

Diversification through Agritourism in a Changing U.S. Farmscape

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In recent decades, agriculture in the U.S. has undergone a major shift from many small-medium sized farms and ranches to the majority of revenues emanating from a small share of increasingly larger farms and ranches. There have been many benefits from this change in the American farmscape, such as lower costs of production from economies of scale and technological advances. However, this evolution of the agricultural sector has left many rural communities that were once supported by mid-sized farms and ranches with the new challenge of a shrinking economic base. Along with a changing farm structure, rural communities in general have experienced less employment opportunities, and thus, struggle to hold on to their population. This leads to a lower tax base and other community development issues. Due to these challenges, an increasing number of small- and medium-sized farms and ranches have looked toward diversifying their agricultural businesses through agritourism to create alternative revenue streams and create employment opportunities appropriate for family or community members. The diversity of agritourism activities and the growing public interest in food makes this diversification strategy particularly appealing to producers across the U.S. who are able to cater their agritourism activities in a way that leverages the value the traveling public places on a variety of community's location- or their own farm-specific assets.

Research on agritourism in the U.S. has been relatively light compared to other developed countries, such as Europe. For example, the changing landscape makes it interesting to explore how different locations throughout the US are seeing agritourism change and grow. As another example, there is little work exploring the differences in demand for agritourism across different travelers seeking different activities. For those working with farmers and ranchers in the West, it may be interesting to understand the impact of place-based factors on the adoption or success of agritourism enterprises, leading one to consider the diversity of opportunities or challenges agritourism entrepreneurs encounter. This information is likely of interest to the producers themselves, but also, the rural communities, policy makers, and economic development and tourism practitioners who want to encourage more agritourism and support this increasingly popular and influential rural economic sector.

This article seeks to provide a general overview of trends in the agritourism industry and to review some emerging literature on the topics noted in the previous paragraph. The data for this work was gathered partially from secondary sources (i.e. the USDA's Census of Agriculture), as well as from a survey on agritourists in the Western U.S. and an additional producer survey on Californian and Coloradan agritourism farms and ranches. Some aspects of this article focus on the western U.S., and at times specifically on California and Colorado, which are particular regions of interest for studying agritourism, but many of the findings can be generalized to the rest of the U.S. In the following sections, the article examines 1) general industry trends, 2)

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importance of community, location, and farm attributes, and lastly 3) a look at some interesting aspects of agritourism producers in California and Colorado.

Trends in Agritourism

While the growth and success of agritourism varies across regions and farm/ranch types, the number of agritourism farms and ranches in the contiguous U.S. grew by roughly 64% from 2002-2012 according to the 2012 USDA Census of Agriculture. In relative terms, this translates to a 48% increase in the percent of farms/ranches with agritourism from 2007-2012, however, the total percent of farms and ranches with agritourism in the U.S. is still relatively low at 1.6%, signaling potential for further growth. Average agritourism revenues per farm were down about 13% in 2012 from what they were in 2007, but this signal may be a moving target as the definition of agritourism activities has varied across the years in the Census of Agriculture questionnaire. Nonetheless, the drop in activity may signal a need for more business support and better market analysis information to guide pricing and marketing strategies. Although the drop in revenues could be a result of a declining economy in 2012, the literature actually suggests agritourism is an inferior good, meaning as incomes decrease consumers substitute towards less expensive alternatives like agritourism (compared to other travel alternatives).

