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## Who Shops at the Market? Using Consumer Surveys to Grow Farmers' Markets: Findings from a Regional Market in Northwestern Vermont

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# Who Shops at the Market? Using Consumer Surveys to Grow Farmers' Markets: Findings from a Regional Market in Northwestern Vermont

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**Abstract:** This article presents findings from a consumer survey conducted in 2006 and 2007 at two locations of a regional farmers' market in northwestern Vermont. Consumer survey data is used to learn more about consumer preferences and solicit feedback for vendors. Data collected profiled consumers who attended the market, effective advertising techniques, planned spending, and interaction between markets. This information is valuable to markets seeking to understand their consumers and maximize efforts invested in advertising and community outreach. It provides guidance to Extension agencies seeking to develop networks of regional farmers' markets, particularly with respect to managing competition among markets.

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## Introduction

Growth in the number of farmers' markets over the past decade has been dramatic. In 2004 there were 3,706 farmers' markets operating in the United States, an increase of 53% since 1994 (USDA-AMS, 2004). In Vermont, the number of markets has more than tripled since 1986—from 19 to 60 markets in 2007 (NOFA-VT, 2008). This has increased networking among markets and heightened the need for information about what consumers want to find at farmers' markets.

The growth in farmers' markets follows from the many benefits offered by direct marketing to vendors, consumers, and communities. Abel, Thomson, & Maretzki (1999) suggest that farmers' markets can be an effective community development tool. The creation of close relationships between farmers and consumers can lead to increased producer incomes as well as improved consumer access to fresh foods, while

communities benefit from boosts to local economies. Feenstra (2007) finds social and economic benefits, documenting the community-building contributions of markets to social interaction, as well as the new economic activity stimulated by farmers' markets.

This article details the findings from a consumer survey conducted in 2006 and 2007 at two locations of a regional farmers' market in northwestern Vermont. Survey data is used to develop an understanding of the consumers who attend the market and solicit feedback for vendors. This information helps vendors maximize efforts invested in advertising and community outreach. It provides guidance to Extension professionals seeking to develop networks of regional farmers' markets, particularly with respect to managing competition between markets.

## Literature Review

Studies of consumers have been conducted at farmers' markets across the country, in Tennessee, New Jersey, California, Alabama, Maine, and Oregon (Brooker, Eastwood, & Gray, 1993; Brooker, 1996; Eastwood, Brooker, & Gray, 1999; Lev & Stephenson, 1999; Govindamsamy, Italia, & Adelaja, 2002; Wolf, Spittler, & Ahern, 2005; Onianwa, Mojica, & Wheelock, 2006; Hunt, 2007). In order to maximize participation and minimize costs, Lev and Stephenson (1999) used dot surveys to collect data from consumers at three farmer's markets in Oregon. There are several key reasons why gathering consumer data is important for markets. Eastwood, Brooker, and Gray (1999) proposed marketing strategies based on an understanding of target consumers. Similarly, Govindamsamy et al. (2002) emphasized the utility of this data for marketing purposes and provided insight into how vendors could better meet consumer needs. Ultimately, an increased understanding of these needs allows market managers and vendors to make necessary changes that lead to continued market growth.

Eastwood et al. (1999) found that the typical consumer at a farmers' market was likely to be a well-educated female older than 45 years of age with above average income. In an empirical study conducted in New Jersey comparing shoppers of pick-your-own operations, roadside stands, direct farm markets, and farmers' markets, individuals with some college education or college graduates were more likely to visit farmers' markets than individuals with only high school education (Govindamsamy & Nayga, 1999). A 2005 consumer study comparing farmers' market shoppers and non-shoppers found no statistical difference between levels of income (Wolf et al., 2005).

Consumers choose to purchase food at farmers' markets for a variety of reasons. A survey in New Jersey indicated that quality and freshness of produce were important factors affecting their decision (Govindamsamy et al., 2002). Wolf et al. (2005) determined shoppers' primary reason for attending the farmers' market in San Luis Obispo County, California was the availability of high-quality food products. In addition to quality and freshness, Eastwood et al. (1999) found that consumers also reported the motivation to support local agriculture and the ability to purchase nutritious foods as reasons for visiting the market.

