

Fighting the Big Cheese: The Artisanal Cheese Industry of Wisconsin

Abstract

Wisconsin maintains its title, held by the state for decades, as America's Dairyland; but its industry and producers have recently been challenged by larger scale production. Archival research and a literature review show that Wisconsin has responded to these challenges by leveraging its strong cheese culture and tradition, emerging as the leader in a smaller-scale artisan revival. Consumer surveys and producer interviews demonstrate that while "Big Cheese" continues to dominate the market, demand for artisan cheese in Wisconsin presents a viable alternative to increased scale and centralization, as well as a promising future for the state's industry.

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Introduction

In September every other year, the city of Monroe, Wisconsin, holds a three-day festival called “Green County Cheese Days.” Over the course of one weekend, cheese makers and cheese appreciators alike are brought together to celebrate not only this commodity and its presence in Southern Wisconsin, but also to rejoice in Swiss culture as it is manifested in this part of the world. Accordion players blast polkas from the main stage, a “cheese tent” provides taste testing and sale of the artisan cheeses from several factories from Southern Wisconsin; shuttles leave every half hour to take Cheese Days celebrators to the National Historic Cheesemaking Center; and a Cheese Days King and Queen—selected from prominent cheese makers in the county—are crowned in a Swiss themed ceremony. This celebration is just one of many in the heart of America’s Dairyland. Cheese is more than just a product for many in our state—it’s a way of life.

Cheese in Wisconsin is both a commodity for distribution nationally and internationally, and it is an essential part of our Midwestern culture. In our project we set out to look at the history of cheese production and culture in our state. By considering first the history of “cheese culture”—meant in both senses of the word—we learned the ups and downs the state has experienced. Through interviews we learned how Wisconsinites see cheese and how cheese makers see themselves—past, present and future. Through surveys at different grocery venues in the Madison area, we learned how consumers perceive cheese as a product and what they value when they make their purchases.

As students of the University of Wisconsin at Madison, there is a wealth of information, history and tradition of cheese making available to us on campus and in the

surrounding areas. Shortly after the passage of the Morrill act by the newly formed Department of Agriculture in 1862, the University of Wisconsin was established as a Land-Grant University to contribute to the development and study of agriculture and food sciences (Apps 1998; 31-32). Since this time, cheese making and other agricultural and life sciences have been a pertinent part of the studies here in Madison, and a very present part of our lives in Wisconsin.

Over time, there has been a consistent reforming and regulation of cheese making in Wisconsin, as well as a constantly changing and improving process for the production of cheese (Weigle 1921-1926; 61). Cheese became an essential household product all over the United States, going from the consumption of 3 pounds per capita per annum in 1890 (Babcock and Russell 1897, 78) to over 25 pounds per capita by 1995 (Foltz, Werner and Wu 1999; 25). In the 1980s and 1990s however, Wisconsin's production volume wavered, and factories were shut down all over the state. The factories that weren't shut down were forced to standardize and sell "commodity" cheeses such as mozzarella and Muenster, which would go to pizza distributors or large companies like Kraft at low prices (Ginsberg-Schutz 2010). The recent revival of the cheese industry again is due to a number of factors, which we hope to explore and explain here through our research.

In this study, we examined the way in which smaller producers have been able to resist the trend of concentration. Of all the cheese producing states, Wisconsin has prided herself immensely on her top status as America's Dairyland. Much of this has to do with the historical development of cheese making here and with the subsequent creation of a "cheese culture" in this state, both being products to be proud of. Today, 48 percent of artisan cheese produced in the United States comes from Wisconsin (Ginsberg-Schutz 2010), which suggests not only a

resurgence of cheese making on a smaller scale, but also a change in the values of cheese production and consumption both in Wisconsin and across the nation.

The qualifications for the “artisanal” designation are complex and subjective. Norton and Dilley (12) admit that it is nearly impossible to decide what exactly makes a cheese maker an artisan, but some qualities are offered as possibilities:

- An emphasis on quality over consistency
- Personal handling of the cheese (cutting the curd by hand, turning aged cheese by hand, filling forms by hand)
- Small volume production (a few thousand pounds a day)
- Experimentation and the production of many different sorts of cheese, some seasonal, some one offs
- The use of specialty milks (goat, sheep, pasture-grazed cow, certified organic)
- Sale to gourmet cheese shops, direct to public, high-end restaurants
- Using more (usually more specially trained) employees per pound of cheese produced

While “few cheesemakers fall squarely into either category,” the distinguishing characteristics of artisanal producers are often apparent in marketing strategies, production figures or simply in an interview with a producer that can reveal the character of the company (Norton and Dilley 2009; 12). By these characteristics, Wisconsin truly is the home of an amazing number of artisanal cheese producers.

