Ecolabel Value Assessment

Consumer and Food Business Perceptions of Local Foods



A report of market research conducted and prepared by the Leopold Center for Sustainable Agriculture and the Iowa State University Business Analysis Laboratory

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Special note: The ISU Business Analysis students in this project were all undergraduates. The market research conducted in this pilot project was not intended to meet the standards for graduate academic research.

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Executive Summary

An ecolabel is a seal or a logo indicating that a product has met a certain set of environmental and/or social standards or attributes. Ecolabels offer one avenue to educate consumers about locally grown, sustainably-raised foods.

The Leopold Center for Sustainable Agriculture partnered in a pilot with the Iowa State University Business Analysis Laboratory to conduct consumer and food business market research related to ecolabels.

Project Goals

- 1. Gauge understanding and perceptions of consumers and food businesses regarding ecolabels and local foods, and
- 2. Assess ISU Business Analysis Laboratory's role to assist in addressing challenges found in value chains where food production is rooted in the principles of sustainable agriculture.

Objectives for Goal One

- Analyze different opinions and perceptions of several ecolabel prototypes.
- Document the perceptions of buying local as viewed by consumers and businesses.
- ♦ Identify attitudes and perceptions of food labeling issues.
- ◆ Ascertain the perceptions of consumers and food businesses on how far fresh produce, meat, and poultry travels from farm to point of sale.
- ♦ Identify the additional monetary value businesses and consumers are willing to pay for locally grown foods.
- ♦ Based on the consumer Internet survey results, make recommendations on further development of the ecolabel prototypes.

A **value chain** is a network of collaborating players who work together to satisfy market demand for a specific product or set of services.

An Internet-based survey was conducted of consumers and food businesses in the states of Illinois, Indiana, Iowa, Kansas, Massachusetts (Boston area), Minnesota, Missouri, Nebraska, Wisconsin, and Washington (Seattle area). The consumer survey questions and ecolabel prototypes were refined based on comments provided at three Iowa focus groups. Consumers were asked to respond to one of three sets of ecolabel prototypes for fresh produce (table grapes) that conveyed information on product origin, distance from farm to point of sale, mode(s) of transportation, and amount of carbon dioxide (CO₂) emitted during transport. They also were asked a series of questions to assess their perceptions about locally grown/raised produce and meats. Another group of consumer respondents did not view any ecolabels.

Responses reflect food values

The consumer survey results showed that consumers were most responsive to the set of ecolabel prototypes that had the least amount of information, that did not focus on the CO₂ emission/environmental impacts, and connected the consumers' core value of product freshness with the time (in days) it took for the product to travel from farm to store. With this information, the majority of consumer respondents thought of reasons to buy local grapes, in part because of a perception that local grapes were fresher.

Regardless of whether or not they viewed ecolabels, consumer respondents exhibited basic knowledge about the seasonality of produce. They shifted their selection as to how far produce traveled (from farm to point of sale) from a longer distance across all four seasons to a shorter distance when considering the summer months only. Midwest consumer respondents also identified that meat and poultry products travel shorter distances from farm to point of sale than produce items over the course of the year, as well as during the summer.

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Freshness was the most important reason selected for buying local foods for consumer respondents across all three geographic regions.



More than 75 percent of consumer (ecolabel and no ecolabel) and 55 percent of food business respondents chose "grown locally by family farmers" as their first choice for produce or meat products.

Freshness was the most important reason selected for buying local foods for consumer respondents across all three geographic regions, with more than 40 percent of Boston- and Seattle-area respondents, and 39 percent of Midwest respondents selecting this option. However, "supporting family farmers" received the second highest percentage for the Midwest respondents, although it was the fourth highest choice for Boston respondents, and tied for third among Seattle-area respondents.

Approximately 25 percent of the ecolabel and no ecolabel respondents were willing to pay from 5 to 15 percent more for locally grown meat and produce items than for the same items that were not local. A follow-up set of willingness to pay questions will be posed in a future study because the pay range suggested in this study (0 to 15 percent)—although based on focus group input—was not wide enough to get an accurate portrayal of respondents' intentions.

More than 75 percent of consumer (ecolabel and no ecolabel) and 55 percent of food business respondents chose "grown locally by family farmers" as their first choice for produce or meat products, compared to four different organic choices, even though the survey question stated that price and visual appearance would be the same for all choices. This selection was consistent across all three of the geographic regions.

This is surprising, considering that one of the options was "grown locally-organic" (this choice received the second highest percentage of first choice selections). It is possible that "grown locally-organic" would have received a higher percentage of first choice selections had the words "by family farmers" been added. However, the results do suggest that "grown locally" combined with "by family farmers" offers a more compelling story to consumer and food business respondents than organic produce or meat products that may or may not be locally grown—with price and appearance being equal.

Marketing implications

In marketing terms, this study determined that the freshness, quality, and price (value) attributes of the food product are part of the core product to consumer respondents. When these consumers shop for foods, the characteristics of the core product are what drive their overall purchasing decision. Consumers secondarily look for secondary or augmented benefits, such as supporting local farms, low environmental impacts, and supporting the local economy. The survey results indicate that—regardless of whether they viewed the ecolabels—consumer respondents do place a high value on their perception that purchasing local foods supports local farms. It is unlikely, however, that these consumers would buy the local food product a second time if it were not fresh, or did not have the taste and quality that they are seeking.

The results suggest that "grown locally" combined with "by family farmers" offers a more compelling story to consumer and food business respondents than organic produce or meat products that may or may not be locally grown—with price and appearance being equal.



In marketing terms, this study determined that the freshness, quality, taste, and price (value) attributes of the food product are part of the core product to consumer respondents.



The secondary benefits of low environmental impacts, supporting the local economy, and supporting local farmers can be more closely linked to the core product benefits through education and market messages that build contextual bridges to these core product benefits.



Food business respondents selected "grown locally" as the most frequent consumer request for produce and meat items over four organic choices that included "organic grown locally."



The secondary benefits of low environmental impacts, supporting the local economy, and supporting local farmers can be more closely linked to the core product benefits through education and market messages that build contextual bridges to these core product benefits. For example, consumer respondents in this set of surveys placed a high priority on the freshness of local foods. Information on the time involved in transport and storage from farm to point of sale can be used to develop a concept parallel to "freshness dates" often found on perishable and semi-perishable items such as milk, orange juice, and yogurt.

Responses to survey questions were compared for food business respondents and the one set of consumer respondents who did not view the ecolabels. When making a purchase decision on carrying a food product, the food business respondents were much more likely to view "local" as being "grown in my state" (38 percent) than the no ecolabel consumer respondents, who selected "grown 25 miles or less from purchase" as their definition of "local." This difference may have been influenced by the high percentage of Iowa food businesses surveyed, a number of which participate in the state's *A Taste of Iowa* marketing program.

Food business respondents selected "grown locally" as the most frequent consumer request for produce (52 percent) and meat (40 percent) items over four organic choices that included "organic grown locally." In this case, the words "by family farmers" were not part of the "grown locally" option. The choice receiving the second highest percentage for both produce and meat was "organic grown within my state." Food business respondents perceived that more than 50 percent of their customers would be interested in a label that indicates product source, mileage from farm to point of sale, mode of transport, and environmental impacts in food transportation.

Future collaboration and ecolabel research

Prior to the summer of 2003, the Leopold Center had not collaborated with any department, center or group within the ISU College of Business. Prior to working with the Leopold Center, the ISU Business Analysis Laboratory had never undertaken a project that focused on sustainable agriculture and the marketing of food products. An important goal of this project was to assess the ISU Business Analysis Laboratory's role in supporting market research and business development in food value chains where the farm production practices were rooted in the principles of sustainable agriculture.

This pilot project has successfully demonstrated that ISU College of Business students can—with appropriate mentoring and guidance—conduct ecolabel market research with consumers and food businesses. The Leopold Center is currently working with the ISU Business Analysis Laboratory on a second phase of ecolabel market research. Once the work is completed, the two groups will coordinate a forum to share results with students, faculty, farmers, and sustainability-oriented food businesses who may be interested in contracting with the ISU Business Analysis Laboratory to conduct market and product development research.

Introduction

The Leopold Center is a research and education center with statewide programs to develop sustainable agricultural practices that are both profitable and conserve natural resources. It was established under the Groundwater Protection Act of 1987 with a three-fold mission: (1) to conduct research into the negative impacts of agricultural practices; (2) to assist in developing alternative practices; and (3) to work with ISU Extension to inform the public of Leopold Center findings. The Center is administered through the Agriculture and Home Economics Experiment Station at Iowa State University. Additional information about the Leopold Center can be found in Appendix 1.

Research Initiatives

In 2002 a major shift occurred in the Leopold Center's orientation, replacing a more general competitive grants program with three research initiatives:

Ecology – development of ecologically friendly systems that are more resilient and less costly to farmers, communities, and the environment.

Marketing and food systems – development of markets for food, fuel, and fiber that support farmers and rural communities.

Policy – analysis and development of new food, agricultural and natural resource policies that are community, farmer, and environment-friendly.

Within the Center's Marketing and Food Systems Initiative, a major focus is developing food and fiber value chains that support farmers and rural communities. A **value chain** is a network of collaborating players who work together to satisfy market demand for a specific product or set of services. There are simple value chains, such as a farmer selling produce to an urban consumer at a farmers market. There also are value chains where farmers do not direct market to consumers, but share in the risks and rewards with other value chain partners to produce a quality product for consumers. An example is an organic dairy farmer who belongs to a cooperative. His milk is picked up by a tanker, brought to a processing plant, pasteurized, homogenized, and bottled, and then sent to the warehouse of a large natural food grocery store for eventual distribution to a store in a major city 200 miles from the farm.

In March 2003, the W.K. Kellogg Foundation funded the Value Chain Partners for a Sustainable Agriculture (VCPSA) project. The key partners in VCPSA project are the Leopold Center for Sustainable Agriculture, Iowa State University (ISU), Practical Farmers of Iowa (PFI), and the Henry A. Wallace Endowed Chair for Sustainable Agriculture at ISU. Additional financial support comes from the Leopold Center, the ISU College of Agriculture, and the SYSCO Corporation, as well as other cooperating partners.

VCPSA project goals are two-fold:

- Use collaborative approaches to foster the growth of value chains that reward small and midsize farmers for production practices rooted in the principles of sustainable agriculture, and
- Help increase ISU's capacity to respond to the challenges of these unique value chains.

The Leopold Center's Marketing Initiative shares the same goals as the VCPSA project. From 1988 through 2002, the Leopold Center funded more than 250 projects with Iowa State University researchers and educators, but not a single project was supported with the ISU College of Business. During the same period, Practical Farmers of Iowa worked with numerous ISU faculty members to conduct on-farm research and food systems projects, but none of these faculty members were from the ISU College of Business. Iowa farmers and entrepreneurs who are developing small and midsize sustainable food businesses based on sustainable production practices have not received adequate support and response from Iowa State University. To achieve the goals outlined in the VCPSA project and the Leopold Center's Marketing and Food Systems Initiative, it is critical to form new partnerships among farmers, entrepreneurs, and ISU's College of Business. Toward this end, the Leopold Center initiated conversations with the ISU Business Analysis Laboratory in April 2003.

The ISU Business Analysis Laboratory provides a unique learning experience at Iowa State University. Graduate and undergraduate students from the Colleges of Business, Education, and Engineering work together in cross-functional teams to solve real business and manufacturing problems. The Laboratory is designed to provide a setting within which students may apply their education to real world business situations. It serves as the academic equivalent of a technology business incubator with students as tenants. Students work part-time in the Laboratory in multidisciplinary teams, progressing to leadership positions with superior performance over the course of a semester. Faculty members - one each from the Colleges of Business, Education (Industrial Technology), and Engineering - provide support to students during their work in the Laboratory. Additional information on the ISU Business Analysis Laboratory can be found in Appendix 2.

Ecolabels

Ecolabels offer one avenue to educate consumers about locally grown, sustainably-raised foods. An ecolabel is a seal or a logo indicating that a product has met a certain set of environmental and/or social standards or attributes.

In May 2003, agreement was reached between the Leopold Center and the ISU Business Analysis Laboratory to work cooperatively to conduct consumer market research on food ecolabel prototypes, as well as on perceptions of local foods by consumers and food businesses. The food ecolabel prototypes were first advanced by the Leopold Center in 2002 during a conference focused on ecolabels.¹

Project Goals

- 1. Gauge understanding and perceptions of consumers and food businesses regarding ecolabels and local foods, and
- 2. Assess ISU Business Analysis Laboratory's role in responding to challenges found in value chains based on sustainable production practices.

Objectives for Goal One

- Analyze different opinions and perceptions of several ecolabels,
- Document the perception of buying local as viewed by consumers and businesses,
- Identify and understand attitudes and perceptions of food labeling issues,
- Ascertain the perceptions of consumers on how far fresh produce, meat, and poultry travel from farm to point of sale,
- Identify the additional monetary value businesses and consumers are willing to pay for locally grown foods, and
- Based on the consumer Internet survey results, make recommendations on further development of ecolabel prototypes.

Ecolabels offer one avenue to educate consumers about locally grown, sustainably-raised foods. An ecolabel is a seal or a logo indicating that a product has met a certain set of environmental and/or social standards or attributes.

¹ Pirog, Rich and Patrick Schuh, 2002. "The load less traveled: examining the potential of using food miles in ecolabels." Proceedings from Ecolabels and the Greening of the Food Market Conference, November 2002. p. 69.

Focus Groups

Methodology

The purpose of the focus groups was to obtain both qualitative and quantitative data regarding individual perceptions about the ecolabel prototypes, what defines locally grown food, and consumer preferences in buying organic foods, labeled foods, and locally grown food items.

Three focus groups were conducted in Ames, Cedar Rapids, and Des Moines, Iowa during June and July 2003. An incentive of \$25 was offered to compensate participants for their time.

Potentially interested participants responded via phone or e-mail. These prospective participants were asked the following screening questions to ensure that they fit within the targeted population:

- Are you between the ages of 28-70?
- Are you male or female?
- Is your annual household or personal income between \$40,000 and 100,000?
- What is your interest in food issues?
 - Very interested
 - Somewhat interested
 - Not interested
- What is your interest in environmental issues?
 - Very interested
 - Somewhat interested
 - Not interested
- What city do you live in?
- What is the highest level of education completed?
- How much do you know about sustainable agriculture?
 - o A lot
 - o Some
 - Nothing

If participants were not between the ages of 28 and 70, their income was not between \$40,000 and \$100,000, if they were not at least somewhat interested in environmental issues, they were not at least somewhat interested in food issues, they did not live in the city of the focus group or the surrounding suburbs, they did not have at least some college education, or they knew a lot about sustainable agriculture, they were told that they were not in the population being sampled. If the potential participants met all of the criteria, they were asked their name, phone number, and e-mail address. The consent process was explained briefly. Directions to the focus group location were e-mailed to the participants along with a copy of the consent document to review before they arrived.

Ames Focus Group

The ecolabels used in the Ames focus group appear in Appendix 3. In the Ames focus group session, three food characteristics emerged as important: freshness, quality, and value as they relate to produce and meat. Overall, consumers were concerned with the contamination of produce and meat that is imported from other countries. The participants were not concerned about the distance food travels, just the time it takes and whether or not it is contaminated. Food products from specialty regions were unimportant to the participants.

Many participants were confused about why environmental impact shown on the ecolabels was limited to pollution from transportation. No consensus was reached in regard to the gauge on the ecolabels. Many participants were bothered by not having definite ranges to define the color ratings on the gauge. For example, they wanted to know what the exact range of CO_2 emissions would be for a rating of high. The participants would trust the ecolabels only if they were issued by the U. S. government.

Cedar Rapids Focus Group

Following the Ames focus group experience, the written and discussion questions were refined and the ecolabels were redesigned based on participants' comments. The Cedar Rapids focus group was conducted with the new questions and revised ecolabels (Appendix 4), using the same format as above with a few changes. Participants defined local as being within the state of Iowa. Participants buy local foods to support the regional economy and for freshness. In order to determine if food is fresh, the participants look at appearance and texture. However, price and quality determine whether or not a food purchase is made. Seasonality also was a concern with buying local foods.

Before looking at the ecolabels, the consumers were asked what came to mind when thinking of the environmental impacts of food. They responded that the disposal of the packaging materials was a concern. Many participants had not considered the environmental effects of transportation. The participants wanted the coordinating colors to be included in the label design to show the information at a quick glance. In contrast to the Ames focus group, the Cedar Rapids participants wanted the gauge to remain on the ecolabels. They felt that the written CO₂ emissions information and the gauge should be used together to give consumers a clearer picture of environmental impact. Overall, there was confusion about the labels; the participants thought an educational campaign would solve these problems over time.

In the participants' opinions, too much information on the ecolabels would confuse people but, conversely, an ecolabel with a design that was too simple would not inspire trust in the eyes of the average consumer. The label needs to be understandable to the average person.

Participants were concerned about the use of the phrases "Organic" and "Pesticides Used When Necessary." They felt that the term "organic" currently does not have a clear definition and they doubted whether all food labeled "organic" truly is organically grown. They viewed the phrase "Pesticides Used When Necessary" as contradictory. They thought that growers would always consider pesticides as necessary. Participants were influenced by the ecolabels to the extent that they would be willing to change the grocery store where they shop if the ecolabels were not available there.

Des Moines Focus Group

After the Cedar Rapids focus group, additional modifications were made to the written and discussion questions and the ecolabels were redesigned for the Des Moines focus group (Appendix 5). The Des Moines focus group was conducted using the same format as the Cedar Rapids focus group. Participants in the Des Moines focus group defined local as being from within the state of Iowa. They buy local foods because of freshness and to support the local economy. Participants decided produce travels an average of 1,600 miles and that distance is influenced by season, while meat travels a much shorter distance and is not influenced by season. The logic behind this assumption was that there is not much produce grown in this area while there are many meat processing plants in the Midwest.

Participants were concerned about farm practices, pesticides, and chemicals used on their produce as well as the length of shipping time. When asked about environmental impacts, disposal of the packaging and pollution from run-off were concerns. When asked about transportation impacts, the participants were not aware of how the environmental effects of transportation compare with the effects of production and disposal.

When they viewed the ecolabels, the participants had many different comments than the Ames and Cedar Rapids groups. To incorporate the time element into the current label design, participants suggested a dating system to be used as a visual timeline on the ecolabels. Participants wanted symbols to be used on the labels to show that the item was organically grown and which pesticides were used and they suggested that these symbols be similar to the designs on road signs.

Participants liked the coordination of colors between the level of emissions and the ring around the label. However they were confused about how the poundage of CO₂ emitted equated to the ratings of low, moderate, high, or very high environmental impact. Despite this confusion, the participants liked the gauge's visual representation of CO₂ emissions. The set of labels which included the CO₂ information had too much information in the participants' opinions, but they liked the rating system. The participants believed the government should use tax dollars to provide ecolabels for stores. Overall, participants were most concerned about the taste and quality of all produce, whether it was local or not.

Following the explanations of the written questions, the participants were shown "food odometers" representing the number of miles a produce item had traveled. The interviewers gathered feedback and opinions about whether this information was viewed favorably. When the Des Moines focus group was completed, the questions and ecolabels were revised once more and prepared for use in the consumer Internet survey.

Analysis

Feedback from the focus groups was extremely valuable in refining the ecolabels and testing survey questions for use in a consumer interest survey. The driving factors behind food purchases by the focus group participants are the freshness, quality, value, and taste of food items.

The element of time plays a large role in their purchases because high-quality food must

- be fresh,
- have a favorable taste, and
- be readily available for purchase.

They are concerned with other factors such as the environmental impact and what pesticides are used, but only in terms of freshness, quality, value, and taste. **Reduced environmental impact alone, including production, transportation, and disposal, will not predispose consumers to purchase a food item.**

The focus group participants who were interviewed seek out and understand information that is presented concisely and in easy-to-grasp concepts. When shopping for food, these participants believe that most consumers do not take time to read the information presented about the product. Participants wanted the ecolabels to be somewhat simple, yet feature information accessible at a glance, and have more information available if the consumer would like added details.

The driving factors behind food purchases by the focus group participants are the freshness, quality, value, and taste of food items.

Consumer Internet Study

Methodology

The focus groups were used as a tool to revise the ecolabels and consumer survey questions for use in an Internet-based consumer study. For this survey, a population was selected from the Midwest United States including Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, and Wisconsin. In addition, the city of Boston and surrounding areas were used to represent the Northeast/New England states, and the city of Seattle and surrounding areas were used to sample the Pacific Northwest region. It should be noted that the survey respondents do not represent a statistically random sample of these three geographical areas, but rather a random sample of e-mail addresses owned by the survey administrator.

