Consumer Interest in Locally Raised Meats in Northern Minnesota

Prepared for the
Sustainable Farming Association

By Renewing the Countryside

In Collaboration with On the Commons and Minnesota Institute for Sustainable Agriculture, University of Minnesota

December 2015

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BACKGROUND

A commonly noted limitation of local food systems in Minnesota and throughout the country is the scarcity of decentralized, small-scale meat processing relative to the growing number of farmers and consumers interested in selling/buying locally raised meat. To address this, a team of stakeholders, including meat producers, state regulators and inspectors, University of Minnesota, meat processors, and others, formed in 2011 to identify barriers to growth of small-scale meat processing in Minnesota. The issues that came into focus through these discussions included: workforce development and succession plans for an aging butcher shop workforce; availability of inspectors; need for livestock aggregation and transportation to and from processing; education on rules related to meat processing and sales; and, more generally, to understand the current state of meat processing in Minnesota and how existing facilities are being used.

Partly as an outcome of these discussions, the Sustainable Farming Association (SFA) received a Farmers' Market Promotions Program grant to expand the meat processing infrastructure in northern Minnesota so that people in the region can access locally-raised meat directly from area farmers. As part of this grant, SFA commissioned Renewing the Countryside to survey consumers in northern Minnesota in 2012 about their purchasing habits and interest in purchasing locally raised meat.

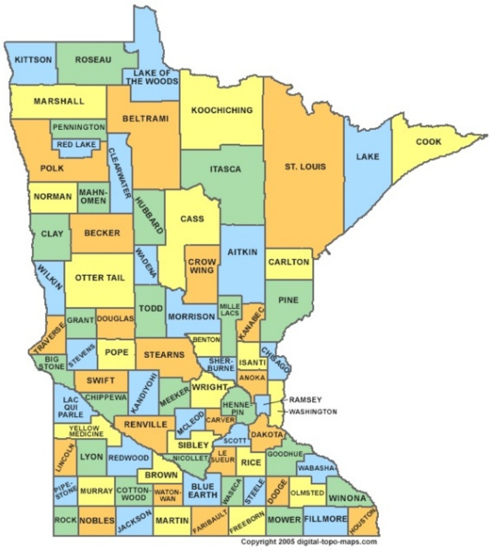
METHODOLOGY

The research team was comprised of John Mesko from the Sustainable Farming Association, Julie Ristau and Ana Micka from On the Commons, Jane Jewett from the Minnesota Institute for Sustainable Agriculture (MISA) at the University of Minnesota, and Jan Joannides, Renewing the Countryside and MISA. Bolormaa Jamiyansuren, a doctoral student in the Department of Applied Economics at the University of Minnesota, joined the project at the analysis phase and conducted the majority of the analysis of the results. Heather Lewis assisted with formatting of the report.

We developed a survey instrument with 22 questions. Our survey was informed by surveys developed in other parts of the country that had similar goals related to understanding consumers' interest in local foods. The survey was uploaded into Survey Monkey, the platform we chose to use for this project. It was then tested by a handful of consumers and direct-market farmers and their feedback was incorporated.

Concurrently, we identified networks that we could call on to help distribute the survey. Given our timeframe and budget, our strategy was to send out an email invitation to individuals in our databases and to send that same invitation out to various contacts and ask them to forward it on to their networks.

In April 2012, an email invitation was sent to individuals and networks. The invitation explained the purpose of the survey, indicated who should take the survey, provided a link to the survey, and offered an incentive for taking the survey (entered into a drawing for one of three Minnesota Homegrown Cookbooks or one of two Sustainable Farming Association caps). The SFA Connect Newsletter ran an article on the research with a link to the survey, and the survey was also promoted through SFA's Facebook site. By April 30, we had 338 responses. The distribution list for the survey invitation is included in the appendix.



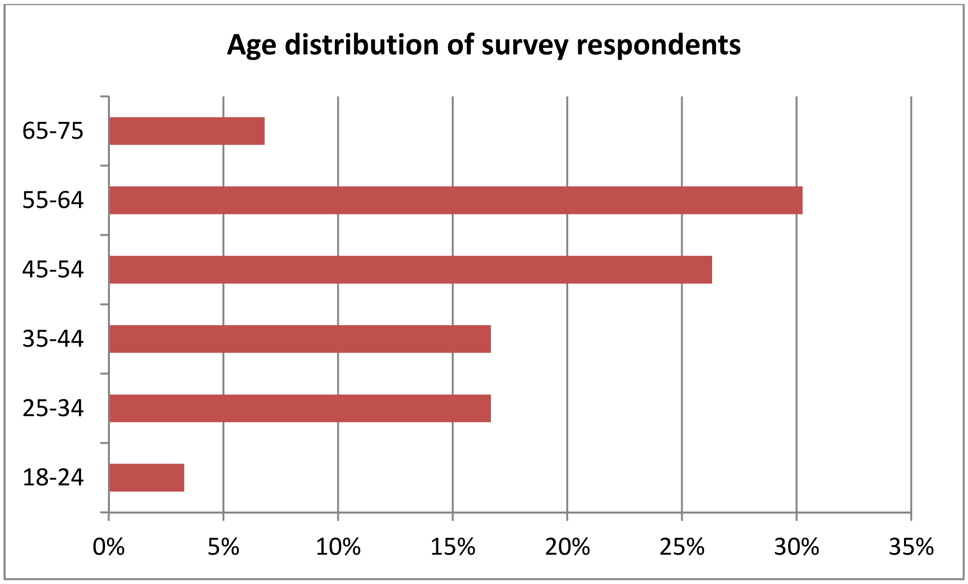
Our goal was to have 500 surveys completed, so we did an additional push in May that included resending the email invite out to our networks and sending a press release to media contacts in the region. On the final count, we had 455[1] respondents from 30 different counties from northern Minnesota. There were 312 respondents from northeast Minnesota and 143 from northwest Minnesota. In our analysis of the survey data, we decided to keep the responses from northeast and northwest separate in order to compare them to each other, and to offer more specific information about consumer preferences by region. Details on the number of respondents per county are in the appendix.

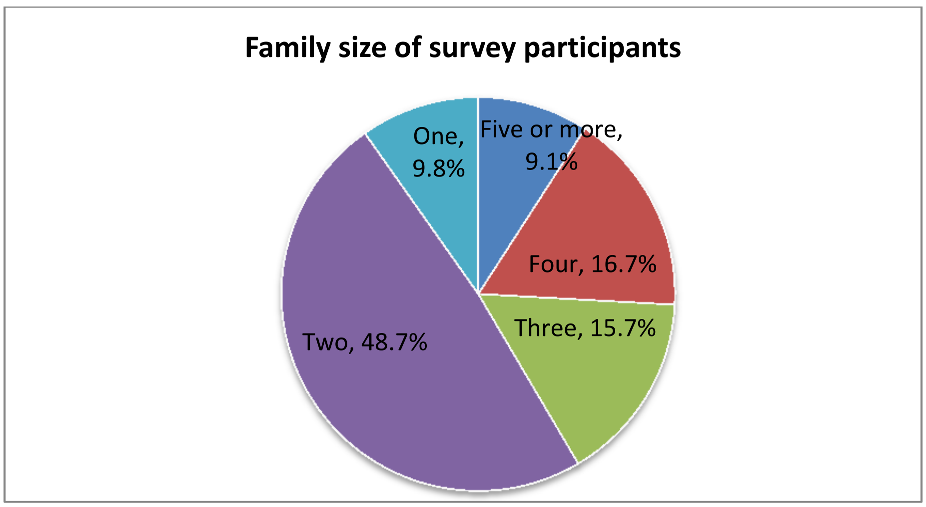
DATA AND DISCUSSION

Demographics

Survey respondents were asked about their gender, age, and the size of their families. The graphs below show the distribution of the latter two categories. Sixty percent of the respondents were in age bracket of 45-65 years. About 70 percent, or 350 respondents, were female, while 23 percent were male; 92 percent of the participants indicated that they were decision maker in the household regarding food purchases. Average household size was 2.6 people. Almost half of the respondents had a family size of two people. The information on purchasing habits obtained through this survey was on a per-household basis, not a per-person basis.