Marketing strategies often require significant investment on the part of the vendors, and it is important to determine the most effective strategies for attracting consumers. Two studies found that newspaper advertisements and road signs were the most frequently cited forms of media recalled by consumers (Eastwood et al., 1999; Govindamsamy et al., 2002) However, Owainwa, Mojica, and Wheelock (2006) reported that 69% of respondents in a study in Alabama knew about farmers' markets through word of mouth.

## Market Background

The two market sites considered in the study are located in towns in Grand Isle County, Vermont. Towns in Grand Isle County have long agricultural histories yet face significant development pressures from suburbanization. While farms have been lost over time, dairy and other agricultural enterprises continue to dominate the landscape and are closely identified with local culture. Both towns support local agriculture in their town plans, which is in concert with statewide government and non-profit programs encouraging sustainable agriculture through the development of farmers markets.

The market locations differ in a number of respects. The South Hero site (referred to henceforth as the Southern site) has been in operation 1 year longer than the Grand Isle site (Northern site). A local land trust has also been active in promoting the Southern site, both through its publications and by sponsoring "theme days" at the market targeted towards families. The Northern site features a greater share of handicrafts among the products it sells. The markets operate on different days, with the Southern site open on late afternoons on Wednesdays and the Northern site on Saturday mornings.

## Methods

The consumer survey was developed using an iterative and participatory process between researchers and the farmers' market executive committee. The goal was to develop a survey that could be implemented and analyzed efficiently and provide useful information for vendors.

Surveys were administered in person to consumers leaving the market. During busy times every third person leaving the market was interviewed. During slower times an attempt was made to interview at least one person in each group of customers leaving the market. Surveying was conducted at 30% of market days for each site. A total of 245 surveys were administered at both sites. Customer counts were made a number of times during the season. Over these days 5% of all customers were interviewed.

Bivariate statistical analysis was used to compare the markets. Crosstabulations were completed for categorical variables, and independent samples t-tests were used to examine differences for continuous variables. These statistical tests were completed by the use of the Statistical Package for Social Sciences (SPSS) software. Significant differences between 2006 and 2007 data for each market location were not found for most variables. Based on this finding the data for each market was pooled, and the two markets were then compared. Variables that did vary significantly within a market between the 2 years are identified and discussed.

Two questions allowed respondents to provide multiple responses. These were analyzed by defining a multiple response set for each question in SPSS. Frequencies were then generated by using the multiple response tables facility. Open-ended questions were coded using content analysis. Content analysis involves systematic and objective identification of characteristics of qualitative data using specific selection criteria (Gray, 2004).

## Results

### Consumer Characteristics

The typical shopper at both markets was a female in her early fifties. Women comprised 72% of customers at the Southern site (n= 130) and 69% at the Northern site (n=100). Combined, women comprised 70.4% of all shoppers at both sites during the 2 years of the study (n=230). While neither age nor gender was significantly

different between the markets, the average age of a shopper at the Southern site increased significantly between 2006 and 2007, from 50 years old in 2006 to 55 years old ( $p < .05$ ).

About 64% ( $n=166$ ) of all customers reported household income above \$60,000. This was slightly higher at the Southern site, where 67% reported incomes above this threshold than at the Northern site. For comparison, in 2006, the median family income in Grand Isle County was \$70,500 (HUD, 2006). For both sites, more than 24% reported household incomes above \$101,000, well above the median household income for Vermont. This highlights one of the food security challenges presented by farmers' markets—they tend to attract customers wealthier than typical in the region.

The number of customers attending each market was counted at 12 market days over two seasons. On five market days at the Southern site, the average number of customers was 245. The Northern site averaged 184 customers over 7 days. A seasonal trend was observed, with the number of customers increasing mid-summer, dropping slightly mid-August, and then increasing again as the season progressed towards Labor Day. Seasonal customers drop off dramatically after Labor Day.

