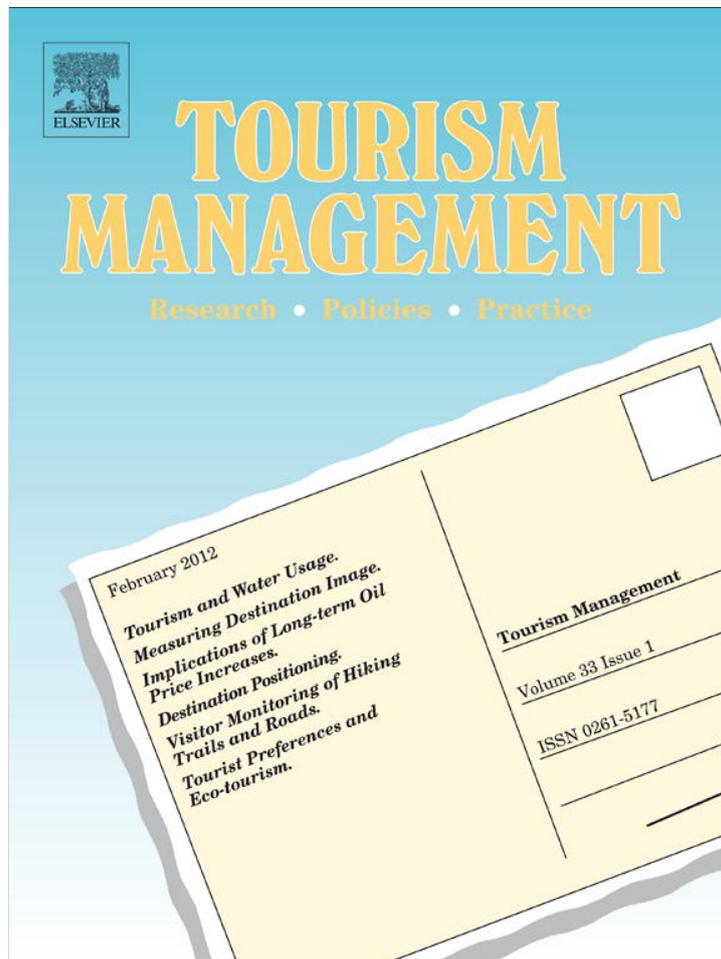


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The perceived benefits of agritourism: The provider's perspective

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ABSTRACT

This study examines the perceived benefits of agritourism by examining the importance of this activity in accomplishing 16 goals of farmers receiving visitors for recreation on their farms. This study also examines several farm household and business attributes associated with the accomplishment of four goal dimensions driving agritourism development. Data were derived from a survey conducted among 164 agritourism farms in Missouri. Results showed that agritourism mostly serves to capture new farm customers, educate the public about agriculture and enhance the quality of life for the farm family, which represents both, economic and non-economic benefits. Organized by goal dimensions, findings showed that agritourism is perceived as most important for market related goals, suggesting that the economic role of agritourism should not only be measured in terms of increased profits but also as a marketing tool. Four significant regression models showed that several farm business and household attributes are associated to the perceived agritourism benefits within four goal dimensions, suggesting opportunities for tailored promotional messages and policy considerations for the entrepreneurial development of agritourism.

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1. Introduction

The agricultural context in the United States has undergone several structural changes during the past three decades, including an emphasis on the development of different enterprises using existing farm resources (Barbieri, Mahoney, & Butler, 2008; Nickerson, Black, & McCool, 2001). Diversifying a farm to include recreation and leisure activities for visitors, commonly labeled agritourism, is increasingly being adopted in the United States and is suggested to bring a myriad of economic as well as non-economic benefits to farmers, visitors and communities. In this sense, agritourism has been suggested to help family farms remain in business, preserve American agricultural heritage, maximize the productivity of farm resources through their recreational use, and even to improve the economic situation of local communities (Ilbery, 1991; Nickerson et al., 2001; Ollenburg & Buckley, 2007; Veeck, Che, & Veeck, 2006; Wilson, Thilmay, & Watson, 2006).

From the farm unit perspective, agritourism is claimed to increase farm revenues and serve other entrepreneurial goals of the farmer, such as the enhancement of their quality of life (Barbieri, 2009; McGehee & Kim, 2004; Nickerson et al., 2001; Ollenburg & Buckley, 2007). Additional economic support for the farm business is especially important within the current agricultural context

of increased land values and agricultural input costs, as well as reduced farm incomes, especially among small family farms (Busby & Rendle, 1999; Ilbery, 1991; Salamon, 2003). In addition, accomplishing farmers' non-economic goals is important because of the increase in "hobby" or "lifestyle" farmers who, although farming, may not be driven primarily by economic pursuits (Valdivia, 2007; Wilson, 2008). The popularity of agritourism among farmers has increased in the United States during the past decade; according to the USDA's Census of Agriculture, the number of US farms participating in some form of direct sales and agritourism in 2007 was 160,000, representing an increase of about 180% from 2002 (USDA: NASS, 2007). However, blending aspects of tourism and agricultural production has been explored in a relatively limited scope in the United States and even less so in Missouri. Despite the growing body of agritourism research, the literature remains inconclusive regarding the potential benefits of the industry, especially concerning the benefits perceived by the agritourism provider. This limited understanding is likely due to the complex set of economic and non-economic goals associated with agritourism development (Barbieri, 2009; McGehee & Kim, 2004; Nickerson et al., 2001; Ollenburg & Buckley, 2007).

Therefore, a study was conducted in 2008 to examine the perceived benefits of agritourism in Missouri (US) by assessing the importance of agritourism in the accomplishment of 16 entrepreneurial goals specific to farmers. The goals were selected to represent four types or dimensions of goals (i.e., farm profits, market opportunities, family connections, and personal pursuits)

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that previous studies reported to be relevant in the development of on-farm enterprises, including agritourism (Barbieri, 2010; Barbieri & Mahoney, 2009; Nickerson et al., 2001; Ollenburger & Buckley, 2007). As benefits are conceptualized as an improvement, the prevention of a worse condition, or a gain (Driver, Nash, & Haas, 1987; Shin, Jaakson, & Kim, 2001), the importance of agritourism in accomplishing those 16 entrepreneurial goals are used in this study as an indicator of a perceived benefit. This study also examines the associations between several farm household and business attributes and the importance of agritourism in accomplishing goals within those four goal dimensions as those attributes may affect perceptions of the agritourism role in the farm household or business. For example, farms with greater acreage may perceive agritourism as a more convenient economic tool as compared to smaller farms, given that agritourism may alleviate the land tax burden and other management costs (Nickerson et al., 2001).