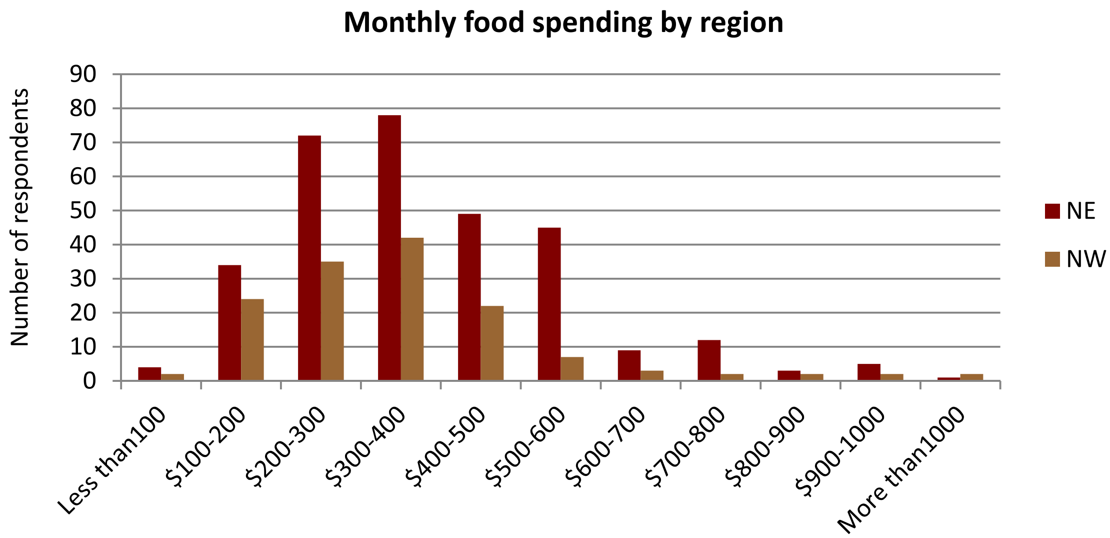
[1] We actually collected total of 484 complete surveys and 35 partially completed surveys, but discarded all those from outside Northern Minnesota, including one from North Dakota (Fargo), seven from Wisconsin (Foxboro, South range, Superior) and 19 from southern Minnesota.

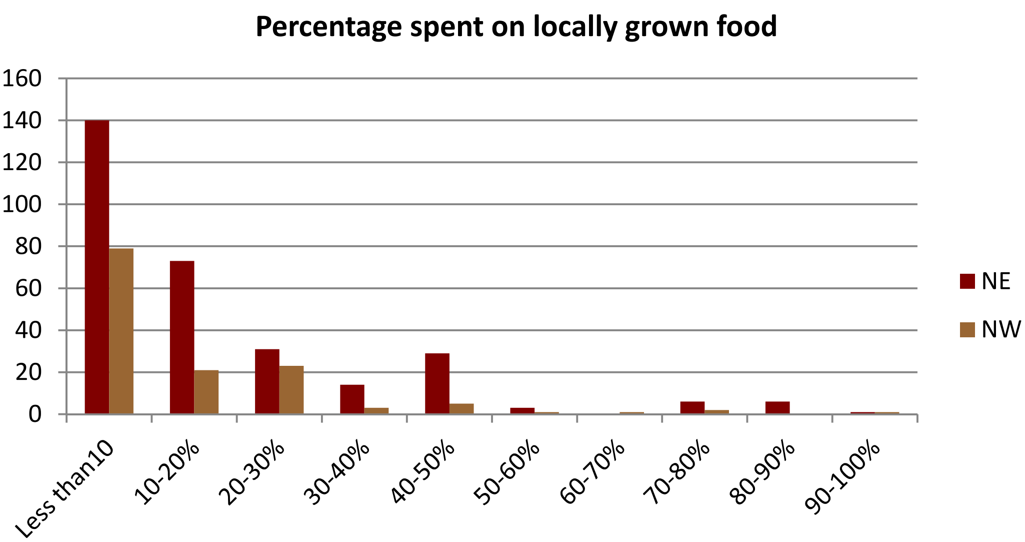




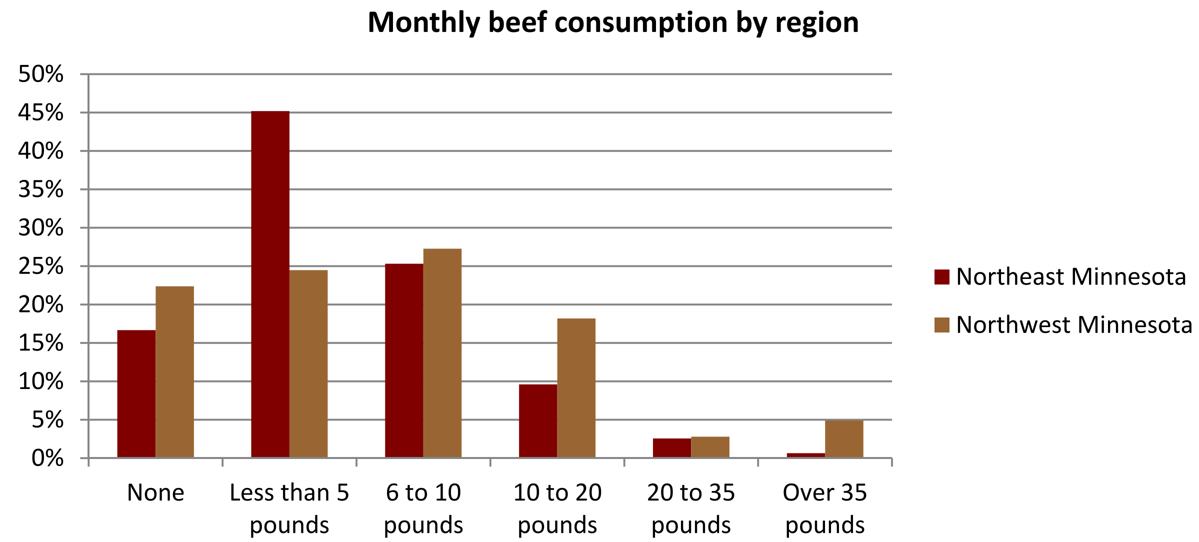
Purchasing habits and values

The average monthly food spending per household for residents in northeast (NE) Minnesota was $426.5, whereas for northwest (NW), it was $388.7 per month. Of this, households from NE spent 20.5 percent of food dollars on locally grown food, and households from NW spent 16.3 percent.

