

# METHODOLOGY REPORT: 2002 OHIO SURVEY OF FOOD, AGRICULTURE AND ENVIRONMENTAL ISSUES

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December, 2003

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**Study Background:** The Ohio Survey of Food, Agriculture, and Environmental Issues Project was conducted by a team of faculty and students associated with the Rural Sociology Program within the Department of Human and Community Resource Development (HCRD) and OSU Extension. The primary objective of the study was to measure Ohioans attitudes on a variety of topics related to food, agriculture, and the environment.

**Questionnaire Construction :** Questionnaire construction began in January 2002. A draft of the survey was piloted during April 2002 and the final version of the questionnaire was completed in June 2002.

**Data Collection:** Data were collected during the summer of 2002 using a mail survey. A sample of 7,976 Ohioans was selected and stratified according to five extension districts and metropolitan core county status (See Appendix 1 for counties within each stratum). The sample list was generated by the private vendor, Experian Direct Tech and acquired by the research team during April 2002.

Dillman's Tailored Design Method (2000) guided the data collection methodology. Up to five contacts were made of each respondent, including a prenotification letter explaining the purpose of the study, the initial survey mail out package, a reminder postcard, a replacement

survey mailing and a second reminder postcard (Table 1). An additional mailing to nonrespondents took place during January 2003. This mailing was used to ascertain how different nonrespondents were from respondents.

Table 1. Mail timeline for 2002 Ohio Survey

Mailing Item	Mailed
Prenotification letter	June 11, 2002
Initial survey	June 21-22, 2002
Reminder postcard #1	July 8, 2002
Replacement survey	July 24, 2002
Reminder postcard #2	August 13, 2002
Nonresponse mailing	January 24, 2003

The prenotification letter explained the purpose of the study and informed the household they would be receiving a survey in the mail. The initial survey mail out package included a cover letter explaining the purpose of the study, who should fill out the survey in the household (adult male or adult female), two one dollar bills affixed to the cover letter, and the questionnaire with a business reply envelope. The first reminder postcard was mailed approximately two weeks after the survey mail out package and asked nonrespondents to return the survey. The replacement survey was mailed one week after the reminder postcard and consisted of a letter reiterating the importance of participating in the study and a replacement survey and a business reply envelope. Three weeks after

the replacement survey was mailed, another reminder postcard was sent to nonrespondents as a final appeal encouraging them to return their survey.

A final mailing took place in January 2003. The purpose of this mailing was to help the research team gauge whether or not those that did return a questionnaire differed from those that did not. Fifteen percent of nonrespondents were sent a follow-up survey, which primarily asked for some background information about the household, including age, education, and ownership of current residence. The response rate for the nonresponse mailing was 19 percent.

Nonrespondents tended to be married and younger than respondents. A similar percentage on nonrespondents report being unemployed as respondents. Fewer nonrespondents rent their housing than respondents. The most frequent reason nonrespondents cited for not returning the original survey was they did not recall receiving the survey followed by not having time.

One problem emerged during data collection that led to some deviation from the Total Design Method timeframe. During the production of the initial survey mail out package it was discovered that the address label on nearly half of the sample was truncated during printing production and resulted in nearly 13 percent having to be returned to the printer to be relabeled and mailed out again using first class postage. Ideally, the first reminder postcard should have been mailed out one week after the initial survey mail out package was mailed; however, due to the fourth of July holiday and the labeling error, the research team decided to wait until after the holiday to mail the reminder postcard as mail delivered close to the holiday weekend may have been dismissed by respondents. This also allowed more time for the corrected mail out packages to be delivered before receiving the postcard.

The total response rate for this survey is 55.7 percent. Table 3 presents the number of surveys received, undeliverable, not usable and those refusing to participate.

Table 2. Ohio Survey of Food, Agriculture and Environmental Issues Response Rate

	Number
Total initial sample size	7976
Surveys dropped (undeliverables)	768
Surveys received	4030
Refusals to participate	51
Survey returned, but not usable	4

The response rate by stratum is shown on Table 3. Effective sample represents number of households to which a survey was successfully delivered. Sixteen returned surveys were returned with identifying information marked out by the respondent and were impossible to place in a geographic strata. The response rate in Northwest Ohio was greatest (58.3 percent) and lowest in the Metro core counties (53.3 percent)

Table 3. Ohio Survey of Food, Agriculture and Environmental Issues Response Rate by Stratum

Strata <sup>1</sup>	Effective Sample	Responses	Response Rate
Metro core	2632	1403	53.3
NW Ohio	930	542	58.3
SW Ohio	922	534	57.9
S Ohio	890	485	54.5
E Ohio	907	525	57.9
NE Ohio	931	522	56.1
Unknown		16	
Total	7212	4027	55.8

<sup>1</sup> See Appendix 1 for counties within each stratum

**Respondent Representativeness:** To assess the representativeness of the sample, demographic characteristics of survey respondents were compared with 2000 census statistics (Table 4). The respondents compared favorably to 2000 census statistics for the adult population of Ohioans in terms of age, gen-

der, proportion of households with children, employment status, and household income. The sample was slightly more educated, reported slightly higher home values, and included a smaller proportion of African American respondents compared to the statewide population. The most substantial difference between the sample and the state population is that a larger proportion of sample respondents reported residing in owner-occupied housing units compared to the general state population.