Considering the entrepreneurial nature of agritourism (Barbieri & Mahoney, 2009; Nickerson et al., 2001), examining the role of agritourism in goal accomplishment is vital to portray the benefits of this activity as the achievement of entrepreneurial goals may sustain a business venture even if such a venture is unprofitable (Kuratko, Hornsby, & Naffziger, 1997; Lynn & Reinsch, 1990). Failing to incorporate entrepreneurs' goals into performance evaluation can lead to incorrect assessments concerning the success or failure of an agritourism venture. For example, a simplistic performance evaluation of an agritourism farm with reduced economic returns could appear as a business failure (McNally, 2001), whereas the farmer may perceive it as a success because it is accomplishing other goals more important to him/her (Barbieri, 2010).

Understanding the perceived benefits of agritourism is especially important in Missouri, a state where agriculture is the top industry and their agricultural sales are ranked third in the U.S. (OSED, 2002; USDA: NASS, 2007). In spite of such importance, many small farms in Missouri are struggling to survive (Valdivia, 2007), thus the need to diversify their offerings through on-farm enterprises such as agritourism or specialty crops (Barbieri & Valdivia, 2010). Study results may be useful within both the public and private realms of Missouri agriculture. Study results may be used as a basis of and support for state policies framing this type of entrepreneurial venture as a strategy to cope with the economic struggles of small farmers in Missouri. In the private realm, study results may assist farmers interested in agritourism to evaluate whether this type of on-farm enterprise fits within their entrepreneurial goals.

2. Literature review

The term agritourism is used to describe nearly any activity in which a visitor to the farm or other agricultural setting contemplates the farm landscape or participates in an agricultural process for recreation or leisure purposes (Fleischer & Tchetchik, 2005; Ilbery, Bowler, Clark, Crockett, & Shaw, 1998; Veeck et al., 2006). Agritourism is usually understood to take place on a working farm or other agricultural setting and to generate income for or add value to the farm (Barbieri & Mahoney, 2009; Ollenburger & Buckley, 2007; Phillip, Hunter, & Blackstock, 2010). Many activities are classified as agritourism, including daily visits (e.g., orchard tours, hayrides), recreational self-harvest (e.g., pick-your-own operations), hunting and fishing for a fee, nature and wildlife observation, and other outdoor activities (Barbieri et al., 2008; Caballé, 1999; Che, Veeck, & Veeck, 2005; Ilbery, 1991; McGehee & Kim, 2004; Wilson et al., 2006). However, inconsistencies exist on the extent of activities that comprise agritourism. For example, while some catalog hospitality services like lodging and accommodations, provision of food and beverages (e.g., on-farm restaurant, catering) and

programming special events (Barbieri et al., 2008; Fleischer & Tchetchik, 2005; Ilbery, 1991; McGehee, 2007), others explicitly exclude them (Ollenburger & Buckley, 2007). Similar inconsistencies are found pertaining to educational activities and direct sales of farm products (Fleischer & Tchetchik, 2005; McGehee, 2007).

While many definitions and activities associated with agritourism are recognized in the literature, researchers have struggled to develop a classification system with respect to both the characteristics and the broad definition of agritourism. One exception, however, is Phillip et al. (2010), who developed a theoretical classification of agritourism operations based on three criteria: whether the setting is a working farm, the level of contact between the tourist and agricultural activity (i.e., passive, direct or indirect), and whether the visitor's experience is authentic or staged. From those three criteria, a non-hierarchical five-class typology of agritourism was developed: (1) Non-working farm agritourism, such as a bed and breakfast on a former farm; (2) Working farm, passive contact agritourism, such as a bed and breakfast on a current farm; (3) Working farm, indirect contact agritourism, such as serving farm products in meals on the farm; (4) Working farm, direct contact, staged agritourism such as viewing farming demonstrations; and (5) Working farm, direct contact, authentic agritourism such as helping with farm chores. Given the definitional inconsistencies of agritourism in the literature, this study adopts the definition used by the Missouri Department of Agriculture (2009): "visiting a working farm or any agricultural, horticultural, or agribusiness operation for the purpose of appreciation, enjoyment, education, or recreational involvement with agricultural, natural or heritage resources".

2.1. Benefits of agritourism

Agritourism is suggested to produce many benefits for farms, their operators, the surrounding communities, and society overall. Perceptions are generally positive towards the introduction of tourism into rural areas, following the belief that blending the two industries may alleviate local issues, including labor shortages in tourism and market shortages in agriculture (Andereck & Vogt, 2000; Torres & Momsen, 2004). The positive influence of agritourism on-farm family income may also be combined with the contribution the business makes to the local community via sales taxes, local employment and stimulation of local businesses such as restaurants and shops (Barbieri, 2009; Saxena, Clark, & Ilbery, 2007; Sharpley, 2007; Veeck et al., 2006). Other non-economic societal benefits, including maintaining rural lifestyles and increasing awareness and preservation of local customs and unique cultural traits of an area, especially as related to food production, have been suggested as well (Che, 2007; Everett & Aitchison, 2008; Ollenburger & Buckley, 2007; Turnock, 2002).

At the farm level, farm entrepreneurial diversification is believed to create a more stable, and often higher, income for the producer (Barbieri et al., 2008; Brandth & Haugen, 2007). Several economic indicators have been used to measure the economic value of agritourism for the farm, including overall revenues, net income and reduced dependence on agriculture production, among others (Barbieri, 2009; Nickerson et al., 2001; Veeck et al., 2006). Studies show that in times of economic distress, such as a poor harvest or depressed prices, receiving visitors for agritourism activities may provide an avenue for generating alternative or supplemental income for the farm family (Busby & Rendle, 1999; Fisher, 2006; McGehee, 2007; Nickerson et al., 2001; Ollenburger & Buckley, 2007). However, in most cases, agritourism serves as a supplemental source of income or a lower-risk coping mechanism, while agricultural production remains the primary focus (Fisher, 2006; McGehee, 2007; Nickerson et al., 2001; Veeck et al.,

2006). It is also suggested that agritourism may provide employment for family members or serve as a plan for farm succession (Fleischer & Tchetchik, 2005; Ollenburg & Buckley, 2007; Veeck et al., 2006). For operators not farming full-time, tourism may serve as a substitute for off-farm employment to meet the economic needs of the farm business and household until the agricultural production situation improves (Ollenburg & Buckley, 2007). In addition, farms with greater acreage may seek tax benefits and other financial management opportunities as an indirect economic benefit associated with agritourism development (Nickerson et al., 2001).