Consumer Survey Groups

- Ecolabel set 1 Midwest
- Ecolabel set 2 Midwest
- Ecolabel set 3 Midwest
- Ecolabel set 1 Boston area (Northeast)
- Ecolabel set 2 Boston area (Northeast)
- Ecolabel set 3 Boston area (Northeast)
- Ecolabel set 1 Seattle area (Pacific NW)
- Ecolabel set 2 Seattle area (Pacific NW)
- Ecolabel set 3 Seattle area (Pacific NW)
- No Ecolabels Midwest

The ten surveys were developed using an online survey software platform provided by SurveyMonkey.com (http://www.surveymonkey.com/). Printed versions of a complete survey instrument for the Midwest Ecolabel survey are provided in Appendix 6. The survey questions were identical for the Boston area (Northeast) and Seattle area (Pacific Northwest) with the exception of question #4 (Appendix 7). The survey questions for the Midwest consumers who did not view the ecolabels can be found in Appendix 8. Questions 1-3 from the consumer ecolabel survey, which covered reactions to the ecolabels, were omitted for those respondents.

Surveys

The surveys began with a set of introductory comments and instructions. To simulate how ecolabels would be presented to consumers in the marketplace, each group of survey respondents was provided with images of two unique ecolabels; one representing grapes grown in Chile and one representing grapes grown locally. Respondents were instructed to look at the ecolabels as they normally would if shopping for grapes in the supermarket. Consumers were told that these labels would not be on the actual grape packaging, but would appear on a sign above the grapes in the produce department.

The two opening survey questions were structured to assess what consumers noticed first when viewing the ecolabels. Both of these questions were open-ended. They did not provide specific response options for respondents to select; rather, respondents typed the replies in their own words. Specifically, respondents were asked to state their initial reactions to the ecolabels ("What was the first thing that comes to mind when you look at these labels?"). The respondents also were asked to explain why they thought this ["What, in particular, about the labels made you think that (first thing that came to mind)?"].

Consumers could click "next" for the subsequent page or "back" for the previous page at any time while taking the survey. Next they were asked a series of questions to gauge their overall opinion of the ecolabels. Respondents were given five statements and asked to indicate whether they strongly disagreed, disagreed, were neutral, agreed, or strongly agreed on a scale of one to five. These statements tested their understanding of the ecolabels, whether or not they thought ecolabels were too complex, if the labels made an impression on the respondents, if the ecolabels were meaningful to the respondents, and if these ecolabels would influence their purchase.

Consumer respondents then were asked about their perceptions of local foods and the distance food travels, and the perceived benefits of local food and low environmental impacts in food transportation. The final question in the section asked what consumers felt were the best characteristics of produce or meat items, keeping price and quality constant ("If the price and visual appearance were equal for a produce or meat item, which of the choices below would you purchase?"). The choices were "Grown locally by family farmers," "Organic-origin unknown," "Organic-imported," "Organic-grown locally," and "Organic-grown in your state."

The last series of questions was intended to create a profile of the respondents based on interest, knowledge, and demographic information. Consumers from the Midwest also were asked to specify their state of residence. This question did not appear on the Boston-area and the Seattle-area surveys which included consumers from only one state each.

Online survey administrator

The online survey was administered to respondents by a third-party company, PostMasterDirect (www.postmasterdirect.com/), which manages the world's largest database of e-mail addresses. This database has been compiled using a double opt-in process whereby individuals who initially visit the

company's website and subscribe to one of its response lists, must revisit the site in order to confirm the subscription prior to the delivery of any surveys or other forms of commercial contact. From this database, a random selection process was employed by PostMasterDirect in order to develop a sample of 7,000 e-mail addresses to which the online survey instrument was sent. The last step in the survey process was the collection of data by Surveymonkey.com which allowed for review of individual responses to each question. **More than 1,600 completed surveys were received.**

Food Business Internet Study

Methodology

The Internet survey of food businesses was developed to solicit the opinions of food industry representatives on local foods, their perception of the distance food travels from its origin to their business, and the importance of organic and local foods among their customers. Initial research was conducted to determine if buying or renting an e-mail list of businesses in the food industry would be feasible. It was concluded by the team that the lists available were not specific enough to the type of businesses needed.

The next step was to have each team member gather business contacts for their particular state or states. Most of the information for business contacts was found on the Internet, but other resources, such as contacts from the Leopold Center and *The Marketing Guidebook: The Blue Book of Supermarket Distribution*, were used. The type of businesses being sought were restaurants, grocery stores, butcher shops, meat markets, caterers, distributors, farmers markets, cooperatives, and producers. Between July 1 and 29, approximately 2,500 calls were made to the different businesses to try to get e-mail addresses or fax numbers.

The next step was composing the survey through the website, Surveymonkey.com. Many of the questions used were similar to those in the consumer web survey, but some referred specifically to the businesses. Business respondents were asked their perceptions of the definition of "local," and based on that perception, how far produce and meat travel from place of origin to their business. They also were asked if and why their particular business buys or carries local foods and if consumers would pay a premium (and how much) for information about low environmental impacts in food transport. Finally, businesses were about the requests for local and organic foods by their customers. The same question was asked regarding their customers' preferences. Demographic questions were used to gain a better insight into the type and size of each business.

Three versions of the questions were constructed using an online survey software platform provided by SurveyMonkey.com (www.surveymonkey.com). An example of the survey for the Midwest is found in Appendix 9. This survey was sent to respondents in the following states:

- Illinois
- Indiana
- Iowa
- Kansas
- Minnesota
- Missouri
- Nebraska
- Wisconsin

Two other versions were created: one for Seattle, Washington and the surrounding metropolitan area, which was selected as a city representing the Pacific Northwest; and Boston, Massachusetts and the surrounding metropolitan area, which represents the Northeast United States.

When completed, the survey was sent to each of the companies that had provided contact information. Most of the surveys were e-mailed; a few were faxed.

The surveys consisted of the same information except for the three different sets of ecolabels that were tested. The surveys were customized for each region of the three regions (Midwest, Boston and Seattle areas).

For the last step in the survey process, the data was collected by Surveymonkey.com. Using SurveyMonkey.com, professional surveys can be created easily. There are many different types of questions and color schemes to choose from to create the survey. Analyzing the results is simple, and individual responses can be viewed for each question.

Consumer Survey Analysis

Ecolabels

Consumers who participated in the Internet study viewed either one of three sets of ecolabels or they did not view any ecolabels. All sets of ecolabels compared grapes grown in and transported from Chile to the grapes grown in and transported to the consumer in his or her home state. Ecolabels in all three sets conveyed the following information:

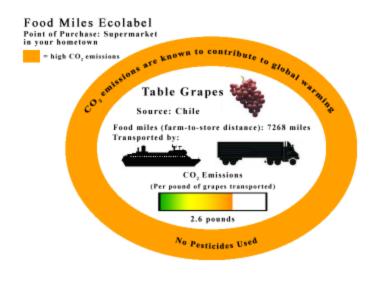
- Where (what state/country) the grapes were grown,
- The farm to grocery store distance to transport the grapes, and
- The modes of transportation used (truck and/or ship).

No Ecolabels

The No Ecolabel survey data set was completed by 434 respondents in the same eight Midwest states sampled in the consumer ecolabel data surveys. These consumers responded to the same questions as the ecolabel consumers, except they did not view any ecolabels, nor did they respond to any questions about the ecolabels.

Ecolabel Set I

The first of two sets included information on carbon dioxide (CO_2) emissions resulting from fuel combustion in transport. A gauge was used to visually depict the amount of CO_2 emissions, with orange/red indicating higher emissions and green indicating lower emissions. The outer ring of the ecolabel reflected the color of the level of CO_2 emissions. To help the consumer understand what relevance CO_2 emissions had to the environment, the label included a statement that read " CO_2 emissions are known to contribute to global warming."



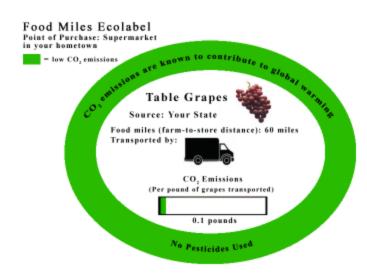


Figure 1. Ecolabel Set 1

Ecolabel Set 2

Like the first set, the second set included carbon dioxide emissions information; however, this set did not include a gauge to visually represent the emissions. Unlike the first set, the outer rings of both ecolabels were blue. In the focus groups, participants suggested using information about food miles (farm to store distance) in the context of freshness of the product. Thus, the second set of ecolabels included the number of days the grapes traveled from farm to store as a relative indicator of freshness.

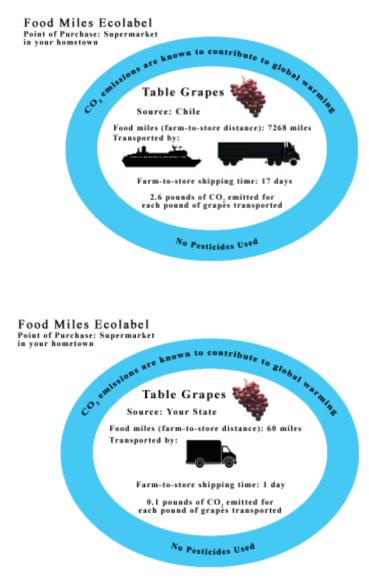


Figure 2. Ecolabel Set 2

Ecolabel Set 3

The third set of labels (Ecolabels set 3) did not include any information about carbon dioxide emissions. The number of days the grapes traveled from farm to store as a relative indicator of freshness also was included.

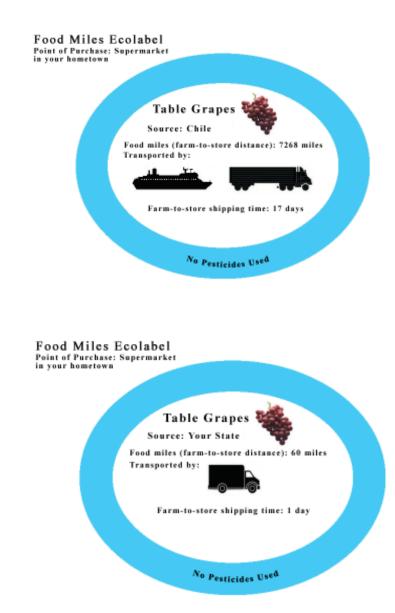


Figure 3. Ecolabel Set 3

Discussion of Ecolabels

After examining the set of ecolabels, respondents were asked the following open-ended question: What was the first thing that comes to mind when you look at these labels?

Responses to the question were reviewed and grouped into seven categories which can be viewed in Figure 4:

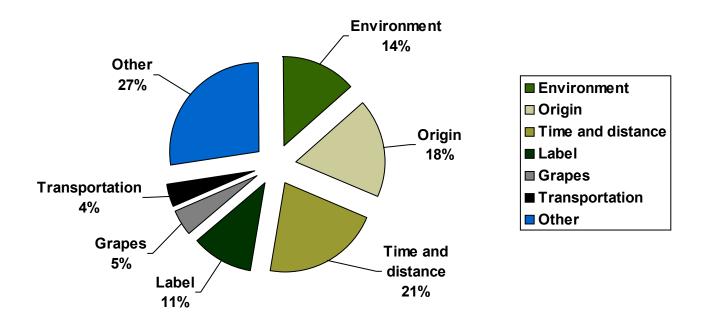


Figure 4. Initial thoughts after viewing labels

The keyword for each category represented an array of responses, including:

- **Environment** (impact on the environment, CO₂ emissions, global warming)
- **Origin** (where the grapes were grown)
- Time and distance (the distance the grapes traveled, and the amount of time in transport)
- Label (the appearance or design of the label, colors, etc)
- **Grapes** (focusing on grapes as a fruit or produce item)
- **Transportation** (the modes of transport used to move grapes from farm to store)
- Other (included food safety, "distraction" from the food item in question, confusion as to purpose of the label)

Reasons for initial reaction

Responses to the question "What, in particular, about the labels made you think that (that being the first thing that came to mind)?" were reviewed and grouped into seven categories as seen in Figure 5.

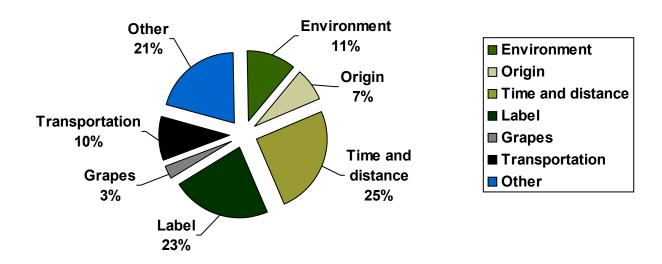


Figure 5. Reasons why consumers had their initial reaction.

Time and distance on the label was the most prominent reason why consumers had a given reaction (time and distance were used in the same context as the preceding question). This reasoning accounted for one-fourth, or 25 percent, of the total responses. The label design also was a major justification for their initial reaction, accounting for nearly another fourth of the total (23 percent).

Respondent understanding of the ecolabels

Consumers were asked to rate five statements, on a scale of 1 to 5 (1 being strongly disagree and 5 being strongly agree) to determine the consumer's overall opinion of the ecolabels. These statements were:

- I clearly understand the labels.
- The labels are too complex.
- The labels did not make an impression on me.
- The labels were meaningful to me.
- As I looked at the labels, I thought of reasons why I would buy the locally grown grapes.

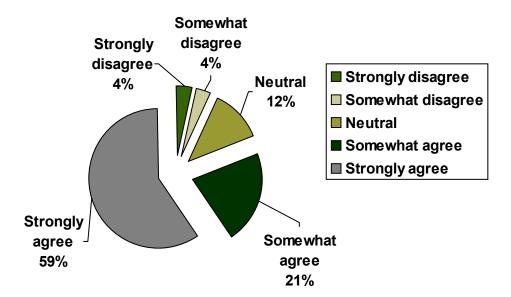


Figure 6. Consumers clearly understand the labels

As Figure 6 shows, the majority of respondents, 59 percent, strongly agreed that the ecolabels were clear and understandable, while 80 percent of the respondents strongly agreed or somewhat agreed with the statement that they clearly understood the labels.

Did the ecolabel trigger reasons to buy local grapes?

The next question asked if the ecolabel triggered reasons why they would buy the locally grown grapes: On a scale of 1 to 5, with 1 being strongly disagree and 5 being strongly agree, please select a response for the following statement: As I looked at the labels, I thought of reasons why I would buy the locally grown grapes.

The ecolabels were effective in getting people to think about reasons they would buy the local grapes, with 76 percent of respondents strongly or somewhat agreeing they could think of reasons to buy the local grapes (see Figure 7). Twelve percent of respondents were not affected by the labels in deciding to purchase the local grapes, while 12 percent were neutral.

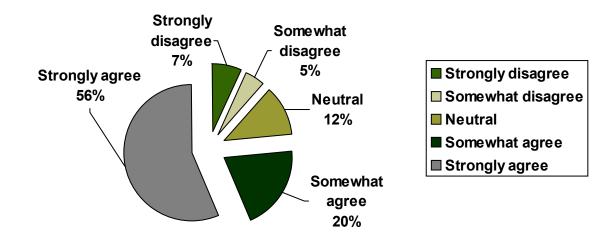


Figure 7. Ecolabels trigger reasons to buy local grapes.

Comparing the effectiveness of the ecolabels

The responses from the statements, "the labels are too complex" and "the labels did not make an impression on me" were reversed in order to be parallel with the other three statements. The higher the mean, the higher the understanding and positive impression made by the ecolabels.

The 394 respondents who viewed the set of ecolabels with CO_2 information provided in a gauge gave the ecolabels the mean rating of 3.80. The 446 respondents who saw the set of ecolabels with CO_2 information as text and the number of days the grapes traveled gave a mean rating of 3.89. In contrast, the 393 respondents who viewed the third set of ecolabels without CO_2 information gave the labels a rating of 4.08 (See Table 1).

The data set from the question was analyzed using the F test. It showed that mean responses in the third set were significantly different than the other two sets of ecolabels. It is uncertain what provoked the more positive response for ecolabel set 3, although comments from the focus group suggest that providing a less complicated ecolabel with information tying the distance the food item travels to consumer interest in freshness will induce a more favorable response toward local food items.

Table I. Comparing understanding of different ecolabels

	Ecolabel Set I Gauge	Ecolabel Set 2 Without Gauge	Ecolabel Set 3 No CO ₂ info
N - Number of respondents*	394	446	393
Mean (I to 5)	3.80	3.89	4.08
Standard Deviation	0.98	0.91	0.84

^{*}Only fully completed surveys were used.

(F test (F2, 1230) = 9.54; PL.05)

Ecolabel and local food perceptions across geographic regions

Demographics: Midwest, Boston and Seattle areas

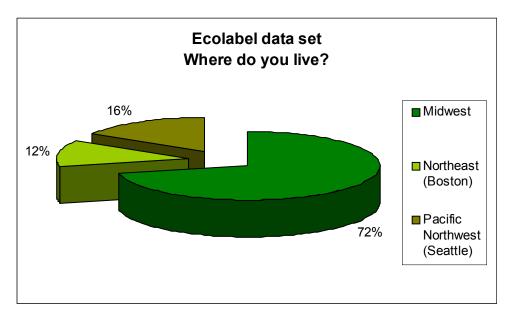


Figure 8. Ecolabel data set: Where do you live?

For the ecolabel data sets, 72 percent of the population sample was from the Midwest (Indiana, Iowa, Illinois, Wisconsin, Minnesota, Missouri, Kansas, and Nebraska), with the Seattle area contributing 16 percent of the responses, and the Boston area 12 percent (Figure 8).

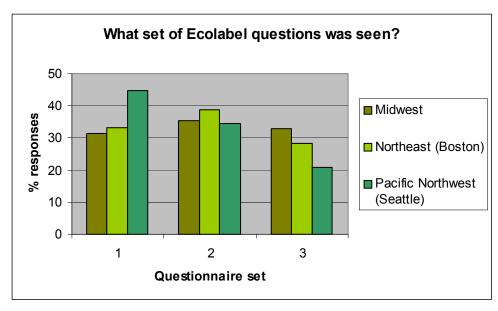


Figure 9. What set of Ecolabel questions was seen?

Figure 9 indicates that the Midwest respondents had the narrowest range of percent of total responses across the three ecolabels offered for viewing. The Seattle-area respondents had the widest variation, ranging from 44.7 percent for ecolabel 1 to only 20.7 percent for ecolabel 3.

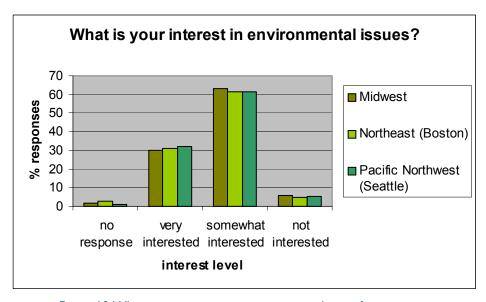


Figure 10. What is your interest in environmental issues?

Figure 10 shows that more than 90 percent of respondents were somewhat to very interested in environmental issues, with the Seattle area having the highest response rate for the very interested category with 32 percent.

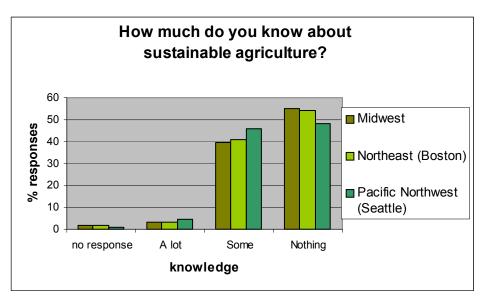


Figure 11. How much do you know about sustainable agriculture?

More than 50 percent of Midwest and Boston-area respondents knew nothing about sustainable agriculture, while 48 percent of Seattle-area consumers said they knew nothing (Figure 11). The Seattle area had the highest understanding of sustainable agriculture, with more than 50 percent of responses indicating at least some knowledge of the subject.

Demographics, continued

Figures 12 through 15 compare demographics regarding age, level of education, gender, and level of household income for the Midwest, Boston-area, and Seattle-area respondents. There were no outstanding differences in these demographics across the three geographic regions.

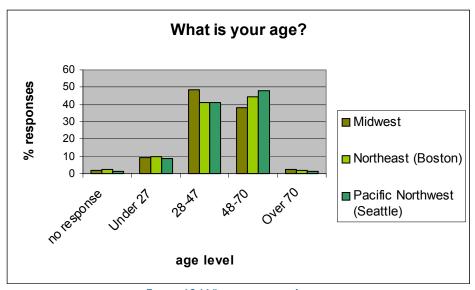


Figure 12. What is your age?

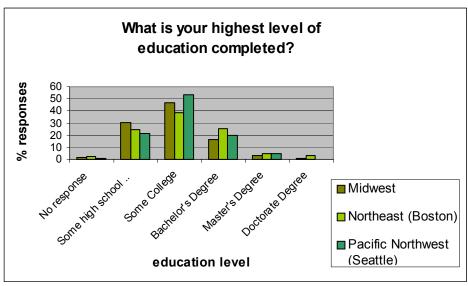


Figure 13. What is your highest level of education completed?