In his study at what would become the College of Agriculture and Life Sciences (CALS) here at the University of Wisconsin-Madison, S. M. Babcock expressed a need for the investigation of cheese making in practice in this country. “It is to be hoped that these may lead cheese makers to study their business more thoroughly, and thereby acquire a more complete insight into the *why* and the *wherefore* of many of the processes that go on in cheese making”

(Babcock and Russell 1897, 82). The ideas that he and this University expressed over a hundred years ago are still relevant today. This group aims to ask the *why* and the *wherefore* of artisan cheese producers in developing and maintaining their cheese, business, culture and values. The question we pose to ourselves, to consumers in Wisconsin and to the cheese makers themselves is this: “What is the role of small producers in the triumph of Wisconsin as America’s Dairyland?”

Methods

We collected both primary and secondary data from a range of sources. These included written surveys, oral interviews and related literature. The data helped us better understand the perspectives of the consumers, producers, and academic researchers on the topic of cheese.

To start, we created a short survey for cheese customers. We distributed our survey in the form of a printed half sheet of paper (see Appendix 1) to keep the survey from looking time consuming and thus reducing willingness to participate. We included only five questions to simplify the process. The survey was administered at two locations on 4 separate occasions—twice at the State Street corner of the Capitol Square during the Dane County Farmers’ Market (10/30 and 11/6) and twice outside of Copps Food Center at 2650 University Avenue (11/9 and 12/4). We conditioned participation based on whether or not the shoppers were purchasing cheese. When consumers indicated that they *usually* bought cheese at that location but for some reason were not at the time of the survey, we offered them the questionnaire as well. It was our hope to find some differences between consumers at the two locations. We expected that factors

such as locality of production and organic certification would be most important for those at the Dane Co. Market, while price would likely be the biggest factor at Copps Food Center.

We acknowledge that the questionnaire fails to address some important issues, such as socio-economic level of shoppers (income hugely impacts access to foods) and education level (which contributes to income but also has a lot to do with knowledge about local food movements). These issues were too complex to be comprehensive in a short questionnaire—the purpose of which is to gain a base level understanding of the complex thinking of a large group of shoppers while being minimally intrusive. We attempted to ask as many people as we could at each location in order to gain a broad section of representative shoppers at both locations. We also suffered from the negative aspects that plague most surveys such as a low response rate, a surface level of understanding of preferences and a lack of visual reactions to questions and the luxury of time which would allow elaborated questions in an interview setting. Surveys were anonymous and completely voluntary to maintain privacy.

In an effort to gain more detailed data, we performed interviews with a few cheese producers (see Appendix 2 for sample questions). We interviewed representatives of Hook's cheese of Mineral Point, WI, Roth Käse of Monroe, WI, and Belgioioso of Green Bay, WI. Our interview questions allowed for a conversational interview, to gain a good feeling for the business through the interviewee. At all the interviews, three or more group members were present, so that between the one or two asking questions, and the others taking notes, we could maintain eye contact and focus on conducting a more relaxed interview rather than fervent note taking. The questions we include in Appendix 2 were used to gain understanding on some similar topics at each interview, but were only the beginning of conversations that delved much deeper

into topics and wider into related ideas. Having more group members present also meant that we could keep electronic recording devices out of the interview to keep the mood relaxed without losing information.

Our whole group was CITI certified to maintain integrity in the process of surveys and interviews.

History

An in-depth look at the history of cheese and especially cheese in Wisconsin is important to consider when looking at the present day conditions of the cheese industry. The history of cheese is a long one, being one of those substances that has long been known and to many cultures. It has been a valued food product and has developed in production all over the world. For our purposes, we looked at a history of western and new world cheese production. 4000 BC is the earliest verifiable record of cheese production in the world; it was known and mentioned then by the ancient Sumerians. Over several thousand years, cheese production changed and developed--from cottage cheese in India to Swiss cheese in Europe to cheddar in England--it became a product important and valuable to many different people and cultures (Apps 1998; 8). Cheese making knowledge was brought over on the Mayflower in 1620, which began the subsistence production of cheese in the New World.

In Wisconsin, the first record of commercial cheese production was not until 1837 on one Charles Rockwell's farm (Apps 1998; 11). The cheese industry grew as fast as the state and as early as 1858 the first factory was established in Sheboygan Falls. By 1869 less than half of the cheese production in Wisconsin took place in farm kitchens (Apps 1998; 11). This marked a

huge shift not only in production and industry but also in cheese culture. This difference was what first started changing peoples' attitudes about cheese in Wisconsin--viewing it as something made at a factory by a cheese maker and purchased outside the home rather than produced by individuals on a farm for personal use. The value of cheese as a perishable product made outside the home by professionals with specific cheese expertise would become an important one in the next century and a half of cheese production in Wisconsin and the rest of the world.

The whirlwind growth of the cheese industry in Wisconsin can be attributed to a few important factors. In 1870, the wheat production in Wisconsin peaked and then began to fall rapidly as cheaper prices were being offered farther west and railroad line provided swifter transport of goods in these United States. As exportation outside of the state became possible (the first shipment to eastern markets was in 1873) the refining of the industry began to take place. In a key persuasive document written by S. M. Babcock in 1897, he describes the perfect conditions for cheese production on a large scale:

“The factors that have influenced the development of the cheese industry throughout the world may be considered, in our judgment, under the following heads:

1. The natural conditions that are favorable to the economic production of cheese.

2. The social factors that control or modify these natural conditions” (9)

Babcock, one of the founding fathers of CALS at UW-Madison, goes on to describe Wisconsin as one of the perfect places to develop the cheese industry, as it fits perfectly both with its natural conditions and social factors. He makes an argument for a type of “cheese culture” already

present in Wisconsin. The majority of immigrants to this part of the country already came from cheese producing nations, such as Switzerland, Germany, northern Italy and Holland. He also lists environmental factors that have made Wisconsin the ideal state for cheese production. Though these environmental factors may have little importance as to where cheese is made in the 21st century, the existence of “cheese making culture” is very much alive.