In addition, agritourism appears as a convenient diversification strategy because it does not necessarily require excessive investments in farm infrastructure, labor or equipment. Farms diversifying into tourism are likely to focus on those activities that utilize their existing resources, rather than requiring additional investment, as many producers view the diversification as a method to boost revenues or to cope with the rising costs of agricultural technologies and inputs (Fisher, 2006; Ilbery, 1991; Nickerson et al., 2001). For example, farm operators tend to offer activities similar to their existing farm procedures, which do not have to dramatically alter farm production and may take advantage of the flexibility of individual schedules and experiences (Fisher, 2006; Fleischer & Tchetchik, 2005; Ollenburg & Buckley, 2007; Veeck et al., 2006). However, studies suggest that the economic benefits of agritourism for the farm household are not universal, as they may vary depending on the stage of the agritourism development (i.e., recent vs. established operations) and whether the agritourism farm is isolated or near other attractions (Busby & Rendle, 1999; Fisher, 2006; Fleischer & Tchetchik, 2005; Nickerson et al., 2001; Saxena et al., 2007; Veeck et al., 2006).

Although the economic benefits of agritourism at the farm level have received some attention in the literature, non-economic benefits, such as personal, family or social benefits, need more examination (Sharpley & Vass, 2006; Veeck et al., 2006; Nickerson et al., 2001). Agritourism has been suggested to provide an opportunity to improve the likelihood of the survival of the farm business, allowing the farm operator and their family to continue farming and enjoying their rural lifestyle (Ilbery et al., 1998; Ollenburg & Buckley, 2007; Sharpley & Vass, 2006). Nickerson et al. (2001) suggest that economic outcomes associated with agritourism may serve as gateways for achieving other non-economic (e.g., social) pursuits. More than the economics of the farming profession, being able to continue farming is associated with the personal value of “being a farmer” in terms of self-identity as well as of enjoying the practice of farming (Gasson, 1973). However, there is a lack of research on the role of agritourism in providing non-economic benefits to the farm household, especially in the form of goal attainment from the provider’s perspective.

2.2. Goals associated with agritourism development

Agritourism has been identified as a form of farm entrepreneurial diversification in North America and abroad (Barbieri et al., 2008; Ilbery, 1991; Ilbery et al., 1998), a consideration that is critical for the development of this study. Farmers developing or offering recreational services on their farms are considered [agricultural] entrepreneurs, thus they share entrepreneurial attributes (Barbieri & Mahoney, 2009; Nickerson et al., 2001). For example, entrepreneurs highly value their business independence, and most importantly for the purpose of this study, their entrepreneurial ventures are goal-driven.

Goals are internal representations of desired outcomes, events or processes (Austin & Vancouver, 1996) that govern individual and entrepreneurial behavior (Hornsby & Kuratko, 2002). A complex

arrangement of economic and non-economic goals drives the development of overall farm enterprise diversification and specifically agritourism (Barbieri, 2010; Barbieri & Mahoney, 2009; Bowler et al., 1996; McGehee & Kim, 2004; Nickerson et al., 2001; Ollenburg & Buckley, 2007; Turner et al., 2003). Some agritourism goals have been linked to the agricultural context of a given region, as well as to individuals and their positions in the household and business life cycle (Nickerson et al., 2001; Ollenburg & Buckley, 2007). The most common goals associated with agritourism include economic ones, such as compensating for fluctuations in agricultural income, generating additional revenues and expanding market share, as well as non-economic goals, such as keeping the farm in the family, developing a hobby, or enjoying the rural lifestyle (McGehee & Kim, 2004; Nickerson et al., 2001; Ollenburg & Buckley, 2007). That variety of goals encompasses a mix of typical entrepreneurial (Alsos, Ljunggren, & Pettersen, 2003) and farmer-specific goals, such as enjoying the life-style and the pride of being a farmer (Gasson, 1973; Getz & Carlsen, 2000; Rob & Burton, 2004).

Several studies have classified goals driving agritourism development into fewer dimensions or categories, the most predominant being the following four. The first goal dimension relates to the farm [household] profitability, such as stabilizing or increasing farm revenues and reducing farm debts (Barbieri, 2009, 2010; McGehee & Kim, 2004; Nickerson et al., 2001; Ollenburg & Buckley, 2007). The second goal dimension relates to external factors, including those related to responding to market opportunities and social bonding, such as the ability of the farm family to interact with customers and educate the public (Barbieri, 2009, 2010; McGehee & Kim, 2004; Nickerson et al., 2001). The third goal dimension relates to the farm household, such as keeping the farm within the family, their ability to continue farming and providing opportunities to keep the family together (Barbieri, 2009, 2010; Ollenburg & Buckley, 2007). The fourth goal dimension refers to personal pursuits, such as those related to the individual hobbies and interests of the farm operator, including their enjoyment of the rural lifestyle, retirement plans, or to retain their business independence (Barbieri, 2009, 2010; Ollenburg & Buckley, 2007).

Although important academic advances have been achieved regarding the goals driving farm enterprise diversification, and especially goals driving agritourism development, assessing the accomplishment of these goals (i.e., entrepreneurial success or failure) warrants further research. An exception is a study conducted in Canada that revealed that, among 20 entrepreneurial goals of agritourism providers, the goals with higher levels of accomplishment were: to provide a new challenge, to capitalize on an interest or hobby, and to interact with customers (Barbieri, 2010). Given that a complex set of economic (e.g., farm profitability, respond to market opportunities) and non-economic (e.g., family related, personal) goals drive agritourism development (Barbieri, 2009, 2010; McGehee & Kim, 2004; Nickerson et al., 2001; Ollenburg & Buckley, 2007), it is critical to assess the importance of agritourism in accomplishing goals as a framework for assessing the perceived benefits of agritourism for the farm.

3. Study methods

The study population was specified to include agritourism farms in Missouri, which were defined as those farms receiving visitors for recreational, leisure or educational purposes. The sample was drawn from two sources: (1) the Missouri Department of Agriculture (MDA) provided a list of farms affiliated with its agritourism and marketing programs, (2) an internet search for on-farm recreational activities available to visitors conducted by researchers using key words. In addition, snowball sampling was used to capture a larger number of respondents. Similar sampling

procedures have been used to collect information from agritourism and other diversified farms in North America due to the lack of a comprehensive list (Barbieri & Mahoney, 2009; Barbieri et al., 2008). The final study sample included 592 farms. However, it is worth mentioning that the study sample also included non-agritourism farms involved in direct sales, as they were included (without being able to be discriminated) in the MDA list.