Figure 1

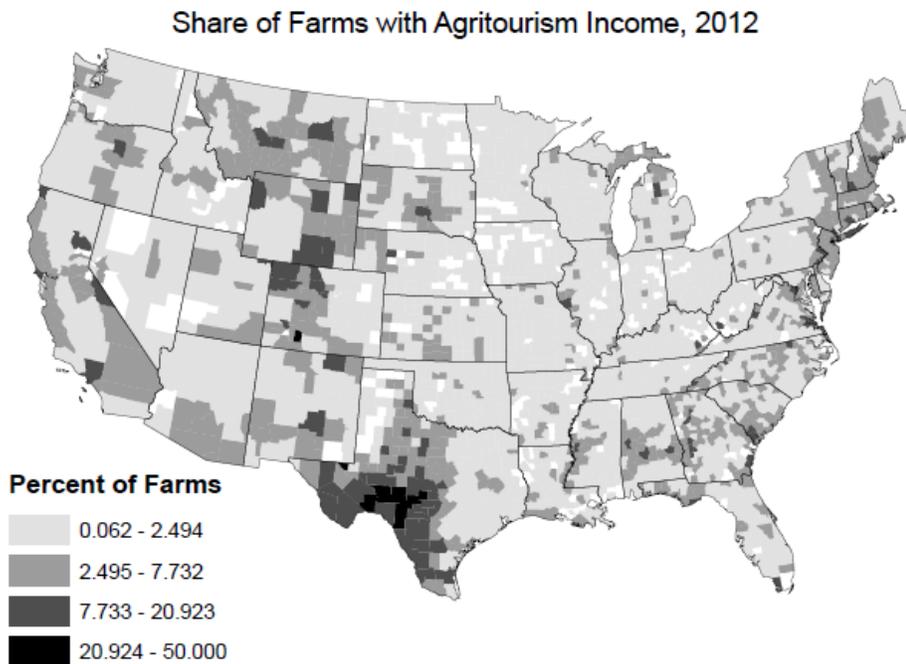


Figure 1 shows the percent of farms and ranches reporting some agritourism revenues among the contiguous U.S. The highest concentrations of agritourism enterprises appear to be located in Texas, the Rocky Mountain States, and to a lesser extent, New England and California. Note this map shows the share of farms participating in agritourism and does not show where the most agritourism enterprises are in absolute numbers, so those areas with many farms may not show a high share of overall agritourism activity (if significantly outnumbered by ag operations who do not participate).

It is interesting to note that these concentrations exist in both rural and urban counties where the pressures to diversify an agricultural business may be very different, suggesting a wide array of market and community tourism conditions where growing agritourism may be a good fit for very different types of enterprises and communities.

Not surprisingly, Table 1 (column 2) shows that in terms of absolute numbers, the larger agricultural states with the largest populations or higher dependence on an agricultural economic base tend to have the most agritourism farms. Yet, the New England states have the highest share of farms participating in agritourism in the contiguous 48. These densely populated states are an interesting juxtaposition to Wyoming and Montana, both of which are extremely rural and have the lowest population densities in the U.S., excluding Alaska.

Table 1-Highest Activity of Agritourism by Share and Number of Farms Participating, Average Revenue per Participating Farm and Total Agritourism Revenue by State

State	AgTrsm (Share of Farms)	State	AgTrsm Farms	State	Average AgTrsm Revenue (\$,000's)	State	AgTrsm Revenue (\$,000's)
RI	5.47%	TX	7,775	NJ	\$ 53.07	TX	\$ 132,864
NH	4.33%	CA	1,699	UT	\$ 46.70	CA	\$ 64,520
CT	3.97%	NC	1,135	MA	\$ 41.93	NY	\$ 31,250
WY	3.83%	KS	1,000	CT	\$ 40.07	CO	\$ 28,240
NJ	3.83%	GA	944	CA	\$ 37.98	GA	\$ 26,044
MA	3.70%	CO	864	NY	\$36.46	PA	\$ 24,677
ME	3.30%	NY	857	PA	\$ 33.85	MT	\$ 20,310
TX	3.12%	MO	844	AZ	\$ 32.73	MI	\$ 18,995
MT	2.59%	OK	840	CO	\$ 32.69	NJ	\$ 18,416
MD	2.50%	IL	834	WY	\$ 31.62	NC	\$ 17,625

Let's consider how agritourism drivers may vary across the US. For example, the pressure to diversify in New England could be driven by the threat of development pressures related to urban sprawl, or on a positive note, the opportunity to take advantage of the large population and traveler spending dollars in the region. In contrast, the motivation for farmers and ranchers in the West could be more strongly related to taking advantage of the natural resource base and public lands of the West, as well as the related demand for hunting, fishing, and other outdoor activities. But, the Western region may also face the threat of long travel distances and remote rural areas that simply see agritourism as a means to create economic opportunities where there otherwise were none (Nickerson, 2001; Van Sandt et al, 2016).

As expected, the majority of the states bringing in the most agritourism revenue also have the greatest number of farms reporting some agritourism activity. One might assume that the popular activities across these states vary greatly. Perhaps Texas, Colorado, and Montana enterprises may be focused on outdoor recreation, including hunting or fishing, while California and New York have regions known for their wineries and artisanal foods, and yet other regions may focus on agricultural entertainment (pumpkin patches), events (farm dinners and tours) or education (farm classes). The contrast in the nature of activities motivates the idea that

agritourism can be a viable diversification strategy to a wide array of farms and ranches across the U.S.

While gross agritourism revenues may be a good indicator of the absolute size of a state's agritourism industry, the average revenue per agritourism farm/ranch in each state is a better metric of how intensely farms and ranches that participate in agritourism focus on growing that part of their business. The top ten states with the highest average agritourism revenue per farm are located in the Western and North Atlantic regions; note there are no Midwestern or Southern states in the top ten. One might assume this relates to differential regional demand for agritourism, but it may also be that farms in the Midwest and South remain focused on more traditional agricultural models of production.