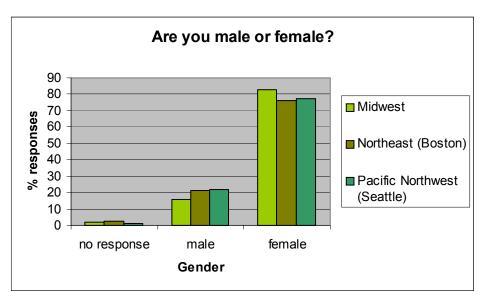


Figure 14. Are you male or female?

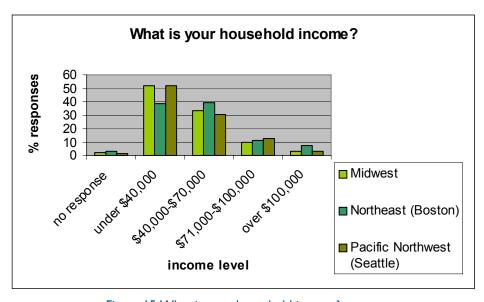


Figure 15. What is your household income?

Perceptions and understanding of the ecolabels

Figures 16 through 20 gauge the perception and impact of the ecolabels across geographic regions (Midwest, Boston area, and Seattle area).

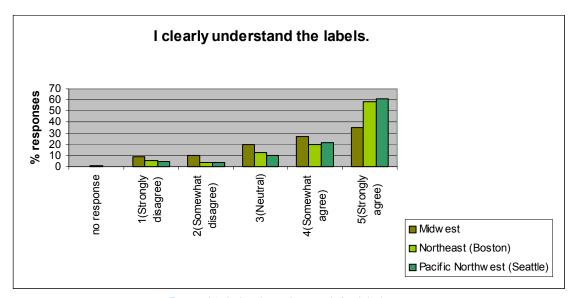


Figure 16. I clearly understand the labels.

Although a majority of the respondents across geographic regions somewhat or strongly agreed with the statement that they clearly understood the ecolabels (80 percent of the total sample), Figure 16 shows that less than 40 percent of the Midwest respondents strongly agreed with the statement compared to 59 percent for the Boston area and 61 percent for Seattle.

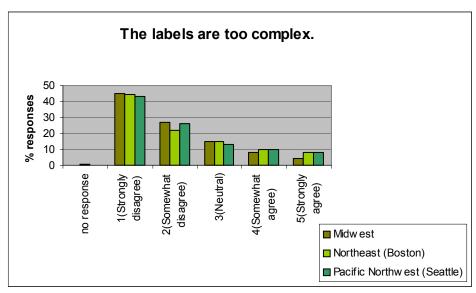


Figure 17. The labels are too complex.

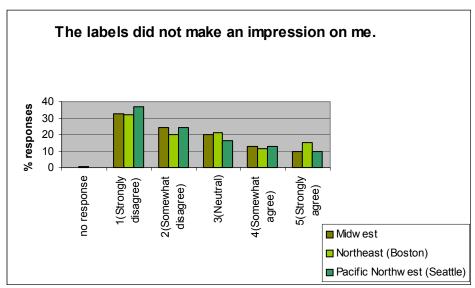


Figure 18. The labels did not make an impression on me.

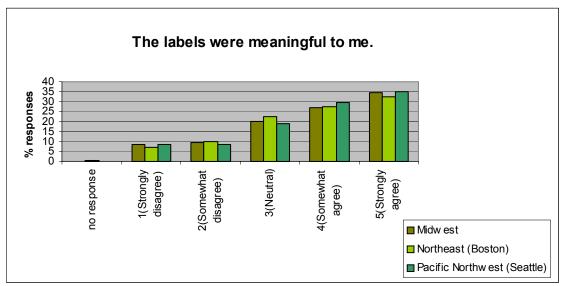


Figure 19. The labels were meaningful to me.

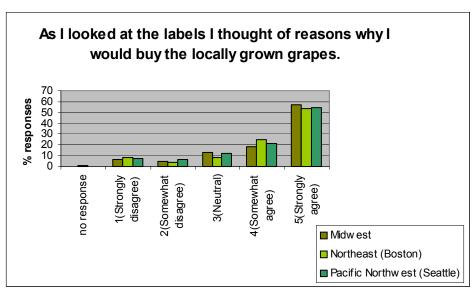


Figure 20. I thought of reasons why I would buy the locally grown grapes.

Figures 16 through 20 illustrate the consistency of responses across geographic regions as to the degree of complexity, level of impression, and meaning of the ecolabels. Overall, respondents understood the labels and did not believe they were complex. More than 70 percent of respondents in the Midwest, Seattle, and Boston strongly or somewhat agreed that the ecolabels evoked reasons why they should buy the locally grown grapes.

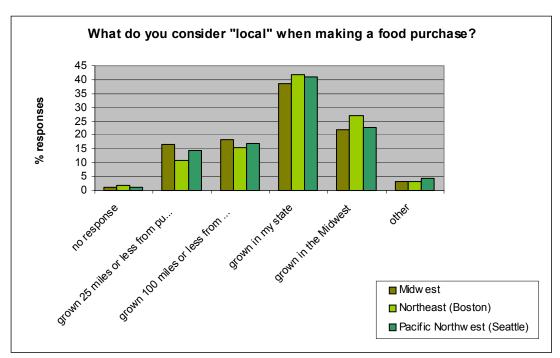


Figure 21. What do you consider "local" when making a food purchase?

Figure 21 shows that more than 40 percent of respondents from Seattle and Boston and nearly 39 percent of Midwest respondents considered local to mean "grown in my state." Approximately 35 percent of the Midwest respondents and 26 and 31 percent, respectively, of those responding in Boston and Seattle, considered local to be a distance of 100 miles or less from farm to store. It is likely that the grape ecolabels had an influence on "grown in my state" being the most popular choice, because the "local" ecolabels used the term "grown in my state."

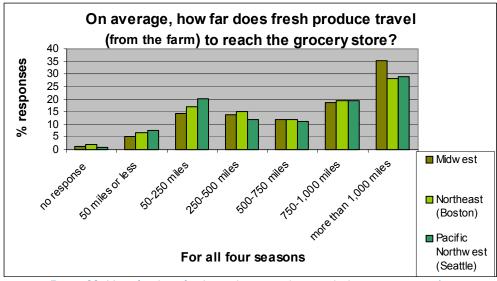


Figure 22. How far does fresh produce travel to reach the grocery store?

Figures 22 and 23 report that respondents from the three geographic regions perceive that when considering the entire year, produce is on average traveling a great distance from farm to store. Fifty-four percent of the Midwest respondents believed that produce traveled from 750 to more than 1,000 miles on average over the entire year, with 47 and 48 percent of Boston and Seattle respondents sharing this perception.

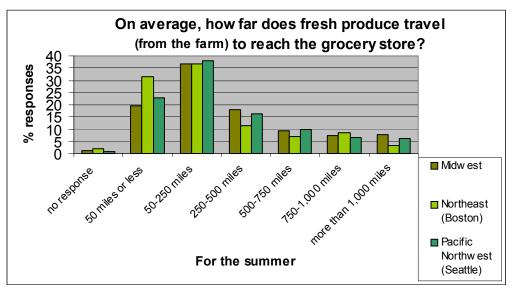


Figure 23. On average, how far does fresh produce travel to reach the grocery store?

Respondents from all three geographic regions believed that the distance produce traveled from farm to store during the summer months was considerably lower than that distance for the entire year. More than 56 percent of the Midwest respondents and 68 and 60 percent, respectively, of the Boston and Seattle respondents believed that their summer produce traveled on average less than 250 miles from farm to store.

Figures 24 and 25 illustrate that respondents from all three geographic regions perceive there is less seasonal variation (comparing all four reasons to summer) in the distance that meat travels from farm to store than is the case for produce (Figures 22 and 23).

There was, however, a marked difference between the Midwest and Boston/Seattle respondents in the perception that meat traveled more than 1,000 miles from farm to store. For example, only 7 percent of Midwest respondents believed that meat traveled more than 1,000 miles on average during the summer months, while 16 percent of the Boston and 14 percent of the Seattle residents held this belief. The difference in this perception may be based on the fact that more of the U.S. meat production and processing (beef and pork) takes place in the Midwest than the Northeast or Pacific Northwest.

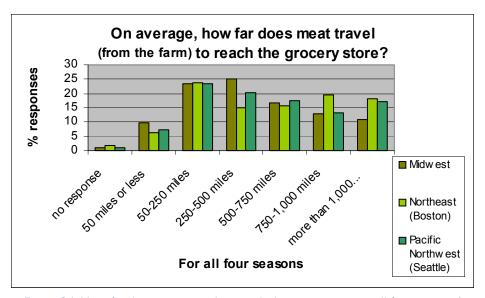


Figure 24. How far does meat travel to reach the grocery store - all four seasons?

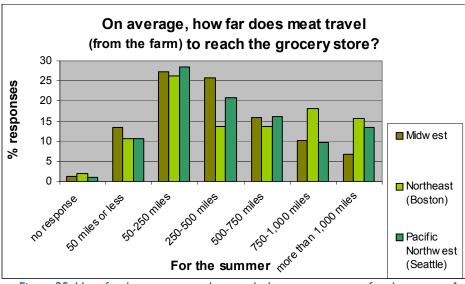


Figure 25. How far does meat travel to reach the grocery store - for the summer?

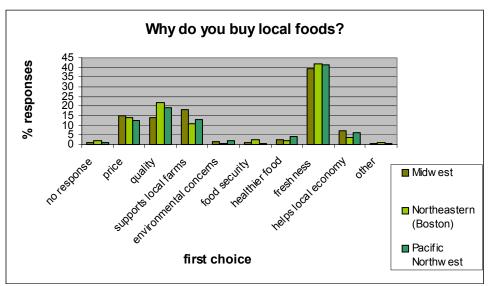


Figure 26. Why do you buy local foods?

Figure 26 shows that "freshness" was by far the most important reason to buy local foods for respondents across the three geographic regions. More than 40 percent of Boston- and Seattle-area respondents and 39 percent of Midwest respondents selected this option.

The second highest response for the most important reason to buy local was "quality" in the Boston and Seattle areas. However, quality earned the fourth highest percentage for the Midwest respondents, with "supporting family farms" receiving the second highest percentage of responses. "Price" scored the second highest percentage for top choice in the Boston area, and was third among Midwest and Seattle-area respondents.

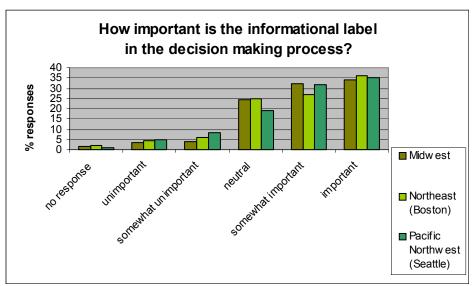


Figure 27. How important is the informational label in the decision making process?

Figure 27 shows that the informational labels were rated somewhat important to important for two-thirds of Midwest and Seattle-area respondents, and 63 percent of the Boston-area respondents. More than 13 percent of the Seattle-area respondents placed little to no importance on informational labels in their decision-making process.



Figure 28. How much higher of a price would you be willing to pay for locally grown foods?

Figures 28 and 29 indicate how much more respondents would be willing to pay for locally grown food and food that had low environmental impacts in food transportation. Responses were similar across the three geographic regions, with more than 70 percent of Midwest and Boston-area respondents being willing to pay 1 to 15 percent more for locally grown foods and food products with low environmental impacts in transportation.

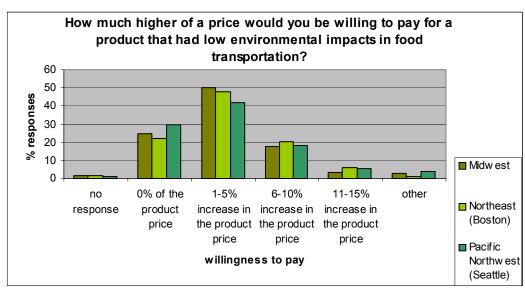


Figure 29. How much would you be willing to pay for low environmental impacts?

Approximately 69 percent of the Seattle-area respondents were willing to pay 1 to 15 percent more for locally grown food, while only 64 percent were willing to pay for food that had lower environmental impacts in food transportation.

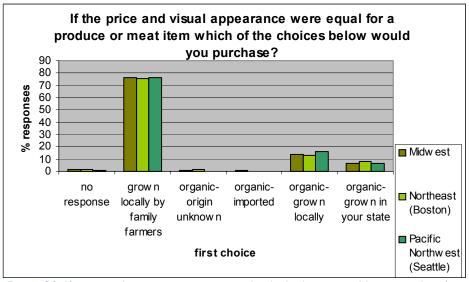


Figure 30. If price and appearance were equal, which choice would you purchase?

When asked to select an option for produce or meat items, given that price and visual appearance were the same, more than 75 percent of Midwest, Boston-area and Seattle-area respondents selected "grown locally by family farmers" as their first choice (Figure 30). "Organic-grown locally" totaled the second highest percentage (13 percent) as the first choice of respondents across all three geographic regions. "Organic grown in your state" was the third highest response.

Ecolabel & No Ecolabel Consumer Respondents

Demographics

Table 2 shows that residents of Illinois accounted for more than 21 percent of the consumer respondents who did or did not view the ecolabels. Responses from Indiana residents accounted for the second highest percentage, while residents from Nebraska constituted the smallest percentage from the eight states represented. Appendix 10 provides responses to each survey question for the ecolabel and no ecolabel data sets by state, or in the case of Boston and Seattle (ecolabels only) by metropolitan area. (Although not presented here, data sets contain responses for Boston and Seattle metropolitan areas.)

Table 2. Percentage of Midwest Ecolabel and No Ecolabel Respondents by State.

	Where do you live?	Where do you live?
	Ecolabel Respondents N = 940	No Ecolabel Respondents N = 445
No response	4.7%	1.9%
IL .	22.9%	21.6%
IN	13.9%	15.5%
IA	11.7%	8.7%
KS	7.4%	7.8%
MN	11.5%	10.2%
MO	13.7%	13.2%
NE	4.5%	5.6%
WI	9.7%	15.4%
sum	100.0%	100.0%

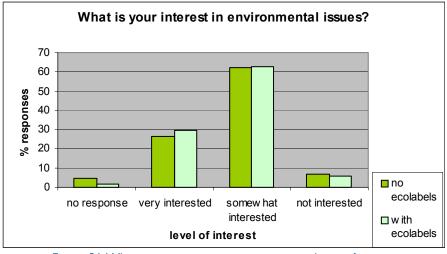


Figure 31. What is your interest in environmental issues?

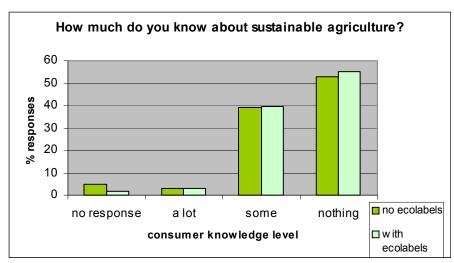


Figure 32. How much do you know about sustainable agriculture?

Figures 31 and 32 show that there are few differences between the Midwest respondents who viewed and did not view the ecolabels in regard to interest in environmental issues and knowledge about sustainable agriculture. Nearly 30 percent of respondents who viewed the ecolabels were very interested in environmental issues, compared to 26 percent for those who did not view the ecolabels. More than 50 percent of both ecolabel and no ecolabel respondents knew nothing about sustainable agriculture.

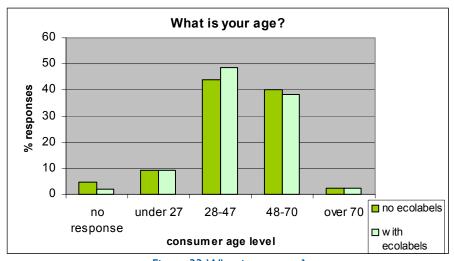


Figure 33. What is your age?

Figures 33 through 36 compare the demographics for age, level of education, household income, and gender for consumer respondents who viewed and did not view the ecolabels. There are minor differences in these demographic categories between the two groups of consumer respondents. It is interesting to note that females dominated both populations' samples, with 80 or more percent of total responses.

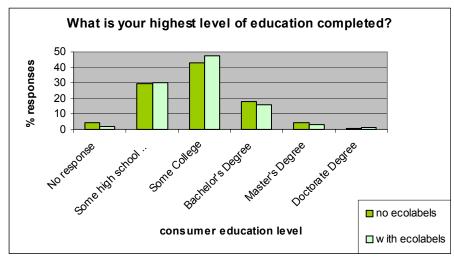


Figure 34. What is your highest level of education completed?

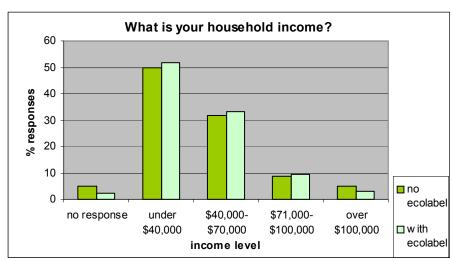


Figure 35. What is your household income?

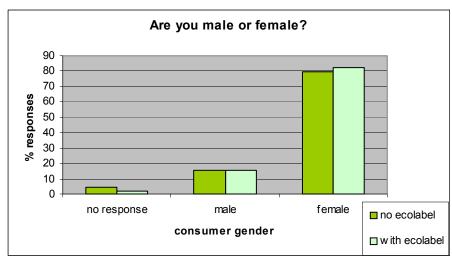


Figure 36. Are you male or female?

Perceptions of how far produce, meat, and poultry travel

Figures 37 and 38 show that there were few differences between consumer respondents who did or did not view ecolabels in their perceptions of how far produce traveled during the summer. Both sets of respondents believed that produce traveled a shorter distance (from farm to store) during the summer months than the average distance for the year. Thirty-five percent of respondents who had viewed the ecolabels perceived that for all seasons produce traveled more than 1,000 miles, compared to 29 percent of the respondents who did not view the ecolabels.

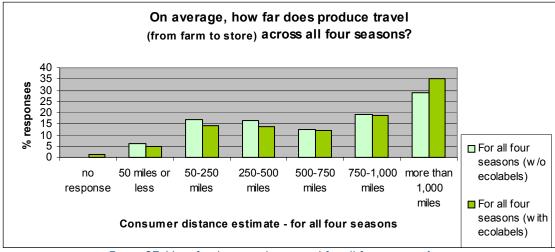


Figure 37. How far does produce travel for all four seasons?

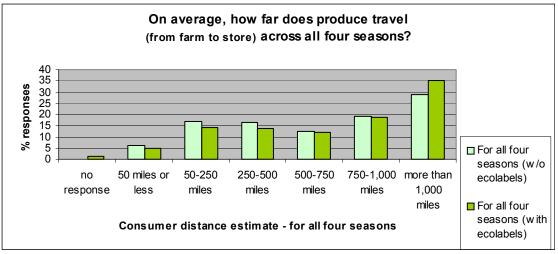


Figure 38. How far does produce travel for the summer?

Figures 39 and 40 indicate that when compared to the ecolabel consumer respondents, a higher percentage of no ecolabel consumer respondents believed that meat and poultry traveled 500 or more miles over the entire year; the same was true during the summer. Both ecolabel and no ecolabel respondents perceived that meat and poultry did not travel as far as produce over the entire year and during the summer months.

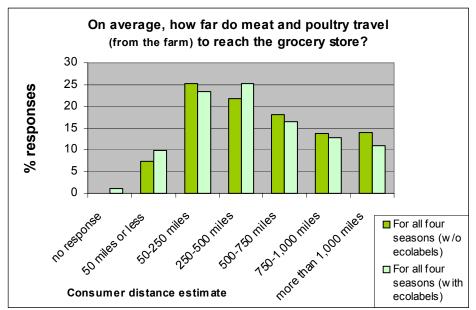


Figure 39. How far do meat and poultry travel to reach the store for all seasons?

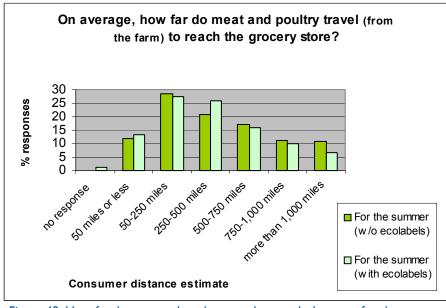


Figure 40. How far do meat and poultry travel to reach the store for the summer?

Reasons for buying and concerns with locally grown foods

As shown in Figure 41, both ecolabel and no ecolabel consumer respondents selected the same set of four reasons for purchasing local foods: freshness, quality, price, and supporting local farmers. Freshness received the highest percentage of responses from both consumer groups, with 39 percent of respondents who viewed the ecolabels selecting this option compared to 33 percent of those respondents who did not view the ecolabels.