A questionnaire addressing study objectives was developed via adaptation of instruments from previous studies in the areas of agritourism and farm enterprise diversification (Barbieri & Mahoney, 2009; Barbieri et al., 2008; Nickerson et al., 2001). A pre-test to ensure face validity was conducted with representatives of the Missouri Department of Agriculture Agribusiness Development Division. The questionnaire included 56 questions and collected information in the following areas: (1) farm land and ownership profile; (2) economic farm profile, including economic standing, gross sales and types of farm products; (3) characteristics of agritourism offerings, including number of years receiving visitors, types of agritourism activities offered and fees charged; (4) the role of agritourism in entrepreneurial goal accomplishment; (5) business marketing and managerial profile; and (6) farmer/farm household profile including socio-demographics and off-farm employment status.

Data were collected using parallel electronic and printed surveys with similar instructions, word choice and formatting to take advantage of the cost saving and efficiency benefits of a web-based questionnaire while continuing to provide paper copies for subjects with a lack of internet access or preference for the hard copy. Invitation letters/emails describing the purpose of the study, confidentiality and privacy procedures, instructions and participation incentives were sent during November 2008. A series of two postcards and four electronic reminders were used to encourage participation following Dillman's modified protocol (Dillman, Smyth, & Christian, 2009). The survey was closed on March 2, 2009, after being open for about four months. The survey produced 243 valid responses, representing a response rate of about half (43.6%), which is higher than similar studies with farmers engaged in agritourism activities (Barbieri & Mahoney, 2009; Nickerson et al., 2001; Ollenburg & Buckley, 2007). The composition of completed questionnaires between the printed ($n = 116$) and electronic ($n = 107$) formats was nearly evenly divided. Although no bias was expected due to different methods for data collection (Dillman et al., 2009), statistical comparisons conducted on key variables (i.e., farmland size, type of farm operation, total gross sales and number of generations in farming) revealed no significant differences between mail and online respondents ($p > .001$). A total of 164 cases were included for this study, after those not involved in agritourism (e.g., agritourism farms no longer in operation, farms involved only in direct sales, those from other states captured through snowball sampling) were removed.

Analyses for this study include both descriptive and inferential statistics. Descriptive statistics were used to develop a profile of respondents based on their farm household and business attributes and to examine the importance of agritourism in accomplishing 16 economic and non-economic goals, measured on a five-point Likert scale anchored in (1) Not Important and (5) Extremely Important. Those 16 economic and non-economic goals were chosen to represent the four goal entrepreneurial dimensions that are most dominant in the literature (Barbieri, 2009, 2010; McGehee & Kim, 2004; Nickerson et al., 2001; Ollenburg & Buckley, 2007): (1) Farm Profitability (e.g., decrease revenue fluctuations; enhance ability to meet financial obligations); (2) Market Opportunities (e.g., capture new customers; educate the public about agriculture); (3) Family Connections (e.g., enhance family quality of life; keep the farm in the family); and (4) Personal Pursuits (e.g., keep you active;

make money from a hobby/interest). Within each of those four dimensions, the individual goals examined are applicable to both the farm business and the farm household.

Multiple linear regressions were used to examine relationships between the characteristics of the farm household and business (independent variables) and the importance of agritourism for accomplishing each of the four goal dimensions (dependent variables): Farm Profitability; Market Opportunities; Family Connections; and Personal Pursuits. Six independent variables were included to describe the farm household and business. Farm household descriptors were: operator's age; household gross income; and percent of operator's time in off-farm employment. Farm business descriptors were: number of full-time year-round employees; number of years offering agritourism; and number of marketing methods used. Multicollinearity tests revealed no correlations among the independent variables. Dependent variables were the composite means of the overall importance of agritourism in accomplishing goals calculated by averaging the means of the goals comprising each of the four dimensions ($D1, D2, D3$ and $D4$). Cronbach's alpha within the four dimensions were greater than .60 suggesting strong internal reliability (Leech, Barrett, & Morgan, 2005; Nunnally, 1978).

4. Results

4.1. Profile of responding farmers and their farms

About one-half (46.6%) of respondents are younger than 55 years, which is similar to the average age (57.1 years) of Missouri farmers (USDA: NASS, 2007; Table 1). Over one-third (34.7%) of respondents have formal education in either agriculture (17.1%) or business (17.6%), and more than one-fourth (26.1%) have formal education in both agriculture and business. Consistent with the age

Table 1
Socio-demographic attributes of responding farm households.

Farm household attributes	%
Farm operator age ($n = 161$)	
34 years or less	4.9%
35–44 years	15.5%
45–54 years	26.2%
55–64 years	33.5%
65 years or more	19.9%
Educational background of the operator ($n = 153$)	
Agriculture	17.1%
Business	17.6%
Agriculture and business	26.1%
Other area	39.2%
Retirement status ($n = 155$)	
Retired from previous job	32.9%
Not retired	67.1%
Generations of family farmers ($n = 156$)	
First-generation farmers	48.8%
Multi-generation farmers	50.6%
Unknown	.6%
Farm household income in 2008 ($n = 143$)	
Less than \$25,000	8.4%
\$25,000–\$49,999	23.8%
\$50,000–\$99,999	30.0%
\$100,000–\$199,999	28.0%
\$200,000 or more	9.8%
Percent of time of operator's off-farm employment ($n = 154$)	
None (0%)	64.9%
1–14%	5.1%
15–40%	5.7%
More than 40%	23.8%

distribution of respondents, about one-third (32.9%) are retired from another occupation. Farm operators are nearly evenly divided between first-generation (48.8%) and multi-generation (50.6%) farmers. More than one-third (37.8%) of respondents have annual gross household incomes of \$100,000 or more, and 64.9% exclusively work on the farm business.

Respondents indicated an average farm size of 333.1 acres, which is larger than the 269-acre average for Missouri farms (USDA: NASS, 2007). Nearly one-third (30.1%) of respondents farm less than ten acres, while less than one-tenth (9.8%) farm 500 acres or more. The majority (67.3%) of farms are located more than thirty miles from an urban area of at least 50,000 people and 72.2% are located over or within one mile of a paved road or highway. Almost two-thirds (65.0%) of the responding agritourism farms are family operated, which is lower than the 87.9% reported in Missouri (USDA: NASS, 2007). The vast majority (85.2%) of respondents produce agricultural products for commercial sale on their farms. A relatively large proportion of farms offering agritourism activities are involved in traditional agriculture producing commodity crops (19.5%) or raising livestock (26.0%). The majority of respondents grow specialty crops (58.4%) and 13.6% raise rare or non-traditional animals.