## Consumer Residency

Of 234 customers surveyed at both markets, 50% were residents of towns within Grand Isle County. At the Southern site, 25% ( $n=34$ ) listed the town as their primary residence, while at the Northern site, 28% ( $n=28$ ) reported that their home was in town. Another question ( $n=233$ ) asked customers to characterize themselves as year-round residents of the county, seasonal residents who lived in the county for 1 week or more, and those who were short-term visitors staying less than 1 week (and including day visitors). The survey found that 25% of customers at both markets combined were seasonal visitors and just less than 27% were short-term visitors. Thus, these markets depended on non-locals for more than half of their customer base.

Perhaps more important in some ways than the location of customers' residence is how far they were willing to travel to get to the market. Among customers who had previously planned to come to either market, the average travel time was nearly identical, at 18 minutes for the Southern site ( $n=122$ ,  $s.d.=17.2$ ) and 17 minutes for the Northern site ( $n=88$ ,  $s.d.=29.3$ ). This presents useful information for market planners interested in developing regional networks of markets. It demonstrates consistency in how far customers are willing to travel and suggests the density at which markets open on the same day could be sited without engendering significant competition for the same customer base.

The two market locations are currently open on different days of the week. Located about 10 minutes apart, over the course of the 2-year period, almost 38% ( $n=237$ ) of customers at one of the markets had been to the other. There was a significant difference between the markets ( $p < .1$ ), and customers interviewed at the Northern site were more likely to have visited the Southern site than the reverse. This likely reflects the longer history of the Southern site. Customers who live near the Northern site and now shop at that site could have been begun shopping at the Southern site when that was the only option available to them.

## What Drew Consumers to the Market?

Consumers in the study were asked to list the three most important reasons they came to the market ( $n=229$ ). The results are summarized in Table 1.

**Table 1.**  
Most Important Reasons for Attending the Market \*

<b>Importance Rank</b>	<b>Both Markets</b>	<b>Southern Site</b>	<b>Northern Site</b>
First	Local Food (175)	Local Food (100)	Fresh Food (77)
Second	Fresh Food (167)	Fresh Food (90)	Local Food (75)
Third	Support for Local Agriculture (144)	Support for Local Agriculture (79)	Support for Local Agriculture (65)
Fourth	Organic Food (68)	Organic Food (44)	Organic Food (24)
Fifth	Social Benefits (33) †	Social Benefits (23) †	Convenience (12)
Sixth	Convenience (32)	Convenience (20)	Social Benefits (10) †

\*n= 661. More than one response was possible. In parenthesis is the number of times a response was given as one of the top three reasons for attendance  
 † - Social benefits include a good place to see friends and family, a good place to meet people, a good place to take visitors.

The results were quite similar between the markets. Local and fresh foods were clearly the most important reasons for attendance. The third most popular reason, support for local agriculture, emphasizes that customers were seeking more than just improved food quality. They were explicitly looking to sustain local farms. Among the options offered respondents, four options included various social benefits. Combined, this non-food value ranked fifth at the Southern site and sixth at the Northern site. In neither market was convenience ranked highly, suggesting a weakness faced by markets and the importance of other factors in attracting customers.

Most clients intended to come to the market as part of their planned activities for the day. This was consistent for both markets over 2 years when compared to themselves and to each other. Over that period, two-thirds of customers (66.3%, n=240) at the combined markets arrived at the market intentionally. This included customers who lived in the market's home town (32% of customers surveyed) and customers who lived outside of the market's home town (35%). From a marketing perspective, it is also important to note that more than 28% of customers who shopped at the markets did not plan to stop. Instead these customers changed their plans to attend the market. The importance of advertising that attracts customers passing through, such as road signs, flags, and a visually attractive market, is highlighted by these findings.

Advertising is a common strategic planning question for small markets, and the cost of advertising can have a significant impact on the generally small operating budgets of farmers' markets. Customers were asked how they found out about the market. Multiple responses were possible, and the results are summarized in Table 2.

**Table 2.**  
 Most Important Advertisements for the Market \*

<b>Importance Rank</b>	<b>Both Sites</b>	<b>Southern Site</b>	<b>Northern Site</b>
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First	Road Sign (132)	Road Sign (72)	Road Sign (62)
Second	Newspaper (47)	Newspaper (34)	Newspaper (13)
Third	Word of Mouth† (32)	Word of Mouth† (20)	Word of Mouth† (12)
Fourth	Local Resident (16)	Other (8)	Islands Resident (10)
Fifth	Other (15)	Flyers & Pamphlets (7)	Other (7)
Sixth	Flyers & Pamphlets (10)	Local Resident (6)	Flyers & Pamphlets (3)
†-Refers to learning about the markets through a friend, family member, or a market vendor.			