It was this university and government interest in not only in management of cheese but also in the proliferation of its production in Wisconsin that would bring about changes at the turn of the 19th century. Babcock, in the aforementioned article, lobbied much of his life for the establishment of studies at the University of Wisconsin that would lead to better cheese and better cheese makers. His dream achieved, the state was well on its way to being one of the biggest and best producers in the U.S. In 1910 Wisconsin became the nation’s leading cheese producer (Apps 1998; 45).

The Wisconsin Cheese Makers’ Association (founded in 1891) would bring further changes to the way cheese was viewed and policy upheld over the years in Wisconsin. In an excerpt from a speech given in 1921, George Weigle, an ex-Dairy and Food Commissioner of Wisconsin, outlines the dangers of unregulated cheese production. Weigle’s speech is poignant in that he is adamant about “the necessity of quality products” (Needed Reforms in the Cheese Industry; 61). He was speaking at a critical time in cheese-production history, shortly after WWI. Cheese making was being mechanized and packaged cheeses were just beginning to come on the scene. Only five years prior in 1916, licensing of cheese making in Wisconsin became mandatory by law. In the year of Weigle’s speech, Wisconsin established the nation’s first

grading system for cheese. This marked the first time that government had been involved in the process of cheese making both in the state of Wisconsin and nationwide.

After World War I, the geographical dialogue between New York cheese and Wisconsin cheese was relevant for the first time. The competition was not about volume, but taste. In 1921—the year of the grading system—the people at the WCMA turned toward the privatization and the keeping out of big government. Weigle, in his speech, mentions that although Wisconsin has been experiencing quality control issues, the cheese makers are the ones that should make the changes, not the state. He says, “The cheese dealers and distributors by nature of their business are in a position to do more to correct the evils in the cheese industry and to improve the quality than any other body of men in the state” (Needed Reforms in the Cheese Industry; 63). For an ex-government official, this is an interesting position to take. The involvement of government would remain a topic of contention and discussion in years to come.

The years immediately following the First World War also meant the emergence of packaged processed cheese instead of wholesale, small-scale distribution, mirroring a trend seen across the whole food industry around that time. Other factors influenced this as well, “apartment living was changing family habits... to more frequent purchases in smaller quantities” and a demand for uncontaminated foods (Nicholls 1939; 824). Companies like Kraft-Phenix and Land O’ Lakes were able to gain control over this branch of the industry by acquiring patents on packaging and processing technology (Nicholls 1939; 827). The Great Depression stunted this sectors’ growth but during World War Two and in the Post-War economy there was a huge boom of these technologies.

The 1950s forward marked a time for further consolidation of the cheese industry. Factory production grew at a rapid rate—over the 35 years between 1960 and 1995 the production grew from 641 million to 2.09 billion pounds. At the same time, smaller factories consolidated into larger factories, buying out their neighbors or simply shutting down the competition. In the same span of time, 656 cheese factories closed (Apps 1998; 63). The face of cheese making had changed again: what 100 years before had undergone the change from a farmer's wife's job in the kitchen to a local factory service now became a nationwide exporting business. The need for an increase in volume of cheese produced to feed New York and California was just one reason production was growing and factories closing. After World War II, the American public began to change how it ate cheese as well—the homecoming soldiers had developed a taste for pizza in far away Italy and brought the craft home to the U.S. (Apps 1998; 62). The dairy farm industry mirrored the cheese making industry precisely in consolidation as the number of dairy farms shrank while the number of cows exploded.

Beginning in the 1980s into the 1990s and 2000s, the cheese making industry began to move into crisis. The problem was that the consolidation of these factories and the rising consumption of single types of cheese being available and the skill, technique and tradition of cheese makers across Wisconsin was being lost. Factories with highly trained cheese makers—often from the University of Wisconsin-Madison's short course training program—were wasting their talents making one kind of cheese, and not for quality. During the same time studies into cheese production were proliferated. The “Center for Dairy Research” was established in 1986 in the CALS department of UW-Madison with money received from the Wisconsin Milk Marketing Board (Apps 1998; 71). The WCMA continued sponsoring educational events in the cheese

industry as they had for the better part of a century—conferences, workshops, equipment expositions and technical seminars, not to mention competitions. Wisconsin has won in both national and international contests, on odd-numbered and even-numbered years, respectively. All these events and are held on a regular basis to this day (Apps 1998; 71).

It is the stark contrast between these two worlds of cheese making in Wisconsin that made it so hard to pinpoint exactly how the crisis of closing farms, consolidated practice, and low-quality cheese could be resolved. It is this issue, moving through the 2000s to today that we hope to explore more of with this research.