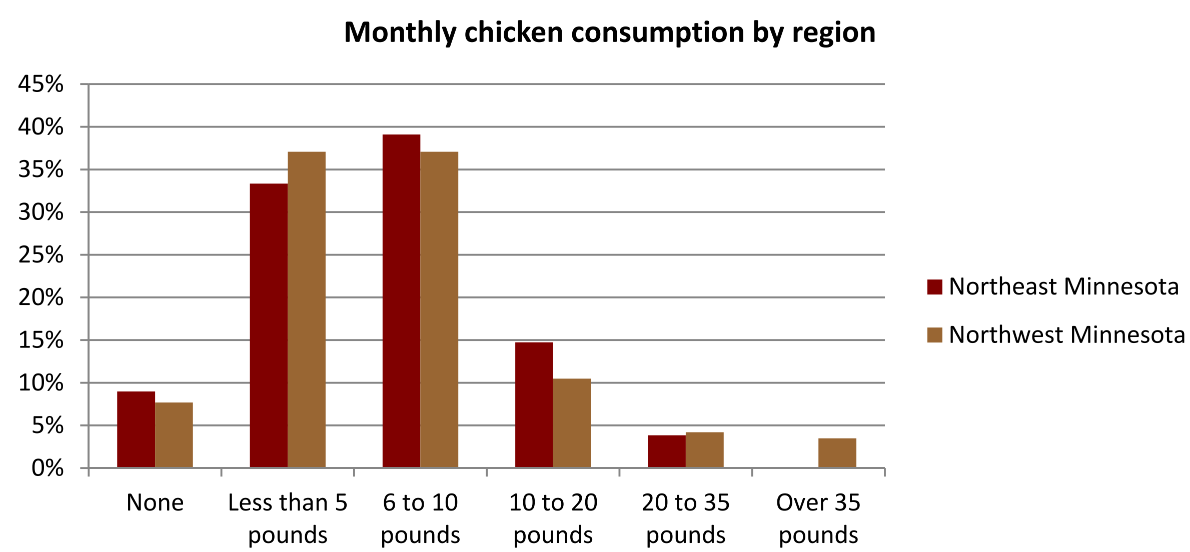




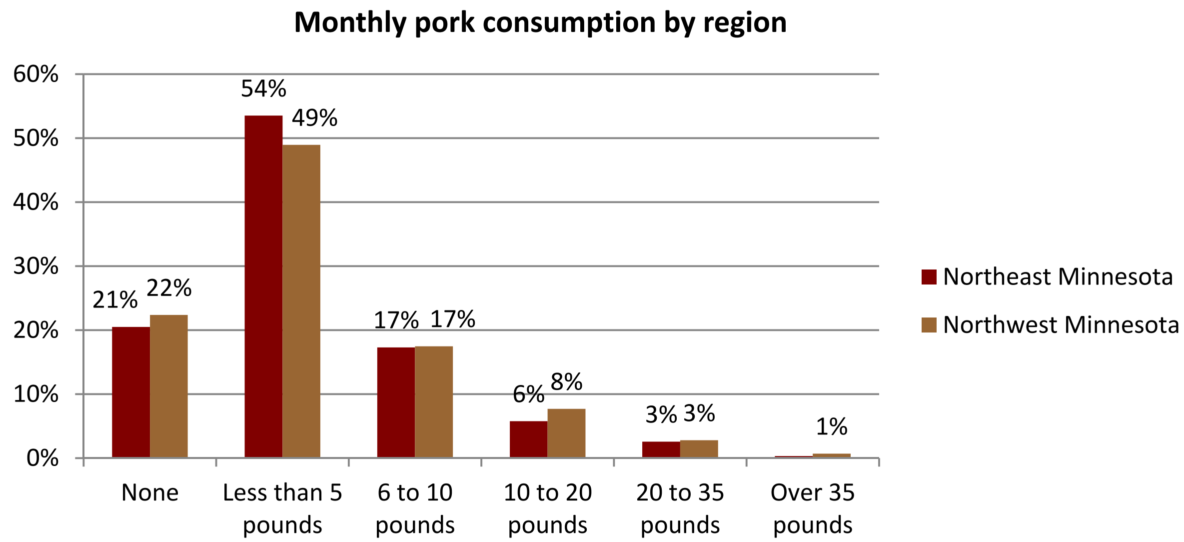
Respondents were asked about the types and amounts of meat their households consumed per month (whether locally grown or otherwise), and a few regional differences were found, as described below.



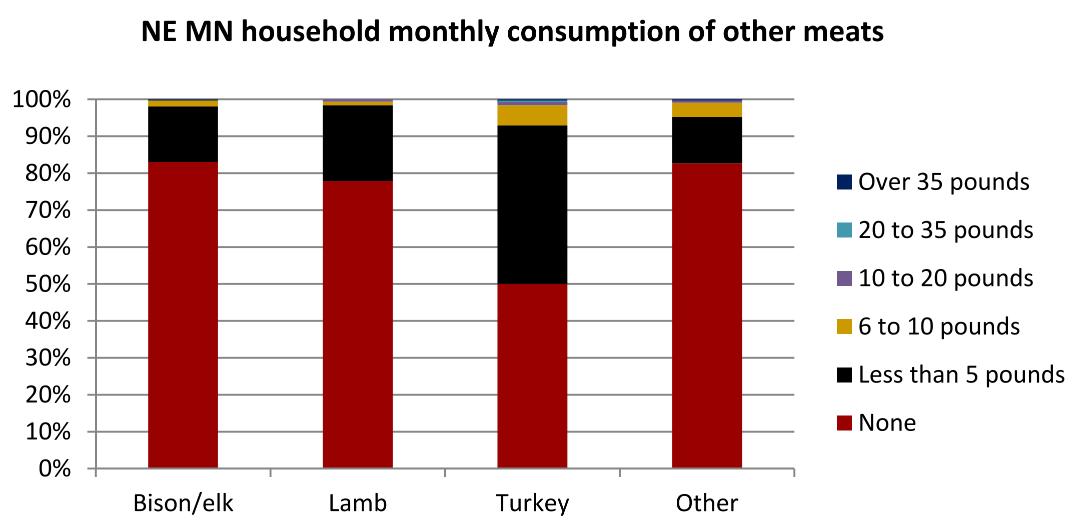
Based on those completing the survey, people in NW Minnesota appeared to consume more beef than people in NE Minnesota. We can see in the above graph that 6 percent more people in NE than in NW indicated that their households do not consume any beef, while the percentage of the households that consumed more than six pounds of beef per month was much higher in the NW. Thirteen percent more NW Minnesotan households consumed 10-20 pounds beef and 4.3 percent more consumed over 35 pounds of beef, compared to NE Minnesota, based on survey participants. Conversely, at the smaller level of beef consumption of less than five pounds, there were 21 percent more NE Minnesotans who chose that answer.



Overall chicken consumption seemed similar across the two regions, based on responses. Although 3 percent more NE households did not consume any chicken, more NE Minnesotan households consumed 6 to 10 pounds and 10 to 20 pounds of chicken per month..

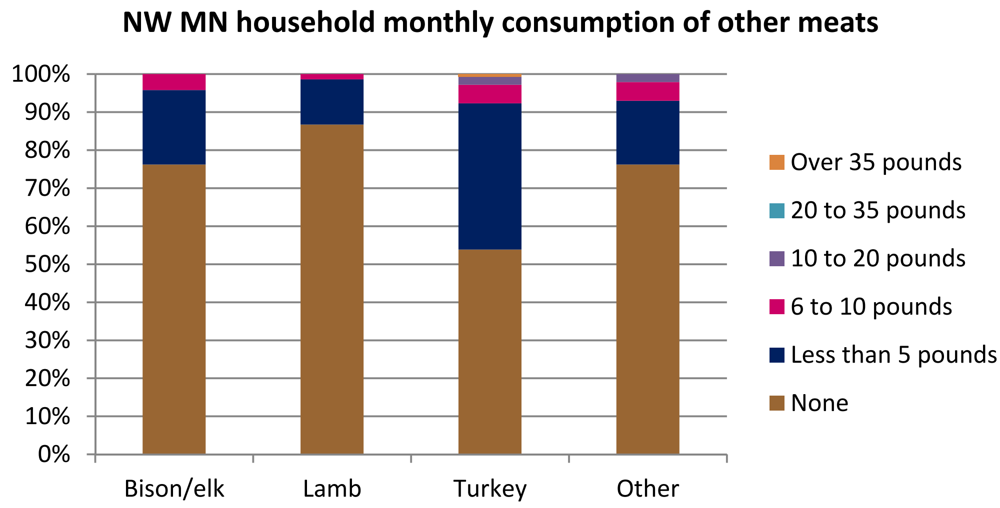


Monthly household pork consumption was almost identical in the two regions.



Most NE Minnesota respondents' households consumed bison or elk and lamb in amounts less than five pounds per month. Eighty-three percent of NE Minnesotan households did not consume any bison or elk, while 78 percent of this group consumed no lamb. Fifteen percent consumed between zero and five pounds of bison or elk, while 21 percent consumed between zero and five pounds of lamb. A few consumed 6 to 10 pounds of these meats per month. No one reported consumption of more than 10 pounds of bison or elk.

However, turkey was a much more popular meat choice. Half of NE MN households do not consume any turkey, while the other half consumes up to 10 pounds of turkey each month.



Compared to NE Minnesota households, NW respondents consumed more bison. Five percent more NW households consumed up to five pounds of bison, and two percent more consumed 6 to 10 pounds of bison per month, compared to NE households.

