinent to point that respondents were older than overall Missouri residents. About a-quarter (21.0%) of respondents were young adults between 18 and 40 years old as compared to 40.2% Missourians in the same age group (Missouri Census Data Center, 2009). This is critical for agritourism, as senior citizens and families with small children represent the most frequent two groups of visitors among agritourism farms in Missouri (Tew & Barbieri, 2011). In addition, it is cautioned generalizations beyond Missouri, which is especially true regarding the marketing application of study results. Marketing strategies should address a target audience which preferences and behavior are usually influenced by geographic as well as socio-demographic variables. In this case, we have to take into consideration the fact that Missouri has a unique geography influenced by the presence of the Lake of the Ozarks, conveniently located in the heart of the State which makes it easily accessible from anywhere.

A second limitation is that this study only focused on the internal factors driving participation in outdoor recreation activities (i.e., motivations and perceived benefits). However, it excluded a variety of personal, social, and environmental factors that may represent enablers and also constraints (e.g., lack of time, bad weather, lack of partners)

of outdoor recreation (Wilhelm Stanis, Schneider, Chavez, & Shinew, 2009) including agritourism.

Finally, it is worth discussing the apparently low response rate (19.62%) of this study. According to Chiu and Brennan (1990) response rates between 10% and 30% are not uncommon within mailed surveys. Furthermore, less than 20% response rate is frequently reported in tourism marketing surveys among households (Gursoy, Chi, & Dyer, 2010; Huh & Vogt, 2008). Specifically regarding the agritourism field, the study conducted by Jolly and Reynolds (2005) to address level of agritourism participation and motivations, which surveyed a random sample of residents from two counties in California using also mailed questionnaires, reported 15% of response rate. Thus, although 20% may be perceived as a low response rate, it should not be interpreted as a limitation for this study.

Recommendations for Future Research

Study results also shed light to future agritourism-related research. First, it would be important to replicate this study in other geographical contexts or maybe at a larger scale (e.g., multi-state level) which may help to ameliorate some of study findings that may be associated with some geographic particularities of Missouri. On these regards it would be interesting to contrast localities with different levels of agritourism development (e.g., growing agritourism markets vs. more established ones) to examine whether few differences between farms and forested lands vanish or the contrary, more differences are found.

It is also advisable that future studies control for different types of external factors related to possible constraints and/or enablers, especially those related to seasonality and

weather conditions that tend to influence overall visitation decisions and those policy-related as they may encourage more agritourism development (e.g., through incentives), thus visitation. Furthermore, future studies on visit motivations and perceived benefits from farms, private forests and state/national parks should consider examining whether motivations and perceived benefits differ across groups with different demographic (e.g., ethnicity, metropolitan versus non-metropolitan residency) and behavioral (e.g., previous visitation, satisfaction levels with the visit) attributes.

Although this study contributes to our understanding of the perceived benefits of agritourism, further academic research would be recommendable on its disbenefits as it has been studied with other forms of nature-based tourism (Andereck & Vogt, 2000; Besculides et al., 2002). This is especially important in those areas where agritourism is not longer in its inception phase but is more consolidated as negative outcomes could be better perceived by residents. Examination of the perceived disbenefits of agritourism could also help to better understand some of the results from this study, such as why respondents considered significantly less important private forests as compared to farms and state/national parks to “revitalize local economies”.

Finally, lower perceptions associated with private forests in revitalizing local economies as compared to farms and state/national parks deserve further exploration. On this regards, qualitative research (e.g., focus groups) would be advisable to explore in-depth the reasons behind those lower perceptions.

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APPENDIX A

**THE VISIT MOTIVATIONS AND PERCEIVED BENEFITS OF FARMS,
PRIVATE FORESTS AND STATE/NATIONAL PARKS IN MISSOURI SURVEY**

VISITING AN AGRITOURISM FARM

Instructions: Questions 1 through 10 ask about Agritourism Farms.

Definition:

Agritourism Farms provide recreational activities for visitors besides agriculture production. Typical agritourism activities are pick-your-own apples, hay rides, corn mazes, etc.

1. Below is a list of experiences you might have when visiting an Agritourism Farm. Please tell us how important or unimportant each of the following experiences would be on a visit to an Agritourism Farm:

	Very Unimportant	Unimportant	Neutral	Important	Very Important
Experience excitement	<input type="checkbox"/>				
Use your equipment (e.g., camera, rifle, gear)	<input type="checkbox"/>				
Do something with your family	<input type="checkbox"/>				
Learn more about nature	<input type="checkbox"/>				
Get exercise	<input type="checkbox"/>				
Be with people having similar values	<input type="checkbox"/>				
Give your mind a rest	<input type="checkbox"/>				
Experience new and different things	<input type="checkbox"/>				
Think about your personal values	<input type="checkbox"/>				
Recall good times from the past	<input type="checkbox"/>				
Enjoy the smells and sounds of nature	<input type="checkbox"/>				
Share your agritourism skills with others	<input type="checkbox"/>				
Have a change from your daily routine	<input type="checkbox"/>				
View the scenic beauty	<input type="checkbox"/>				
Experience solitude	<input type="checkbox"/>				