Present Day and Outlook

The cheese industry in Wisconsin has rebounded, largely thanks to its artisan and specialty producers. From 1998 to 2008, specialty cheese went from accounting for 4% to over 16% of total cheese production in the state (Norton and Dilley 2008; 4). “For the past four years, retail sales of specialty cheese have seen a 3.9 percent growth every single year, and it spiked up to 9.2 percent growth last year” (Ginsberg-Schutz 2010). The state’s cheese makers no longer feel pressured to sell to giant corporations like Kraft, and have been able to expand production from just a few varieties to several or many. “For years Wisconsin cheese makers specialized in big blocks of commodity cheddar, the cheaper and more homogenized the better, because that’s what it took to compete” (Ginsberg-Schutz 2010). Now, Hook’s Cheese of Mineral Point produces and sells over 30 varieties of cheese and Roth Käse of Monroe has moved from producing Muenster cheese for Little Caesar’s to being the only domestic producer of Gruyère. Wisconsin still produces more cheese than any other state in the U.S. including California, which

comes in second, producing over a million pounds less than Wisconsin per year (Ginsberg-Schutz 2010).

Since California passed Wisconsin in milk production in 1993 (Apps 1998; 66), it has been considered a competitor in the cheese sector as well. Wisconsin cheese makers manage to hold off California using teamwork. Interestingly, they tend to consider themselves to be in competition with producers in that state and other geographically distant places more than with each other. Tony Hook told us that he thinks of Wisconsin producers as working together to give the state's cheese a good reputation. He actually sees proximity to other cheese makers as a bonus. While we were at Hook's factory in Mineral Point he said, "The locality is so strong in cheese making." He says this is a helpful factor for business because buyers can come with a truck and easily pick up many varieties of high quality cheese from several different farms. Being near other producers translates to a better chance for all of them getting contracts. He reminded us that Wisconsin is still the nation's top cheese producer because, "look at [our cheese], it's a lot better" than California's or other states' (Interview Nov. 2010). Instead of boasting the quality of his own cheese, he referred to the state's as a whole. Jim Natzke of Roth Käse expressed a similar opinion. Because their main product is Gruyere and they are the only domestic producer of it, Natzke sees his business as competing with foreign producers of his products. In fact, he said that there is more to be gained by cooperating with other cheese makers of southern Wisconsin than competing with them. He told us to think of the situation this way: at Roth Käse, they make a name for themselves by producing varieties of Gruyere, Baby Swiss and Havarti cheeses, to name a few. Their neighbor might produce varieties like Colby, English cheddar and feta. Like Hook, he espoused the idea that if everyone in one area, in this case Green

County, produces different cheeses, everyone gains together. A new customer for one of them can conveniently plan a shipping pick-up route around visits to all of the local producers (Interview Oct. 2010).

The strong histories of cheese livelihood and culture in Wisconsin, as well as the hard work of individuals in the industry, have helped the state's producers to weather the storms that were the crisis of the 1990s and the recent economic recession. In the second half of this decade, some cheese makers have actually seen sales increase despite difficult times.

Tony Hook told us he had not experienced any negative effects of the recent economic recession. He said, "I don't know if cheese is a comfort food or what." In fact, Hook's Cheese has experienced 25-40% annual growth over the past 5-6 years (Interview Nov. 2010). Jim Natzke, general manager of Roth Käse cheese, made the same observation. His company has seen 8% increases annually especially thanks to their retail sales. The main concern for Roth Käse during the recession was that the restaurants they sell to would scale back their cheese purchases. However, Natzke noted, rather than sacrificing dining out altogether, Americans seem to have decided to go to less expensive places. Our surveys showed that despite the economic downturn and the rising price of food, only 13.2% of those surveyed overall listed price as the most important factor when choosing cheese (Figure 7). Since every restaurant (and most every cheese, for that matter) is a step down for someone, most managed to stay afloat and Roth Käse did not suffer (Interview Oct. 2010).

A hurdle specialty cheese producers have had to overcome on the road to their recent success is lack of consumer knowledge about different varieties and their uses. "Educating customers is a major challenge... 'Some of these longtime customers have never heard of

cheeses like Havarti or Asiago” (Apps 1998; 77). In our survey, only 3% of those surveyed chose “type” or “variety” as the most important factor in choosing cheese (these responses were the second most common write-ins under the “Other” category, following 8% who listed “taste” or “flavor”; see Figure 7). Relatively new organizations like the Wisconsin Milk Marketing Board (WMMB) and the Dairy Business Innovation Center (DBIC) have contributed significantly to the cheese industry in this regard. People who are invested in seeing it succeed staff and fund them. WMMB was founded in 1994. On its homepage, eatwisconsincheese.com, it describes itself as “a nonprofit organization funded by dairy farmers that promotes the more than 600 varieties, types and styles of Wisconsin Cheese and other dairy products from America's Dairyland.” In our interview with him, Tony Hook cited the organization as one of the reasons his business has done so well lately. As indicated by its name, WMMB is largely a marketing organization. Like some of the cheese makers we spoke with, it treats Wisconsin artisanal cheese as one actor in the cheese market. The organization has as its goal to see the state’s cheese makers succeed and to educate consumers about the many varieties that Wisconsin produces. The site’s homepage usually advertises several different recipes that use cheese as a primary ingredient; it also showcases a “cheese of the month”. December’s is Camembert, “a richly indulgent cheese that’s perfect for the holiday table.” Beautiful photographs of cheese and cheesy desserts are used by WMMB to entice consumers.