Responding farms reported hiring nearly one-dozen employees ($M = 11.7$) on average, with most being part-time seasonal employees ($M = 5.2$; Table 2). Less than one-third (28.3%) of agritourism farms reported gross sales of less than \$10,000, while nearly one-fourth (22.4%) indicated sales of at \$250,000 or more. While for the majority of farms (61.9%) recreation does not contribute directly to farm sales (0%), for some operations (8.4%) it accounts for 60% or more of their sales. Farm operators promote their agritourism offerings in many ways, including both traditional (e.g., paid advertisements in media) and more innovative methods (e.g., blogs). All agritourism providers (100.0%) who responded to

the survey are using some type of marketing tool and about one-half (51.6%) use at least five different marketing tools.

4.2. Types of agritourism offerings and visitors' attributes

Responding Missouri agritourism farms offer a large variety of recreational activities, ranging from tours and wineries to wildlife observation and festivals. The activities most commonly offered by respondents are tours, including those that are educational (50.0%) and leisure-based (48.8%), recreational self-harvest (37.7%), such as u-pick fruits or vegetables, and observation or participation in agricultural processes (34.6%), such as a cider mill (Table 3). Other popular activities among respondents are educational activities, including classes, seminars or workshops (30.9%), festivals and other similar events (30.9%), and animal related displays such as petting zoos (29.6%). A cumulative index of the agritourism offerings (range = 1–20) revealed that respondents offer a diverse spectrum of activities. About one-third (30.1%) of respondents offer three or four activities for visitors and 34.6% offer at least five. The most diversified farms offer thirteen recreational options for visitors ($M = 3.7$; $Mdn = 3.0$). Nearly two-thirds (64.6%) of agritourism farms offer at least one hospitality service, being the most common food and beverage services, such as on-farm dining (53.0%) and hosting-related weddings, private parties and corporate or business retreats (36.0%).

Collectively, responding agritourism farms estimated they received more than 1.2 million visitors (1,203,406) in 2008, with a median value of 425 visitors (Table 4). Various types of visitors were identified, including senior citizens, families and organized groups. Senior citizens (73.5%) and families with young children (73.5%) are the most frequent visitors, while school groups (48.1%) are among the least frequent. About one-fifth of respondents

Table 2
Farm gross sales and recreation-related sales percentages and perceived importance for the continued operation of the farm.

Economic and business indicators	%	M
Employees by categories ($n = 138$)		
Full-time-year round		2.7
Full-time seasonal		2.6
Part-time year-round		1.2
Part-time seasonal		5.2
Total		11.7
Farm gross sales in 2008 ($n = 152$)		
Less than \$10,000	28.3%	
\$10,000–\$49,999	23.0%	
\$50,000–\$249,999	26.3%	
\$250,000 or more	22.4%	
Mean ^a		4.0
Recreation-related sales percentage ($n = 155$)		
None (0%)	61.9%	
Less than 30%	23.2%	
30%–59%	6.5%	
60% or more	8.4%	
Sales percentage (Mean)		13.1
Number of marketing methods used ($n = 160$)		
None	.0%	
One to two	20.1%	
Three to four	28.3%	
Five to six	32.1%	
Seven or more	19.5%	
Mean		4.6

^a Measured in an ordinal scale where: (1) Less than \$1000; (2) \$1000–\$9999; (3) \$10,000–\$49,999; (4) \$50,000–\$99,999; (5) \$100,000–\$249,999; (6) \$250,000–\$499,999; (7) \$500,000–\$999,999; (8) \$1,000,000 or more.

Table 3
Types and diversity of recreational activities and hospitality services offered by Missouri farms.

Recreational and hospitality offerings	%
Most common types of recreational activities ($n = 162$) ^a	
Educational tours	50.0% ^b
Leisure tours (e.g., orchard walks)	48.8%
U-pick or U-harvest	37.7%
Observation/participation of agricultural processes	34.6%
Classes, seminars or workshops	30.9%
Festivals, events and shows	30.9%
Petting zoos or farm animal displays	29.6%
Field rides (e.g., hay rides, tractor rides)	26.5%
Holiday-related activities	19.1%
Winery	17.3%
Pumpkin patch	17.3%
Corn maze or other mazes	15.4%
Wildlife observation	13.6%
Hiking or biking	12.3%
Number of recreational activities offered ($n = 162$)	
One or two activities	35.3%
Three or four activities	30.1%
Five or six activities	21.8%
Seven or more activities	12.8%
Mean	(3.7)
Median	(3.0)
Range	(1–13)
Overall hospitality involvement ($n = 164$)	
All hospitality categories	64.6%
Food services	53.0%
Hosting services	36.0%
Lodging and accommodations	15.2%
Other services	10.4%

^a Activities with an occurrence of 10% of less are not reported.

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

Table 4
Number and types of visitor, number of years in agritourism and fees charged.

Visitors	Total
Number of visitors for 2008 – estimated (<i>n</i> = 152)	
Total number of visitors	1,203,406
Average visitors per farm (mean)	7917
Median	425
Range (min.–max.)	(0–350,000)
Types of visitors (<i>n</i> = 162)	
Seniors	73.5% ^a
Families with children 12 or younger	73.5%
Couples without children	72.2%
Families with teens or young adults	66.7%
Organizations/groups	61.1%
School groups	48.1%
Others	16.0%
Number of years offering agritourism (<i>n</i> = 163)	
Less than two years	19.6%
Three to five years	20.2%
Six to nine years	19.6%
Ten years or more	40.6%
Farms charging agritourism fees (<i>n</i> = 161)	
Charge at least one fee	58.4%
Do not charge any fees	41.6%

^a Percentages may sum to more than 100% as respondents were able to select more than one.

(19.6%) have entered into agritourism in the last two years, while 40.6% have been receiving visitors for more than ten years, showing stability within the farm business and likely an increase of public awareness of farm offerings. More than one-half (58.4%) of farms charge at least one type of fee to enjoy their recreational activities while 41.6% offer these experiences for free.

4.3. Agritourism assessment – the provider perspective

Overall, farmers engaged in agritourism are positive about their agritourism experience. Two-thirds (66.4%) of respondents indicated that they would recommend that others develop agritourism on their farms, while only a very small proportion (2.0%) would not recommend this method of diversification (Table 5). Two-thirds (66.0%) of those currently offering agritourism on their farms plan to add more activities in the future. Although the majority of responding farms do not generate income directly from agritourism, they perceive that their recreational activities are important to very important (*M* = 3.3) to the continued operation of their business. However, some of the more specialized agritourism activities, such as hunting and fishing (*M* = 1.6) or high-input options like lodging (*M* = 1.9) and food services (*M* = 2.1), are not perceived as important for the continued operation of the business. More than one-third (36.2%) of respondents reported that their profits significantly increased after adding agritourism activities on their farms, and an additional 28.2% of respondents saw a slight increase in their profits. Less than one percent (.6%) of respondents indicated that their profits decreased. Nearly one-fourth (21.1%) of farms reported a profit increase of 100% or more, and on average respondents reported a profit increase of 55.6%.