Although average revenues that range from \$30,000-50,000 may seem small when one considers that many commercial farms gross more than \$350,000 in annual sales, it may represent enough revenue to support another family member receiving a salary for their contributions (among mid and large farms), or a means to diversify cash flows for smaller farms and ranches. In addition, it should be noted that these numbers are simply the dollars spent at the agritourism business, so for communities, the spillovers and multipliers from these farm-based agritourism activities may be significantly higher leading to increased economic growth for the entire local community.

Taking a closer look at the county-level agritourism activity across the contiguous 48 states, several counties across the U.S. have significant and well established or budding agritourism industries (refer to Figure 1 for a visual guide). Napa County, CA, generated the highest agritourism gross revenue in 2012 bringing in almost \$24 million. Although not all counties have the ability to leverage the reputation of world-class wines, several other counties are high in valued natural amenities, such as Colfax, NM (\$5.4 mil), Worcester, MA (\$5.3 mil), and Weber, UT (\$5.2 mil). Accordingly, several regions have demonstrated the ability bring significant agritourism revenues into their communities through a variety of other activities/attractions.

While revenues do not indicate a significant level of activity yet, several other counties have shown substantial growth in the number of farms/ranches with agritourism between the most recent Ag Census reporting periods. Between 2007 and 2012, Avery County, NC, Okmulgee County, OK, and Polk County, OK, reported increased activity in the number of farms and ranches reporting some agritourism revenue (40%, 23%, and 18%, respectively). This underscores the dynamic nature of the agritourism industry, and the potential value in identifying emerging agritourism clusters and areas where technical assistance to support these diversifying enterprises may be building.

Leveraging Community, Location, and Farm Strengths

Much of the literature on agritourism published thus far has revolved around identifying motivations to adopt agritourism. As a quick summary, some of the motivations noted in the literature include reducing risk from market fluctuations, providing employment opportunities for family members, and generating more revenue overall (Nickerson et al, 2001; McGehee and Kim, 2004; Philip et al, 2010; Tew and Barbieri, 2012). There are also more complex issues at play such as farmers feeling pressured to maintain their agricultural status or offset increasing property taxes due to land values increasing in those regions experiencing urban sprawl. These motivations are conclusions from studies involving surveys or interviews of operators, and each study tends to find different primary motivations depending on the study area. This highlights the

importance of place-based context when we consider different clusters of agritourism farms and ranches across the country.

Many factors may help to explain the supply and distribution of agritourism farms and ranches across the contiguous 48, but generally the factors affecting the percent of agritourism farms in a county and the counties around it (causing the county to be a hot spot or cold spot) can be grouped into three categories: community, demand, and agricultural production type (Van Sandt et al, 2016). That research basically identified agritourism hot spots (based on spatial analysis that extended what is shown in Figure 1) and explored what factors may influence the existence of a hot spot. Creating a successful agritourism operation is likely grounded in leveraging a farm or ranch enterprise's comparative strengths in these three areas, and recognizing that a shortcoming in one category may be offset by a strength in another.

Some examples of strengths related to the community surrounding an agritourism operation include;

- high natural amenities,
- proximity to other outdoor attractions, and
- alternative travel infrastructure (scenic byways in contrast to interstate corridors) (Van Sandt et al, 2016).

These influential factors highlight the importance of understanding the unique dimensions of your location when developing your competitive advantage. Agritourism clusters in areas with high natural amenities and other outdoor attractions may be able to attract those tourists by intercepting them on their way to those primary destinations and offering up other activities or events to do in the area. Similarly, being located in a county with a significant set of scenic byway mileage, relative to the size of the county, increases the probability that the surrounding counties have a high percentage of agritourism farms (noted as hot spots). This may be due to the greater ease of viewing and stopping (impulse visits) when traveling on scenic byways relative to interstates which often bypass rural areas.

In our previous research focusing on the Western U.S., we found that demand for agritourism differs significantly by region, and that even within each region demand can differ by activity (outdoor recreation, education, etc.) or traveler type (agritourism as the primary destination as compared to when agritourism is just a stop on a multi-destination trip) (Van Sandt and Thilmany, 2016). In general travelers are more price sensitive toward activities like direct to consumer sales and educational activities when compared to events and outdoor recreation, but that is understandable given there are more close substitutes for those activities (retail food stores and other classes). Those agritourists who reported that visiting farms/ranches was the primary purpose of their trip were more price sensitive in some regions, like the Southwest, while those traveling to Northern California were the least price sensitive. This information is important context to share with producers who are exploring the pricing, marketing, and "travel time" dimensions of their agritourism business planning.

Finally, it seems obvious that certain agricultural production types are more conducive to agritourism than others, for example if one compares the tourism appeal of a corn and soybean farm versus a vineyard, but there are little to no empirical studies on how these production types affect agritourism revenues. Preliminary findings in a study using farm-level data across the U.S. show orchards, vineyards, and specialty livestock enterprises perform significantly well in terms of earning agritourism revenue when compared to traditional types of livestock and forest products (Van Sandt et al, 2016 (b)). The takeaway here is that farms and ranches interested in

diversifying their businesses should first recognize all of the factors that influence an agritourism business' success and then decide if leveraging their community and farm/ranch-specific assets will allow them to be competitive in the wide array of agritourism models one may find across the U.S.

