

Oregon Small Farms Technical Report



Analyzing Three Farmers' Markets in Corvallis and Albany, Oregon

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Abstract

During summer 1998, research conducted at three local farmers' markets determined the number of shoppers they attract, the value of purchases both within the markets and from surrounding businesses, and the reasons why consumers patronize the markets. The research documents high traffic counts (about 4500 adults per week) for these markets that result in sales of local agricultural products of nearly \$37,000 per week. The two Saturday markets draw consumers downtown, where they patronize other shops and restaurants. The social atmosphere of these markets contributes greatly to their appeal.

Introduction

In January 1998, the Small Farm Program of the OSU Extension Service conducted a random mail survey of consumers in Corvallis and Albany that focused on the demand for locally grown agricultural products. The findings demonstrated a high level of interest in these products, cutting across community boundaries and income and education levels (Stephenson and Lev 1998). The lack of availability of local products where and when consumers shop was viewed as the primary constraint to expansion of their sales.

As a follow-up to the survey, research during summer 1998 focused on gathering more detailed information from consumers in one of the primary distribution networks for local farm products -- farmers' markets. As a result of this effort we now have a better understanding of:

- ❖ The number of people shopping in these markets;
- ❖ The value of sales;
- ❖ The value of "spillover" sales generated on market days in downtown shopping districts;
- ❖ Why consumers choose to shop at farmers' markets.

Market Descriptions

The three markets involved in the study are:

- ❖ Corvallis Saturday Farmers' Market
- ❖ Albany Saturday Farmers' Market
- ❖ Corvallis Wednesday Farmers' Market

The Corvallis Saturday market and the Albany Saturday market are both located in riverfront parking lots in close proximity to the central downtown shopping district. While the street adjacent to the Corvallis Saturday market has witnessed significant recent growth in retail outlets, this has not been true for the Albany market. Both markets are open for four hours, with the Albany market opening and closing one hour earlier than Corvallis (8 AM to noon versus 9 AM to 1 PM). The Corvallis Wednesday market (8 AM to 1 PM) is located at the Benton County Fairgrounds approximately 3 miles outside of downtown Corvallis. The setting provides a rural flavor to this market that provides an interesting contrast to the other two markets.

A changing collection of vendors sells at these markets. Some are full-time, diversified producers who sell at the markets throughout the season. At the other extreme, are specialized part-timers who may only sell for a month or less. Over the study period (June 13, 1998 - September 19, 1998), the number of vendors at Corvallis Saturday ranged between 29 and 44 with an average of 38 vendors per week. The number of vendors at the Albany market was more consistent as it varied between 26 and 32 with an average of 29 vendors. The Corvallis Wednesday Market had the highest average number of vendors at 41 and a range of between 32 and 47 for individual weeks. Sales revenues for individual vendors varied widely from as little as \$50 per market day to more than \$2000 per market day. Consequently, the number of vendors does not serve as an accurate predictor of total market sales.

How many people come to these markets?

To estimate the number of people coming to these markets, we counted all adults who entered the market from 25 minutes after the hour until 35 minutes after the hour for each hour the market was open. This ten-minute estimate was then multiplied by six to get an hourly estimate, and the set of hourly estimates was added together to get a market day estimate. Although there are potential sources of inaccuracy with this method, we believe it provides a reasonable estimate of total market attendance. Since some customers arrive before or after the posted hours, our estimates are probably somewhat low.

The market days and attendance figures are presented below. Numerous factors including weather, holidays and other competing events influence the attendance on a given market day. The Albany Saturday and Corvallis Wednesday markets show a dramatic increase from a low figure for the initial market day analyzed. The Corvallis Saturday market traffic counts are more consistent.