Results show that agritourism benefits providers in the accomplishment of their economic and non-economic entrepreneurial goals (Table 6). For the majority of respondents, agritourism appears to be very or extremely important to capture new customers (70.4%; *M* = 4.1), to educate the public about agriculture (66.9%; *M* = 3.9), to enhance family quality of life of the farm family (66.4%; *M* = 3.8) and to retain current customers by providing improved or additional services (60.0%; *M* = 3.7). In contrast, over

Table 5
Indirect indicators of overall agritourism satisfaction.

Indicators of agritourism satisfaction	%	M
Willingness to recommend agritourism development (<i>n</i> = 152)		
Would recommend agritourism to others	66.4%	
Would not recommend agritourism to others	2.0%	
Uncertain about recommending	31.6%	
Planning to add more agritourism activities (<i>n</i> = 159)		
Plan to add additional agritourism activities	66.0%	
Do not plan to add additional agritourism activities	34.0%	
Perceived importance of agritourism for the farm (<i>n</i> = 155) ^a		
Recreational, entertainment and tourism activities		3.3
Hunting and fishing		1.6
Lodging and accommodations		1.9
Restaurant, catering and food services		2.1
Overall perceived importance (mean)		2.2
Nature of change in profits after agritourism development (<i>n</i> = 162)		
Significantly increased	36.2%	
Slightly increased	28.2%	
Did not change	35.0%	
Slightly decreased	.0%	
Significantly decreased	.6%	
Profit increase after agritourism development (<i>n</i> = 90) ^b		
1%–10%	27.8%	
11%–30%	23.3%	
31%–99%	27.8%	
100% or more	21.1%	
Percent increase (mean)		55.6%

^a This is measured using a 5 point Likert Scale anchoring in (1) = Not important and (5) = Extremely important.

^b Data for profit decreases not reported due to low number of responses in the category.

one-third of responding farms stated that agritourism is not as important for reducing the effects of catastrophic events (38.9%; *M* = 2.6) and providing employment for family members (33.4%; *M* = 2.8).

Organized into the four dimensions considered in this study, agritourism seems to be most important to satisfy Market Driven goals (*M* = 3.70, *SD* = 1.050), especially for capturing new customers (*M* = 4.05, *SD* = 1.190) and educating the public about agriculture (*M* = 3.90, *SD* = 1.075) as Table 7 shows. Agritourism also satisfies goals related to Personal Pursuits (*M* = 3.33, *SD* = 1.135) and Family Connections (*M* = 3.26, *SD* = 1.268), dimensions that include mostly non-economic goals. Respondents indicated that agritourism is important for the farm family, specifically for enhancing the quality of life of themselves and their family members (*M* = 3.83, *SD* = 1.251) and for keeping the farm in the family (*M* = 3.15, *SD* = 1.612). Similarly, agritourism brings several personal benefits to farm operators, such as keeping the farmers active (*M* = 3.60, *SD* = 1.384) and keeping them farming (*M* = 3.42, *SD* = 1.484), which are two goals usually associated with the practice of farming. The least important benefit of agritourism relates to the Firm Profitability goal dimension (*M* = 3.16, *SD* = 1.237), although respondents considered agritourism important for decreasing revenue fluctuations associated with the farm business (*M* = 3.34, *SD* = 1.348) and enhancing their ability to meet financial obligations, such as debts (*M* = 3.30, *SD* = 1.518).

4.4. Farm attributes associated with the perceived benefits of agritourism

Simultaneous multiple linear regressions resulted in four significant models indicating that different farm business and household attributes are associated with the provider's perceived benefits of agritourism in the four goal dimensions examined in

Table 6
Perceived importance of agritourism in accomplishing various entrepreneurial goals.

Goals	n	Not important	Somewhat important	Important	Very important	Extremely important	M ^a
Capture new customers	152	4.6%	7.9%	17.1%	19.7%	50.7%	4.1
Educate the public about agriculture	150	3.3%	6.6%	23.2%	30.5%	36.4%	3.9
Enhance family quality of life	148	7.4%	8.8%	17.4%	26.8%	39.6%	3.8
Better serve current customers	149	9.3%	6.0%	24.7%	27.3%	32.7%	3.7
Keep you active	153	14.4%	5.8%	20.1%	25.3%	34.4%	3.6
Increase direct-sale of value-added products	145	17.1%	8.9%	15.1%	24.7%	34.2%	3.5
Additional revenues to keep farming	149	18.1%	11.3%	13.3%	25.3%	32.0%	3.4
Increase direct-sale of other products	149	20.0%	10.0%	15.3%	22.0%	32.7%	3.4
Decrease revenue fluctuations	153	13.6%	14.3%	20.1%	28.6%	23.4%	3.3
Enhance ability to meet financial obligations	154	18.7%	15.5%	14.2%	20.0%	31.6%	3.3
Keep the farm in the family	148	26.9%	10.7%	14.1%	16.8%	31.5%	3.2
Better utilize farm resources	147	22.3%	10.1%	26.4%	19.6%	21.6%	3.1
Make money from a hobby/interest	148	26.9%	10.1%	23.5%	17.4%	22.1%	3.0
Off-season revenue generation	149	28.0%	14.7%	16.7%	19.3%	21.3%	2.9
Provide jobs for family members	143	33.4%	10.4%	20.1%	15.3%	20.8%	2.8
Reduce impact of catastrophic events	148	38.9%	9.4%	20.1%	16.8%	14.8%	2.6

^a Measured on a 5-point Likert Scale anchoring in (1) = Not important and (5) = Extremely important.

this study. The first significant model ($R^2 = .160, p = .005$) shows that the number of years in agritourism ($\beta = -.203, p = .039$) was negatively associated with goals related to Market Opportunities, suggesting that the importance of agritourism in retaining and capturing new markets or clients vanishes with time (Table 8). This model also shows that the number of marketing methods used to promote farm offerings ($\beta = .349, p < .001$) was positively associated with the Market Opportunities goal dimension, suggesting that agritourism may be used as an advertising tool, result deserving further examination in future studies.