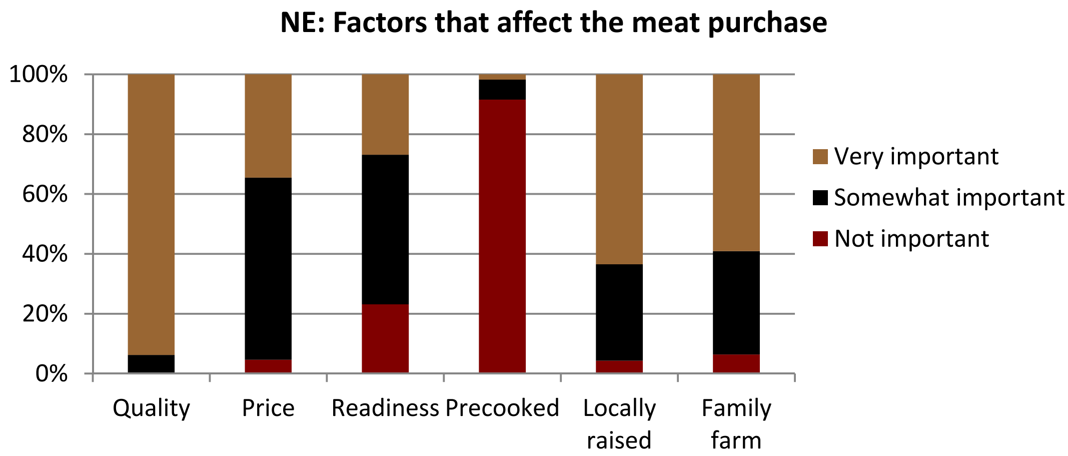
However, lamb was consumed much less in NW compared to NE Minnesota. Nine percent more NW households did not consume any lamb on a monthly basis. Only 12 percent of NW households consumed up to five pounds of lamb per month compared to NE Minnesota's 21 percent.

Turkey use by households in NW was about the same as for NE Minnesota consumers.

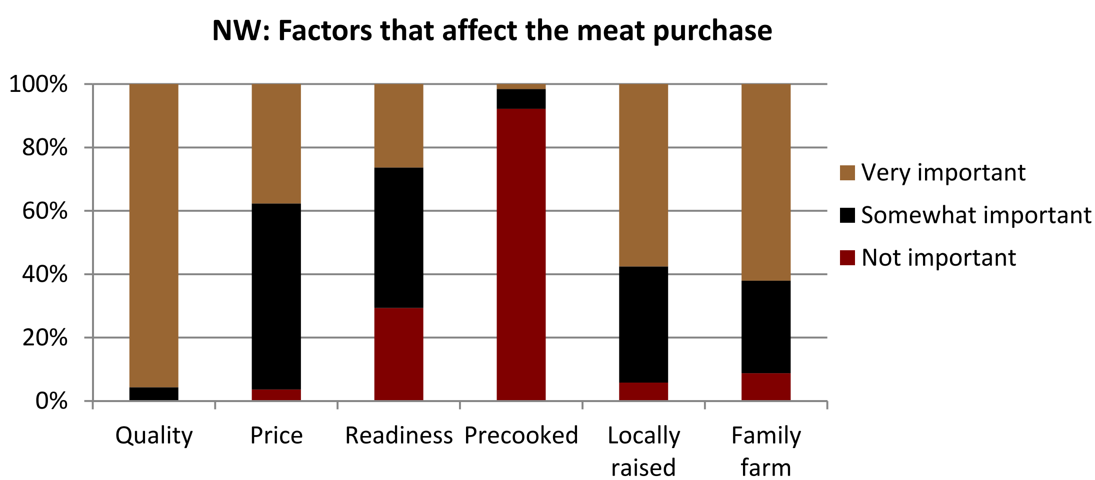
Many respondents marked "other" to the previous question, and also provided information about what other type of meats they consumed. This table summarizes those answers:

Monthly Household Consumption of Other Meats		
	NE	NW
	--------- lbs. --------	
Fish	44	27
Venison	12	8
Raise our own	6	7
Sausage	4	1
Pheasant	2	1
Goat	1	1
Herring	1	NA
Rabbit	1	NA
Seafood	1	2

Both fish and venison were consumed by more people in NE than in NW, based on survey responses. Generally it appeared from this survey that more households in NE Minnesota eat a greater variety of types of meat and poultry.



All respondents in NE Minnesota cared about the quality of meat. Other important factors affecting meat purchases were being locally raised and from a family farm. Price was less important than these three attributes. Thirty-five percent of the respondents chose price as very important for their purchase, whereas 61 percent said price was somewhat important. Purchasing precooked meat was not important for 92 percent of the respondents.



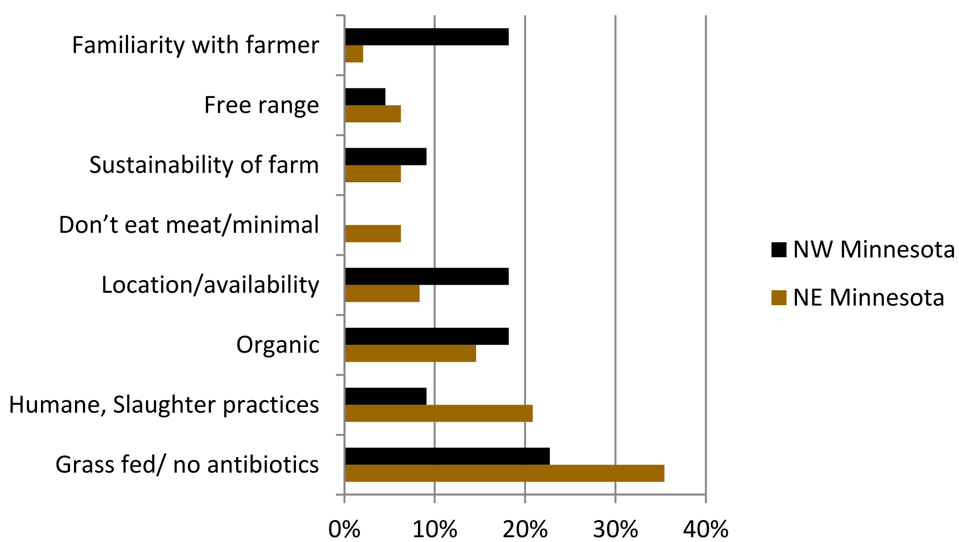
Factors affecting meat purchases were nearly the same for respondents in NW Minnesota as for those in NE Minnesota. Quality was the single most important factor followed by locally raised and from family farm. Price was important, but not the most important factor, and precooked was not important.

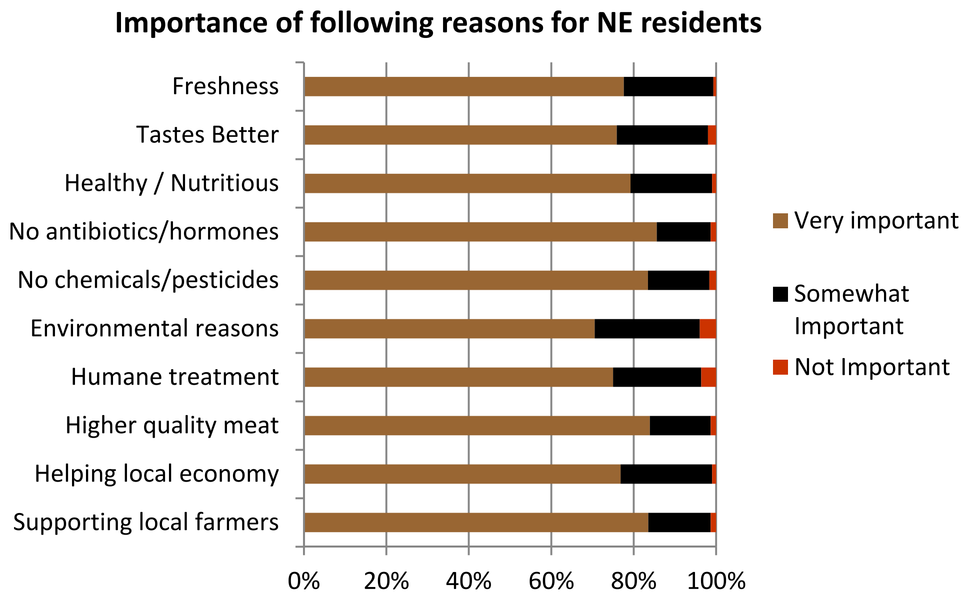
Other Factors Affecting Meat Purchases

Number of consumers	NE Minnesota		NW Minnesota	
	Count	%	Count	%
Grass fed/ no antibiotics	17	35%	5	23%
Humane/ slaughter practices	10	21%	2	9%
Organic	7	15%	4	18%
Location/availability	4	8%	4	18%
Don't eat meat/minimal	3	6%	0	0%
Sustainability of farm	3	6%	2	9%
Free range	3	6%	1	5%
Familiarity with farmer	1	2%	4	18%