A Look at Producers in California and Colorado

According to the USDA's Census of Agriculture, there were approximately 21,220 farms and ranches with agritourism in the U.S. in 2012, and on average, these agritourism enterprises earned roughly \$20,622/year. Keeping the national/regional agritourism sectors in mind, in this section we transition and focus on the agritourism sectors in California and Colorado, both of which are significant states in the agritourism sector in terms of agritourism farms and total revenue.

Activity	Primary Source of Rev. (CA)	Primary source of Rev. (CO)	Visitors (CA)	Visitors (CO)	Midpoint Sales/visitor (CA)	Midpoint Sales/visitor (CO)
Direct sales at farm/ranch site	64%	71%	7,544	3,810	\$50.53	\$118.21
Accommodations	6%	37%	581	6,387	\$226.97	\$1,167.23
Entertainment/ Events	10%	30%	11,295	9,577	\$570.29	\$24.13
Outdoor Recreation	4%	28%	8,508	825	\$164.21	\$29.03
Educational Activities	14%	20%	2,742	4,124	\$450.83	\$30.21
Other/ Diversified	0%	27%	1,892	3,143	\$10.46	\$540.41

In a 2014 survey of 288 agritourism farms in California and Colorado, over half of the agritourism establishments earned at least \$25,000 in 2015. At the extremes, 9% of agritourism businesses earned less than \$1,000 while a little over 6% earned more than \$1M from just their agritourism ventures. Agritourism farms and ranches in both states indicated that direct sales at the farm/ranch site were the primary source of their revenue, but Colorado farms and ranches had a greater percent of respondents who said their primary sources of revenue came from other activities (Table 2).

Both California and Colorado seem to receive the most visitors when hosting entertainment venues and events, but differ significantly in visitorship across the other activity types. Offering on farm or ranch accommodations appears to be much more popular in Colorado, perhaps due to the remote areas they operate in and fewer alternatives for off-site lodging. In contrast, for California, the second most popular activity is direct sales, perhaps driven by wine country enterprises.

Exploring the "midpoint" enterprise for each state may better illustrate the most "common" approach operators in each state take. At the midpoint, California enterprises receive the highest revenue per visitor from entertainment and events (its most popular activity), while Colorado receives the most from accommodations (its second most popular activity). One possible reason for differences in sales per visitor by these "midpoint firms" are the comparable

substitutes for the activity. For example, outdoor recreation revenues are significantly less in Colorado than in California which may be due to the large number of other, free-to-the-public outdoor recreation activities found in the Rocky Mountains, whereas in California, most national parks are congested so visitors may see their ranches as unique getaways. But, in rural Colorado, lodging may be scarce so on-premise lodging demand may be higher in that state.

These differences emphasize again the vast array of different market forces influencing agritourism farms and ranches across states and regions. These differences provide a strong justification for more place-based work to support this sector (case studies, operator surveys, etc.). Moreover, it should encourage researchers, policy makers, or tourism practitioners to be cautious when recommending models of agritourism they have seen work in other regions for their own region, as their community and operators may require a different model to successfully grow agritourism in their own backyard.

References

- McGehee, N. G., and Kim, K. 2004. Motivation for Agri-tourism Entrepreneurship. *Journal of Travel Research* 43 (2): 161-170.
- Nickerson, N. P., Black, R. J., and McCool, S. F. 2001. Agritourism: Motivations behind Farm/Ranch Business Diversification. *Journal of Travel research* 40 (1): 19-26.
- Phillip, S., Hunter, C., and Blackstock, K. 2010. A Typology for Defining Agritourism. *Tourism Management* 31 (6): 754-758.
- Tew, C., and Barbieri, C. 2012. The Perceived Benefits of Agritourism: The Provider's Perspective. *Tourism Management* 33 (1): 215-224.
- United States Department of Agriculture 2014. Ag Census: Desktop Data Query Tool [Data file]. Retrieved from: <http://www.agcensus.usda.gov/Publications/2012/>
- Van Sandt, A., Low, S. A., and Thilmany, D. 2016. A Spatial Analysis of Agritourism in the U.S.: What's Driving Clusters of Enterprises? A Working Paper.
- Van Sandt, A. and Thilmany, D. 2016. Exploring the Economics of Agritourists: Customizing Travel Cost Methods to Evaluate Differences across the Western U.S. A Working Paper
- Van Sandt, A., Low, S.A., and Thilmany, D. 2016 (b). Place Based Factors and the Success of Farm Level Agritourism: A Spatial Interaction Model of Agritourism in the U.S. A Working Paper.