The second significant model ($R^2 = .264, p < .001$) shows that the percentage of time the operator devotes to a job off the farm ($\beta = -.186, p = .042$) and the number of full-time year-round farm employees ($\beta = -.212, p = .024$) were negatively associated with

Table 7
Perceived importance of agritourism to accomplish various entrepreneurial goals by goal dimensions.

Goals by Dimensions ^a	n	M ^b	SD
Farm profitability ($\alpha = .89$)			
Decrease revenue fluctuations	153	3.3	1.3
Enhance ability to meet financial obligations	154	3.3	1.5
Better utilize farm resources	147	3.1	1.4
Off-season revenue generation	149	2.9	1.5
Reduce impact of catastrophic events	148	2.6	1.5
Overall mean		3.2	1.2
Market opportunities ($\alpha = .78$)			
Capture new customers	152	4.1	1.2
Educate the public about agriculture	150	3.9	1.1
Better serve current customers	149	3.7	1.2
Increase direct-sale of value-added products	145	3.5	1.4
Increase direct-sale of other products	149	3.4	1.5
Overall mean		3.7	1.0
Family connections ($\alpha = .79$)			
Enhance family quality of life	148	3.8	1.3
Keep the farm in the family	148	3.2	1.6
Provide employment for family members	143	2.8	1.5
Overall mean		3.3	1.3
Personal pursuits ($\alpha = .68$)			
Keep you active	153	3.6	1.4
Additional revenues to keep farming	149	3.4	1.5
Make money from a hobby/interest	148	3.0	1.5
Overall mean		3.3	1.1

^a Accomplishment categories were constructed based on the Barbieri (2009) goals factor model.

^b This is measured using a 5 point Likert Scale anchoring in (1) = Not important and (5) = Extremely Important.

the Farm Profitability goal dimension. These results suggest that to make agritourism a profitable venture, there is a need for full-time commitment from the farmer and farm employees. However, it is pertinent to acknowledge that the lesser perceived profitability of agritourism in farms with larger number of employees may be also indicating a greater emphasis on traditional farming (as compared to agritourism), a situation that was not controlled in this study. In contrast, the number of marketing methods showed a positive association ($\beta = .447, p < .001$) with Farm Profitability.

The third model ($R^2 = .199, p = .001$) showed that the age of the primary farm operator ($\beta = .191, p = .045$) and the number of marketing methods used to promote farm offerings ($\beta = .302, p < .001$) were positively associated with the importance of agritourism in accomplishing goals related to Personal Pursuits. Those results are not surprising, as the farmer ages and has less family economic obligations, the more awareness he or she may grant to the accomplishment of personal pursuits. This model also indicates that the number of full-time year-round farm employees ($\beta = -.224, p = .023$), the number of years in agritourism ($\beta = -.217, p = .025$) and the number of marketing methods used to promote farm offerings ($\beta = .302, p = .001$) were negatively associated with the Personal Pursuits goal dimension.

In the last significant model ($R^2 = .121, p = .035$), the number of marketing methods used to promote farm offerings ($\beta = .302, p = .002$) was the only independent variable significantly associated with the importance of agritourism in accomplishing the goals

Table 8
Multiple linear regressions of farm and household characteristics on the importance means for goal accomplishment.

Independent variables	DV – Agritourism importance by goal dimensions ^a (standardized β and significance)			
	D1	D2	D3	D4
Operator age	-.007	.052	.191**	-.068
Household income	.016	.098	.133	.008
Operator off-farm employment	-.091	-.186*	-.041	-.129
Full-time year-round employees	-.038	-.212**	-.224**	-.137
Years in agritourism	-.203**	-.026	-.217**	-.070
Number of marketing methods used	.349***	.447***	.302**	.302**
p Value	.005	.001	.001	.035
R ²	.160	.264	.199	.121
Adjusted R ²	.111	.221	.153	.070

* $p < .10$, ** $p < .05$, *** $p < .001$.

^a (D1) Market Driven, (D2) Farm Profitability, (D3) Personal Pursuits, (D4) Family Connections.

associated with the Family Connections dimension, again suggesting the positive role of marketing and advertising in the perceived importance of agritourism in accomplishing entrepreneurial goals even within the realm of the farm family.

5. Concluding remarks and future research

5.1. Discussion and implications

Study results show that agritourism farms in Missouri are still in the business of agricultural production, and are not maintaining their land exclusively for landscaping a tourism destination, as their average farm size is very similar to the average acreage farmed and the majority of agritourism farms generate products for commercial sale. However, the main focus of these operations is not on the commodity crops traditionally associated with Missouri production agriculture but on the production of specialty crops. These results make sense given that specialty crops are better suited to provide unique and experiential recreational opportunities for visitors as compared to the large-scale monoculture typical of commodity production. The even distribution between first and multi-generational farm families among respondents suggests that previous farming experience should be viewed as neither an impediment nor an advantage to developing agritourism on the farm. The lower average age of respondents as compared to the overall Missouri statistic may suggest either the incorporation of new skills within a younger generation of farmers or the use of farm diversification to facilitate succession of the business among family members. The prevalence of families with young children among farm visitors (73.5%) suggests an important relationship with farm offerings, specifically those friendly to the youngest visitors, such as petting zoos, mazes and field or hay rides, all of which are relatively prevalent in the sample used in this study. Community organizations and school groups are also common visitors to agritourism farms, further supporting the importance of farm offerings for educating the public (Barbieri et al., 2008; Ollenburg & Buckley, 2007).

The majority of farms reported that their agritourism activities do not contribute directly to farm sales, which is likely due to the large proportion of farms that do not charge a fee for activities. However, agritourism activities were widely perceived as being important for the continued operation of the businesses. Furthermore, the majority of respondents reported an increase in farm profits since adding agritourism to their operations. These results may be suggesting that the economic benefits derived from agritourism are not related directly to the activities, but to the sale of other farm products such as value-added items (Barbieri et al., 2008), especially considering that a very large proportion of respondents are involved in this entrepreneurial line with a diversity of products, ranging from processed foods and wine to decorative items. It may also suggest some beneficial synergies between agritourism and other farm enterprises that are not yet clearly understood (Barbieri, 2009).

Results show that operators perceive that agritourism brings several benefits to the farm household and business, especially that it is important to capture new customers, educate the public about agriculture, and enhance the quality of life for the farm family. The emphasis on attracting new customers is critical as it reinforces the notion that agritourism is a successful strategy for bringing visitors to the farm, who may purchase other farm products in addition to bringing recreation-related revenues. Educating the public about agriculture and enhancing the quality of life for the farm family speaks to the importance of promoting and preserving the rural and agricultural lifestyle for those living on the farm and in the surrounding area (Barbieri & Mahoney, 2009). Different from other studies (Fisher, 2006; Ollenburg & Buckley, 2007), this study shows

that agritourism in Missouri is not as important for reducing the impact of catastrophic events, challenging the belief that agritourism is a coping mechanism for poor harvests or other financial hardship of the farm business. Results also support agritourism as not being greatly important for providing employment for family members (Barbieri & Mahoney, 2009), a result that was not expected considering the desires of farmers to maintain their rural and agricultural lifestyle for themselves and their families, as has been previously suggested (Veeck et al., 2006).