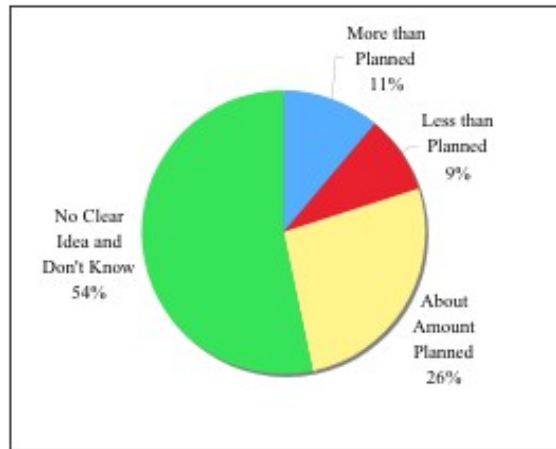
By far, the most common way customers found out about the market was through road signs. This low-cost method was cited by 55% of responses at the Southern site (n= 72) and 63% at the Northern site (n=62). Although both locations were advertised in local newspapers, this form of advertising was apparently much less important than road signs. This suggests that rural markets might be better served by investing more in signage compared to other forms of advertising.

## Consumer Spending

The amount spent by visitors to the markets differed significantly ( $p < .1$ ). Average spending per customer at the Southern site was \$13.46 for both years combined (n=140, s.d.=10.86), while at the Northern site it was significantly higher at \$19.68 (n=101, s.d.\$31.04). The higher and more variable spending at the Northern site is due to the greater mix of non-food vendors at the market. Items such as quilts and furniture pulled average spending up although it was not clear whether attracting customers with non-food items influenced spending on food items.

Customers were also asked about the difference between how much they expected to spend before coming to the market and how much they actually spent. This is summarized for both locations combined in Figure 1.

**Figure 1.**  
Actual Spending at Market Compared to Planned Spending (n=234)



At both markets, about half of customers came to the market without a clear idea about how much they planned to spend, 51% at the Southern site (n=134) and 57% at the Northern site (n=100). Fewer than 10% of customers spent less than originally planned.

Consumers were asked if there were items that they wanted to buy that were not available at the market. Not surprisingly, sweet corn, a perennial seasonal favorite, was among the unavailable items most in demand. For a market committed to selling locally grown produce, the relatively short season of this product will inevitably lead to unmet demand. Interestingly, out of the 101 items desired but unavailable, 44% were items that could potentially be sold year-round, such as bread, cheeses, ice cream, meats, and prepared foods. This suggests opportunities for developing a year-round farmers market catering to consumers demanding these goods. A number of such year-round farmers markets have been explored in other communities, and this data supports the potential to expand this model.

## Conclusion and Recommendations

Knowing the characteristics of typical consumers allows vendors to identify unmet demand, coordinate among markets, and develop stronger and more strategic plans. Understanding what reasons motivate individuals to purchase goods from farmers' markets can guide marketing efforts. For example, if consumers choose to purchase produce from a farmers' market because of a desire for local and fresh foods, then markets could emphasize these aspects in consumer outreach. Similar to other studies, the research reported here also found that markets tend to draw customers from their immediate geographic area. Advertising methods, such as prominent road signs, work well with local residents—serving as an instant reminder of the market to those passing by. Based on these findings, markets should redouble efforts to improve road signage and reconsider more expensive but less effective advertising venues. Extension professionals could develop portfolios of eye-catching road signs to help markets with signage design.

Markets in Vermont have increasingly moved towards year-round operation, providing vendors with income and consumers with locally produced foods beyond the typical market season. Understanding consumer demand for seasonal and non-seasonal items can support a market's decision to operate year-round. The results of the survey at the Champlain Island Farmers' Market found that there were a number of items that could be produced locally and sold year-round such as meats and cheeses, indicating that a year-round market could be feasible.