Traffic Counts per Market Day (Number of Adults)

Date	Corvallis Saturday	Albany Saturday	Corvallis Wednesday
June 13	1650		
June 17			840
June 20		1242	
June 27	1900		
July 1			1323
July 8			1266
July 11		1698	
July 15			1373
July 18	1620		
August 1	2070		
August 5			1292
August 8		1944	
Sept. 19	2006		
Average	1849	1628	1219

The average traffic count figures are the most useful for our purposes. They show traffic counts of above 1800 and 1600 respectively for the two downtown markets and above 1200 for the Corvallis Wednesday Market. Thus, over 4500 adults per week attend the three markets. These traffic counts are far greater than many market participants predicted and represent an impressive proportion of the total population for each of these medium size towns (Corvallis has a population of approximately 51,000 and Albany a population of 38,000). In our random mail survey, 13% of consumers reported that they had shopped at farmers' markets ten or more times in 1997 and an additional 46% shopped at these markets between one and nine times. Taken together these results demonstrate that area farmers' markets have achieved broad participation in both communities.

How We Collected Information from Consumers

We faced three constraints in collecting information from consumers. First, although we wanted to have as broad a sample as possible, we didn't have the personnel to conduct hundreds of interviews in the market place. Second, we didn't want our interviewing to detract from the atmosphere in the market. Finally, we were reluctant to distribute questionnaires to be returned by mail because this approach typically suffers from a low response rate (causing concerns of response bias).

The method that we devised addresses all of these concerns but forced us to accept certain compromises with respect to the number and types of questions we could ask. We carefully crafted questions that were posted on large flip charts. We then handed consumers a set of dots that they were asked to place on each poster "...where it makes the most sense". In most instances the research was conducted self-service -- the

consumers placed their own dots. But if they didn't have a spare hand, we would place the dots where instructed.

The response to this approach was overwhelmingly positive. On two occasions we kept track of the percentage of people we approached who agreed to answer our questions. In both instances, the percentage agreeing to participate was right around 90%. On another market day (at Corvallis Wednesday), one of the DOT posters asked people to compare the DOT approach to filling out a questionnaire. The responses to that question were similarly very favorable and are provided below.

What do you prefer -- answering a written questionnaire or using DOTS to answers questions (this technique)?

Strongly prefer questionnaire	0%
Prefer questionnaire	2%
No preference	4%
Prefer DOTS	36%
Strongly prefer DOTS	58%

More than 90% expressed a preference for DOTS. From their verbal comments, the respondents like the self-service nature of the approach, the participatory nature of the process, and the ability to answer the questions quickly.

The DOT poster method allowed us to obtain a very large and representative sample of consumers. On three market days, more than 300 households participated in our DOT surveys. For the 13 market days, we had 2714 participants or just over 200 respondents per market day.

What Do Consumers Spend?

Spending in the market and other questions were collected on a *single pocketbook basis*. Thus if two or more adults attended the market together and **purchased jointly**, only one of them was asked to respond to the spending question. As a result, there is an important distinction between the number of adults who came to the market and the number of households (for lack of a better term) who shopped at the market. Spending per *household* is shown below.

How much have you (or will you) spend in the Farmers' Market this morning?

Date	Corvallis Saturday	Albany Saturday	Corvallis Wed.
June 13	\$11.11		
June 17			\$13.50
June 20		\$11.23	
June 27	\$11.08		
July 1			\$17.00
July 8			\$17.08
July 11		\$10.60	
July 15			\$15.60
July 18	\$11.38		
August 1	\$13.03		
August 5			\$14.56
August 8		\$13.75	
September 19	12.60		
Average	\$11.84	\$11.86	\$15.55

These are probably underestimates of what consumers actually spent. Because consumers buy from multiple vendors (generally between 3 and 6), they face a significant challenge in calculating what they spent. We were pleased to observe that respondents treated this question quite seriously and often took several minutes to add up the cost of their purchases. Based on our observations of this process, it is much more likely that the figures they provided underestimated (because they forgot to include certain items) rather than overestimated what they spent. Also, although we tried to get consumers as they left the market, some respondents returned to the market and made additional purchases after they answered our questions. The average spending figures reported above may be as much as 10 % below the actual spending figures.

The spending results for the two Saturday markets are virtually identical. This similarity confirms the central conclusion from our mail survey that local food products have comparable support in the two communities. The data show average purchases of just under 12 dollars with a slight trend toward increasing expenditures, as more produce becomes available later in the season. The sale of plants and flowers are also quite strong at both of these markets, and purchases of those items decline as the season progresses. This tends to equalize sales over the course of the season.