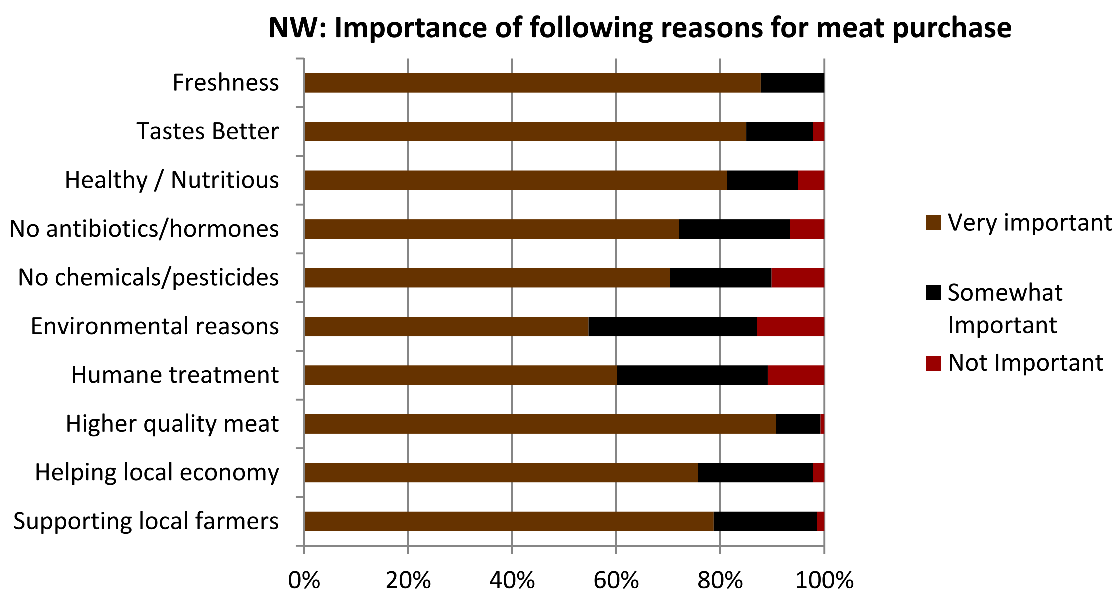
The table above summarizes the other factors that impacted the consumers' decisions on meat purchases. Grass-fed and no use of antibiotics mattered a lot in both regions. Humane treatment and slaughter practice was the second most important factor for NE Minnesotans, but it was not so important for those in the NW. Organic meat was sought after in both regions. Availability and location/availability mattered as well. Among respondents, familiarity with the farmer mattered much more for NW consumers than for NE consumers.

The following chart summarizes the above information.





All the reasons for selecting meat to purchase, as specified in the above graph, were very important for NE respondents The most important factor was no antibiotics/hormones as 86 percent of consumers from NE Minnesota chose that as “very important.” High-quality meat was as important as supporting local farmers. Seventy percent of the NE respondents reported that environmental reasons were important; however, it was the least important compared to all other reasons.



The ranking of reasons for NW respondents’ meat purchases was a bit different than for NE Minnesota. The most important reason for NW consumers was quality. One hundred twenty-seven of 140 consumers from NW chose higher quality meat as the number one factor in meat purchases. Freshness and better taste were the next most important factors among the list.

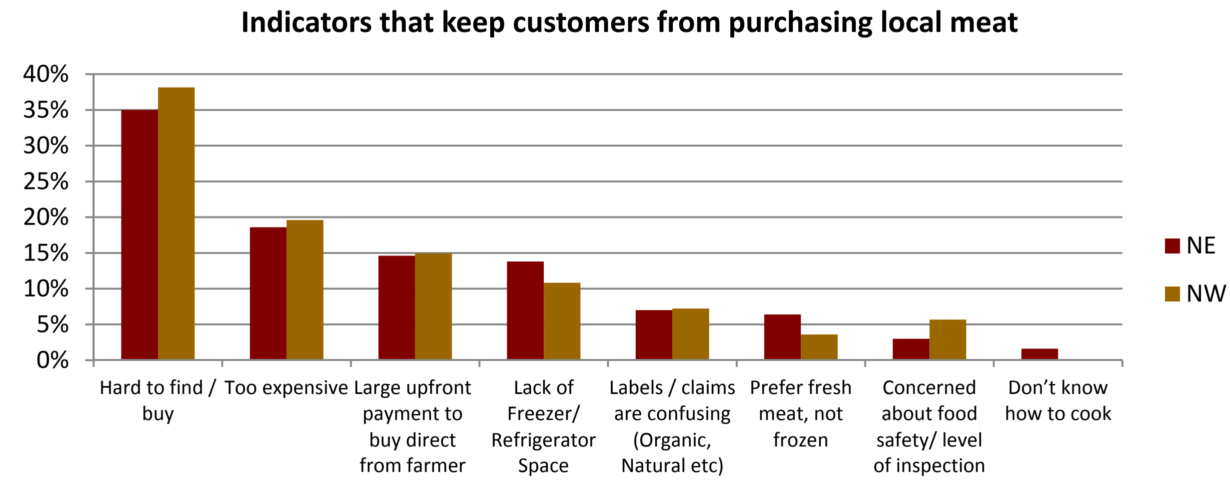
Consistent with NE respondents, environmental reasons were the least important factor among the specified 10 factors, although 55 percent of the NW respondents still chose that as a very important factor.

Which labels are valuable to the survey respondents?

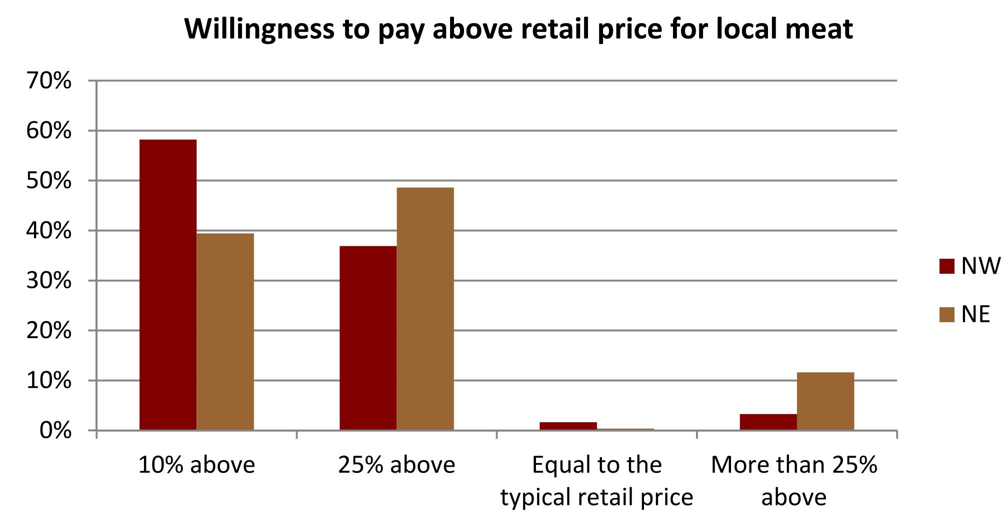
	Yes		No		No preference	
	NE	NW	NE	NW	NE	NW
	----------------- % of survey respondents -------------------					
Organic	66	49	15	30	19	22
Local	90	86	2	7	8	7
Natural	43	46	34	32	23	22
Grass-fed	78	62	7	17	14	21
Free-range	73	62	10	18	17	20
No antibiotics/hormones	89	78	4	15	8	7
Pasture raised	72	61	8	18	20	21

The ranking of labels by importance looks the same for NE and NW. However, for most of the labels, a higher percentage of respondents from NW than from NE marked 'No' to whether the labels were valuable to them.

The most important label in both regions was 'local,' followed by 'no antibiotics/hormones,' and then 'grass-fed.' Ninety percent of consumers in NE and 86 percent of consumers in NW said 'Yes' to the importance of a 'local' label; 89 percent of NE respondents value 'no antibiotics/hormones,' while 78 percent of NW respondents valued that label. The biggest divergence was on the labels 'organic' and 'grass-fed'. NW respondents valued these labels 17 percent and 16 percent less, respectively, compared to NE respondents. The percentage of respondents who had no specific preference was about the same across the regions.



