

# Methods of Surveying Direct Market Customers<sup>1</sup>

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**Abstract.** Three surveys of direct market (pick-your-own) strawberry customers were conducted in Illinois to obtain demographic information, distance travelled, purchase habitude, and advertising response. A mail survey utilizing postcard reminders resulted in a higher number of returned forms than 2 anonymous handout surveys without follow-up. The rates of return were influenced by follow-up cards, the time interval of mailing the follow-up cards, and the growers' personal request to their customers to complete survey forms. The survey methods are discussed relative to the large numbers of completed surveys required in our research and the applicability of various survey methods for direct marketing.

Farmer-to-consumer sales (direct marketing) have become an important method of marketing horticultural crops. Direct marketing in Illinois through roadside stands, farmers' markets, and pick-your-own is estimated at \$11 million. The leading crops are strawberries and other small fruits, apples, tomatoes, sweet corn, peaches, and melons.

Cognizance of consumers' attitudes and shopping habits help growers plan production and marketing strategies for expanding their direct markets. This paper discusses 3 survey methods used to study pick-your-own consumers. Specific data on where customers live, how far they travel, how often they shop, how much they purchase, and other relevant demographic information will be reported in a subsequent paper.

In 1970, 8 pick-your-own (PYO) strawberry farms were selected for customer survey (3). Each farm furnished a mailing list from which names of 300 customers were randomly selected. A 4-page printed survey with 29 multiple choice questions and a stamped return envelope were mailed in a franked envelope during a 3-day period immediately after the strawberry season (Fig. 1). Follow-up postcards were mailed 2, 3, or 4 days after the questionnaires.

In 1978, a 1-page printed survey form and a franked return envelope were handed to customers on 17 strawberry farms (Fig. 2). The number of survey forms distributed was based on

farm PYO acreage, with enough forms for 1 to 2 days of picking during the peak of harvest (2).

The 1979 survey form was printed on a 4 x 6 inch index card (Fig. 3). Twenty-four farms participated in the survey and each farm was supplied with 140 cards per acre of berries. The cards were distributed by growers to be completed by their customers at the farm. The cards were collected and returned by the growers.

All 3 survey forms were designed and organized so as not to disconcert the respondent (12). The completion rate varied depending upon the survey method employed (Table 1). The higher number of returned forms for the 1970 mail survey are attributed to individual contact of the consumer at his home address plus a follow-up card requesting immediate cooperation. The time lapse between mailing the questionnaire and mailing the follow-up card significantly affected the rate at which the forms were returned. Mailing the follow-up card in 2 days resulted in 21% more returned forms compared with mailing in 4 days (Fig. 4). The day of the week on which the survey was mailed (Tuesday, Wednesday, or Thursday) did not affect the rate at which the surveys were returned. The data on surveys received early did not vary from those received after the follow-up cards were mailed. Survey forms that were mailed in 1970 were returned more promptly than those hand-distributed to consumers in 1978 (Table 2).

The survey forms in 1978 and 1979 were returned at the rate of 31 and 51%, respectively. Although lower than the 1970 returned form rates, they were considered excellent in view of the large samples and the anticipated return rate of 15 to 20% (10). The costs for hand distribution in 1978

## A SURVEY OF PICK-YOUR-OWN STRAWBERRY CUSTOMERS



Conducted by the Department of Horticulture and Cooperative Extension Service, University of Illinois at Urbana-Champaign

Please answer the questions by putting a check in the appropriate blank or by filling in the blanks. (The small numbers will be used in transferring the answers to computer cards.)

- How did you first learn of this farm?
 

Neighbor or friend	Newspaper	Radio	Roadside sign	Television	Other
<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
- How did you know when strawberries were ready to pick this year?
 

Postcard from farm	Neighbor or friend	Newspaper	Roadside sign	Television	Other
<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
- How far did you travel (one way) to pick?
 

Less than 25 miles	25-50 miles	50-100 miles	More than 100 miles
<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
- Last year did you pick at the same farm where we obtained your name?
 

Yes	No
<input type="checkbox"/> 0	<input type="checkbox"/> 1
- Did you pick strawberries at more than one farm this year?
 

Yes	No
<input type="checkbox"/> 0	<input type="checkbox"/> 1
- How many times did you pick strawberries this season?
 

One time	Two times	Three times	More than three times
<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
- What amount (total) did you harvest this season?
 

Less than 10 qts. (15 lbs.)	10-20 qts. (15-45 lbs.)	30-50 qts. (45-75 lbs.)	More than 50 qts. (75 lbs.)
<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

Fig. 1. 1970 survey, mailed to the customer in a franked envelope with a stamped return envelope. (Page 1 of a 4-page form.)

## SURVEY OF "PICK-YOUR-OWN" STRAWBERRY CUSTOMERS — 1978

Conducted by the Departments of Horticulture and Agricultural Economics and Cooperative Extension Service, University of Illinois at Urbana-Champaign

YOU CAN HELP US by completing this questionnaire. The results will help strawberry growers to plan better facilities, service, and strawberries for you. Please answer the questions by filling in the blanks or by putting a check in the appropriate box. (The small numbers will be used for transferring the answers to computer cards.) You may obtain the results of this study and a free Directory of U-Pick Fruits and Vegetables from your County Cooperative Extension Service office. Thank you. Please put this form in the attached envelope and mail it to

*J. W. Courter*  
J. W. Courter  
Extension Specialist  
Small Fruit and Vegetable Crops  
Rt. 1, Simpson, Illinois 62985

- This farm is \_\_\_\_\_ miles from where you live. 0-4
- Quantity picked today \_\_\_\_\_ quarts lb. 0-45
- Price paid per quart lb \_\_\_\_\_ cents 0-40
- How many times have you picked strawberries this season? 0-50
- Do you plan to pick again this season? 51 Yes  No
- How many times did you pick strawberries last year on this farm? 0-55
- How many times did you pick strawberries last year at other farms? 0-55
- How many people live in your home? 0-50
- How many are under 18 years old? 0-45
- Family income before taxes last year: 0-50
 

under \$9,000	\$9,000-14,999	\$15,000-19,999	\$20,000 or more
<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
- Your age: 0-50
 

under 30	30-39	40-49	50-59	over 60
<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
- Name of town or city in which you live:
 

Population	County	State
Today's date	1978	0-50

We will appreciate any comments you may have. Please write them on the back of this sheet.