In 2004, U.S. Senator Herb Kohl set aside \$2 million to “reinvigorate the cheese industry.” (Ginsberg-Schutz 2010) Wisconsin Department of Agriculture employee Jeanne Carpenter used the money to create the DBIC. It is also a non-profit organization, and it helps the dairy industry in some similar ways to WMMB. It is more producer-focused, but advises makers

on how to create demand for what they have to offer. The five services that DBIC provides are Business Planning, Product Development, Facility Assessment, Packaging and Label Development and Marketplace Penetration (*dbicusa.org*).

Along with WMMB and the DBIC, a number of other organizations dedicate themselves to the survival of Wisconsin's dairy and cheese industries in different capacities. Some such groups are the Wisconsin Dairy Business Association, the Wisconsin Cheese Makers Association, the Center for Dairy Research at UW Madison and its Master Cheesemaker Program, the Wisconsin Specialty Cheese Institute, and Wisconsin Cheese Originals, to name a few. Their efforts and success, as well as contributions like Senator Kohl's, point to the fact that dairy and cheese matter to a large number of people in this state. Anecdotal information we gathered in the form of unsolicited comments supported this claim when conducting our surveys. One man said "ask me how many kinds of cheese I have at home. Fifteen" (survey at Dane Co. Farmers' Market, 11/6). Another man claimed to eat cheese thirty times a week (Dane Co. F. M., 10/30). Even without words, one look at a Wisconsinite excited enough about cheese to wear a foam "cheesehead" wedge will demonstrate the unusual identity created by cheese in the state.

Cheese has been of importance in Wisconsin for over 150 years. Still, a relatively new movement has made its mark on the long history of the state's industry. The local food craze that has been in the spotlight as of late benefits Wisconsin's cheese makers and influences its consumers. Regardless of shopping location, 92% of the buyers we surveyed said that they try to eat locally produced foods. One respondent told us that they "want it [cheese] to be made in Wisconsin, but how do I know?" (Survey at Copps, 12/6). One in five buyers listed "where it is

made” as the most important factor in choosing cheese, with some specifically mentioning Wisconsin (Figure 7). Clearly, people are paying attention to where their food comes from. Wisconsin residents throughout the state are lucky to live in a place where they have access to quality cheeses made not far away. Belgioioso Cheese sells about 90% of its product to the East and West coasts. However, Errico Auricchio, President of the company, partially attributes the fact that Wisconsin consumption of their cheese has grown to the local food movement. Tony Hook expressed more enthusiasm. He said that for Hook’s, demand for local food has “helped [business] tremendously in the last 2 to 3 years” (Interview).

Another relatively new niche market has arisen in the form of organic-certified cheese. Originally, we were surprised at how low participation in the organic market is according to the consumers and producers we heard from. When interviewing the general manager of Roth Käse, we learned that organic milk producers most often retain the brand name of their farm for the cheese that the milk becomes. A dairy farmer, for instance, would sign a contract with a cheese maker to have their milk made into cheese. However, the maker is basically a contractor and does not stand to gain in terms of brand recognition. We were told that this model does not fit into Roth Käse’s strategy, and therefore they do not pursue it. Consumers indicated a moderate interest in organic-certified cheeses, with around 35% of all respondents answering “yes” to a question of whether organic certification was important to them. Yet some expressed disdain with organic-certified cheese. One mentioned that “there is no definition of organic,” indicating frustration with the certification process. Similarly another participant said organic was important, but the certification was not. From an extreme end of the spectrum, one person simply

responded to the question by saying “that’s all hooley.” And yet to some, it is absolutely crucial, as three participants wrote in “organic” as the *most* important factor when buying cheese.

Survey Results

After conducting four sets of surveys, our data is ready for analysis and comparison. Our surveys were conducted at two locations. Twice we surveyed at the Dane County Farmers’ Market, situating ourselves on the sidewalk next to the Capitol building on the corner of Mifflin and Carol (where State Street hits the capital square), and conducted surveys two consecutive weekends, October 30th and November 6th, both between the hours of 8 and 10 AM. We also surveyed at Copps Food Center at 3650 University Avenue. We were there the evening of November 9th and surveyed from around 5 to 6:30 PM and December 4th from 11 AM to noon. In the graphs that follow, Dane County Farmers’ Market is abbreviated as DCFM and the suffixes of -1 and -2 chronologically refer to the specific dates of survey, -1 being October 30th and -2 being November 6th. The Copps dates are arranged the same way, with -1 referring to November 9th and -2 referring to December 4th. We hoped to find shoppers from similar demographics (age structure, socio-economic class, etc.) at these two venues while still surveying at places that would show differences in purchasing preferences.