2. Indicate how important or unimportant Agritourism Farms are to...

	Very Unimportant	Unimportant	Neutral	Important	Very Important
...preserve rural heritage and traditions	<input type="checkbox"/>				
...provide scenic beauty and landscapes	<input type="checkbox"/>				
...enhance the quality of life of local people	<input type="checkbox"/>				
...preserve natural resources and ecosystems	<input type="checkbox"/>				
...revitalize local economies (e.g., create jobs)	<input type="checkbox"/>				
...share cultural heritage with visitors	<input type="checkbox"/>				
...enhance the tourism appeal of rural areas	<input type="checkbox"/>				
...educate visitors about agriculture or nature	<input type="checkbox"/>				
...provide recreational activities for visitors	<input type="checkbox"/>				

3. How likely are you to visit an Agritourism Farm in the next 12 months?
- Very unlikely Unlikely Undecided Likely Very likely
4. Have you ever visited an Agritourism Farm for recreation purposes? If "no", please skip to the following page (question 11).
- Yes No → Go to question 11.
5. Write in how many times you have visited an Agritourism Farm for recreation purposes in the last 5 years.
- times
6. When did you visit an Agritourism Farm for recreation purposes for the first time?
- Last year 2-4 years ago 5-9 years ago At least 10 years ago Don't recall
7. In which of the following activities have you participated while visiting an Agritourism Farm? *Check all that apply.*
- | | |
|---|---|
| <input type="checkbox"/> Attend a festival or event (e.g., harvest festival, spring events) | <input type="checkbox"/> Boating, canoeing or sailing |
| <input type="checkbox"/> Attend a private party (e.g., wedding, business retreat) | <input type="checkbox"/> Fishing |
| <input type="checkbox"/> Drive motorized recreational vehicles (e.g., ATV, snowmobiling) | <input type="checkbox"/> Horseback riding |
| <input type="checkbox"/> Hiking, biking or cross-country | <input type="checkbox"/> Hunting |
| <input type="checkbox"/> Pick-your-own fruit or vegetable (e.g., apples, Christmas trees) | <input type="checkbox"/> Swimming |
| <input type="checkbox"/> Wildlife observation (e.g., bird watching) | <input type="checkbox"/> Other recreational activity |
8. During the last 5 years, have you stayed overnight in an Agritourism Farm (e.g., camping, cabin, Bed & Breakfast)?
- No Yes, for free (i.e., you did not pay) Yes, for a fee (i.e., you paid)
9. During the last 5 years, have you visited an Agritourism Farm for the sole purpose of enjoying a meal (e.g., picnic, cookout, specialty dining)?
- No Yes, for free (i.e., you did not pay) Yes, for a fee (i.e., you paid)
10. How frequently did you visit an Agritourism Farm when you were 16 years old or younger?
- Never Rarely Occasionally Often Always Don't recall
-

VISITING A PRIVATE FOREST

Instructions: Questions 11 through 20 ask about Private Forests.

Definition:

Private Forests are managed by private individuals or organizations. Many of them are open to the public for recreational use, such as for hunting, hiking, bird watching, etc.

11. Below is a list of experiences you might have when visiting a Private Forest. Please tell us how important or unimportant each of the following experiences would be on a visit to a Private Forest:

	Very Unimportant	Unimportant	Neutral	Important	Very Important
Experience excitement	<input type="checkbox"/>				
Use your equipment (e.g., camera, rifle, gear)	<input type="checkbox"/>				
Do something with your family	<input type="checkbox"/>				
Learn more about nature	<input type="checkbox"/>				
Get exercise	<input type="checkbox"/>				
Be with people having similar values	<input type="checkbox"/>				
Give your mind a rest	<input type="checkbox"/>				
Experience new and different things	<input type="checkbox"/>				
Think about your personal values	<input type="checkbox"/>				
Recall good times from the past	<input type="checkbox"/>				
Enjoy the smells and sounds of nature	<input type="checkbox"/>				
Share your outdoor skills with others	<input type="checkbox"/>				
Have a change from your daily routine	<input type="checkbox"/>				
View the scenic beauty	<input type="checkbox"/>				
Experience solitude	<input type="checkbox"/>				