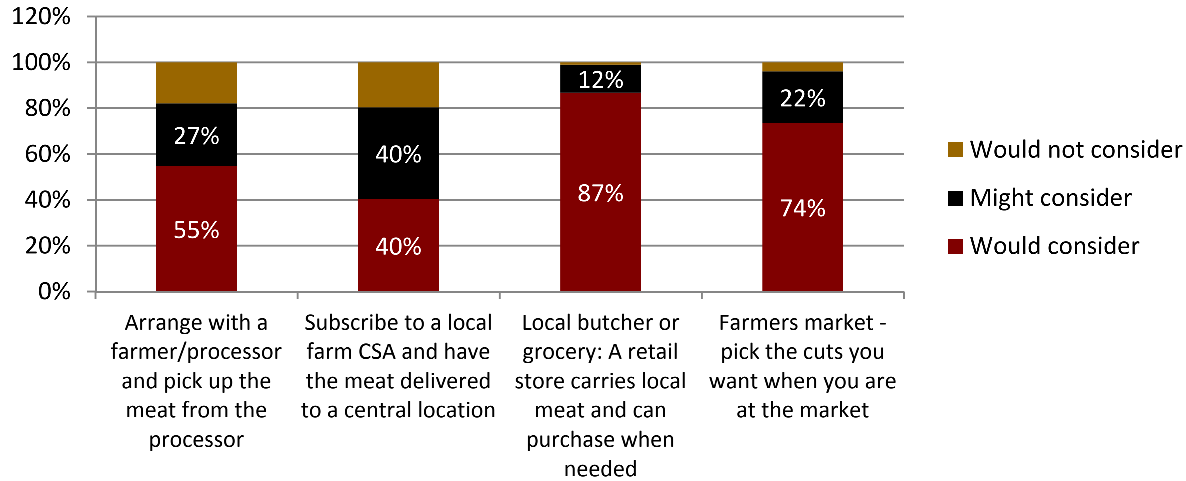
The main reason given for not purchasing locally raised meat was that it is hard to find or buy. Over 35 percent of respondents in both regions asserted this. Twenty percent of respondents in each region said it was too expensive to purchase local meat, making this the second most important reason. Between the two regions, the responses were very consistent. The only difference was on the food safety and inspection related concerns, with a slightly higher percentage of NW respondents expressing concern about safety of local meats.



Ninety-three percent of residents in NE and 87 percent from NW were willing to pay a higher price for local meats, knowing that local farmers incur higher production costs.

Almost 20 percent more NW than NE Minnesotan respondents were willing to pay 10 percent above the typical retail price for local meat. Conversely, 12 percent more NE respondents were willing to pay 25 percent above the retail price, compared to NW respondents.

In short, NE respondents were willing to pay much more for local meat than their NW counterparts. Interestingly, almost no consumer from either region responded that they were willing to pay the typical retail price for local meat.



A large majority of the NE respondents preferred the option of purchasing meat from a local butcher or grocery store. The next choice would be farmer's market where the consumer can have a say in meat cuts. The least favorite option was subscribing to a local farm and having meat delivered to a central location. This suggested that respondents valued the flexibility to purchase the local meat as needed versus committing to purchasing in larger quantities from a particular farm.

The preferences of NW Minnesota respondents on meat purchasing options were very similar to those of NE Minnesotans, but with greater willingness on the part of NW respondents to pre-arrange picking up meat from a processor . Eighty-six percent of all NW respondents would consider buying local meat if there were a local butcher or a retail store carrying local meat.

CONCLUSION

Northern Minnesotans who responded to this survey were in their 40s to 60s mostly, and were the primary decision maker on food purchases for their households.

Respondents allocated an average of 18.5 percent of grocery spending to products made locally. This amounted to average monthly spending of $71 on locally produced food, out of an average monthly food budget of $410.

Respondents expressed a wish to purchase more local products. Indeed, the second two most important factors, after meat quality, that respondents in both NE and NW Minnesota said affected their meat-purchasing decisions were whether the meat was raised locally and whether it was from a family farm. These factors were more important even than price. Similarly, supporting local farmers was viewed by around 80 percent of respondents as “very important.”

More than 85 percent find labeling locally raised meat as such to be valuable. There were no other labels that respondents found more valuable than a local label. A comment made by several survey respondents was that it is impossible to tell where meat was produced when purchasing meat from grocery stores as the labeling does not include such information. Labeling meat raised without antibiotics or hormones as such was the second most valuable, followed by labeling for grass-fed meat. The label the fewest number of respondents found valuable was “natural.”

Participants thought locally raised meat was much more expensive than conventional meat. However, given information as to why the price difference exists, a substantial percentage of people were willing to pay up to 25 percent more than the typical retail price. The main barrier to purchasing locally raised meat was that it is hard to find/buy, while the perception that it is too expensive was only the second most common reason respondents gave for not buying more locally raised meat. Fewer than 20 percent of respondents chose the latter reason, compared to more than 35 percent stating that “difficult to find/buy” was the main reason for not buying local. Respondents indicated they would be most satisfied if locally raised meat were available for purchase at grocery stores or butchers, with farmers markets being the second most popular venue for purchasing locally raised meat.

In addition to meat that is locally raised, the attributes valued by respondents included: grass-fed, antibiotic-free, hormone-free, organic, and chemical-free. The environment ranked lowest among their reasons for purchasing local meat.

Despite many similarities between responses from NW Minnesota and those from the NE part of the state, there were notable differences. One interesting difference was that respondents from NE spent a larger portion of an already larger monthly grocery bill on locally grown foods, compared to those from NW; an average of $87 per month was spent in NE on local foods, versus $63 per month in NW. Furthermore, 12 percent more respondents from NE than from NW would pay 25 percent more than the typical retail price for locally raised meat.

Another regional difference was the types of meat consumed, with NE respondents reporting a greater variety of meat consumed, while those from the NW reported eating larger amounts of beef. In terms of the attributes valued by region, NE consumers valued humane slaughter practices, not using hormones or antibiotics, and grass-feeding more than their NW counterparts; while those from the NW placed greater value on the availability/location, freshness, taste, and nutritional value of meat than did those in the NE.

Finally, many more NW consumers (more than 20 percent) than NE consumers (less than 5 percent) indicated that familiarity with the farmer affects their meat purchasing decisions. Also, NW respondents were more willing to arrange with the farmer to pick up meat from the processor, while NE respondents were more willing to join a CSA as a way to source locally raised meat. The willingness of NW consumers to arrange with the farmer to pick up meat from the processor would allow for greater use of custom-exempt plants.

Based on these results, one could imagine a local food system in NW Minnesota focused on traditional meats, more extensive use of custom-exempt processors, and informal relationships between farmers and their customers. In the NE, on the other hand, there may be more opportunity to experiment with a wider variety of meats and marketing arrangements, including CSAs. There was more interest in the NE in meat with attributes associated with sustainable agriculture (grass-fed, antibiotic-free, etc.), and a greater willingness to pay any premium associated with those methods.

APPENDICES

Appendix A: Email invitation to northern Minnesota residents to take consumer survey

Dear Friend of the Sustainable Farming Association and/or Renewing the Countryside:

*We are conducting a survey of residents of northern Minnesota (**north of a line from Moorhead to Brainerd to Sandstone)** to better understand regional interest and preferences for purchasing locally raised meat and poultry. This survey is an initiative of the Sustainable Farming Association of Minnesota and Renewing the Countryside -- and part of an effort to expand interest in and availability of locally raised meat and poultry in the northern part of the state.*

The survey only takes about 10 minutes to complete, and your input is important to us. If you live in Northern Minnesota, please take the survey by clicking the following link: www.surveymonkey.com/s/NorthernMNLocalMeat

*If you do not live in Northern Minnesota, but have friends, family, or colleagues who live there - **please forward this on to them!***

As an incentive to take the survey - those who complete the survey will be entered into a drawing for several prizes. We will be giving away three copies of the Minnesota Homegrown Cookbook, two Sustainable Farming Association caps, and a Farm Ninja T-Shirt. Again, the link for the survey is www.surveymonkey.com/s/NorthernMNLocalMeat

Sincerely,

John Mesko, Director, Sustainable Farming Association of MInnesota, and

Jan Joannides, Director, Renewing the Countryside This survey is being conducted by the Sustainable Farming Association of Minnesota and Renewing the Countrysidewith assistance from the Minnesota Institute for Sustainable Agriculture at the University of Minnesota