Shoppers often had things to say to add to our standard questions, commenting on what was important to them and often bringing humor into the process. This data, while unsolicited and thus highly variable, is valuable ancillary data that paints a more vivid picture of cheese consumers. Quotes and comments have been included in our analysis, but these should not be

taken as representative of a group, survey area or ideology. They are simply individual comments that add spice to the numbers.

Our information would have benefitted from larger sample sizes, especially at the Copps Food Center location. Nevertheless, the data reveal interesting characteristics about shoppers' preferences.

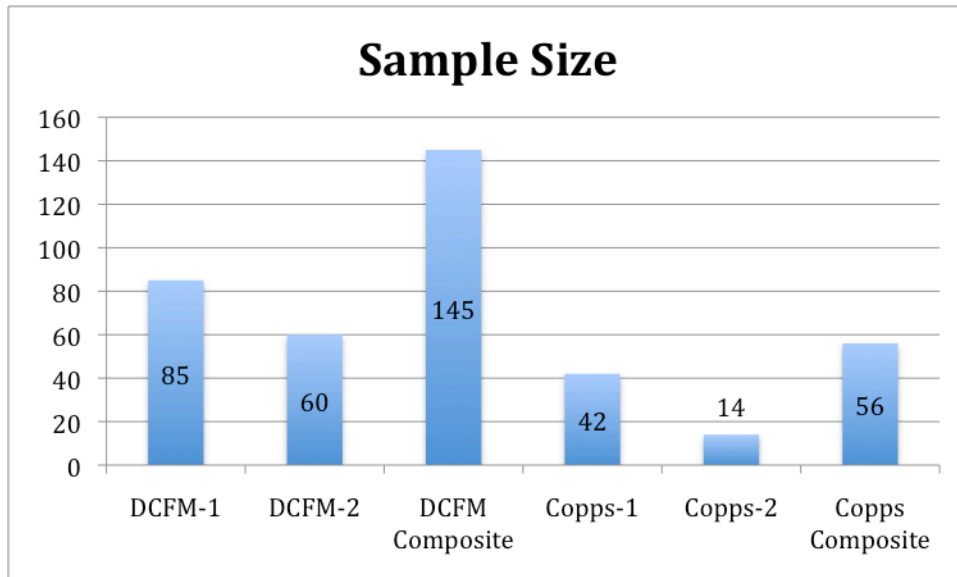


Figure 1. Sample Size

Results by Question

Question 1

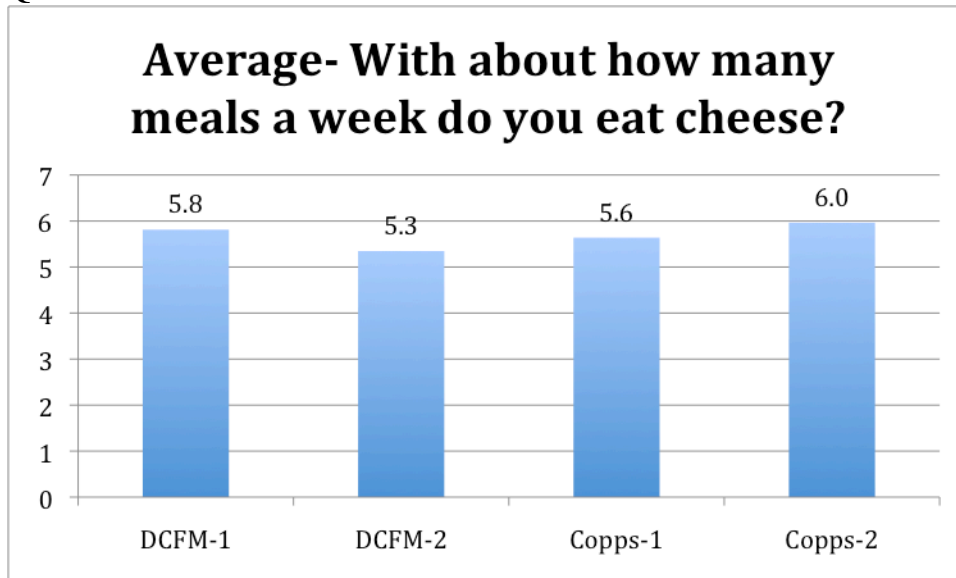


Figure 2. Question 1 mean

Question One Analysis

Composite Info	DCFM	Copps
Skew	2.27459387	1.86275527
Kurtosis	9.025800769	3.483054228
Standard Deviation	4.015810766	3.917385857
Median	5	5
Mode	3	5
Max	30	20
Min	1	1

Table 1. Question 1 data

The people we surveyed, likely Wisconsinites and specifically Madisonians, seem to eat a lot of cheese. A great variation was present, with a high value of 30 (reported at DCFM-1) and numerous reports of 1 (present at all survey locations). The mean for all locations were remarkably similar, and the medians were the same. A positive skew value means that the results were clustered near to low end of the curve (as larger numbers were less frequent). A positive kurtosis for both samples shows a leptokurtic or highly peaked distribution.