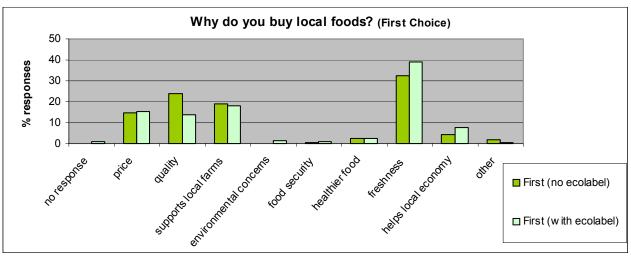


Figure 41. Why do you buy local foods?

An open-ended question asked of both set of respondents solicited information about concerns with local foods. The vast majority of ecolabel and no ecolabel respondents did not have any concerns with buying local foods. Nearly 5 percent of the respondents expressed concerned about the use of pesticides in growing local products, while 1 percent of those responding had concerns about food safety or "cleanliness" issues.

More than 60 percent of ecolabel and no ecolabel respondents believed the information label was important or somewhat important in the decision making process to buy food (Figure 42).

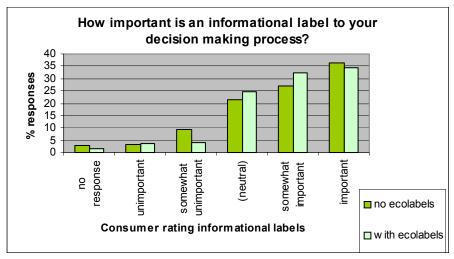


Figure 42. How important is an informational label to your decision?

Consumer respondent willingness to pay

More than 70 percent of ecolabel and no ecolabel respondents were willing to pay from 1 to 15 percent more for local foods. However, nearly half of both consumer respondent samples were willing to pay 1 to 5 percent more, but less than 4 percent of both groups was willing to pay an increase of more than 10 percent (Figure 43).

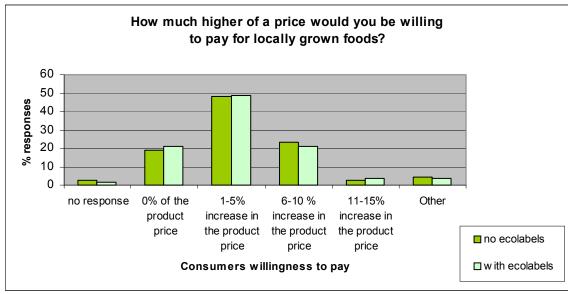


Figure 43. How much of a higher price would you be willing to pay for locally grown foods?

Following a similar pattern to the local foods question, Figure 44 shows that slightly less than 70 percent of the ecolabel and no ecolabel respondents were willing to pay 1 to 15 percent more for food products that had low environmental impacts in food transportation. It appears that viewing the ecolabels had little influence on consumer willingness to pay for the low environmental impacts.

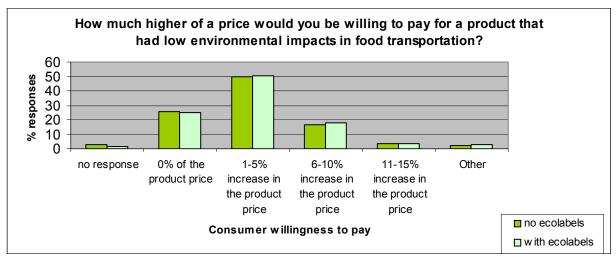


Figure 44. How much higher of a price would you be willing to pay for a product that had low environmental impacts in food transportation?

Grown locally versus organic options

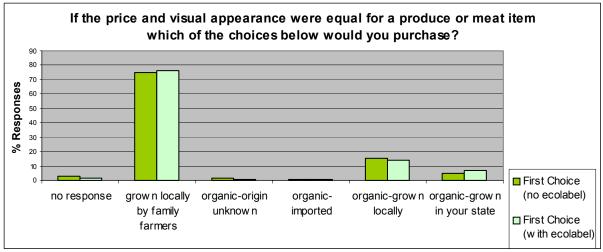


Figure 45. If the price and visual appearance were equal, which choice would you purchase?

Figure 45 shows that if price and visual appearance were the same, both ecolabel and no ecolabel respondents were far more interested in purchasing produce or meat products that were "grown locally by family farmers" (75 percent for no ecolabel and 76 percent for ecolabel), than any other organic option presented, including "organic grown locally." Nearly 15 percent of no ecolabel respondents and 14 percent of those who viewed ecolabels, selected "organic-grown locally" as their first choice. It is possible that the difference would not be as great between these two choices if the words "by family farmers" were added to the "organic grown locally" choice.

Food Business Survey Analysis

Analysis

Food business participants in the Internet survey did not view any of the three sets of ecolabels viewed by participating consumers. However, the food business participants were asked many of the same questions as the consumers, and were asked several other questions (including demographic specifics) unique to the food businesses survey.

Eighty-seven businesses responded to the survey, a response rate of approximately 3 percent of the total number of businesses contacted. Nine respondents were from Seattle, five from Boston, thirty from Iowa, and thirty-four were from seven other Midwest states. More responses were from the state of Iowa because the team obtained a greater number of e-mail addresses and fax numbers from the businesses in this state than from other states. In this section, we examine only food business responses to the survey questions.

Table 3 shows a broad representation of different types of businesses for the survey. The business represented most often is the grocery store, with 28 percent of the total respondents. The next highest representation was in the "other" category with 25 percent of total respondents. This percentage is high because some of the businesses that considered themselves to be in this category are a specialized version of some of the other choices. For example, a health food grocery store was not included in the grocery store category, but rather in the category "other." Fifteen percent of the respondents were in the farmer/cooperative/producer category, and 14 percent were in the distributor category.

There is a large representation of businesses from Iowa, with 39 percent of the total businesses located in the state (Table 4). This is probably because more e-mail addresses were received from Iowa businesses than businesses in other states. The rest of the Midwestern states represented 44 percent of the total. The East and West Coast states, Massachusetts and Washington, accounted for 6 percent and 11 percent, respectively.

Table 5 shows that the majority of the businesses, 71 percent, are independently owned. The other businesses are chains or franchises, accounting for the remaining 29 percent of the total.

Food Business Survey Analysis Tables

Table 3. Type of Food Business

Distributor	14%
armers Market	6%
armer/Cooperative/Producter	15%
Grocery Store	30%
Restaurant	9%
Other	25%

Table 4. State Where Located

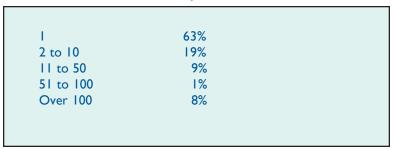
lowa	39%
Midwest (excluding lowa)	44%
Massachusetts	6%
Washington	11%

Table 5. Structure of Food Business

29%
71%

Most of the businesses surveyed (63 percent) have one location of operations (Table 6). The next largest category was two to ten locations of the business (19 percent). These categories are the largest segments of the total because more than 70 percent of the businesses are independently owned.

Table 6. Number of Locations of Operations



According to Table 7, the majority of the people responding to the survey, 60 percent, has complete autonomy in choosing the suppliers of meat and/or produce. This increases the survey's ability to gauge the opinions of the actual decision makers. The next largest category with 31 percent contains people with some autonomy in buying meat and/or produce. A small percentage (9 percent) of respondents has no autonomy in buying the meat and/or produce.

Table 8 indicates that the vast majority of respondents (70 percent) currently purchase some types of locally grown foods. The percentages for the other two responses are nearly equal; 14 percent have purchased locally grown foods in the past but do not currently purchase these items and 16 percent have never purchased locally grown foods. More than 80 percent of businesses either support or have supported the local food businesses, a promising indication that people appear willing to purchase locally grown foods.

Half of the businesses claim locally grown foods represent 0-10 percent of their total business (Table 9). Another fourth of the businesses (26 percent) say that locally grown foods make up more than 50 percent of their total business. The top two responses suggest that the businesses either have a lot of locally grown foods or little to none. The other two percentages, 10-25 percent and 25-50 percent, each account for about an eighth of the total, or 12 percent of the responses.

Table 7. Level of Autonomy

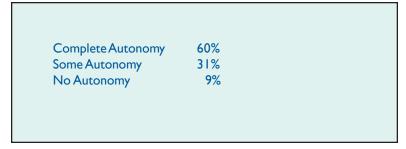


Table 8. Does the Business Carry Local Foods

Currently Purchase Purchased in the Past	70%
(not currently)	14%
Never Purchased	16%

Table 9. Percentage of Local Food in the Food Business

0 to 10%	50%	
10 to 25%	12%	
25 to 50%	12%	
Greater than 50%	26%	

Comparing responses of consumers vs. food business respondents

Responses from consumers who did not see the ecolabels were compared with those of food business respondents who also did not view the ecolabels.

More than 44 percent of consumer respondents chose "grown 25 miles or less from purchase" as what they considered local, compared to only 17 percent for food businesses. On the other hand, 34 percent of food businesses chose "grown in my state" as their definition of local, compared to 23 percent of consumer respondents. (See Figure 46.)

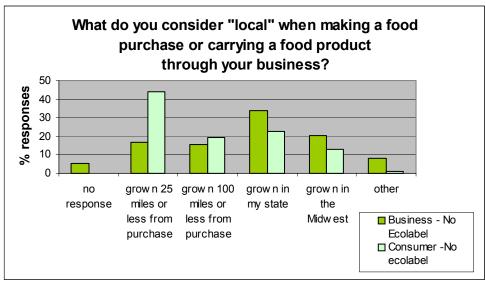


Figure 46. What do you consider "local" when making a food purchase?

On face value, it appears that consumers and food businesses do not share a consistent definition of local when it comes to food. It is possible, however, that the large percentage of Iowa food business respondents was a factor contributing to the high percentage of respondents who chose "grown in my state." Many of the Iowa food businesses respondents participate in the *A Taste of Iowa* marketing program, and therefore might be more likely to perceive local to mean "grown in my state."

How far do fresh produce, meat, and poultry travel?

Figures 47 and 48 show that 45 percent of food business respondents perceived that produce traveled more than 1,000 miles for all four seasons, compared to 29 percent of consumer respondents. During the summer, the percentage of food business and consumer respondents who perceived produce to travel more than 1,000 miles decreased, with 15 percent of the food business total and 9 percent of the consumer total choosing this response. (Note: food business respondents who chose "not applicable" for their response were not included in the percent calculation.)

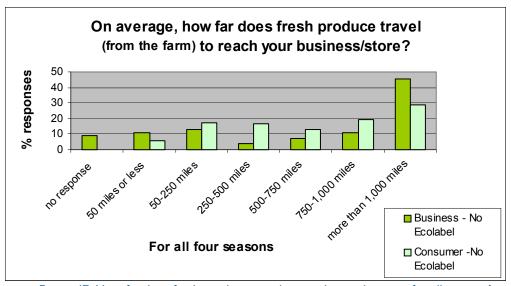


Figure 47. How far does fresh produce travel to reach your business for all seasons?

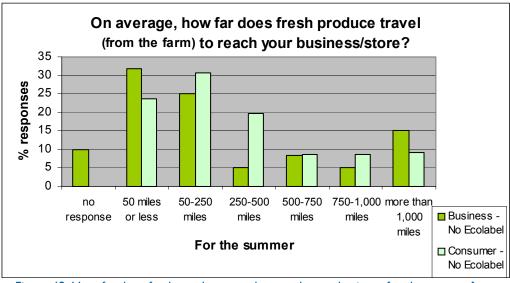


Figure 48. How far does fresh produce travel to reach your business for the summer?

Figures 49 and 50 show that food business respondents indicated consistently lower distances compared to consumer respondents regarding the average distance meat and poultry travels to reach your business (or store, in the case of the consumer respondents) for the choices of 250 miles, 500-750 miles, 750-1,000 miles, and more than 1,000 miles.

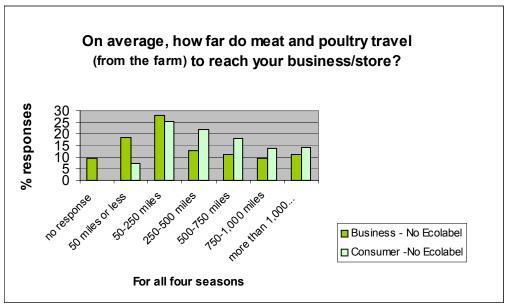


Figure 49. How far do meat and poultry travel to reach your business for all seasons?

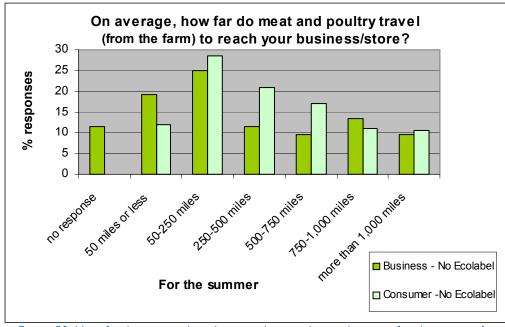


Figure 50. How far do meat and poultry travel to reach your business for the summer?

Willingness to pay for locally grown foods

Figure 51 compares the willingness of consumer and food business respondents to pay more for locally grown foods. The chart shows mixed signals between the two groups; far more consumers were willing to pay 1 to 5 percent more than food businesses. However, 18 percent of the food business respondents chose "other," compared to only 4 percent for the consumer group. Food business responses for "other" included 25, 100, and 200 percent more for the locally grown food. The food business and consumer responses for the "other" category also included comments that local food price should be the same or cheaper since the transportation costs would be lower.

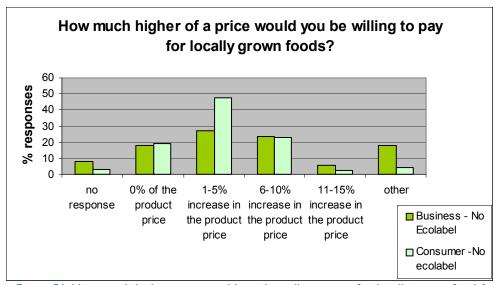


Figure 51. How much higher price would you be willing to pay for locally grown foods?

Figure 52 compares responses between no ecolabel consumer respondents and food businesses regarding their interest in locally grown and/or organic produce and meat items, assuming that price and visual appearance were the same. Both food businesses and consumer respondents overwhelmingly chose "grown locally by family farmers" as their first selection. A higher percentage of food business respondents chose "organic-grown locally" or "organic-grown in my state" than did the consumer respondents.

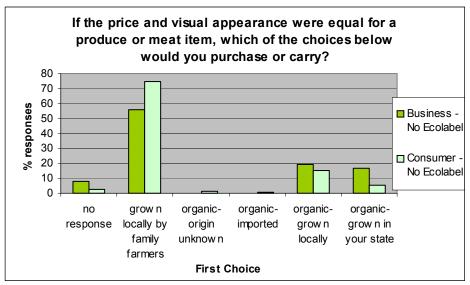


Figure 52. If the price and visual appearance were equal, which of the choices would you purchase?

Food business perceptions of consumers:

Perceived customer interest in an ecolabel

Figure 53 shows that approximately 57 percent of the food business respondents believed that consumers would be somewhat to very interested in a label that indicates product source, mileage from farm to point-of-sale, mode of transport, and environmental impacts in food transportation.

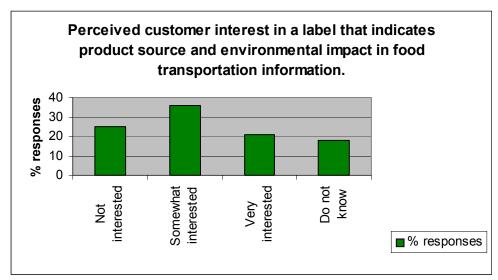


Figure 53. Perceived customer interest in a label indicating product source and environmental impact.

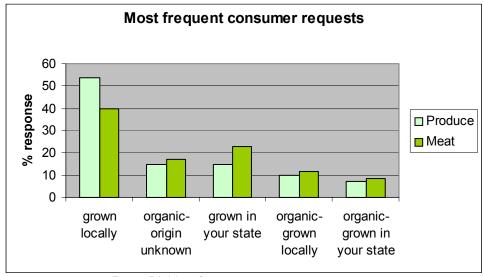


Figure 54. Most frequent consumer requests.

Figure 54 shows the responses across five options to the question "Which of the choices are you receiving the most request for from your customers?" Many of the food business respondents who chose "not applicable" to either produce or meat were not included. For those that did respond, "grown locally" received 53 percent of the responses for produce and 40 percent for meat. The choice receiving the second highest response due to consumer requests was "grown in your state."

Leopold Center & ISU Business Analysis Lab Collaboration

Prior to the summer of 2003, the Leopold Center had not collaborated with any department, center or group within the ISU College of Business. Likewise, the ISU Business Analysis Laboratory had never undertaken a project that focused on sustainable agriculture and the marketing of food products before working with the Leopold Center. An important goal of this project was to assess the ISU Business Analysis Laboratory's role in supporting market research and business development in food value chains—value chains where the farm production practices were rooted in the principles of sustainable agriculture.

From the start of the project, ISU Business Analysis Lab students and faculty scholar, Tom DeCarlo, met on a weekly basis with Rich Pirog of the Leopold Center to discuss project direction and focus. Although the students and faculty scholar were not familiar with ecolabels and local food systems, all members of the team were willing to learn more about the underlying reasons for doing consumer market research in this area. Pirog took the time to learn about previous ISU Business Analysis Lab projects, so he was aware of the potential performance of the Lab. Pirog also routinely sent related marketing and ecolabel articles to the team as a means of providing additional context to this work.

Although the students had little agriculture or food background, they were quick learners who easily grasped the ecolabel concept. The students made invaluable suggestions and contributions to revise the designs of the ecolabel prototypes, and suggested wording and structure of survey questions. The Business Analysis Lab students and faculty scholar made a presentation to Pirog and other Leopold staff and food system colleagues on August 8, 2003.

One challenge in this collaboration was the limited time Pirog had available to provide guidance and direction during the final survey questions revision and the data analysis and final report. The students needed to finish the work within a few days after the final report. If more time had been available for all parties to examine the raw data, the amount of survey data analysis could have been reduced with a more intentional focus on certain key questions.

This pilot project has been successful in demonstrating that ISU College of Business students can—with appropriate mentoring and guidance—conduct ecolabel market research with consumers and food businesses. The Leopold Center is currently working with the ISU Business Analysis Laboratory on a second phase of ecolabel market research, which is described in the section "Opportunities for Future Research." Once that work is completed, the two groups will coordinate a forum to share results with a group of students, faculty, farmers, and sustainability-oriented food businesses who also may be interested in contracting with the ISU Business Analysis Laboratory to conduct market and product development research.

Conclusions

More than 70 percent of consumer respondents who viewed the ecolabel prototypes understood them, and 75 percent who viewed them could think of reasons to buy the local grapes. When choosing between local and non-local food products, consumer respondents appeared to better understand ecolabels that had less total information and that conveyed context about local product "freshness," rather than warnings of higher environmental risk.

It appears that viewing the ecolabels influenced the perception of the term"local" when making a food purchase. For those who viewed the ecolabels, local was more likely to mean "grown in my state" than "grown a distance of 25 miles or less from purchase," which was the choice made most frequently by consumer respondents who did not view any ecolabels. A likely explanation for this is that the consumer ecolabels for the "local" grapes contained text indicating they were "grown in your state." Extending this logic implies that if the "local" label contained text indicating the grapes were "grown within 100 miles of purchase," respondents would have chosen "grown 100 miles or less from purchase" to answer the question about what constitutes "local" when making a food purchase.

The ecolabels also may have influenced the perception of how far fresh produce travels, and how fresh the produce would be. Thirty-five percent of respondents who had viewed the ecolabels perceived that, for all seasons, produce traveled more than 1,000 miles, compared to 29 percent of the respondents who did not view the ecolabels. Freshness received the highest percentage of responses as the top reason to buy local foods from both consumer groups, with 39 percent of respondents who viewed the ecolabels selecting this option, compared to 33 percent of those respondents who did not view the ecolabels.

Regardless of whether or not they viewed the ecolabels, consumer respondents exhibited basic knowledge about the seasonality of produce by choosing that on average produce would—over the course of the year—travel farther from farm to point of sale than produce grown during the summer months. Also, consumer respondents from the Midwest recognized that meat and poultry products travel comparatively shorter distances from farm to point of sale than produce items.

For consumer respondents across all three geographic regions, **freshness was the most important reason selected for buying local foods**, with more than 40 percent of Boston- and Seattle-area respondents, and 39 percent of Midwest respondents selecting this option.

"Supporting family farmers" was the second most popular reason for purchasing local foods among the Midwest respondents, although it was the fourth highest choice for Boston respondents and tied for third among Seattle-area respondents.

Approximately 67 percent of consumer respondents who viewed the ecolabels and 72 percent of those who did not view the ecolabels, **believed informational labels are important to some degree in their decision making process.** Both the "ecolabels" and the "no ecolabels" consumer respondents place the most value on freshness, quality, price, and the notion of supporting family farms for local foods.