12. Indicate how important or unimportant Private Forests are to...

	Very Unimportant	Unimportant	Neutral	Important	Very Important
... preserve rural heritage and traditions	<input type="checkbox"/>				
... provide scenic beauty and landscapes	<input type="checkbox"/>				
... enhance the quality of life of local people	<input type="checkbox"/>				
... preserve natural resources and ecosystems	<input type="checkbox"/>				
... revitalize local economies (e.g., create jobs)	<input type="checkbox"/>				
... share cultural heritage with visitors	<input type="checkbox"/>				
... enhance the tourism appeal of rural areas	<input type="checkbox"/>				
... educate visitors about agriculture or nature	<input type="checkbox"/>				
... provide recreational activities for visitors	<input type="checkbox"/>				

13. How likely are you to visit a Private Forest in the **next 12 months**?

Very unlikely Unlikely Undecided Likely Very likely

14. Have you ever visited a Private Forest for recreation purposes? *If "no", please skip to the following page (question 21).*

Yes No → Go to question 21.

15. Write in how many times you have visited a Private Forest for recreation purposes in the **last 5 years**.

times

16. When did you visit a Private Forest for recreation purposes for the **first time**?

Last year 2-4 years ago 5-9 years ago At least 10 years ago Don't recall

17. In which of the following activities have you participated while visiting a Private Forest? *Check all that apply.*

<input type="checkbox"/> Attend a festival or event (e.g., harvest festival, spring events)	<input type="checkbox"/> Boating, canoeing or sailing
<input type="checkbox"/> Attend a private party (e.g., wedding, business retreat)	<input type="checkbox"/> Fishing
<input type="checkbox"/> Drive motorized recreational vehicles (e.g., ATV, snowmobiling)	<input type="checkbox"/> Horseback riding
<input type="checkbox"/> Hiking, biking or cross-country	<input type="checkbox"/> Hunting
<input type="checkbox"/> Pick-your-own fruit or vegetable (e.g., apples, Christmas trees)	<input type="checkbox"/> Swimming
<input type="checkbox"/> Wildlife observation (e.g., bird watching)	<input type="checkbox"/> Other recreational activity

18. During the last 5 years, have you stayed overnight in a Private Forest (e.g., camping, cabin, Bed & Breakfast)?

No Yes, for free (i.e., you did not pay) Yes, for a fee (i.e., you paid)

19. During the last 5 years, have you visited a Private Forest for the sole purpose of enjoying a meal (e.g., picnic, cookout, specialty dining)?

No Yes, for free (i.e., you did not pay) Yes, for a fee (i.e., you paid)

20. How frequently did you visit a Private Forest when you were 16 years old or younger?

Never Rarely Occasionally Often Always Don't recall

VISITING A NATIONAL OR STATE PARK

Instructions: Questions 21 through 30 ask about National or State Parks.

Definition:

National/State Parks are large land or water areas set to protect natural resources and to provide recreational opportunities for visitors, such as camping, fishing, boating, biking, etc.

21. Below is a list of experiences you might have when visiting a **National or State Park**. Please tell us how important or unimportant each of the following experiences would be on a visit to a National or State Park:

	Very Unimportant	Unimportant	Neutral	Important	Very Important
Experience excitement	<input type="checkbox"/>				
Use your equipment (e.g., camera, rifle, gear)	<input type="checkbox"/>				
Do something with your family	<input type="checkbox"/>				
Learn more about nature	<input type="checkbox"/>				
Get exercise	<input type="checkbox"/>				
Be with people having similar values	<input type="checkbox"/>				
Give your mind a rest	<input type="checkbox"/>				
Experience new and different things	<input type="checkbox"/>				
Think about your personal values	<input type="checkbox"/>				
Recall good times from the past	<input type="checkbox"/>				
Enjoy the smells and sounds of nature	<input type="checkbox"/>				
Share your outdoor skills with others	<input type="checkbox"/>				
Have a change from your daily routine	<input type="checkbox"/>				
View the scenic beauty	<input type="checkbox"/>				
Experience solitude	<input type="checkbox"/>				

22. Indicate how important or unimportant National or State Parks are to...

	Very Unimportant	Unimportant	Neutral	Important	Very Important
... preserve rural heritage and traditions	<input type="checkbox"/>				
... provide scenic beauty and landscapes	<input type="checkbox"/>				
... enhance the quality of life of local people	<input type="checkbox"/>				
... preserve natural resources and ecosystems	<input type="checkbox"/>				
... revitalize local economies (e.g., create jobs)	<input type="checkbox"/>				
... share cultural heritage with visitors	<input type="checkbox"/>				
... enhance the tourism appeal of rural areas	<input type="checkbox"/>				
... educate visitors about agriculture or nature	<input type="checkbox"/>				
... provide recreational activities for visitors	<input type="checkbox"/>				

23. How likely are you to visit a National or State Park in the next 12 months?

Very unlikely Unlikely Undecided Likely Very likely

24. Have you ever visited a National or State Park for recreation purposes? If "no", please skip to the following page (question 31).