**Data Entry:** Tracking and precoding of surveys was conducted as surveys were returned. Data entry began in August 2002 and completed by the middle of September 2002. Three persons were hired to enter the survey data into SPSS. To verify the accuracy of the data entry, a 10 percent random sample was taken of the dataset and checked and corrected for errors.

**Missing Data:** Nearly 150 surveys were identified early in the data entry phase as having one or more missing pages. In August 2002, these survey pages were photocopied and sent to the respondent thanking them for returning the survey and asking them to fill out the missing questions and return the photocopied pages in the enclosed self-addressed stamped envelope. Nearly 40 percent of the missing pages were completed and returned as of November 1, 2002.

### Works cited

Dillman, Don A. 2000. *Mail and Internet Surveys: The Tailored Design Method*. New York: John Wiley & Sons, Inc.

### Acknowledgements

The project was jointly funded by the Department of Human and Community Resource Development, OSU Extension, the Ohio Agricultural Research and Development Center (OARDC), and the College of Food, Agriculture, and Environmental Sciences.

Table 4. State of Ohio population characteristics compared with sample

	Ohio	Respondents
<b>Sex</b>		
Male	47.7	47.4
Female	52.3	52.6
<b>Race</b>		
African American	11.5	6.3
Asian	1.2	1.3
Hispanic/Latino	1.9	1.0
Native American/American Indian	0.2	0.9
White	85.0	89.4
Other	0.2	1.1
<b>Educational Attainment</b>		
Percent high school graduate or higher	83.0	93.0
Percent bachelor's degree or higher	21.1	32.7
<b>Married-couple family households</b>	51.4	60.8
<b>Households-individuals under 18</b>	34.5	39.4
<b>Households-individuals 65 years &amp; over</b>	27.3	28.0
<b>Owner-occupied housing units</b>	69.1	80.5
<b>Renter-occupied housing units</b>	30.9	16.5
<b>Value of home</b>		
Less than \$50,000	12.2	7.8
\$50,000 to 99,999	37.5	27.2
\$100,000 to 149,999	26.3	29.5
\$150,000 to 199,999	12.3	18.1
\$200,000 to 299,999	7.8	12.1
\$300,000 or more	3.9	5.3
<b>Household Income</b>		
LT 10,000	9.1	4.1
\$10,000 to \$49,999	50.7	48.6
\$50,000 to \$99,999	30.4	35.5
\$100,000 or more	9.8	11.8
<b>Employment Status (Civilian Labor Force)</b>		
Employed	95.0	95.0
Unemployed	5.0	5.0

*For additional information about the study and findings related to this topic, contact Molly Bean Smith by either telephone (614-292-1354) or e-mail (bean.21@osu.edu).*

Appendix 1. Ohio Survey of Food, Agriculture and Environmental Issues Sampling Strata

Strata	Counties within strata
Metro core	Lake, Cuyahoga, Lorain, Summit, Franklin, Butler, Hamilton, Trumbull, Mahoning, Stark, Clark, Montgomery, Greene, Richland, Allen, Lucas
Northwest district	Williams, Fulton, Henry, Wood, Ottawa, Sandusky, Seneca, Wyandot, Crawford, Marion, Morrow, Hardin, Putnam, Van Wert, Paulding, Defiance
Southwest district	Mercer, Auglaize, Darke, Shelby, Miami, Preble, Warren, Clermont, Champaign, Madison, Franklin, Delaware, Union, Logan
South district	Clinton, Brown, Highland, Adams, Scioto, Gallia, Meigs, Athens, Vinton, Jackson, Hocking, Pike, Ross, Pickaway, Fayette, Lawrence
East district	Knox, Licking, Fairfield, Perry, Morgan, Washington, Noble, Monroe, Belmont, Guernsey, Muskingum, Coshocton, Tuscarawas, Harrison, Carroll, Jefferson
Northeast district	Erie, Huron, Ashland, Holmes, Wayne, Columbiana, Portage, Medina, Geauga, Ashtabula