Based on this data, the Wednesday shoppers spend about 30% more than the Saturday shoppers. The types of shoppers who come to the Wednesday are noticeably different from the weekend market shoppers. Our informal observations indicate a higher percentage of women and elderly shoppers at the mid-week market. As a group the Wednesday patrons appear to be more serious shoppers. Particularly at the height of berry season, it was clear that many Wednesday consumers were stocking up for home processing.

The distribution of purchase amounts per household has a peak around the mean value and a long tail to the right. For both Corvallis Saturday and Albany Saturday, approximately 20% of the shoppers spend \$20 or more. In contrast, 34% of the Corvallis Wednesday Market shoppers reported spending \$20 or more.

Do the Farmers' Markets Attract People Downtown?

At the first two downtown markets in each community, we probed to find out whether the people shopping in the market had come specifically for the market or were downtown for another reason. The results are averaged and presented in the following table (the Corvallis results were identical in percentage terms between the two weeks, for Albany the results were very similar between the two weeks)

"Was the Farmers' market your primary reason for coming downtown this morning"

	Corvallis Saturday	Albany Saturday
Yes	78%	88%
No	12%	8%
Partially	10%	5%

These results demonstrate that for both towns the vast majority of consumers came because of the market and would not otherwise have been downtown. Since there are no non-market Saturdays for comparison purposes during the period of the year that the farmers' markets are open, downtown merchants may not be aware of the attractiveness of these markets. The markets are pulling people into the downtown shopping district rather than vice-versa. The relative drawing power of the market is even greater in Albany than it is in Corvallis.

The next question sought to address the issue of whether their presence downtown has a positive spillover for other downtown businesses. This issue was addressed on three occasions in each market with results that are once again quite similar across market days. Consumers were asked:

Do you plan on doing additional shopping or eating downtown this morning? Select '0' for NO and estimate the dollar amount for YES.

Date	Corvallis Saturday		Albany Saturday	
	%YES	Amount	% YES	Amount
June 13	64%	\$9.87		
June 20			37%	\$4.16
June 27	58%	\$8.31		
July 11			38%	\$4.21
August 1	64%	\$10.55		
August 8			38%	\$4.58
September 19	65%	\$11.80		
Average	63%	\$10.13	38%	4.58

The spending data in this table are averaged across all farmers' market shoppers. If we calculate the average amount spent only by those who do some additional shopping, **the figures turn out to \$16.08 per household for Corvallis and \$12.05 for Albany.** It must be emphasized that in most cases consumers were planning on doing this additional shopping **after** they finished at the farmers' market. So these estimates are probably much less accurate than the estimates that consumers provided on purchases in the market. We believe that the estimates err on the low side since they don't take into account unplanned, spur-of-the moment purchases.

It is important to recognize that for both communities the percentage of consumers indicating they will do additional shopping downtown far exceeds the percentage who said they were downtown for a reason other than the farmers' market. The hypothesis that farmers' markets bring additional dollars downtown is strongly supported by this data. The changing array of products in the market and the household's steady need to buy food combine to make farmers' markets an attractive destination on a consistent week after week basis.

The data demonstrate a marked contrast between the two communities in the interaction between the farmers' market and the downtown shopping district. Corvallis market shoppers are much more likely to do other shopping or eating downtown (63% versus 38%). The data support the observation that downtown Corvallis provides more attractive shopping opportunities and that the Corvallis Saturday market has hours that better match downtown shopping hours. One Albany respondent stated "This isn't really a fair question. What is open at 8:30 AM on a Saturday morning in Albany?"

Corvallis Saturday market patrons also spend more than twice as much per household at \$10.13 versus \$4.58 for Albany patrons. For Corvallis, the average spent per household across the three market days represents 86% of the total that these households spent in the

market itself. In Albany, the figure is a much lower 39% of the total spent in the farmers' market.