Pricing willingness to pay options

Approximately 25 percent of the ecolabel and no ecolabel respondents were willing to pay from 6 to 15 percent more for locally grown produce and meat products. Approximately 20 percent of ecolabel and no ecolabel consumer respondents were willing to pay from 6 to 15 percent more for products that had low environmental impacts in food transportation. The percent increase over conventional price options for the "willingness to pay" questions were based, in part, on responses from focus group participants.

The "willingness to pay" question options may have, however, been too narrowly focused. A number of consumer and food business respondents chose "other" for their response to this question. A small portion of these respondents were willing to pay more than 50 percent more for local foods.

Locally grown and organic perceptions

More than 75 percent of consumer respondents chose "grown locally by family farmers" as their first choice for produce or meat products compared to four different organic choices, even though the survey question stated that price and visual appearance would be the same for all choices. This selection was consistent across all three of the geographic regions.

This is surprising, considering that one of the options was "grown locally-organic" (this choice received the second highest percentage of first choice selections). The same trend was found for the food business respondents, with more than 55 of respondents choosing "grown locally by family farmers." It is possible that "grown locally-organic" would have received a higher percentage of first choice selections had the words "by family farmers" been added. However, the results do suggest that products "grown locally" combined with "by family farmers" offers a more compelling market story to consumer and food business respondents than organic produce or meat products that may or may not be locally grown – if price and appearance are equal.

It also is possible that the term organic may not be well understood, or may not be as popular with consumers as locally grown foods that are not necessarily organic. Figure 54 suggests the latter, with food businesses stating they receive more requests for produce and meat items that are grown locally than grown locally-organic. Food business respondents perceived that more than 50 percent of their customers would be interested in a label that indicates product source, mileage from farm to point of sale, mode of transport, and environmental impacts in food transportation.

Food business and consumer responses without viewing ecolabels

Food business respondents and one set of consumer respondents did not view the ecolabels. Responses to survey questions for the two groups were compared. When making a purchase decision on carrying a food product, the food business respondents were much more likely to view "local" as being "grown in my state" (38 percent) than the no ecolabel consumer respondents, who selected "grown 25 miles or less from purchase" as their definition of "local." This disparity may have been influenced by the high percentage of Iowa food businesses surveyed, a number of which participate in the state's *A Taste of Iowa* marketing program.

Food business respondents selected "grown locally" as the most frequent consumer request for produce and meat items over four organic choices that included "organic grown locally" (52 percent of the responses for produce and 40 percent for meat items). In this case, the words "by family farmers" were not part of the "grown locally" option. The choice receiving the second highest percentage for both produce and meat was "organic grown within my state."

Marketing perceptions

In marketing terms, the freshness, quality, taste, and price (value) attributes of the food product (in our ecolabel case, grapes) are part of the core product to consumers (Figure 55). "Taste" is included in the set because of the responses it received in the open-ended questions. When consumers shop for foods, the characteristics of the core product are what drive their overall purchasing decision. Consumers secondarily look for augmented benefits such as supporting local farms, low environmental impacts, and supporting the local economy.

The survey results indicate that—regardless of whether they viewed the ecolabels—consumer respondents do place a high value on their perception that purchasing local foods supports local farms. In fact, 18 percent of the Midwest consumer respondents chose "supports local farms" as their primary reason for buying local foods. It is unlikely, however, that these consumers would buy the local food product again if it was not fresh, or did not have the taste and quality that they are seeking. That is why freshness, taste, quality, and value are core attributes, and supporting local farms is not. However, the importance of the augmented benefits should not be discounted as an important factor in consumer decision-making.

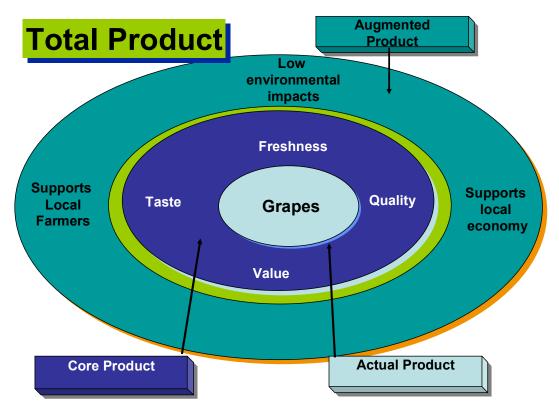


Figure 55. Core and Augmented Product Chart

Building contextual bridges to product benefits

Over time, the secondary or augmented benefits of low environmental impacts, supporting the local economy and supporting local farmers can be more closely linked to the core product through education and market messages that build contextual bridges to the core product benefits. For example, consumer respondents in this set of surveys placed a high priority on the freshness of local foods. Information on time involved in transport and storage from farm to point of sale can be used to develop a concept parallel to "freshness dates" often found on perishable and semi-perishable items such as milk, orange juice, and yogurt.

Plans for Future Research

Of the labels viewed in the Internet study, consumers gave the most favorable ratings to the ecolabel with information on length of time in transport from farm to store and no CO_2 emissions (from transport) information. Of the three designs, this was the ecolabel with the least information, but it included length of time in transport serving as a "freshness date" for the product. The Leopold Center and the ISU Business Analysis Laboratory are conducting follow-up market research on additional ecolabel prototypes to determine how best to tie the concept of "freshness date" to locally grown produce or other locally produced food items.

The Leopold Center and ISU Business Analysis Laboratory also plan to revise questions on "willingness to pay" to reflect a broader price range, or to have the price response be open-ended. Regarding the question on choice of product type given that price and visual appearance are the same, it will be important to decouple the term "family farmers" from "grown locally" to assess whether there is more interest in locally grown or "grown in my state" products than those same products grown with organic production methods. Another option may be to use two questions; one comparing several "grown locally" options with and without "family farm" without using organic, and the other question comparing "organic-grown locally" with and without "by family farmers."

Ecolabel options for future study

To study what attributes drive consumers' decisions, a conjoint analysis study could be done using the Internet. Consumers would be shown the ecolabel that was best received in this study. Then they would be asked several questions to determine what attributes of the ecolabel would make them more willing to pay a premium for the product being sold. For example, consumers would be given different scenarios and then asked to select the most appealing option. They could have locally grown grapes with a 10 percent increase in price that were grown with pesticides, or they could have grapes from Chile with a 5 percent increase in price that were grown without pesticides. From this it could be concluded what particular element on the ecolabel makes consumers willing to pay a premium for the produce.

The follow-up study will probe consumers' perceptions of various strategies to increase farm profitability, including selling to local and regional markets.

Appendices

Appendix I: Leopold Center for Sustainable Agriculture

The Leopold Center is a research and education center with statewide programs to develop sustainable agricultural practices that are both profitable and conserve natural resources. It was established under the Groundwater Protection Act of 1987 with a three-fold mission: (1) to conduct research into the negative impacts of agricultural practices; (2) to assist in developing alternative practices; (3) to work with ISU Extension to inform the public of Leopold Center findings. The Center is administered through the Agriculture and Home Economics Experiment Station at Iowa State University.

In late 2002, a vision statement was adopted: The Leopold Center for Sustainable Agriculture explores and cultivates alternatives that secure healthier people and landscapes in Iowa and the nation. As part of the Center's new orientation, three research initiatives have replaced the more general competitive grants research program. Each of the three research programs—marketing and food systems, ecology, and policy—are responsible for its own projects and educational events. This report is coordinated by the marketing and food system initiative.

A 17-member advisory board, established in the 1987 legislation, advises the director on funding of research proposals, policies and procedures, budget development, and program review. In 1994, four *ex-officio* members active in farming and agribusiness were added to the board. They received full voting privileges in 1999.

State fees on nitrogen fertilizer and pesticides provide an estimated \$1,100,000 annually to support research, education, and administration of Center programs. A state appropriation of approximately \$500,000 supports many of the Center's competitive grants.

As of July 1, 2002, the Leopold Center has awarded more than 250 competitive grants totaling more than \$10 million. Leopold Center competitive grants are available to researchers and educators at all Iowa colleges and universities, and to investigators at private nonprofit agencies and foundations in the state. These awards often act as seed money to initiate work for which other larger sources of funding then become available.

The Center's mission includes an educational component of informing the agricultural community and the general public about its research findings. The Center collaborates with ISU Extension and other university, state, and local organizations to communicate research findings. It also supports conferences, seminars, and special events related to the three research initiatives.

For additional information, contact the Leopold Center for Sustainable Agriculture, 209 Curtiss Hall, Iowa State University, Ames, IA 50011-1050; (515) 294-3711, fax (515) 294-9696, e-mail leocenter@iastate.edu, and Web site www.leopold.iastate.edu.

Appendix 2: ISU Business Analysis Laboratory

The Business Analysis Laboratory is a unique learning experience at Iowa State University. Graduate and undergraduate students from the colleges of Business, Education, and Engineering work together in cross-functional teams to **solve real business and manufacturing problems,** many involving the 3M Corporation.

Our Purpose and Mission

The Laboratory is designed to provide a setting within which students may apply their education to real world business situations. It is essentially the academic equivalent of a **technology business incubator with students as tenants**. Students work part-time in the Laboratory in multidisciplinary teams, progressing to leadership positions with superior performance over the course of a semester. Faculty members - one each from the Colleges of Business, Education (Industrial Technology), and Engineering - provide support to students during their work in the Laboratory.

Instructional Components

Faculty team-teach an undergraduate Business Administration course (BusAd 392x) associated with the Lab experience. The course is offered in seminar format and is comprised of instructional components designed to provide students with some of the skills they require for technological problem solving, innovation, and integration.

History

The ISU Business Analysis Laboratory is an outgrowth of 3M efforts during the early 1990s to investigate innovative ways of partnering with academic institutions. The Lab was opened at Iowa State University in 1997.

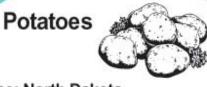
Goals & Objectives

- Provide students with practical business experience that benefits both the students and the corporate partners.
- Expose students to the cross-functional nature of real projects.
- Put students in situations that require them to move outside of their academic comfort zones.
- Present semester projects to key members of their sponsoring organizations.

Appendix 3: Ames Focus Group Ecolabels

Food miles ecolabel Point of purchase: supermarket in Des Moines, Iowa **Apples** Source: Iowa Food miles (farm-to-store distance): 60 miles Transported by: Transport Environmental Impact

Food miles ecolabel Point of purchase: supermarket in Des Moines, lowa



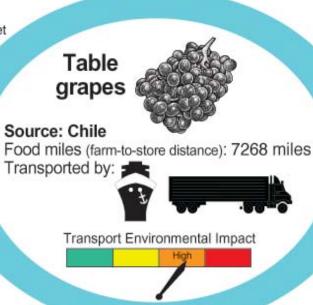
Source: North Dakota

Food miles (farm-to-store distance): 558 miles Transported by:



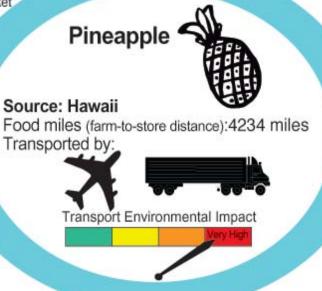
Food miles ecolabel

Point of purchase: supermarket in Des Moines, Iowa

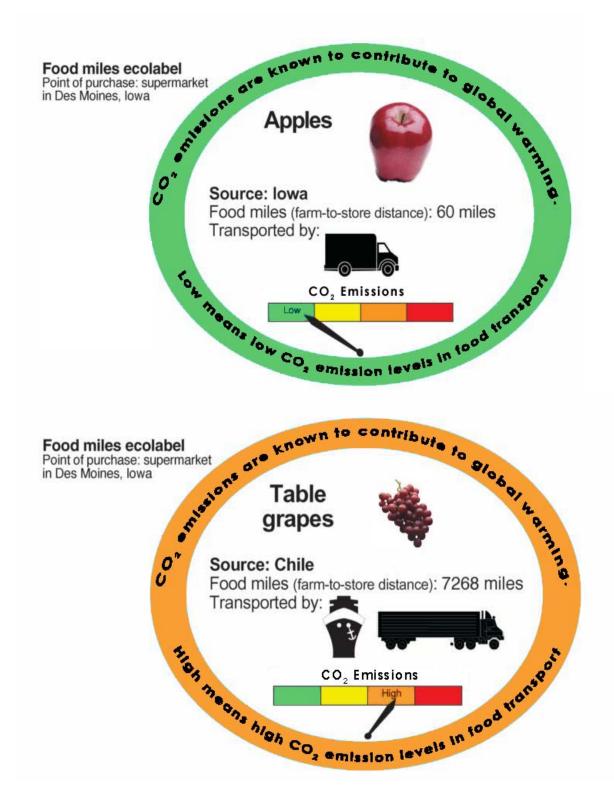


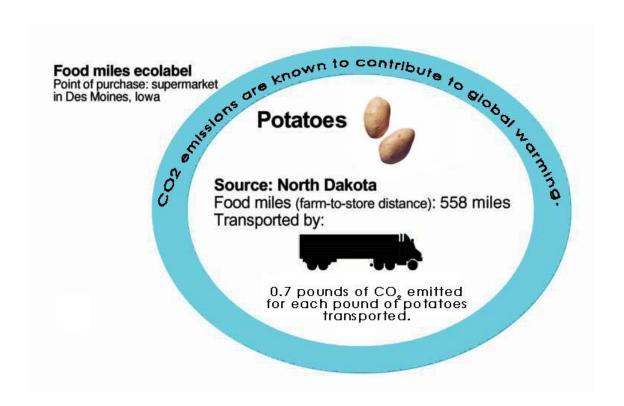
Food miles ecolabel

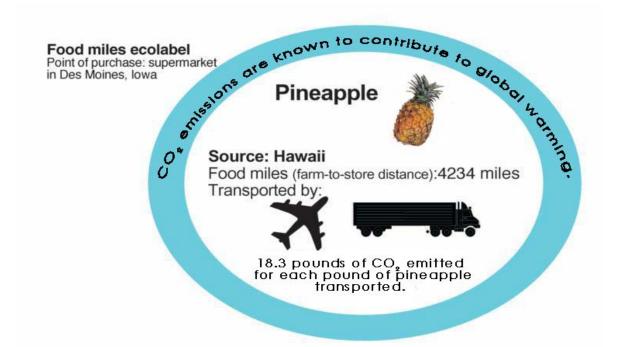
Point of purchase: supermarket in Des Moines, Iowa

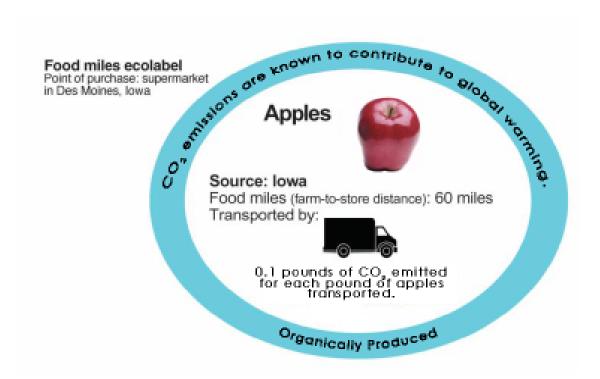


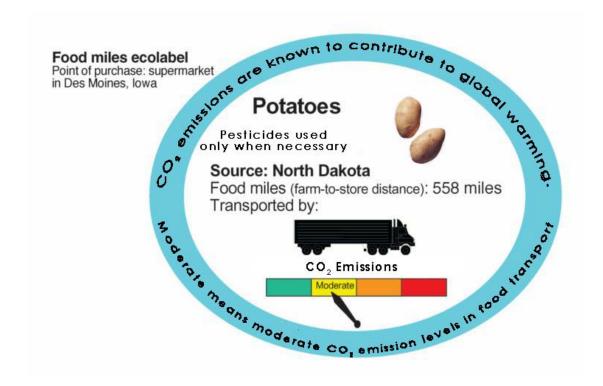
Appendix 4. Cedar Rapids Focus Group Ecolabels

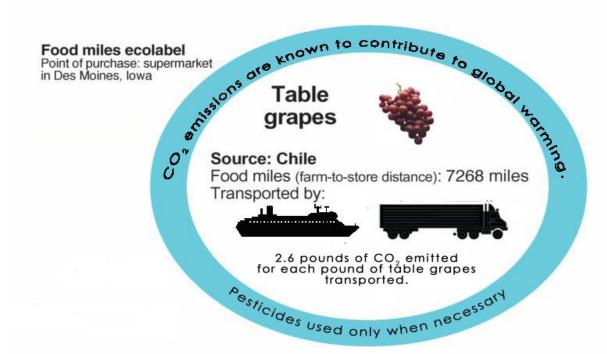


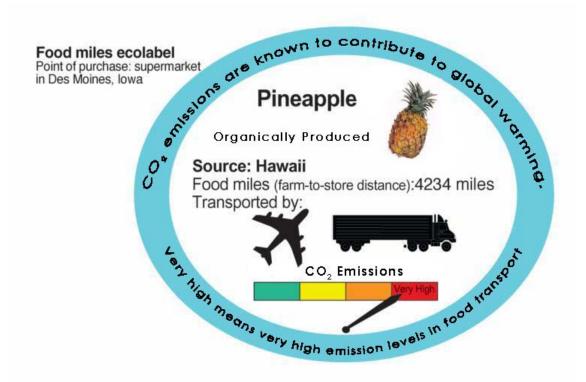












Appendix 5. Des Moines Focus Group Ecolabels

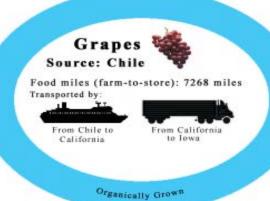
Food Miles Ecolabel Point of Purchase: Supermarket in Des Moines, Iowa

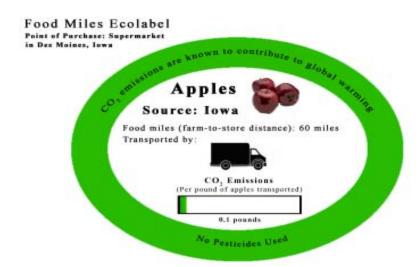


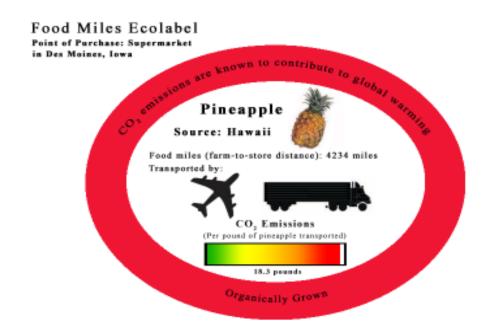
From Jamestown, ND to Des Moines, IA

No Pesticides Used

Food Miles Ecolabel Point of Purchase: Supermarket in Des Moines, Iowa







Food Miles Ecolabel Point of Purchase: Supermarket in Des Moines, Iowa Apples Source: Iowa Source: Iowa Food miles (farm-to-store distance): 60 miles Transported by: 0.1 pounds of CO, emitted for each pound of apples transported Organically Grown



Food Miles Ecolabel Point of Purchase: Supermarket in Des Moines, Iowa

Apples



Source: Iowa

Food miles (farm-to-store distance): 60 miles Transported by:



From Marshalltown, IA to Des Moines, IA

Organically Grown

Food Miles Ecolabel Point of Purchase: Supermarket in Des Moines, Iowa

Pineapple

Source: Hawaii



Food miles (farm-to-store distance): 4234 miles

From Hawaii to California

From California to Iowa

No Pesticides Used

Appendix 6. Midwest Consumer Survey with Ecolabels

Example

1. (Page 1 of 5)

Today, we'd like you to participate in a brief consumer survey about food labels consisting of 19 questions. First you will be shown two labels; then you will be asked some questions about these labels. Next we will ask some questions about your shopping habits. There are no right or wrong answers; we are interested only in your opinions. Click on "Next" at the bottom of each page to advance to the next page of the survey. Also, all of your responses will be kept confidential. Thank you in advance for participating. To continue with the survey, please click "Next".

2. (Page 2 of 5)

Below are pictures of two labels that would be in the produce section of the supermarket. These labels would be posted above each individual produce item in the store. The label would not be a sticker on the produce itself. Please look at these labels as you normally would if you were shopping for grapes on the shelf in the store. To view both labels, you will need to scroll down the screen using your scroll wheel on your mouse or by using the scrollbar on the right side of your screen. When you have finished answering the questions on a page, please go to the next page by clicking "Next". At any time while taking this survey, you can click "Back" on the bottom of the page and return to a previous page. Remember that you can change your responses at anytime during the survey before you click "Done".

The questions presented below concern the labels you were just shown. Please answer each of these questions to the best of your ability.