Appendix B: Northern Minnesota meat consumer survey distribution list

An invitation to complete the consumer survey was emailed to Northern Minnesota residents associated with the following organizations:

- Master Gardener
- Bemidji State departments
- Sustainable Farming Association members
- Renewing the Countryside supporters
- CSAs in the region
- North Central Research and Outreach Center in Grand Rapids
- Northwest Sustainable Development Partnership
- Northeast Regional Sustainable Development Partnership
- Northland Sustainable Business Alliance
- Leech Lake Band of Ojibwe
- White Earth Band of Ojibwe
- U of M Crookston campus contacts
- League of Women Voters in Duluth
- Sustainability Coordinator at Bemidji State
- Extension Educators
- SHIP contacts

Appendix C: Press release announcing northern Minnesota meat consumer survey

FOR IMMEDIATE RELEASE

Date: May 1, 2012

For more information contact:

John Mesko Sustainable Farming Association of Minnesota

763-260-0209, john@sfa-mn.org or

Jane Jewett, Minnesota Institute for Sustainable Agriculture, University of Minnesota, jewet006@umn.edu

Interest in local meats has swept across the country. In fact, the National Restaurant Association annual survey of chefs predicted that locally sourced meats would be the "hottest" restaurant trend for 2012.

But what does this mean for Northern Minnesota? Are people interested in locally sourced meat? Are they buying it? Do they know where to find it? The Sustainable Farming Association of Minnesota (SFA) and the Minnesota Institute for Sustainable Agriculture at the University of Minnesota are conducting a survey to find out.

"We are working on a project to expand availability of locally raised meat and poultry," says John Mesko, Executive Director of SFA. "This survey will help us understand consumer interest and preferences for purchasing locally raised meat and poultry in Northern Minnesota."

SFA and MISA are asking people who live in Northern Minnesota (North of Hwy 210/ Fergus Falls, Wadena, Brainerd, Duluth and further North) to take the survey online at the following link: click here (http://www.surveymonkey.com/s/NorthernMNLocalMeat)

Those who complete the survey by May 30 will be entered into a drawing. Three copies of the Minnesota Homegrown Cookbook and two Sustainable Farming Association caps will be given away to survey respondents who enter the drawing by that date.

This project is supported by USDA's Farmers Market Promotion Program.

This survey is being conducted by the Sustainable Farming Association of Minnesota (www.sfa-mn.org) with assistance from the Minnesota Institute for Sustainable Agriculture at the University of Minnesota (www.misa.umn.edu).

Appendix D: Supplementary tables

COUNTIES REPRESENTED

Aitkin	6	Lake of the Woods	4
Becker	12	Mahnomen	1
Beltrami	24	Marshall	4
Carlton	21	Norman???	3
Cass	8	Otter Tail	29
Chisago	2	Pennington	10
Clay	5	Pine	2
Clearwater	29	Polk	9
Cook	2	Pope	1
Crow Wing	6	Red Lake	2
Hubbard	4	Roseau	1
Isanti	1	Saint Louis	224
Itasca	21	Stearns	2
Koochiching	1	Todd	1
Lake	18	Wadena	2

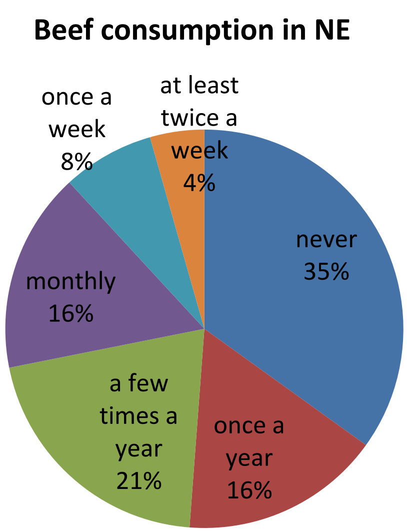
Table: Monthly meat consumption of NE Minnesota residents

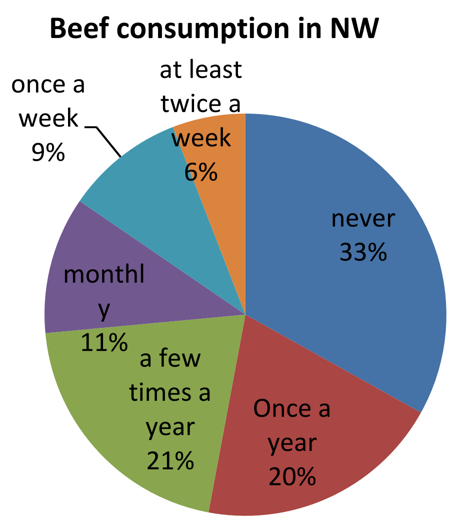
	None	Less than 5 pounds	6 to 10 pounds	10 to 20 pounds	20 to 35 pounds	Over 35 pounds	Response Count
Beef	52	141	79	30	8	2	312
Chicken	28	104	122	46	12	0	312
Pork	64	167	54	18	8	1	312
Bison/elk	259	47	5	0	0	1	312
Lamb	243	64	3	2	0	0	312
Turkey	156	134	17	3	1	1	312
Other	258	39	12	2	0	1	312

Table: Monthly meat consumption among NW Minnesota residents

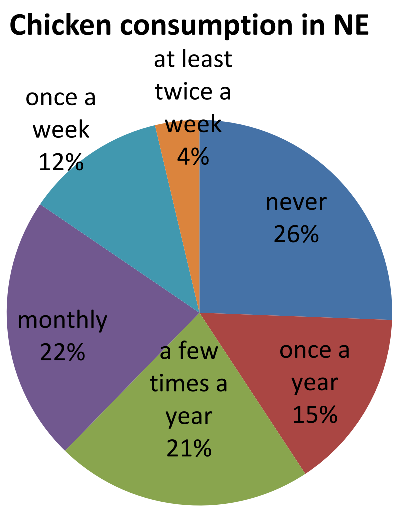
	None	Less than 5 pounds	6 to 10 pounds	10 to 20 pounds	20 to 35 pounds	Over 35 pounds	Response Count
Beef	32	35	39	26	4	7	143
Chicken	11	53	53	15	6	5	143
Pork	32	70	25	11	4	1	143
Bison/elk	109	28	6	0	0	0	143
Lamb	124	17	2	0	0	0	143
Turkey	77	55	7	3	0	1	143
Other	109	24	7	3	0	0	143

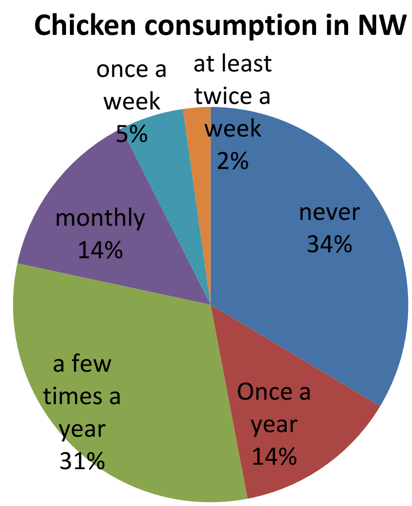
Frequency of local product purchase by regions of Minnesota