Yes No → Go to question 31.

25. Write in how many times you have visited a National or State Park for recreation purposes in the last 5 years.

times

26. When did you visit a National or State Park for recreation purposes for the first time?

Last year 2-4 years ago 5-9 years ago At least 10 years ago Don't recall

27. In which of the following activities have you participated while visiting a National or State Park? Please, check all that apply.

<input type="checkbox"/> Attend a festival or event (e.g., harvest festival, spring events)	<input type="checkbox"/> Boating, canoeing or sailing
<input type="checkbox"/> Attend a private party (e.g., wedding, business retreat)	<input type="checkbox"/> Fishing
<input type="checkbox"/> Drive motorized recreational vehicles (e.g., ATV, snowmobiling)	<input type="checkbox"/> Horseback riding
<input type="checkbox"/> Hiking, biking or cross-country	<input type="checkbox"/> Hunting
<input type="checkbox"/> Pick-your-own fruit or vegetable (e.g., apples, Christmas trees)	<input type="checkbox"/> Swimming
<input type="checkbox"/> Wildlife observation (e.g., bird watching)	<input type="checkbox"/> Other recreational activity

28. During the last 5 years, have you stayed overnight in a National or State Park (e.g., camping, cabin, Bed & Breakfast)?

No Yes, for free (i.e., you did not pay) Yes, for a fee (i.e., you paid)

29. During the last 5 years, have you visited a National or State Park for the sole purpose of enjoying a meal (e.g., picnic, cookout, specialty dining)?

No Yes, for free (i.e., you did not pay) Yes, for a fee (i.e., you paid)

30. How frequently did you visit a National or State Park when you were 16 years old or younger?

Never Rarely Occasionally Often Always Don't recall

INFORMATION ABOUT YOU AND YOUR FAMILY

32. Please write in your age and check your gender:

Age: years old Gender: Male Female

33. How often do you do the following recreational activities?

	Very Rarely	Rarely	Occasionally	Often	Very Often
Watching TV or movies at home	<input type="checkbox"/>				
Reading for pleasure (not work-related)	<input type="checkbox"/>				
Doing exercises (e.g., gym) or participating in a sport	<input type="checkbox"/>				
Hanging out with friends	<input type="checkbox"/>				
Surfing the internet for fun (e.g., twitter, facebook)	<input type="checkbox"/>				

34. What is the highest level of formal education you received?

<input type="checkbox"/> High school graduate	<input type="checkbox"/> Some college
<input type="checkbox"/> Two-year college degree (e.g., associate degree)	<input type="checkbox"/> Four-year college degree (bachelor's degree)
<input type="checkbox"/> Post-graduate studies (Masters or Doctorate)	

35. What's your current employment status? *Check all that apply.*

<input type="checkbox"/> Full-time employee	<input type="checkbox"/> Part-time employee	<input type="checkbox"/> Homemaker (care for family and/or house)
<input type="checkbox"/> Student	<input type="checkbox"/> Retired	<input type="checkbox"/> Unemployed

36. With whom do you live at home? *Check all that apply.*

<input type="checkbox"/> I live alone	<input type="checkbox"/> With spouse, partner or significant other
<input type="checkbox"/> With child(ren) 6 years old or younger	<input type="checkbox"/> With child(ren) 7-12 years old
<input type="checkbox"/> With child(ren) 13-17 years old	<input type="checkbox"/> With other relatives or friends

37. How far do you live from an area of at least 50,000 people?

<input type="checkbox"/> I live in a 50,000 pop. city	<input type="checkbox"/> Less than 5 miles	<input type="checkbox"/> 5 – 9 miles
<input type="checkbox"/> 10 – 29 miles	<input type="checkbox"/> 30 – 59 miles	<input type="checkbox"/> 60 miles or more

38. Which of the following apply to at least one member of your household? *Check all that apply.*

<input type="checkbox"/> Live on a farm land or forested land	<input type="checkbox"/> Own or lease farmland or forested land
<input type="checkbox"/> Is a full time farmer	<input type="checkbox"/> Is a part time farmer
<input type="checkbox"/> None of the above	

39. Which of the following best represents your annual household income before taxes?

<input type="checkbox"/> Less than \$25,000	<input type="checkbox"/> \$25,000 - \$34,999	<input type="checkbox"/> \$35,000 - \$49,999	<input type="checkbox"/> \$50,000 - \$74,999
<input type="checkbox"/> \$75,000 - \$99,999	<input type="checkbox"/> \$100,000 - \$149,999	<input type="checkbox"/> \$150,000 - \$199,999	<input type="checkbox"/> \$200,000 or more

Thank You!

To be entered into the drawing for the chance to win one of the four \$50.00 gift cards, please enter:

Name:	_____
Address:	_____
E-mail:	_____
Phone Number:	() _____