STATE COUNTY LOCAL GROUPS UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING  
The Illinois Cooperative Extension Service provides equal opportunities in programs and employment.

Fig. 2. 1978 survey distributed at the farm with a franked return envelope.

and 1979 were lower than the cost for mailing with stamps in 1970. No follow-up reminder card was possible in 1978 or 1979 because of the anonymity of the customers.

The growers participating in the 1979 survey probably influenced the willingness of their customers to complete the cards by asking them for information to "help us to serve you (the customer) better." The returned form rate was high even though the check-out lane of pick-your-own farm is not conducive to filling out a survey,

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WE ARE STUDYING THE TRADE AREA AROUND OUR FARM. PLEASE TAKE A MINUTE TO FILL OUT THIS CARD AND LEAVE IT WITH THE CASHIER. THIS INFORMATION WILL HELP US TO SERVE YOU BETTER.

1. We live \_\_\_\_\_ miles from this farm.
2. We drove \_\_\_\_\_ minutes to this farm.
3. Name of home town or post office \_\_\_\_\_  
(do not write address)
4. Quantity picked today \_\_\_\_\_ pounds or \_\_\_\_\_ qt., gal., bu.  
(circle one)
5. We chose this farm because:  
check one reason **most important to you**  
( ) only choice  
( ) closest, most convenient  
( ) lowest price  
( ) best fruit, best farm
6. We came to this farm today because:  
picked here before ( )  
recommended by a friend ( )  
saw or heard advertisement for this farm ( )  
for other farms ( )  
other reason ( ) give below

Thank you!  
Please leave card with cashier.

Fig. 3. 1979 survey card distributed and completed at the farm.

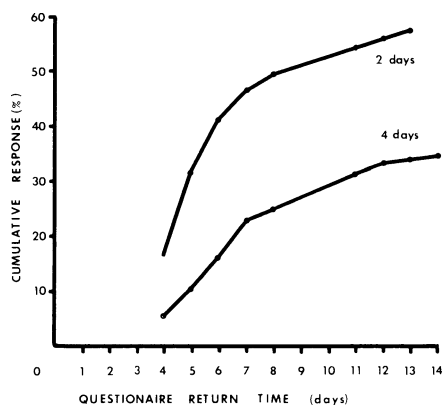


Fig. 4. The effect of reminder cards mailed 2 and 4 days after questionnaires on rate of return.

even a brief one. No reference was made to the University of Illinois on the card.

In general, mail surveys cost more than handout surveys but their chief advantage is that they permit a follow-up reminder that significantly increases the response (1, 5, 7, 8). The follow-up card should be mailed within 2 or 3 days after mailing the survey. However, biases that may be introduced by non-response and misinterpretation of questions can be problems (4, 5, 6, 8, 9). To conduct a mail survey, it is necessary to have access to an active mailing list which many growers no longer keep because of high postage costs.

Telephone interviews are a popular and quick way to obtain consumer information. High form completion rates, standardized questions, wide geographic coverage, and less cost than personal interviews are advantages

(1, 6, 8, 11). Telephone time limitations, high cost relative to hand distributed surveys, interview training variability, and respondent antagonism are major disadvantages (1, 6, 8, 9, 11).

When time is not critical, or if money is limited, on-farm consumer surveys are a practical alternative to mail surveys. One limitation is that the consumer can be reached only during the crop harvest season.

Methods other than those used in this study to survey consumers were rejected as impractical. Personal interviews allow for flexibility, completeness, high returns, and interview control with disadvantages of cost and interview bias (1, 8, 9, 11). Also, the inability to obtain consumer lists made personal and telephone interview methods prohibitive. Our samples were large and the consumers were widespread in rural areas so that cost of personal interview ruled out that survey method.

In conclusion, it is usually better to randomly sample a limited number and obtain a high return than to survey a large sample and receive a low return. Relatively large samples were mandated in our work to study farm trade areas and advertising effectiveness (11). In 1979, quota sample sizes were selected for each farm based on acreage. A minimum sample of 50 completed surveys per acre, or at least 50 per farm, was required for accuracy. This was confirmed by comparisons of random sub-samples of the survey. However, the type of information desired and variability of the sources ultimately determine sample size (8). For example, a survey

Table 1. Survey response in relation to method of distribution.

Survey method	Number of surveys distributed	Response rate (%)
Mail, 1970	2,400	65
Handout, 1978	6,241	31
Handout, 1979	22,700	51

Table 2. Cumulative rate of return at 1, 2, 3 and 4 weeks for handout and mail distributed surveys.

Survey type	Cumulative rate of return (%)			
	Weeks after distribution			
	1	2	3	4
Mail <sup>2</sup> , 1970	38	92	97	98
Handout, 1978	17	51	76	92

<sup>2</sup>Included postcard follow-up.

of customers to determine quantity picked or product quality could encompass a much smaller sample. Responses to similar questions asked in our 3 surveys did not vary when the characteristics of the PYO farm remained unchanged.

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