Question 2

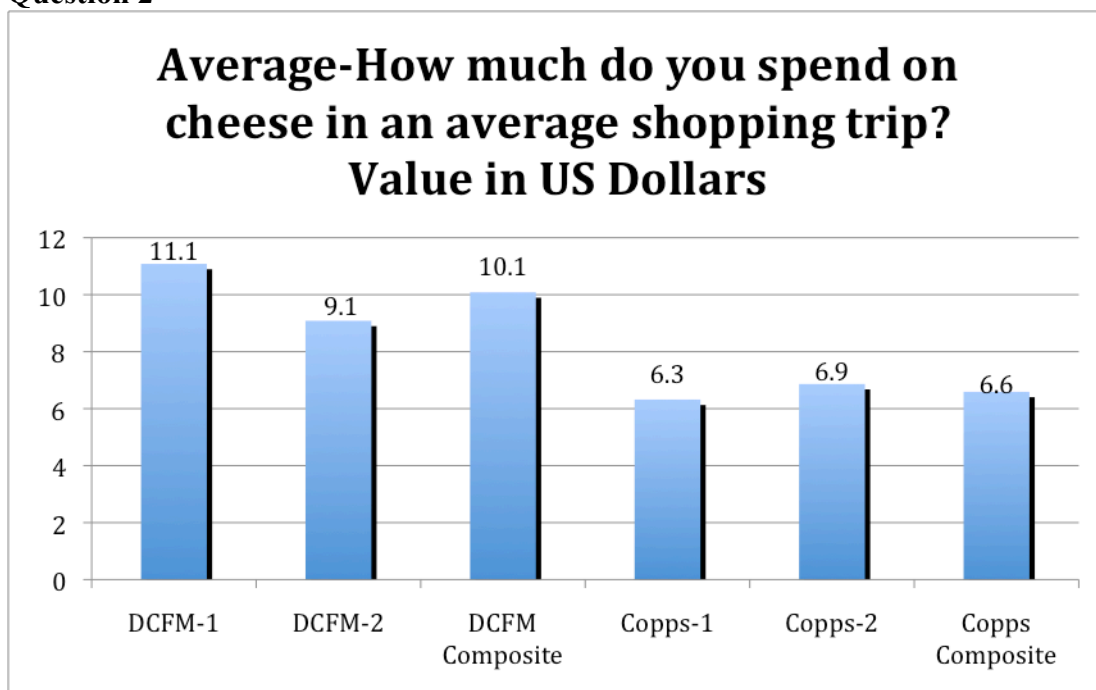


Figure 3. Question 2 mean

Question Two Analysis

Composite Info	DCFM	Copps
Skew	3.413680831	1.638606178
Kurtosis	14.79809031	3.231478623
Standard Deviation	7.546115669	4.00116122
Median	10	5
Mode	10	4
Max	50	20
Min	2.5	1

Table 2. Question 2 data

Copps shoppers spent less on average than shoppers at the Farmers' Market. This could be confusing, as the frequency with which one shops is highly variable (this question could have been worded better). However, with cheese consumption reported as largely similar across surveyed groups (as per Question 1), Copps does provide cheaper cheese than that sold at the Dane Co. Market. As one shopper from DCFM-1 surveys related, "Cheese is not cheap, but it's worth it." Minimum, maximum, mode and median were all higher at the DCFM than at Copps Food Center. Both distributions were positively skewed, so the data were concentrated on the low side, and the high kurtosis points to a very peaked distribution.