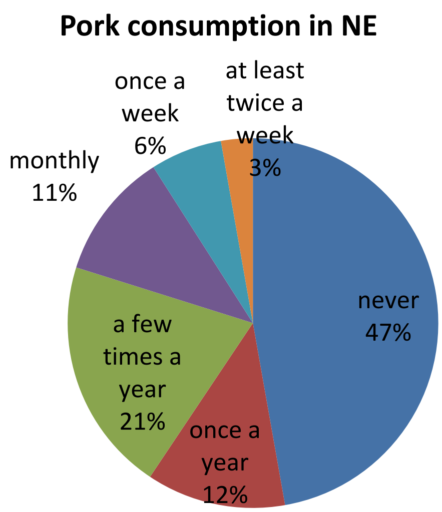


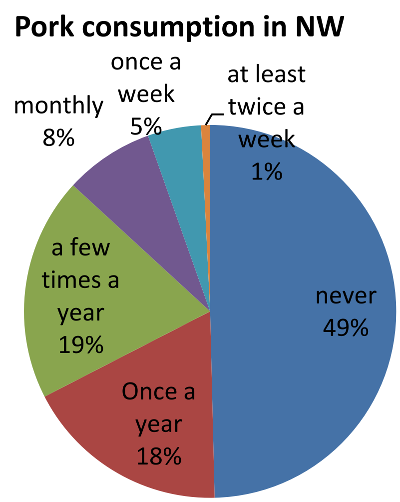


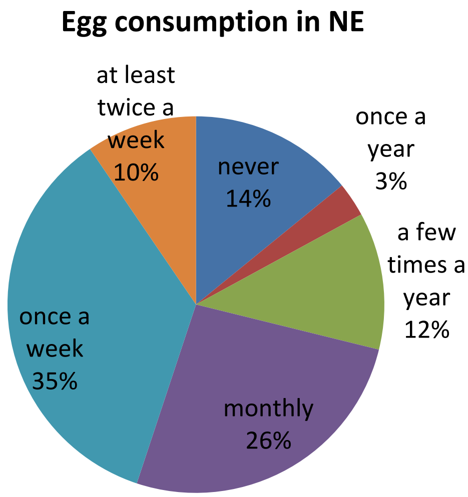
Although the numbers of respondents from the two regions have great difference, their consumption pattern of beef is very similar as shown above. Frequency of beef purchase is almost identical across the regions.

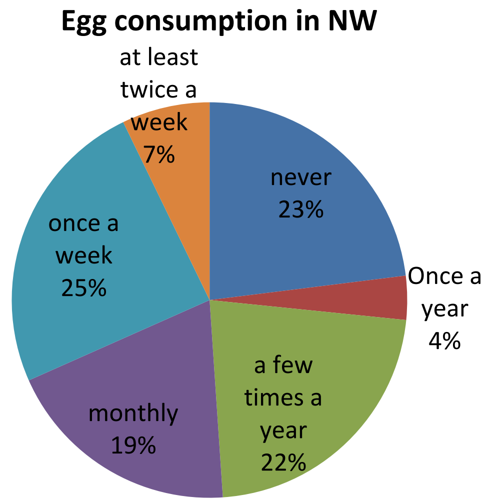

Chicken consumption in NE
at least twice a week 4%
never 26%
once a year 15%
a few times a year 21%
monthly 22%
once a week 12%

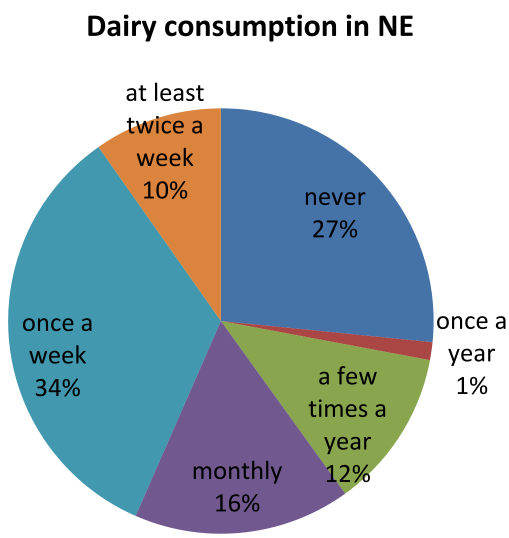

Chicken consumption in NW
at least twice a week 2%
never 34%
Once a year 14%
a few times a year 31%
monthly 14%
once a week 5%

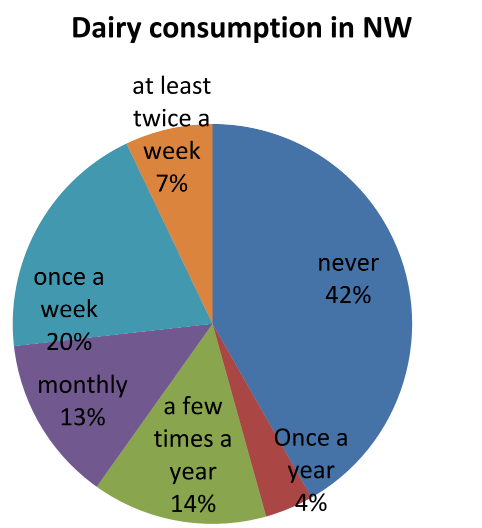

Pork consumption in NE
at least twice a week 3%
never 47%
once a year 12%
a few times a year 21%
monthly 11%
once a week 6%

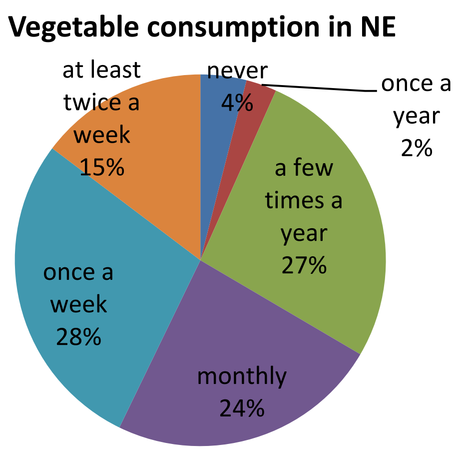

Pork consumption in NW
at least twice a week 1%
never 49%
Once a year 18%
a few times a year 19%
monthly 8%
once a week 5%

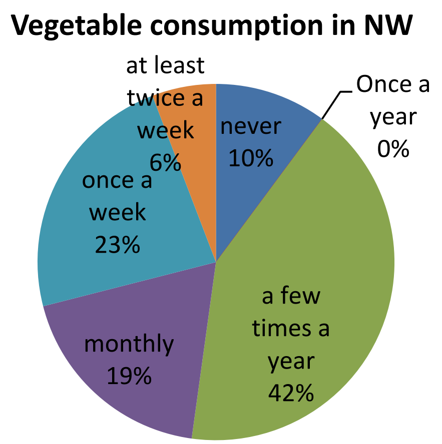

Egg consumption in NE
never 14%
once a year 3%
a few times a year 12%
monthly 26%
once a week 35%
at least twice a week 10%

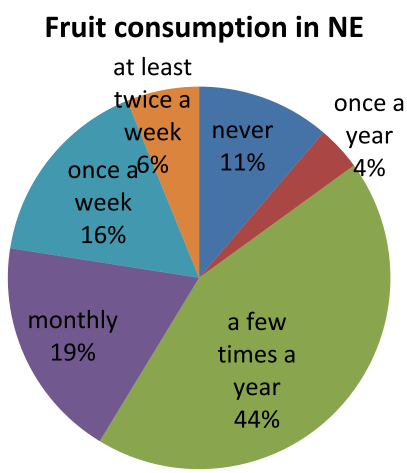

Egg consumption in NW
never 23%
Once a year 4%
a few times a year 22%
monthly 19%
once a week 25%
at least twice a week 7%

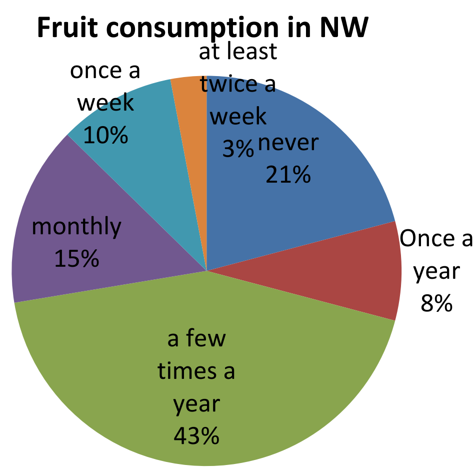

Dairy consumption in NE
never 27%
once a year 1%
a few times a year 12%
monthly 16%
once a week 34%
at least twice a week 10%


Dairy consumption in NW
never 42%
Once a year 4%
a few times a year 14%
monthly 13%
once a week 20%
at least twice a week 7%


Vegetable consumption in NE
at least twice a week 15%
never 4%
once a year 2%
a few times a year 27%
monthly 24%
once a week 28%


Vegetable consumption in NW
at least twice a week 6%
never 10%
Once a year 0%
a few times a year 42%
monthly 19%
once a week 23%


Fruit consumption in NE
at least twice a week 6%
never 11%
once a year 4%
a few times a year 44%
monthly 19%
once a week 16%


Fruit consumption in NW
at least twice a week 3%
once a week 10%
never 21%
Once a year 8%
a few times a year 43%
monthly 15%