Conducting consumer surveys is not necessarily an easy task. Surveying requires significant investments of time and expertise depending on the depth of the survey. Many vendors may not have prior experience or resources to devote to these efforts. Some of the most basic and useful information, such as tracking consumer attendance, is time consuming and requires dedication to a monotonous task. Other information, such as vendor gross receipts, requires assurance of confidentiality necessitating systems not normally associated with either food production or marketing.

In addition to providing farmers' markets with assistance in survey development, implementation, and analysis, Extension professionals should explain the practical utility of consumer surveying to producers at farmers' markets. This requires a continued commitment beyond the survey into a discussion of the strategic use of the information collected through the research. In the research reported here, unmet demand for products was identified that could lead to increased sales at the market and, perhaps more important, the opportunity to extend the market into the wintertime. For their effort, Extension professionals investing time assisting in the implementation and analysis of consumer surveys at farmers markets can gain knowledge about market conditions that can be used to assist additional producers start or expand their markets.

## References

Abel, J., Thomson, J., & Maretzki, A. (1999). Extension's role with farmers' markets: Working with farmers, consumers, and communities. *Journal of Extension* [On-line] 37(5) Article 5FEA4. Available at: <http://www.joe.org/joe/1999october/a4.php>

Agricultural Marketing Service (AMS-USDA). (2004). *AMS Farmers' Market Facts*.

Brooker, J. R., Eastwood, D. B., & Gray, M. D. (1993). Direct marketing in the 1990s: Tennessee's new farmers' markets. *Journal of Food Distribution Research*, 24(1), 127-138.

Eastwood, D. B. (1996). Using consumer surveys to promote farmers' markets: A case study. *Journal of Food Distribution Research*, 27, 24-30.

Eastwood, D. B., Brooker, J. R., & Gray, M. D. (1999). Location and other market attributes affecting farmer's market patronage: The Case of Tennessee. *Journal of Food Distribution Research*, 30, 63-72.

Feenstra, G. (2007). The roles of farmers' markets in fueling local economies. *Gastronomic Sciences: Food for Thought*, 1.

Govindasamy, R., Italia, J., & Adelaja, A. (2002). Farmers' markets: Consumer trends, preferences, and characteristics. *Journal of Extension* [On-line] 40(1) Article 1RIB6. Available at: <http://www.joe.org/joe/2002february/rb6.php>

Govindasamy, R., & Nayga, R. M. (1997). Determinants of farmer-to-consumer direct market visits by type of facility: A logit analysis. *Agricultural and Resource Economics Review*, 26(1), 31-38.

Gray, D. (2004). *Doing research in the real world*. Thousand Oaks, CA: Sage Publications.

Hunt, A. R. (2007). Consumer interactions and influences on farmers' market vendors. *Renewable Agriculture and Food Systems*, 22, 54-66.

Lev, S., & Stephenson, G. (1999). Dot posters: A practical alternative to written questionnaires and oral interviews. *Journal of Extension* [On-line] 37(5) Article 5TOT1. Available at:

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<http://www.joe.org/joe/1999october/tt1.php>

Northeast Organic Farming Association of Vermont. (2008). *History of farmers' markets in Vermont*. Retrieved on July 5, 2008 from: <http://www.nofavt.org/market-organic-food/farmers-markets>

Owainwa, O., Mojica, M., & Wheelock, G. (2006). Consumer characteristics and views regarding farmers markets: An examination of on-site survey data of Alabama consumers. *Journal of Food Distribution Research*, 37(1), 119-125.

U.S. Department of Housing and Urban Development. (2006, April). *FY 2006 income limits*. Retrieved July 5, 2008, from: [http://www.huduser.org/Datasets/IL/IL06/vt\\_fy2006.pdf](http://www.huduser.org/Datasets/IL/IL06/vt_fy2006.pdf)

Wolf, M. M., Spittler, A., & Ahern, J. (2005). A profile of farmers' market consumers and the perceived advantages of produce sold at farmers' markets. *Journal of Food Distribution Research*, 36(1), 192-201.

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