In organizing the sixteen examined goals into four dimensions, this study showed that agritourism is perceived as most important for accomplishing Market Driven goals, suggesting that the economic role of agritourism for farms should not be limited to direct revenues from visitors, but should also include economic marketing benefits in terms of increased awareness and market share of farm products and services, and branding benefits, among others. However, study results were somewhat unexpected in terms of the benefits of agritourism related to Farm Profitability goals, such as increasing revenues, paying debts and minimizing financial risks for the farm business. While still important to farm operators, financial goals appear somewhat disconnected from the economic gains attributed to developing agritourism activities identified in previous studies (Fleischer & Tchetchik, 2005; Ollenburg & Buckley, 2007; Veeck et al., 2006). These results suggest that policies and initiatives encouraging farm enterprise diversification through agritourism should not only emphasize its role as revenue generator, but primarily as a marketing tool to create overall public awareness, potentially boost sales of the farm products and produce several personal and family benefits. At the same time, messages encouraging the adoption of agritourism should also be framed not to reflect or over-estimate the role of agritourism for mitigating risks and coping with catastrophic events associated with agriculture.

Results showed that although several farm business and household characteristics were related to the perceived benefits of agritourism, these farm business and household characteristics were not found to be consistently associated across the four goal dimensions. The number of marketing methods used to promote farm offerings was significantly associated with all four goal entrepreneurial dimensions, suggesting that the critical role of marketing extends beyond increasing revenues (sales) and advertising farm products, to facilitate the accomplishment of personal and family related pursuits. Increased marketing activity and use of other techniques for raising public awareness of farm offerings should attract more visitors to the farm. Hence, it is expected that greater numbers of farm visitors are also likely to increase farm sales and income, as well as profitability. Greater advertising efforts could also grow the farm business to maintain the operation for future generations, or in response to lifestyle considerations of those living and working on the farm (Veeck et al., 2006). The negative relationship between the number of years offering agritourism experiences and the importance of those activities for meeting goals related to market opportunities and accomplishing personal pursuits is very important for promoting agritourism. That relationship is notable as efforts for filling a market niche with agritourism activities wanes and the operation becomes entrenched in a given aspect of the industry. It was not surprising to find that the older the farm operator, the higher their perceived importance of agritourism for accomplishing their personal goals when considering the family life cycle. Operators at or above the average age (55 years or older) are likely parenting adult children and have somewhat lower time-related, social and economic barriers to pursuing their personal interests than individuals in earlier stages of the family life cycle.

The associations found between different farm household and business attributes and the perceived benefits of agritourism suggest opportunities for tailored promotional messages regarding the entrepreneurial development of agritourism. For example, promotional efforts can emphasize the role of agritourism as a strategy to capture new markets, for that outcome seems more evident during early stages of the entrepreneurial development. Also, promotional efforts targeted for certain audiences (e.g., hobby farmers, those adopting an agrarian lifestyle) should emphasize the adoption of agritourism as a strategy for accomplishing various personal pursuits rather than goals in a single area (e.g., increasing profitability). Specifically, developing agritourism activities may be presented as a very good way for older individuals to achieve their personal goals related to farming and a rural lifestyle as a second career choice or retirement activity. Furthermore, messages intended for individuals thoroughly entrenched in the existing agritourism industry should be built upon alternative business strategies, as longevity in the industry was negatively associated with the importance of accomplishing goals of the farm operator, household and business.

5.2. Insights for future research and study limitations

While the results of this study provide insight into both the characteristics of Missouri agritourism farm operators and their perceptions of the importance of agritourism in goal accomplishment, this study also sheds light on opportunities for future research. Study results suggest that additional research is needed to comprehensively address the economic impact of agritourism on the farm, especially regarding marketing benefits. Future studies should evaluate the impact of agritourism on market share in terms of the number of clients captured, farm products awareness and branding, and cross sales of other farm products by recreational visitors. The number of household and farm characteristics associated with the perceived importance of agritourism on personal pursuits suggests that a closer look should be taken to the role of agritourism in personal aspirations as compared to economic purposes (i.e., market development and firm profitability). For example, whether differences exist in the level and extent of agritourism (e.g., number of visitors, number of activities) and the operator characteristics (e.g., age) between those agritourism providers primarily motivated by personal drivers and those who are primarily economically driven should be explored in greater detail. In addition, results suggest that further examination is needed to assess agritourism farms with different number of employees.

Research into agritourism from stakeholder perspectives beyond the farmer should also be considered. While farm operators may perceive agritourism as an important avenue for accomplishing farm goals, and the accomplishment of those goals as a benefit to themselves, their families and their farms, those individuals are not alone in the industry. A great opportunity exists for future research exploring the agritourism industry from visitor and stakeholder perspectives. The marketing methods used to promote farm offerings, as well as the offerings themselves, could be strengthened with the support of academic research on the motivations of farm visitors. In addition, opportunities for future academic research exist in terms of the agritourism industry in both Missouri and North America, where the level of understanding is somewhat limited. Definitions of agritourism vary greatly in terminology and label, as well as with respect to the activities offered. While most definitions agree that agritourism must occur on a farm producing items for commercial sale, research into visitor perceptions of the cultural and colloquial definition of agritourism are lacking (Barbieri & Mahoney, 2009; Fleischer & Tchetchik, 2005; Ilbery, 1991; Ilbery et al., 1998; Phillip et al., 2010; Veeck et al., 2006).

One of the primary study limitations relates to the generalizability of study results. Following the generalization criteria stated by Shadish, Cook, and Campbell (2002), study results could be generalized with caution to other Missouri agritourism farms, especially as the sample could be under-representing certain types of farms (e.g., with presence on the internet or more proactive toward marketing). Thus, it is recommended that agencies and organizations within Missouri (e.g., Missouri Department of Agriculture and the Missouri Division of Tourism) partner to inventory farms engaged in agritourism. Developing such an inventory will assist in strengthening awareness among both the public and other providers of available opportunities, as well as facilitating two-way communication among all stakeholders.

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Appendix. Supplementary material

Supplementary material related to this article can be found at doi:10.1016/j.tourman.2011.02.005.

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