- 1. What was the first thing that comes to mind when you look at these labels? When finished, please go to question #2.
- 2. What, in particular, about the labels made you think that (first thing that came to mind)? When finished, please go to question #3.
- **3.** On a scale of 1 to 5, with 1 being strongly disagree and 5 being strongly agree, please select a response for each of the following statements. When finished, please click "Next" to go to the next page of the survey.

(Continued next page.)

3. continued.	1 Strongly Disagree	2	3	4	5 Strongly Agree
I clearly understand the labels.					
The labels are too complex.					
The labels did not make an impression on me.					
The labels were meaningful to me.					
As I looked at the labels, I thought of					
reasons why I would buy the locally grown grapes.					

Please answer the following questions by clicking on the appropriate response.

- **4.** What do you consider "local" when making a food purchase?
 - a. Grown 25 miles or less from purchase point
 - b. Grown 100 miles or less from purchase point
 - c. Grown in your state
 - d. Grown in the Midwest
 - e. Other
- **5.** On average, how far does fresh produce travel (from the farm) to reach the grocery store?

50 miles or less	50-250 miles	250-500 miles	500-750 miles	750-1,000 miles	more than 1,000 miles
For all four seasons					
For the summer					

6. On average how far do meat and poultry travel (from the farm) to reach the grocery store? When finished, please go to question #7.

50 miles or less	50-250 miles	250-500 miles	500-750 miles	750-1,000 miles	more than 1,000 miles
For all four seasons					
For the summer					

7. Why do you buy local foods? (Please rate your top 3 choices, 1 being the most important reason, 2 being the second most important reason, and 3 being the third most important reason; please only choose 3 responses.)

Price		Environ mental concern	security	Freshness	Helps local economy	Other
First						
Second						
Third						

8.	Do you have any concerns about purchasing local foods?

Please answer the following questions by clicking on the appropriate response.

9. Rate the next question on a scale of 1 to 5, with 1 being unimportant, 3 being neutral, and 5 being important.

	1 Unimportant	2	3	4	5 Important
How important is an informational label to your					
decision making process?					

10. I	How muc	h higher	of a price	would you be	willing to pay	for locally	grown foods?
-------	---------	----------	------------	--------------	----------------	-------------	--------------

- a. 0%
- b. 1-5%
- c. 6-10%
- d. 11-15%
- e. Other

- 11. How much higher of a price would you be willing to pay for a product that had low environmental impacts in food transportation?
 - a. 0%
 - b. 1-5%
 - c. 6-10%
 - d. 11-15%
 - a. Other____
- **12.** If the price and visual appearance were equal for a produce or meat item, which of the choices below would you purchase?

	Grown locally by family farmers	Organic- origin unknown	Organic- imported	Organic- grown locally	Organic- grown in Iowa
First choice					
Second choice					

Please answer the following questions by clicking on the appropriate response.

- **13.** What is your interest in environmental issues?
 - a. Very interested
 - b. Somewhat interested
 - c. Not interested
- **14.** How much do you know about sustainable agriculture?
 - a. A lot
 - b. Some
 - c. Nothing
 - d.
- **15.** What is your age?
 - a. Under 27
 - b. 28-47
 - c. 48-70
 - d. Over 70

- **16.** What is your highest level of education completed?
 - a. Some High School or High School Diploma
 - b. Some College
 - c. Bachelor's Degree
 - d. Master's Degree
 - e. Doctorate Degree
- 17. Are you male or female?
 - a. Male
 - b. Female
- **18.** Where do you live?
 - a. Illinois
 - b. Indiana
 - c. Iowa
 - d. Kansas
 - e. Minnesota
 - f. Missouri
 - g. Nebraska
 - h. Wisconsin
- 19. What is your household income?
 - a. Under 40,000
 - b. 40,000-70,000
 - c. 71,000-100,000
 - d. Over 100,000

Thank you for your participation! To complete the survey please click "Done" and the browser window will close.

Appendix 7. Consumer Survey with Ecolabels Boston area (Northeast) and Seattle area (Pacific Northwest)

Example

The only difference between this and the Midwest with ecolabel survey is noted in question #4:

- 4. What do you consider "local" when making a food purchase?
 - a. Grown 25 miles or less from purchase point
 - b. Grown 100 miles or less from purchase point
 - c. Grown in Massachusetts (or Washington)
 - d. Grown in the Northeastern United States (or Pacific Northwest)
 - e. Other

Appendix 8. Midwest Consumer Survey without Ecolabels

- 1. What do you consider "local" when making a food purchase?
 - a. Grown 25 miles or less from purchase point
 - b. Grown 100 miles or less from purchase point
 - c. Grown in Massachusetts
 - d. Grown in the Northeastern United States

	\sim 1
e.	Othe
U.	Out

2. On average, how far does fresh produce travel (from the farm) to reach the grocery store?

	50 miles or less	50-250 miles	250-500 miles	500-750 miles	750- 1,000 miles	more than 1,000 miles
For all four seasons						
For the summer						

3. On average how far do meat and poultry travel (from the farm) to reach the grocery store?

	50 miles or less	50-250 miles	250-500 miles	500-750 miles	750- 1,000 miles	more than 1,000 miles
For all four seasons						
For the summer						

4.	Why do you buy local foods? (Please rate your top 3 choices, 1 being the most important
	reason, 2 being the second most important reason, and 3 being the third most important reason;
	please only choose 3 responses.)

Price	Quality					Freshness		Other
		local	mental	security	food		local	
		farms	concern	S			economy	
First								
Second								
Third								_

5.	Do you have	any concerns abo	out purchasing l	ocal foods?

Please answer the following questions by clicking on the appropriate response.

6. Rate the next question on a scale of 1 to 5, with 1 being unimportant, 3 being neutral, and 5 being important.

	1 Unimportant	2	3	4	5 Important
How important is an informational label to your decision making process?					

7.	How much higher	of a price wou	ıld you be will	ing to pay for	locally grown foods
----	-----------------	----------------	-----------------	----------------	---------------------

- a. 0%
- b. 1-5%
- c. 6-10%
- d. 11-15%

Other

- **8.** How much higher of a price would you be willing to pay for a product that had low environment impacts in food transportation?
 - a. 0%
 - b. 1-5%
 - c. 6-10%
 - d. 11-15%

Other

9. If the price and visual appearance were equal for a produce or meat item, which of the choices below would you purchase?

	Grown locally by family farmers	Organic-origin unknown	Organic- imported	Organic- grown in Iowa
First choice				
Second choice				

Please answer the following questions by clicking on the appropriate response.

- **10.** What is your interest in environmental issues?
 - a. Very interested
 - b. Somewhat interested
 - c. Not interested
- 11. How much do you know about sustainable agriculture?
 - d. A lot
 - e. Some
 - f. Nothing
- **12.** What is your age?
 - g. Under 27
 - h. 28-47
 - i. 48-70
 - j. Over 70
- **13.** What is your highest level of education completed?
 - k. Some High School or High School Diploma
 - l. Some College
 - m. Bachelor's Degree
 - n. Master's Degree
 - o. Doctorate Degree
- **14.** Are you male or female?
 - p. Male
 - q. Female
- **15.** What is your household income?
 - r. Under 40,000
 - s. 40,000-70,000
 - t. 71,000-100,000
 - u. Over 100,000

Thank you for your participation! To complete the survey please click "Done" and the browser window will close.

Appendix 9. Food Business Internet Survey

Today we'd like you to participate in a brief food industry survey of 18 questions. First we'd like to ask you some general questions about your business. Then we will ask some questions about the types of foods your business purchases or carries. There are no right or wrong answers; we are interested only in your opinions. Also, all of your responses will be kept confidential and will not be linked to you or your business. Thank you in advance for participating. To continue with the survey, please click "Next" at the bottom of each page.

You can click "Back" to return to a previous page to change your answers at any point before you click "Done" to exit the survey. Please answer these questions to the best of your ability.

- 1. What type of business do you represent?
 - a. Butcher/Meat Market
 - b. Caterer
 - c. Distributor
 - d. Farmers' Market
 - e. Cooperative/Producer
 - f. Grocery Store
 - g. Restaurant
 - h. Other
- **2.** In what state is your business?
 - a. Illinois
 - b. Indiana
 - c. Iowa
 - d. Kansas
 - e. Minnesota
 - f. Missouri
 - g. Nebraska
 - h. Wisconsin
- **3.** Is your establishment:
 - a. A Chain/Franchise
 - b. Independently Owned
- **4.** How many locations do you have?
 - a. 1
 - b. 2-10
 - c. 11-50
 - d. 51-100
 - e. Over 100

5.	What is your title/position?
6.	How much autonomy or freedom do you have to select your suppliers of meats and/or produce?
	a. Complete autonomy
	b. Some autonomy
	c. No autonomy
	d.
7	Does your business currently purchase/carry or have they purchased/carried in the past locally

- 7. Does your business currently purchase/carry or have they purchased/carried in the past, locally grown foods?
 - a. Currently Purchase
 - b. Purchased in the past but not currently
 - c. Never Purchased

You can click "Back" to return to a previous page to change your answers at any point before you click "Done" to exit the survey. Please answer these questions to the best of your ability.

- 8. What do you consider "local" when making a food purchase or carrying a food product through your business?
 - a. Grown 25 miles or less from purchase point
 - b. Grown 100 miles or less from purchase point
 - c. Grown in your state
 - d. Grown in the Midwest

9. On average, how far does fresh produce travel (from the farm) to reach your business?

	50 miles or less	50-250 miles	250-500 miles	500-750 miles	750- 1,000 miles	more than 1,000 miles
For all four seasons						
For the summer						

10. On average, how far does meat and poultry travel (from the farm) to reach your business?

	50 miles or less	50-250 miles	250-500 miles	500-750 miles	750- 1,000 miles	more than 1,000 miles
For all four seasons						
For the summer						

- 11. Locally grown foods represent what percentage of your food business (over the year)?
 - a. 0 to 10 %
 - b. 10 to 25%
 - c. 25 to 50%
 - d. Greater than 50%

12. Why do you buy or carry local foods? (Please rate your top 3 choices, with 1 being the most important reason, 2 being the second most important reason, and 3 being the third most important reason.)

Price	Quality					Freshness		Other
			mental	security	tood		local	
		farms	concern	S			economy	
First								
Second								
Third								

You can click "Back" to return to a previous page to change your answers at any point before you click "Done" to exit the survey. Please answer these questions to the best of your ability.

- **13.** Do you have any concerns about purchasing/carrying local foods?
- 14. How much higher of a price would you be willing to pay for local foods?
 - a. 0%
 - b. 1-5%
 - c. 6-10%
 - d. 11-15%
 - e. Other

- **15.** In your opinion, how interested do you think your customers would be in a label that indicates product source, mileage from farm to point of sale, mode of transport and environmental impacts in food transportation? If you chose "not interested" or "do not know", go to question #17. If you chose "somewhat interested" or "very interested", please go to question #16.
 - a. Not interested
 - b. Somewhat interested
 - c. Very interested
 - d. Do not know
- **16.** If you answered "very interested" or "somewhat interested" in question #15, how much higher would your customers be willing to pay for this information?
 - a. 0%
 - b. 1-5%
 - c. 6-10%
 - d. 11-15%
 - e. Other____
- 17. If the price and visual appearance were equal for a produce or meat item, which of the choices below would you purchase or carry? (Place a 1 by your first choice and a 2 by your second choice; choose only two.)

	Grown locally by family farmers	Organic- origin unknown	Organic- imported	Organic- grown locally	Organic- grown in Iowa
First choice					
Second choice					

18. Which of the choices below are you receiving the most requests from your customers?

	Grown locally	Organic- origin unknown	Grown in your state	Organic- grown locally	Organic- grown in your state	applicable
First choice						
Second choice						

Thank you for your participation! To complete the survey, please click "Done" and the browser window will close.

Appendix 10. Ecolabels and No Ecolabels- Responses by State

Respondents Who Viewed Ecoloabels Responses to Questions by State

RESPONSES				RESPONI	RESPONDENT CATEGORIES	S				
On all questions: No response on State n=18	ate n=18									
On a scale of 1 to I clearly understand the labels.	On a scale of 1 to 5 with 1 being strongly disagree nd the labels.	ngly disagree and	5 being strong	ıly agree, please	and 5 being strongly agree, please select a response for each of the following statements.	for each of the foll	owing statements.			
•	Illinois n=203	Indiana n=146	lowa n=82	Kansas n=73	Minnesota n=96	Missouri n=124	Nebraska n=53	Wisconsin n=145	Boston n=160	Seattle n=217
	%0:0	%0.0	%0.0	%0.0	%0:0	%0.0	%0:0	%0.0	%9.0	%0.0
작 Strongly Disagree-1	1.5%	3.4%	4.9%	4.1%	7.3%	4.0%	%0.0	0.7%	2.0%	4.1%
	5.4%	2.7%	3.7%	1.4%	5.2%	1.6%	1.9%	2.8%	3.8%	3.7%
-	13.3%	10.3%	8.6	13.7%	10.4%	14.5%	15.1%	11.7%	12.5%	10.1%
	17.2%	24.0%	14.6%	20.5%	19.8%	20.2%	32.1%	29.0%	19.4%	21.2%
	62.6%	29.6%	67.1%	%8.09	57.3%	29.7%	20.9%	25.9%	28.8%	%8'09
on a scale of 1 to	On a scale of 1 to 5 with 1 being strongly disagree		5 being strong	lly agree, please	and 5 being strongly agree, please select a response for each of the following statements	for each of the foll	owing statements.			
The labels are toc							0			
Re	Illinois n=203	Indiana n=146	lowa n=82	Kansas n=73	Minnesota n=96	Missouri n=124	Nebraska n=53	Wisconsin n=145	Boston n=160	Seattle n=217
0 N=1317										
No response	%0:0	0.0%	%0.0	%0.0	%0.0	%0.0	%0.0	%0.0	%9.0	0.0%
	49.8%	43.2%	20.0%	45.2%	44.8%	44.4%	37.7%	44.1%	44.4%	41.2%
	24.1%	31.5%	26.8%	27.4%	26.0%	25.8%	28.3%	26.9%	21.9%	29.5%
_	14.3%	11.6%	8.5%	19.2%	13.5%	13.7%	20.8%	20.0%	15.0%	12.4%
O Moderately Agree-4	9.4%	8.9%	11.0%	%8.9	7.3%	6.5%	9.4%	2.5%	10.0%	9.7%
Strongly Agree-5	2.5%	4.8%	3.7%	1.4%	8.3%	%2'6	3.8%	3.4%	8.1%	7.5%
er fo										
	On a scale of 1 to 5 with 1 being strongly disagree		5 being strong	Iv agree. please	and 5 being strongly agree, please select a response for each of the following statements	for each of the foll	owing statements.			
The labels did no	ssion on me.)		=		ò			
	Illinois n=203	Illinois n=203 Indiana n=146	lowa n=82	Kansas n=73	Minnesota n=96 Missouri n=124	Missouri n=124	Nebraska n=53	Wisconsin n=145 Boston n=160	Boston n=160	Seattle n=217
N=1317										
a No response	%0:0	%0.0	%0.0	%0.0	%0.0	%0.0	%0.0	%0.0	%9.0	0.0%
Strongly Disagree-1	41.9%	24.7%	37.8%	30.1%	35.4%	30.6%	28.3%	31.0%	31.9%	36.9%
Moderately Disagree-2	21.2%	28.8%	22.0%	26.0%	27.1%	19.4%	28.3%	24.8%	20.0%	24.4%
-	16.3%	21.9%	22.0%	20.5%	14.6%	21.8%	24.5%	23.4%	21.3%	16.6%
Moderately Agree-4	8.4%	15.8%	12.2%	15.1%	12.5%	17.7%	13.2%	12.4%	11.3%	12.4%
Strongly Agree-5	12.3%	8.9%	6.1%	8.2%	10.4%	10.5%	2.7%	8.3%	15.0%	%2'6
love										

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QUESTIONS AND POSSIBLE RESPONSES				RESPON	RESPONDENT CATEGORIES	S				
On all questions: No response on State n=18	e n=18									
On a scale of 1 to 5 with 1 being strongly disagree and The labels were meaningful to me.	with 1 being stro	ingly disagree and	5 being stron	gly agree, pleasŧ	5 being strongly agree, please select a response for each of the following statements	for each of the follc	wing statements.			
	Illinois n=203	Illinois n=203 Indiana n=146	lowa n=82	Kansas n=73	Minnesota n=96 Missouri n=124	Missouri n=124	Nebraska n=53	Wisconsin n=145 Boston n=160	Boston n=160	Seattle n=217
No response-0	0.0%	0.0%	0.0%	%0.0	0.0%	0.0%	%0.0	0.0%	0.6%	%0.0
Strongly Disagree-1	%6.9	8.9%	6.1%	11.0%	11.5%	8.1%	7.5%	7.6%	%6.9	8.3%
Moderately Disagree-2	5.4%	10.3%	14.6%	%9.6	8.3%	13.7%	9.4%	10.3%	10.0%	8.3%
Agree-3	22.2%	20.5%	15.9%	24.7%	16.7%	21.8%	20.8%	17.2%	22.5%	18.9%
Moderately Agree-4	24.1%	29.5%	22.0%	23.3%	25.0%	25.8%	39.6%	30.3%	27.5%	29.5%
Strongly Agree-5	41.4%	30.8%	41.5%	31.5%	38.5%	30.6%	22.6%	34.5%	32.5%	35.0%
On a scale of 1 to 5	with 1 being stro	ngly disagree and	5 being stron	gly agree, please	On a scale of 1 to 5 with 1 being strongly disagree and 5 being strongly agree, please select a response for each of the following statements.	for each of the follo	wing statements.			
As I looked at the labels I thought of reasons why I would buy the	f reasons why I	would buy the loc	locally grown grapes.	rapes.			-			
!	Illinois n=203	Illinois n=203 Indiana n=146	lowa n=82	Kansas n=/3	Minnesota n=96	Missouri n=124	Nebraska n=53	Wisconsin n=145	Boston n=160	Seattle n=Z1/
N=1317	ò	ò	0	č	i d	ò	Č	ò	ò	i i
No response-0	%0.0	0.0%	%0.0	%0.0	0.0%	0.0%	%0.0	0.0	%9·0	%0.0
Strongly Disagree-1	3.9%	%8.9	6.1%	%8.9	11.5%	8.1%	3.8%	%9'.	8.1%	%6.9
Moderately Disagree-2	3.9%	2.7%	1.2%	2.5%	3.1%	6.5%	9.4%	4.1%	3.8%	%0.9
Agree-3	12.3%	17.1%	8.5%	13.7%	7.3%	12.1%	13.2%	13.1%	8.8%	11.5%
Moderately Agree-4	20.2%	17.1%	23.2%	24.7%	16.7%	15.3%	22.6%	14.5%	25.0%	21.2%
Strongly Agree-5	29.6%	56.2%	61.0%	49.3%	61.5%	58.1%	%6.05	%2'09	53.8%	54.4%
What do you consider "local" when making a food purchase?	making a food p	urchase?								
N=1317	Illinois n=203	Illinois n=203 Indiana n=146	lowa n=82	Kansas n=73	96=u	Miss	Nebraska n=53	Wisconsin n=145 Boston n=160	Boston n=160	Seattle n=217
No response	%0.0	%0.0	%0.0	%0.0	%0:0	%0.0	%0.0	%0:0	1.9%	%6.0
Grown 25 miles or less from purchase	14.8%	21.2%	19.5%	17.8%	13.5%	21.8%	11.3%	12.4%	10.6%	14.3%
Grown 100 miles or less from										
purchase	17.2%	12.3%	19.5%	13.7%	18.8%	22.6%	24.5%	22.1%	15.6%	17.1%
Grown in my state	40.4%	39.0%	29.3%	45.2%	39.6%	33.9%	39.6%	43.4%	41.9%	41.0%
Grown in the Midwest	26.1%	24.0%	26.8%	17.8%	24.0%	16.9%	22.6%	20.0%	26.9%	22.6%
Other	1.5%	3.4%	4.9%	2.5%	4.2%	4.8%	1.9%	2.1%	3.1%	4.1%
On average, how far does fresh produce travel (from the farm) to reach the grocery store? (For all four seasons)	luce travel (from	the farm) to reac	th the grocer	v store? (For al	four seasons)					
N=1317	Illinois n=203	Illinois n=203 Indiana n=146	lowa n=82	Kansas n=73	Minnesota n=96	Missouri n=124	Nebraska n=53	Wisconsin n=145	Boston n=160	Seattle n=217
No response	0.0%	%0.0	0.0%	0.0%	%0.0	%0.0	%0.0	0.0%		%6.0
50 miles or less	2.9%	2.5%	6.1%	2.5%	5.2%	4.8%	%0.0	4.8%	%6.9	7.4%
50-250 miles	14.3%	17.8%	12.2%	12.3%	12.5%	16.1%	15.1%	13.8%	16.9%	20.3%
250-500 miles	14.8%	15.1%	18.3%	8.2%	15.6%	10.5%	15.1%	14.5%	15.0%	12.0%
500-750 miles	13.3%	13.0%	11.0%	16.4%	6.3%	16.1%	7.5%	%0.6	11.9%	11.1%
750-1000 miles	17.7%	19.2%	18.3%	21.9%	20.8%	19.4%	20.8%	16.6%	19.4%	19.4%
More than 1000 miles	34.0%	29.5%	34.1%	35.6%	39.6%	33.1%	41.5%	41.4%	28.1%	29.0%