Some Aggregate Spending Numbers

Moving from the spending per household figures that we collected on the DOT posters to total spending for a market day is a complicated process. We need to adjust our market traffic estimates to arrive at the number of households who shopped at the market before multiplying by the average spent per household. We only directly calculated the number of households at the September 19th Corvallis Saturday Market. Using a DOT poster we determined for that market day that 1.6 adults represented the average household. To be conservative, we decided to use the figure of 1.7 adults per household for the two Saturday markets and the slightly lower figure of 1.5 adults per household for the Wednesday market. We were able to crosscheck the total purchase figures that were thus calculated by comparing them to sales figures collected from vendors (not reported here). This gave us the reassurance that we needed that the aggregate figures are relatively accurate. In the table below, the aggregate spending numbers are provided as an average across the individual market days.

Average Aggregate Spending Per Market Day

	Corvallis Saturday	Albany Saturday	Corvallis Wed.
Market Spending	\$12,878	\$11,358	\$12,637
Downtown Spending	\$11018	\$4386	NA

The aggregate spending figures show that in an average summer week nearly \$37,000 worth of produce and other local goods are sold through the three markets. It should be emphasized that these sales occur at a very high per hour rate since the three markets are only open for a total of 13 hours per week. All three markets are roughly equal in size. The Corvallis and Albany Saturday markets differ substantially with respect to the outside the market sales generated in the downtown area.

What Are Consumers Looking for in the Market?

The relatively low average spending figures motivated us to seek a better understanding of the factors that were limiting purchases. Consumers were making a special trip to come to the market but only spending \$12 or \$15. What could vendors and the market as a whole do differently to expand sales?

What stopped you from buying more at the market today?

	Corvallis Saturday	Corvallis Wednesday
Nothing else wanted	67%	60%
Couldn't carry more	13%	11%
Out of money	10%	14%
Prices too high	6%	8%
Ran out of time	4%	7%

The results for the two markets are quite similar. The overwhelming first choice for both markets "nothing else wanted" may point to an opportunity for broadening the market offerings as a way of increasing market sales. As noted above the vast majority of consumers reported spending \$20 or less. If \$20 became the average across all consumers, total market sales would rise by 67%.

"Couldn't carry more" was offered as a reason by more than 10% of the respondents in each market. Carrying loads of bulky, often fragile produce and plants can represent quite a challenge for many consumers so we were surprised that this response didn't rank more highly.

Price was cited as a reason by fewer than 10% of the respondents. In our random mail survey, 31% of consumers indicated that their purchases of local agricultural products were "greatly reduced" by high prices. But those who chose to shop in these markets seem more willing to pay the prices charged (given the quality of the products and the atmosphere that they receive).

At the farmers' market, when you have the choice between organic and non-organic produce, what do you do?

	Corvallis Saturday	Albany Saturday	Corvallis Wed.
Don't care	21%	43%	17%
Choose organic if less expensive	2%	6%	5%
Choose organic if same price	15%	19%	28%
Choose organic if a little more expens.	32%	18%	34%
Always choose organic	24%	14%	16%

Once again, the people we questioned in the farmers' market provided quite different answers than the respondents to the random mail survey. In the mail survey, only 10% of consumers indicated that organic labels were "very important" to them when selecting

products and no difference was reported between the two communities. The farmers' market results show between 14% and 24% "always choose organic" and that overall between 32% and 56% of consumers chose to pay some price premium for organic products. The difference between the two communities is quite striking. The Albany Farmers' market patrons were decidedly less enthusiastic toward organic produce. The 43% who put themselves in the "don't care" category far exceed the percentage found in the two other markets. Similarly only 32% of Albany respondents placed themselves in one of the two price premium categories while in the two Corvallis markets 50% and 56% of respondents selected those two "interested in organic" categories in the table. Still, although there is somewhat more organic produce in the two Corvallis markets, organic products are also sold in the Albany market.

The responses do show that a diversity of consumers patronizes these markets. Some are attracted by the availability of organic products. Others have little interest in that class of products. The area farmers' markets are open to all who wish to sell, and there is quite a mix of both organic and non-organic products available. On one market day, organic tomatoes were selling for \$2.50/lb. while non-organic tomatoes were selling for a dollar or less/lb. Both products are finding their buyers.