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			Seattle n=217	%6.0	23.0%	37.8%	16.1%	9.7%	6.5%	%0.9		Seattle n=217	%6:0	7.4%	23.5%	20.3%	17.5%	13.4%	17.1%		Seattle n=217	%6:0	10.6%	28.6%	20.7%	16.1%	9.7%	13.4%
			Bos	1.9%	31.3%	36.9%	11.3%	%6.9	8.8%	3.1%		Boston n=160	1.9%	6.3%	23.8%	15.0%	15.6%	19.4%	18.1%		Boston n=160	1.9%	10.6%	26.3%	13.8%	13.8%	18.1%	15.6%
			Wisconsin n=145	%0.0	15.9%	35.9%	20.0%	12.4%	%6.9	%0.6		Wisconsin n=145	%0.0	%0.6	24.1%	29.0%	14.5%	13.1%	10.3%		Wisconsin n=145	%0.0	11.0%	76.9%	%6.92	17.2%	11.0%	%6:9
			Nebraska n=53	%0.0	15.1%	35.8%	18.9%	7.5%	17.0%	2.7%		Nebraska n=53	%0:0	9.4%	24.5%	28.3%	20.8%	9.4%	7.5%		Nebraska n=53	%0:0	13.2%	28.3%	24.5%	22.6%	7.5%	3.8%
S			Missouri n=124	%0.0	14.5%	38.7%	21.8%	12.1%	4.8%	8.1%		Missouri n=124	%0.0	8.9%	21.8%	28.2%	15.3%	14.5%	11.3%		Missouri n=124	%0.0	12.1%	23.4%	32.3%	12.9%	12.9%	%5.9
RESPONDENT CATEGORIES		summer)	Minnesota n=96 Missouri n=124	%0.0	21.9%	45.8%	13.5%	5.2%	7.3%	6.3%	four seasons)	Minnesota n=96	%0.0	10.4%	36.5%	21.9%	9.4%	9.4%	12.5%		Minnesota n=96	%0.0	17.7%	42.7%	16.7%	9.4%	9.4%	4.2%
RESPOND		store? (For the	Kansas n=73	%0.0	12.3%	31.5%	16.4%	15.1%	11.0%	13.7%	y store? (For all	Kansas n=73	%0.0	%8.9	19.2%	28.8%	21.9%	12.3%	11.0%	y store? (For the	Kansas n=73	%0.0	11.0%	20.5%	31.5%	19.2%	8.2%	%9.6
		ch the grocery	<u>0</u>	%0.0	22.0%	37.8%	18.3%	8.5%	8.5%	4.9%	ach the grocen	lowa n=82	%0.0	8.6	24.4%	29.3%	17.1%	13.4%	6.1%	ach the grocery	lowa n=82	%0.0	17.1%	28.0%	30.5%	11.0%	7.3%	6.1%
		the farm) to rea	Indiana n=146	%0.0	27.4%	37.0%	16.4%	8.9	4.8%	7.5%	the farm) to rea	Indiana n=146	%0.0	10.3%	23.3%	19.9%	19.2%	13.0%	14.4%	the farm) to rea	Indiana n=146	%0.0	13.7%	29.5%	21.9%	17.1%	8.2%	%9.6
	e n=18	duce travel (from	Illinois n=203 Indiana n=	%0.0	22.2%	35.0%	19.2%	9.4%	7.4%	%6.9	ultry travel (from	Illinois n=203	%0.0	11.8%	20.2%	23.6%	18.7%	14.3%	11.3%	ultry travel (from	Illinois n=203	%0.0	14.3%	24.1%	25.6%	18.2%	12.3%	5.4%
QUESTIONS AND POSSIBLE RESPONSES	On all questions: No response on State n=18	On average, how far does fresh produce travel (from the farm) to reach the grocery store? (For the summer)	N=1317	No response	50 miles or less	. 50-250 miles	- 250-500 miles	500-750 miles	. 750-1000 miles	More than 1000 miles	On average, how far do meat and poultry travel (from the farm) to reach the grocery store? (For all four seasons)	N=1317	No response	50 miles or less	50-250 miles	250-500 miles	500-750 miles	750-1000 miles	More than 1000 miles	On average, how far do meat and poultry travel (from the farm) to reach the grocery store? (For the summer)	N=1317	No response	50 miles or less	. 50-250 miles	250-500 miles	500-750 miles	750-1000 miles	More than 1000 miles

QUESTIONS AND POSSIBLE RESPONSES				RESPON	RESPONDENT CATEGORIES	S				
On all questions: No response on State n=18	e n=18									
Why do you buy local foods? (First choice)(Rate the top 3) N=1317 Illinois n=203 Indi	choice)(Rate the Illinois n=203	top 3) Indiana n=146	lowa n=82	Kansas n=73	Minnesota n=96	Missouri n=124	Nebraska n=53	Wisconsin n=145	Boston n=160	Seattle n=217
No response	0.0%	%0.0	%0.0	0.0%		%0.0	%0.0	0.0%		%6:0
Price .	12.8%	19.9%	14.6%	9.6%	11.5%	19.4%	20.8%	14.5%	13.8%	12.4%
Quality	13.3%	16.4%	17.1%	16.4%	17.7%	10.5%	7.5%	11.0%	21.9%	19.4%
Supports local farms	%6.6	17.1%	24.4%	26.0%	26.0%	21.8%	13.2%	17.2%	10.6%	12.9%
Environmental concerns	2.5%	2.7%	1.2%	1.4%	%0.0	%0.0	1.9%	1.4%	%9.0	1.8%
Food security	%0.0	%2'0	1.2%	1.4%	%0:0	1.6%	%0:0	2.1%	2.5%	0.5%
Healthier food	2.5%	1.4%	2.4%	2.7%	2.1%	2.4%	1.9%	4.1%	1.9%	4.1%
Freshness	48.3%	38.4%	30.5%	27.4%	34.4%	38.7%	43.4%	44.8%	41.9%	41.5%
Helps local economy	%6.6	2.7%	8.5%	15.1%	7.3%	4.8%	11.3%	4.1%	3.8%	%0.9
Other	1.0%	%2'0	%0.0	%0.0	1.0%	%8.0	%0.0	%2.0	1.3%	0.5%
Why do you buy local foods? (Second choice)(Rate the top 3)	nd choice) (Rate t	the top 3)								
N=1317	Illinois n=203	Indiana n=146	lowa n=82	Kansas n=73	Minnesota n=96	Missouri n=124	Nebraska n=53	Wisconsin n=145	Boston n=160	Seattle n=217
No response	%0:0	%0.0	0.0%	0.0%	0.0%	%0.0	%0.0	%0:0	1.9%	%6:0
Price .	%6.6	12.3%	8.5%	16.4%	9.4%	4.8%	9.4%	9.7%	10.0%	9.5%
Quality	18.7%	24.0%	28.0%	17.8%	26.0%	29.0%	24.5%	29.7%	25.0%	22.6%
Supports local farms	19.2%	11.6%	11.0%	12.3%	15.6%	16.1%	18.9%	17.2%	23.1%	18.4%
Environmental concerns	3.9%	2.7%	2.4%	4.1%	3.1%	2.6%	1.9%	2.1%	1.9%	1.8%
Food security	3.9%	2.5%	2.4%	%0.0	2.1%	4.0%	3.8%	1.4%	%9.0	%6:0
Healthier food	6.4%	8.9%	4.9%	8.2%	7.3%	4.8%	7.5%	7.6%	2.0%	5.1%
Freshness	20.2%	21.9%	26.8%	28.8%	21.9%	22.6%	18.9%	13.1%	20.0%	26.3%
Helps local economy	17.2%	12.3%	15.9%	12.3%	13.5%	11.3%	15.1%	18.6%	11.3%	14.7%
Other	0.5%	0.7%	%0.0	%0.0	1.0%	1.6%	%0.0	%2.0	1.3%	%0.0
Rate the next quest	ion on a scale of	1 to 5 with 1 being t	unimportant, 3	3 being neutral, a	Rate the next question on a scale of 1 to 5 with 1 being unimportant, 3 being neutral, and 5 being important	nt.				
How important is an informational label to your decision making	abel to your deci-	sion making process?	ess?							
N=1317	Illinois n=203	Indiana n=146	lowa n=82	Kansas n=73	Minnesota n=96	Missouri n=124	Nebraska n=53	Wisconsin n=145	Boston n=160	Seattle n=217
No response-0	0.5%	%0.0	%0.0	0.0%	%0.0	%0.0	%0.0	%0.0	1.9%	%6:0
Unimportant-1	3.0%	5.5%	1.2%	2.7%	4.2%	4.8%	3.8%	3.4%	4.4%	5.1%
Moderately unimportant-2	2.5%	4.8%	3.7%	8.9	2.1%	6.5%	%0:0	4.8%	2.6%	8.3%
Neutral-3	22.2%	24.0%	24.4%	28.8%	14.6%	21.8%	37.7%	33.1%	25.0%	18.9%
Moderately important-4	31.5%	34.9%	34.1%	30.1%	32.3%	35.5%	30.2%	29.7%	26.9%	31.8%
Important-5	40.4%	30.8%	36.6%	31.5%	46.9%	31.5%	28.3%	29.0%	36.3%	35.0%

© QUESTIONS AND POSSIBLE RESPONSES				RESPON	RESPONDENT CATEGORIES	S				
On all questions: No response on State n=18	e n=18									
How much higher of a price would you be willing to pay for locally N=1317 Illinois n=203 Indiana n=14	ou be willing to	pay for locally gr Indiana n=146	grown foods? 6 lowa n=82	Kansas n=73	Minnesota n=96 Missouri n=124	Missouri n=124	Nebraska n=53	Wisconsin n=145	Boston n=160	Seattle n=217
No response	1.1%	%0.0	%0.0	%0.0	%0.0	%0.0	%0.0	%0.0		%6.0
n 0% of the product price	56.3%	23.3%	9.8%	23.3%	14.6%	26.6%	20.8%	22.1%	18.8%	24.0%
1-5% increase in the product price	%6.9	45.9%	61.0%	46.6%	55.2%	44.4%	20.9%	53.8%	40.0%	41.0%
6-10% increase in the product price	20.7%	19.9%	20.7%	21.9%	18.8%	19.4%	20.8%	20.0%	30.0%	23.0%
11-15% increase in the product price	%6.9	4.8%	6.1%	5.5%	4.2%	4.8%	3.8%	2.1%	2.0%	5.5%
Other	8.0%	6.2%	2.4%	2.7%	7.3%	4.8%	3.8%	2.1%	4.4%	2.5%
How must higher of a price would you be willing to new for a prode	ot seilling		wol bed tedt	environmental	int that had low anvironmental impacts in food transportation?	Cacitations				
N=1317	Illinois n=203		lower n=82	Kaneae n=73	Missocots n=06 Missouri n=124	Missouri n=124	Nobracka n-53	Wisconsin n=145	Boston n=160	Soo#10 n=247
	0.50		10 Wa 11 -02	Nail Sas II-73	MIIIIESOLA II-30	471 - II II II OSSIIMI	Nebiaska II-33			Seattle II-217
os of the second	0.0%	0.0%	0.0%	0.0 0.0 0.0 0.0	%O.O.	%0.0	%0.0	%.O.O.C	9,6,70	0.8.0
U% of the product price	26.1%	24.0%	15.9%	Z1.9%	20.8%	29.0%	75.6%	30.3%	21.9%	30.0%
1-5% increase in the product price	46.3%	51.4%	63.4%	46.6%	51.0%	49.2%	50.9%	53.8%	48.1%	41.9%
6-10% increase in the product price	19.7%	18.5%	17.1%	27.4%	19.8%	14.5%	20.8%	11.7%	20.6%	18.0%
11-15% increase in the product price	3.9%	4.8%	3.7%	1.4%	3.1%	4.0%	1.9%	2.8%	%8.9	2.5%
Other	3.4%	1.4%	%0.0	2.7%	5.2%	3.2%	3.8%	1.4%	1.3%	3.7%
مارا ا										
) If the price and visual appearance were equal for a produce or meat item, which of the choices below would you purchase? (First choice)	rere equal for a p	roduce or meat it	tem, which of	the choices be	low would you pu	rchase? (First cho	ice)			
N=1317	Illinois n=203	Indiana n=146	lowa n=82	Kansas n=73	Minnesota n=96 Missouri n=124		Nebraska n=53	Wisconsin n=145	Boston n=160	Seattle n=217
No response	0.5%	%0.0	%0:0	%0.0	%0:0	%0.0	%0.0	%0.0	1.9%	%6:0
Grown locally by family farmers	71.4%	79.5%	86.6%	78.1%	77.1%	%9.08	81.1%	75.2%	75.6%	%0.92
Organic-origin unknown	1.0%	%0.0	%0.0	1.4%	%0:0	1.6%	%0.0	0.7%	1.3%	%0.0
Organic-imported	1.5%	%0.0	%0.0	%0.0	1.0%	1.6%	%0.0	%2.0	%0.0	%0.0
Grown locally	15.3%	15.1%	8.5%	12.3%	14.6%	12.1%	13.2%	17.2%	13.1%	16.6%
Organic-grown in your state	10.3%	2.5%	4.9%	8.2%	7.3%	4.0%	2.7%	6.2%	8.1%	6.5%
Α σ										
if the price and visual appearance were equal for a produce or meat item, which of the choices below would you purchase? (Second choice)	rere equal for a p	roduce or meat it	tem, which of	the choices be	low would you pu	rchase? (Second	choice)			
N=1317	Illinois n=203	Indiana n=146	lowa n=82	Kansas n=73	Minnesota n=96 Missouri n=124	Missouri n=124	Nebraska n=53	Wisconsin n=145	Bost	Seattle n=217
No response	0.5%	%0.0	%0:0	%0.0	%0:0	%0.0	%0.0	%0.0	1.9%	%6.0
Grown locally by family farmers	13.8%	20.5%	14.6%	13.7%	17.7%	12.9%	11.3%	15.2%	14.4%	15.7%
Organic-origin unknown	5.4%	4.1%	7.3%	2.5%	3.1%	6.5%	%0.0	3.4%	%6.9	2.8%
Organic-imported	1.0%	1.4%	%0:0	2.7%	2.1%	1.6%	3.8%	2.8%	1.9%	3.2%
Organic-grown locally	42.4%	39.7%	43.9%	43.8%	41.7%	42.7%	47.2%	42.1%	35.6%	41.0%
Organic-grown in your state	36.9%	34.2%	34.1%	34.2%	35.4%	36.3%	37.7%	36.6%	39.4%	36.4%
003										

Ecolabel Value Assessment Report/Leopold Center for Sustainable Agriculture/November 2003

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Ecolabel Value Assessment Report/Leopold Center for Sustainable Agriculture/November 2003

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	QUESTIONS AND POSSIBLE RESPONSES				RESPON	RESPONDENT CATEGORIES	SE				
	On all questions: No response on State n=18	9 n=18									
Ecolabe	What is your interest in environmental issues? N=1317 No response 0.0% Very interested 34.5% Somewhat interested 0.16%	lal issues? linois n=203 0.0% 34.5% 61.6% 0.0%	Indiana n=146 0.0% 28.8% 61.6%	lowa n=82 0.0% 28.0% 65.9%	Kansas n=73 0.0% 40.6% 54.2%	Minnesota n=96 0.0% 31.5% 61.3%	Missouri n=124 0.0% 30.2% 66.0%	Nebraska n=53 0.0% 24.1% 71.7%	Wisconsin n=145 2.5% 31.3% 61.3%	Boston n=160 0.9% 32.3% 61.3%	Seattle n=217 0.9% 32.3% 61.3%
l Value		9,000			9,7	°,	°,	? -	800	2	Š
Asses		iinable agricultur Illinois n=203	e?When finished Indiana n=146	는 호	question #15. Kansas n=73	Minnesota n=96	Miss	Nebraska n=53	Wisconsin n=145	Bos	Seattle n=217
ssme	No response A lot	%0.0 %0.8	0.0% 2.1%	0.0% 3.7%	0.0% 1.4%	0.0% 8.3%	3.2%	0.0 3.8%	0.0% 2.8%	2.5% 3.1%	0.9% 4.6%
ent Re	Some Nothing	38.4% 58.6%	31.5% 66.4%	35.4% 61.0%	43.8% 54.8%	47.9% 43.8%	41.1% 55.6%	45.3% 50.9%	45.5% 51.7%	40.6% 53.8%	46.1% 48.4%
ort/Leo	What is your age?	ioniii 1000	24.00 mm	con i	Kanese n=73	Missing a storage	Miccourt a in 197	Notice of the state of the stat	Wisconsin n=145	2000	710-12
polo			0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	2.5%	0.9%
I C		8.9%	%9.6	9.8%	11.0%	10.4%	10.5%	5.7%	7.6%	10.0%	8.8%
ente	28-47 48-70	45.8% 42.9%	50.0% 37.7%	48.8% 39.0%	64.4% 24.7%	45.8% 41.7%	44.4%	60.4% 34.0%	50.3% 40.0%	41.3% 44.4%	41.0%
er fo		2.5%	2.7%	2.4%	0.0%	2.1%	4.0%	0.0%	2.1%	1.9%	1.4%
r Sustai	_	ion completed?									
nabl	N=1317 No response	Illinois n=203 0.0%	Indiana n=146 0.0%	lowa n=82 0.0%	Kansas n=73 0.0%	Minnesota n=96	Missouri n=124	Nebraska n=53 0.0%	Wisconsin n=145	Boston n=160 2.5%	Seattle n=217 0.9%
e Ag		ì	1	30			30		30		
ricu	Ulpioma Some College	53.7%	37.7%	28.0% 51.2%	31.5% 50.7%	26.0% 52.1%	32.3% 48.4%	34.0% 49.1%	37.2% 42.1%	25.0% 38.8%	71.7% 53.5%
ıltu		20.7%	11.6%	18.3%	12.3%	16.7%	14.5%	13.2%	42.1% 20.0%	25.6%	19.4%
re/N		2.0%	8.9%	1.2%	5.5%	4.2%	3.2%	3.8%	%2.0	2.0%	5.1%
Voven	Doctorate Degree	2.0%	1.4%	1.2%	%0.0	1.0%	1.6%	%0.0	%0:0	3.1%	%0.0
nber 2	Are you male or female? N=1317	Illinois n=203	Indiana n=146	lowa n=82	Kansas n=73	Minnesota n=96	Missouri n=124	Nebracka n=53	Wisconsin n=145	Boston n=160	Seattle n=217
003		0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	2.5%	0.9%
	Male Female	15.8% 84.2%	18.5% 81.5%	18.3% 81.7%	13.7% 86.3%	25.0% 75.0%	14.5% 85.5%	0.0% 100.0%	15.2% 84.8%	21.3% 76.3%	21.7% 77.4%
		: ! !) - -	:)) : !)) 		