Do you come to the farmers' market for the products, the atmosphere, or some combination?

	Corvallis Saturday	Albany Saturday	Corvallis Wed.
Products only	19%	20%	29%
Primarily Products	35%	20%	25%
Equally P & A	43%	53%	45%
Primarily Atmos.	3%	5%	1%
Atmosphere only	0%	2%	1%

While "products only " gained many more votes than "atmosphere only", the importance of the combination of the two elements comes through strongly in the responses. Only in the case of Corvallis Wednesday did as many as 29% of respondents select the "products only" response. For all three markets, the "equally products and atmosphere" category garnered the highest percentage of votes. Albany shoppers expressed the greatest interest in the atmosphere component of the market as only 40% of the Albany respondents placed themselves in the "products only " and "primarily products" categories. In both of the other markets that figure was 54%.

In our mail survey, we asked consumers why they buy local products. "Enjoyment of the buying experience" was chosen by 30% of the respondents as "very important" in their decision. Another interesting survey result is that "supporting the local economy" and "keeping farmers in local area" both scored as highly as "local products are better" as reasons for buying the products (all three were selected as "very important" by 44% of respondents). So patronage of places like farmers markets is based on a complex and intertwined set of factors. They are not simply places where people buy food.

Are consumers willing to pay more for local products?

Do consumers distinguish between local products and those shipped in from more distant locations. More importantly, are they willing to pay more for the local products? We asked consumers this complicated and vital question both in the random mail survey and at the Corvallis Saturday market. As expected, the results differ.

Mail Survey: If a non-locally produced product cost \$1.00, how much would you be willing to pay for a similar product produced locally (choose one category)?

\$0.50	\$0.67	\$0.75	\$1.00	\$1.10	\$1.25	\$1.33	\$1.50
6%	1%	9%	35%	24%	18%	3%	6%

The results from the mail survey show just about half of the consumers willing to pay some premium for a locally produced product. Averaging across all consumers, the local products are valued at \$1.06 versus \$1.00 for the non-local product.

Farmers' market: On average, if a specific item costs \$1.00 in the grocery store, how much would be willing to pay in the farmers' market for a similar product produced locally (choose one category)?

\$0.50	\$0.75	\$1.00	\$1.10	\$1.25	\$1.50	\$2.00
0%	5%	15%	11%	37%	25%	7%

The farmers' market results are substantially more positive for local products. A full 80% of consumers in these markets indicated they would be willing to pay a premium for locally produced products as compared to similar products available in supermarkets. The average price they would be willing to pay is \$1.29 versus \$1.00 for the supermarket product. This was a difficult question to answer and clearly the price premium that consumers are willing to pay varies across products. The results should encourage local producers who fear that will inevitably be forced to match the prevailing supermarket price. We would hasten to add that this result does not imply that farmers' market prices are always above supermarket prices. At the height of the local season, market prices are often well below what is found in the supermarket.

Summary

The three major farmers' markets in the Corvallis/Albany area attract a large and consistent clientele. On most market days, between 30 and 40 agricultural producers sell an ever-changing array of products to over 4500 shoppers. Although consumers patronize the markets primarily for the fresh and processed local agricultural products, they also value the social atmosphere. The introduction of additional vendors with new and different products would likely increase the level of consumer purchases. At the

downtown markets (especially in Corvallis), many of the market patrons also shop and eat at surrounding businesses. These spillover sales represent an important additional benefit of the markets.

While these markets are thriving, there remains room for expansion. This research focused on the questioning of people already shopping in one of the markets. Current patrons are very satisfied. In results not reported here, 78% rated the Corvallis Wednesday market as "great" and 21% rated it as "good". Attracting new customers represent a different challenge. Fostering greater visibility for the three markets is probably a critical requirement.

Reference

Stephenson, Garry and Larry Lev. 1998. "Common Support for Local Agriculture in Two Contrasting Oregon Cities". Paper presented at the 61st Annual meeting of the Rural Sociology Society (Portland, Oregon).