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Respondents Who Viewed Ecoloabels Responses to Questions by State

lestions: No response on State r	80									
your household income?										
N=131/	nois n=203	Illinois n=203 Indiana n=146	lowa n=82	Kansas n=73	Minnesota n=96	Minnesota n=96 Missouri n=124	Nebraska n=53	Wisconsin n=145	Boston n=160	Seattle n=217
No response	1.5%	0.7%	%0.0	%0.0	1.0%	%0.0		%0.0	3.1%	1.8%
Under \$40,000	43.8%	47.9%	58.5%	63.0%	20.0%	57.3%	60.4%	%9:95	38.8%	52.1%
\$40,000-\$70,000	34.0%	42.5%	35.4%	27.4%	35.4%	34.7%	22.6%	29.7%	39.4%	30.4%
\$71,000-\$100,000	15.3%	%8.9	6.1%	8.2%	8.3%	6.5%	9.4%	11.0%	11.3%	12.9%
Over \$100,000	5.4%	2.1%	%0.0	1.4%	5.2%	1.6%	2.7%	2.8%	7.5%	2.8%
What set of questions was seen?										
N=1317 IIII	Illinois n=203	Indiana n=146	lowa n=82	Kansas n=73	Minnesota n=96	Missouri n=124	Nebraska n=53	Wisconsin n=145	Boston n=160	Seattle n=217
No response	%0.0	%0.0	%0.0	%0.0	%0.0		%0:0	%0.0	%0.0	%0.0
_	29.1%	36.3%	31.7%	31.5%	22.9%	33.9%	34.0%	29.7%	33.1%	44.7%
2	34.0%	32.9%	36.6%	32.9%	44.8%	37.1%	39.6%	33.8%	38.8%	34.6%
က	36.9%	30.8%	31.7%	35.6%	32.3%	29.0%	26.4%	36.6%	28.1%	20.7%

RESPONDENT CATEGORIES	
QUESTIONS AND POSSIBLE RESPONSES	

For all questions: No response on State n = 21

What do you consider "local" when making a food purchase? N=445

Source	Illinois n=102	102 Indiana n=62	lowa n=52	Kansas n=33	lowa n=52 Kansas n=33 Minnesota n=51 Missouri n=61 Nebraska n=20 Wisconsin n=43	Missouri n=61	Nebraska n=20	Wisconsin n=43
Grown 25 miles or less from purchase	45.1%	48.4%	48.1%	33.3%	37.3%	44.3%	45.0%	39.5%
100 miles or less from purchase	23.5%	19.4%	15.4%	36.4%	19.6%	11.5%	2.0%	20.9%
In my state	18.6%	17.7%	19.2%	24.2%	31.4%	26.2%	20.0%	32.6%
In the Midwest	12.7%	14.5%	15.4%	6.1%	11.8%	14.8%	30.0%	4.7%
Other	%0.0	%0.0	1.9%	%0.0	%0.0	3.3%	%0.0	2.3%
	:	,	:		,			

On average, how far does fresh produce travel (from the farm) to reach the grocery stores? (All seasons) N=445

Source	Illinois n=102	Indiana n=62	lowa n=52	Kansas n=33	Minnesota n=51	Missouri n=61	Nebraska n=20	Wisconsin n=43
50 miles or less	4.9%	8.1%	2.8%	9.1%	2.9%	1.6%	2.0%	11.6%
50-250 miles	19.6%	19.4%	13.5%	12.1%	13.7%	19.7%	20.0%	11.6%
250-500 miles	16.7%	17.7%	11.5%	9.1%	15.7%	18.0%	20.0%	20.9%
500-750 miles	11.8%	11.3%	11.5%	15.2%	2.9%	13.1%	35.0%	18.6%
750-1000 miles	21.6%	14.5%	17.3%	24.2%	17.6%	21.3%	10.0%	14.0%
more than 1000 miles	25.5%	29.0%	40.4%	30.3%	41.2%	26.2%	10.0%	23.3%

On average, how far does fresh produce travel (from the farm) to reach the grocery stores? (In the summer) N=445

V-445								
Source	Illinois n=102	Indiana n=62	lowa n=52	Kansas n=33	Minnesota n=51	_	Nebraska n=20	Wisconsin n=43
50 miles or less	25.5%	25.8%	26.9%	24.2%	25.5%		25.0%	25.6%
50-250 miles	30.4%	37.1%	32.7%	24.2%	25.5%		25.0%	20.9%
250-500 miles	18.6%	12.9%	15.4%	15.2%	21.6%		30.0%	27.9%
500-750 miles	%6.9	6.5%	7.7%	18.2%	13.7%		%0.0	9.3%
750-1000 miles	9.8%	8.1%	5.8%	9.1%	2.9%	8.2%	10.0%	9.3%
more than 1000 miles	8.8%	9.7%	11.5%	9.1%	7.8%		10.0%	7.0%

RESPONDENT CATEGORIES	
QUESTIONS AND POSSIBLE RESPONSES	

For all questions: No response on State n = 21

On average, how far do meat and poultry travel		n the farm) to r	each the gro	(from the farm) to reach the grocery stores? (All seasons)	All seasons)			
Source	Illinois n=102	ndiana r	lowa n=52	Kansas n=33	Minnesota n=51	Missouri n=61	Nebraska n=20	Wisconsin n=43
50 miles or less	7.8%	6.5%	11.5%	9.1%	, 11.5% 9.1% 5.9%		%0.0	9.3%
50-250 miles	23.5%	27.4%	26.9%	36.4%	11.8%		45.0%	25.6%
250-500 miles	14.7%	24.2%	25.0%	12.1%	29.4%	23.0%	30.0%	23.3%
500-750 miles	21.6%	17.7%	%9.6	24.2%	21.6%	14.8%	15.0%	14.0%
750-1000 miles	14.7%	12.9%	%9.6	6.1%	11.8%	18.0%	10.0%	18.6%
more than 1000 miles	17.6%	11.3%	17.3%	12.1%	19.6%	14.8%	%0.0	9.3%

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On average, how far do meat and poultry travel $N=445$		n the farm) to r	each the gro	ocery stores? ((from the farm) to reach the grocery stores? (In the summer)			
Source	Illinois n=102	Indiana n=62	lowa n=52	Kansas n=33	Minnesota n=51	Missouri n=61	Nebraska n=20	Wisconsin n=43
50 miles or less	12.7%	6.5%	15.4%	9.1%	11.8%		2.0%	18.6%
50-250 miles	25.5%	37.1%	26.9%	39.4%	17.6%	27.9%	40.0%	27.9%
250-500 miles	17.6%	22.6%	23.1%	18.2%	29.4%	13.1%	30.0%	20.9%
500-750 miles	18.6%	14.5%	15.4%	15.2%	17.6%	21.3%	20.0%	11.6%
750-1000 miles	11.8%	12.9%	2.8%	6.1%	11.8%	13.1%	2.0%	14.0%
more than 1000 miles	13.7%	6.5%	13.5%	12.1%	11.8%	13.1%	%0:0	%0'.2

Why do you buy local foods? (1) $N=445$								
Source	Illinois n=102	Indiana n=62	lowa n=52	Kansas n=33	Minnesota n=51	Missouri n=61	Nebraska n=20	Wisconsin n=43
Price	15.7%	21.0%	13.5%	27.3%	11.8%	8.6	10.0%	11.6%
Quality	21.6%	35.5%	21.2%	12.1%	25.5%	24.6%	15.0%	20.9%
Supports local farms	18.6%	9.7%	26.9%	15.2%	23.5%	21.3%	20.0%	25.6%
Environmental concerns	1.0%	%0.0	%0.0	%0.0	%0.0	%0.0	%0.0	%0.0
Food security	1.0%	%0.0	%0.0	%0.0	%0.0	%0.0	%0.0	4.7%
Healthier food	3.9%	1.6%	3.8%	%0.0	2.0%	1.6%	2.0%	2.3%
Freshness	36.3%	24.2%	25.0%	30.3%	31.4%	41.0%	45.0%	30.2%
Helps local economy	2.0%	4.8%	2.8%	15.2%	3.9%	1.6%	2.0%	4.7%
Other	%0:0	3.2%	3.8%	%0:0	2.0%	%0.0	%0:0	%0.0

RESPONDENT CATEGORIES	
QUESTIONS AND POSSIBLE RESPONSES	

For all questions: No response on State n = 21

Why do you buy local foods? (2) N=445								
Source	Illinois n=102	Indiana n=62	lowa n=52	Kansas n=33	Minnesota n=51	Missouri n=61	Nebraska n=20	Wisconsin n=43
Price	10.8%	12.9%	13.5%	9.1%	11.8%	11.5%	2.0%	7.0%
Quality		19.4%	25.0%	27.3%	19.6%	21.3%	15.0%	25.6%
Supports local farms		24.2%	13.5%	27.3%	21.6%	27.9%	25.0%	18.6%
Environmental concerns		1.6%	3.8%	%0.0	2.0%	1.6%	%0.0	7.0%
Food security	1.0%	1.6%	1.9%	%0.0	%0.0	3.3%	%0.0	4.7%
Healthier food	%8'6	3.2%	3.8%	3.0%	8.6	3.3%	2.0%	2.3%
Freshness	21.6%	22.6%	25.0%	21.2%	21.6%	16.4%	30.0%	23.3%
Helps local economy	%8'6	11.3%	11.5%	12.1%	11.8%	14.8%	20.0%	11.6%
Other	%0.0	3.2%	1.9%	%0:0	2.0%	%0.0	%0.0	%0.0

Why do you buy local foods? (3) $N=445$								
Source	Illinois n=102	Indiana n=62	lowa n=52	Kansas n=33	Minnesota n=51	Missouri n=61	Nebraska n=20	Wisconsin n=43
Price	20.6%	19.4%	15.4%	18.2%	19.6%	16.4%	25.0%	25.6%
Quality	15.7%	9.7%	13.5%	15.2%	11.8%	18.0%	2.0%	7.0%
Supports local farms	17.6%	22.6%	13.5%	18.2%	11.8%	16.4%	20.0%	7.0%
Environmental concerns	1.0%	1.6%	5.8%	3.0%	%0.0	%0.0	%0.0	7.0%
Food security	1.0%	3.2%	3.8%	%0.0	2.0%	1.6%	%0.0	4.7%
Healthier food	4.9%	4.8%	5.8%	6.1%	11.8%	14.8%	%0.0	7.0%
Freshness	24.5%	19.4%	23.1%	12.1%	11.8%	18.0%	2.0%	20.9%
Helps local economy	14.7%	16.1%	15.4%	21.2%	27.5%	13.1%	35.0%	20.9%
Other	%0.0	3.2%	3.8%	6.1%	3.9%	1.6%	10.0%	%0.0

Source	Illinois n=102	Indiana n=62	lowa n=52	Kansas n=33	Minnesota n=51	Missouri n=61	Nebraska n=20
Price	20.6%	19.4%	15.4%	18.2%	19.6%	16.4%	25.0%
Quality	15.7%	9.7%	13.5%	15.2%	11.8%	18.0%	2.0%
Supports local farms	17.6%	22.6%	13.5%	18.2%	11.8%	16.4%	20.0%
Environmental concerns	1.0%	1.6%	5.8%	3.0%	%0.0	%0.0	%0.0
Food security	1.0%	3.2%	3.8%	%0.0	2.0%	1.6%	%0.0
Healthier food	4.9%	4.8%	5.8%	6.1%	11.8%	14.8%	%0.0
Freshness	24.5%	19.4%	23.1%	12.1%	11.8%	18.0%	2.0%
Helps local economy	14.7%	16.1%	15.4%	21.2%	27.5%	13.1%	35.0%
Other	%0.0	3.2%	3.8%	6.1%	3.9%	1.6%	10.0%

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Source	Illinois n=102	Indiana n=62	lowa n=52	Kansas n=33	Minnesota n=51	Missouri n=61	Nebraska n=20	Wisconsin n=43
None	86.3%	%8.06	82.7%	84.8%	90.2%	93.4%	82.0%	%0.98
Chemicals/Fertilizers/Pesticides	2.9%	4.8%	3.8%	12.1%	2.9%	%0.0	2.0%	2.3%
Price	2.0%	%0.0	3.8%	%0.0	%0.0	%0.0	%0.0	%0:0
Taste/Quality/Freshness	7.8%	1.6%	5.8%	3.0%	%0.0	4.9%	%0.0	2.3%
Contamination/Safety/Cleanliness	%0.0	%0.0	%0:0	%0:0	%0.0	%0.0	%0:0	%0.0
Selection/Seasonality/Availability	%0.0	1.6%	%0.0	%0.0	%0.0	%0.0	%0.0	%0:0
Other	1.0%	1.6%	3.8%	%0.0	3.9%	1.6%	10.0%	9.3%

RESPONDENT CATEGORIES	
QUESTIONS AND POSSIBLE RESPONSES	

For all questions: No response on State n = 21

N=445 Source No response	Illinois n=102 0.0%	Indiana n=62 0.0%	lowa n=52 0.0%	Kansas n=33 0.0%	Min	Missouri n=61 0.0%	Nebraska n=20 0.0%	Wisc
Unimportant	2.0%	9.7%	1.9%	%0.0	2.0%	%9.9	%0.0	%0'0
2 Somewhat unimportant	12.7%	9.7%	%9.6	12.1%	2.0%	%9.9	10.0%	14.0%
Neutral	20.6%	33.9%	32.7%	18.2%	19.6%	11.5%	20.0%	18.6%
4 Somewhat important	29.4%	14.5%	28.8%	21.2%	39.2%	36.1%	30.0%	25.6%
Important	35.3%	32.3%	26.9%	48.5%	37.3%	39.3%	40.0%	41.9%

How much higher of a price would you be willing to pay for locally grown food? N=445

Source	Illinois n=102	Indiana n=62	lowa n=52	Kansas n=33	Minnesota n=51	Missouri n=61		Wisconsin n=43
No response	%0.0	%0.0	%0.0	%0.0	%0.0	%0:0		%0.0
0% of the product price	22.5%	29.0%	11.5%	18.2%	17.6%	13.1%	20.0%	20.9%
1-5% increase in the product price	42.2%	45.2%	63.5%	51.5%	47.1%	29.0%	30.0%	25.8%
6-10% increase in the product price	30.4%	24.2%	19.2%	18.2%	29.4%	18.0%	35.0%	14.0%
11-15% increase in the product price	2.0%	1.6%	3.8%	6.1%	3.9%	1.6%	2.0%	2.3%
Other	2.9%	%0:0	1.9%	6.1%	2.0%	8.2%	10.0%	7.0%

How much higher of a price would you be willing to pay for a product that had low environmental impacts in food transportation? N=445

N=440								
Source	Illinois n=102	Indiana n=62	lowa n=52	Kansas n=33		Missouri n=61	Nebraska n=20	Wisconsin n=43
No response	%0.0	%0:0	%0.0	%0.0	%0:0	%0.0	%0.0	%0.0
0% of the product price	25.5%	35.5%	28.8%	30.3%		21.3%	25.0%	25.6%
1-5% increase in the product price	47.1%	20.0%	20.0%	42.4%		22.7%	20.0%	25.8%
6-10% increase in the product price	23.5%	11.3%	15.4%	18.2%		14.8%	15.0%	14.0%
11-15% increase in the product price	2.9%	3.2%	1.9%	3.0%		%9.9	10.0%	%0'0
Other	1.0%	%0.0	3.8%	6.1%		1.6%	%0.0	4.7%

RESPONDENT CATEGORIES
QUESTIONS AND POSSIBLE RESPONSES

For all questions: No response on State n = 21

If the price and visual appearance were equal for a produce or meat item, which of the choices below would you purchase? (First choice)

Source

Illinois n=102 Indiana n=62 Iowa n=52 Kansas n=33 Minnesota n=51 Missouri n=61 Nebraska n=20 Wisconsin n=43 0.0% 76.7% 0.0% 2.3% 14.0% 0.0% 65.0% 5.0% 0.0% 25.0% 5.0% 0.0% 72.1% 0.0% 0.0% 26.2% 1.6% 0.0% 82.4% 0.0% 11.8% 5.9% 0.0% 69.7% 6.1% 0.0% 12.1% 0.0% 86.5% 0.0% 9.6% 3.8% 0.0% 80.6% 1.6% 0.0% 14.5% 3.2% 0.0% 75.5% 2.0% 2.0% 15.7% 4.9% Grown locally by family farmers Organic-grown in your state Organic-origin unknown Organic-grown locally Organic-imported No response Source

If the price and visual appearance were equal for a produce or meat item, which of the choices below would you purchase? (Second choice)

Source	Illinois n=102	Indiana n=62	lowa n=52	Kansas n=33	Minnesota n=51	Missouri n=61	Nebraska n=20	Wisconsin n=43
No response	%0.0	%0.0	%0.0	%0.0	%0.0	%0.0		%0.0
Grown locally by family farmers	18.6%	8.1%	21.2%	18.2%	17.6%	16.4%	30.0%	14.0%
Organic-origin unknown	4.9%	6.5%	3.8%	6.1%	8.6	3.3%	%0.0	7.0%
Organic-imported	2.9%	1.6%	3.8%	9.1%	2.0%	3.3%	%0.0	4.7%
Organic-grown locally	43.1%	51.6%	34.6%	39.4%	37.3%	42.6%	20.0%	44.2%
Organic-grown in your state	30.4%	32.3%	36.5%	27.3%	33.3%	34.4%	20.0%	30.5%

What is your interest in environmental issues? N=445

0.44-7/								
Source	Illinois n=102	Indiana n=62	wa n=52	Kansas n=33		Missouri n=61	Nebraska n=20	Wisconsin n=43
No response	%0:0	%0:0	%0.0	%0.0		%0.0	%0.0	%0.0
Very interested	23.5%	25.8%	26.9%	27.3%	35.3%	29.5%	25.0%	30.2%
Somewhat interested	%9'02	66.1%	61.5%	63.6%		62.3%	%0.07	65.1%
Not interested	2.9%	8.1%	11.5%	9.1%		8.2%	2.0%	4.7%

QUESTIONS AND POSSIBLE RESPONSES				RESPON	RESPONDENT CATEGORIES	ES		
For all questions: No response on State n = 21	ate n = 21							
How much do you know about sustainable agriculture? N=445	tainable agricultu	ıre?						
Source	Illinois n=102	Indiana n=62	lowa n=52	Kansas n=33	Minnesota n=51	Missouri n=61	Nebraska n=20	Wisconsin n=43
No response	%0.0	%0:0	%0.0	%0.0	%0:0	%0:0	%0:0	%0.0
A lot	1.0%	%0.0	2.8%	3.0%	%8.6	3.3%	%0:0	4.7%
Some	35.3%	43.5%	34.6%	48.5%	54.9%	39.3%	45.0%	37.2%
Nothing	63.7%	26.5%	29.6%	48.5%	35.3%	57.4%	25.0%	58.1%
What is your age?								
0								
source	Illinois n=10Z	Indiana n=62	Iowa n=52	Kansas n=33	Minnesota n=51	Missouri n=61	Nebraska n=20	Wisconsin n=43
No response	%0:0	%0.0	%0:0	%0:0	%0:0	%0:0	%0:0	%0.0
Under 27	11.8%	8.1%	%9.6	9.1%	7.8%	8.6	2.0%	9.3%
28-47	23.9%	43.5%	44.2%	36.4%	43.1%	39.3%	%0.09	48.8%
48-70	33.3%	48.4%	42.3%	54.5%	45.1%	44.3%	35.0%	39.5%
Over 70	1.0%	%0.0	3.8%	%0.0	3.9%	%9.9	%0.0	2.3%
What is your highest level of education completed?	ation completed?							
N=445		:	;	:				
Source	Illinois n=102	Indiana n=62	lowa n=52	Kansas n=33	Minnesota n=51	Missouri n=61	Nebraska n=20	Wisconsin n=43
No response	%0:0	%0.0	%0.0	%0.0	%0.0	%0:0	%0:0	%0.0
Some high school or high school								
diploma	25.5%	35.5%	36.5%	36.4%	17.6%	36.1%	25.0%	34.9%
Some college	47.1%	41.9%	40.4%	54.5%	43.1%	44.3%	20.0%	46.5%
Bachelor's degree	20.6%	12.9%	21.2%	6.1%	33.3%	16.4%	20.0%	14.0%
Master's degree	%6:9	6.5%	1.9%	3.0%	2.9%	3.3%	%0.0	4.7%
Doctorate degree	%0:0	3.2%	%0:0	%0.0	%0.0	%0.0	2.0%	%0.0

RESPONDENT CATEGORIES	
QUESTIONS AND POSSIBLE RESPONSES	

For all questions: No response on State n = 21

Illinois n=1 02 Indiana n=62 Iowa n=52 Kansas n=33 Minnesota n=51 Missouri n=61 Nebraska n=20 Wisconsin n=43 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 17.6% 8.1% 25.0% 21.2% 19.6% 13.1% 15.0% 14.0%		Missouri n=61 Nebraska n=20 Wisconsin n=43 13.7% 4.5% 9.7%		Nebraska n=20 Wisco	%0.0 %0.0	50.0% 58.1%	30.0% 32.6%		
Missouri n=6' 0.0% 13.1%	%6.9%	Missouri n=61 13.7%		Miss	%0:0	%2'09	27.9%	4.9%	%9.9
Minnesota n=51 0.0% 19.6%	80.4%	Illinois n=1 02 Indiana n=62 Iowa n=52 Kansas n=33 Minnesota n=51 22.9% 13.9% 11.7% 7.4% 11.5%		Minnesota n=51	%0.0	39.5%	47.1%	7.8%	2.9%
Kansas n=33 0.0% 21.2%	78.8%	Kansas n=33 7.4%		Kansas n=33	%0.0	22.6%	30.3%	12.1%	%0:0
lowa n=52 0.0% 25.0%	75.0%	lowa n=52 11.7%		lowa n=52	%0.0	27.7%	28.8%	2.8%	7.7%
Indiana n=62 0.0% 8.1%	91.9%	Indiana n=62 13.9%		Indiana n=62	1.6%	48.4%	38.7%	8.1%	3.2%
Illinois n=102 0.0% 17.6%	82.4%	Illinois n=102 22.9%		Illinois n=102	%0.0	20.0%	30.4%	12.7%	%6:9
Are you male or female? N=445 Source No response Male	Female	Where do you live? Source State	What is your household income? N=445	Source	No response	Under \$40,000	\$40,000-\$70,000	\$71,000-\$100,000	Over \$100,000

Ecolabel Value Assessment Report/Leopold Center for Sustainable Agriculture/November 2003