Question 3

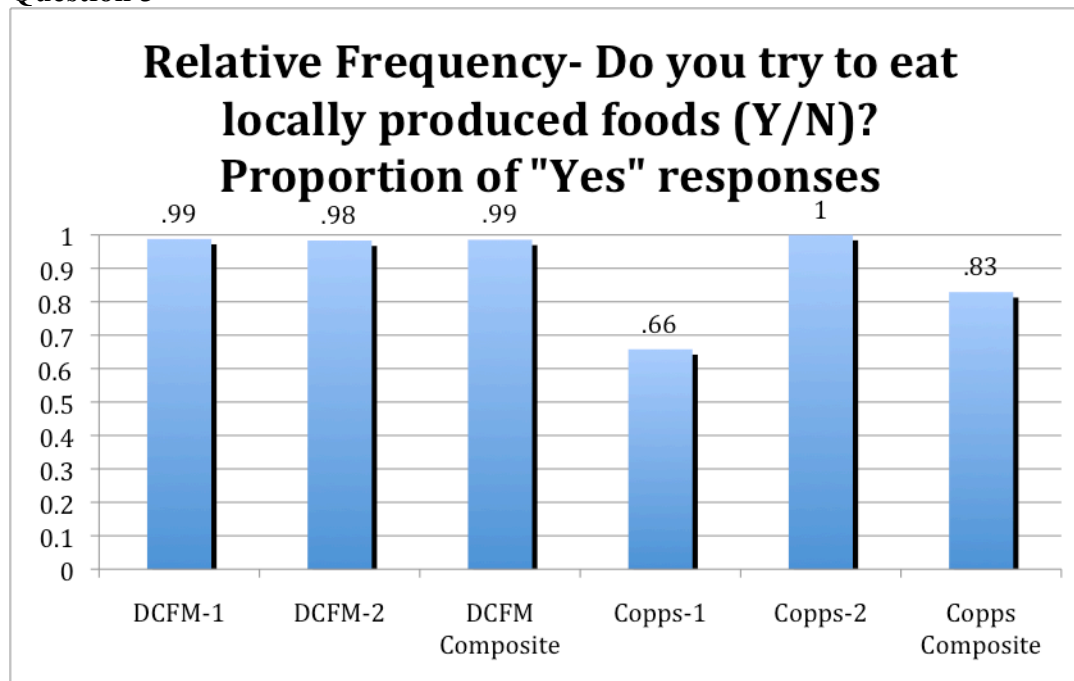


Figure 4. Question 3 relative frequencies

A clear difference is visible in the responses between shoppers at the DCFM versus Copps: local food was not nearly as high of a priority for Copps shoppers in general than it was for DCFM shoppers, who overwhelmingly expressed interest in “buying local.” Results from the second survey at Copps were surprisingly different from the first survey date, but the sample size was comparatively small and so the composite is a better example of the data. On more than one occasion, this third question threw shoppers at Copps a curveball, with two responding “sometimes” and one young man qualifying his “no” response by saying of cheese, “I want it to be made in Wisconsin, but how do I know?” This is particularly interesting in that foods at the DCFM are all locally produced- it is one of the rules of the market. But at Copps a shopper would have to dig much deeper to find out whether their food was “local” or not.

Question 4

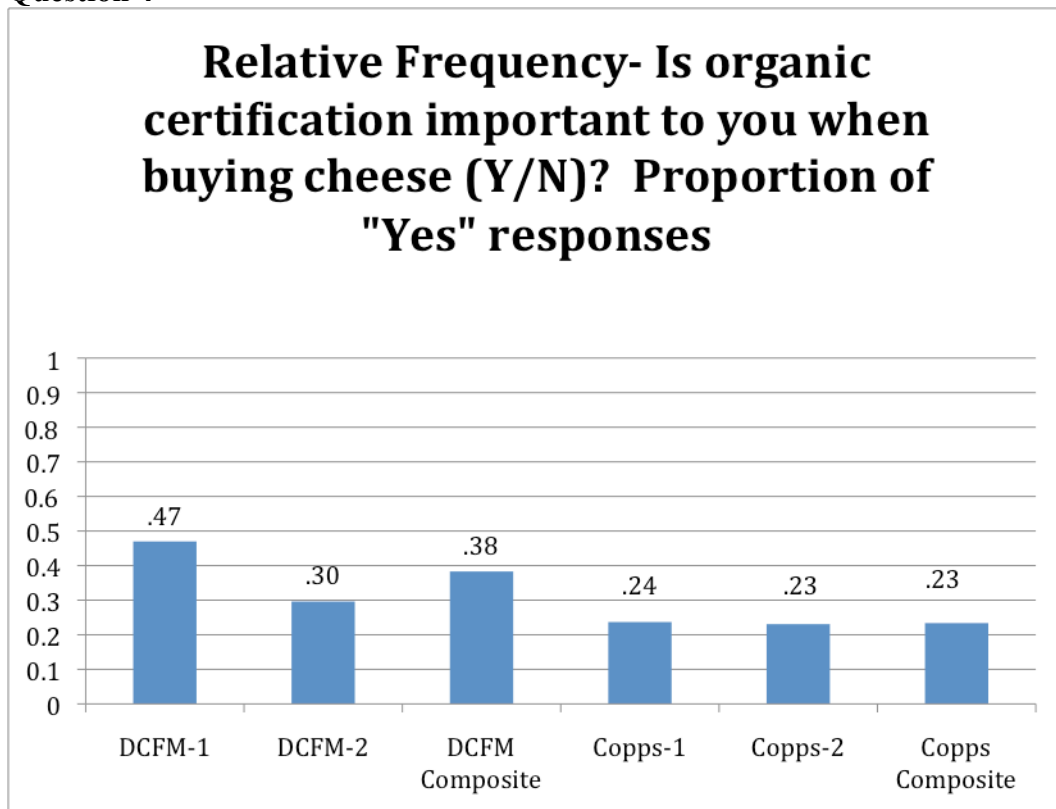


Figure 5. Question 4 relative frequencies

Despite the longstanding association of farmers' markets and organic food, there was a clear distinction in the shopping habits of consumers at the DCFM in that the interest in local food was much higher than the interest in organic cheese. Still, shoppers were more likely to be interested in organically certified cheese at the DCFM than shoppers at Copps were. Yet comments at the DCFM show an interesting side of consumers. Two critiqued that the certification itself was unimportant, with one saying "organic, yes, certified, no," and another, "since there's no actual definition of organic, the label doesn't matter." One respondent simply stated, "It's all hooey." Copps shoppers had interesting remarks as well, with some remarking that organic certification was the most important factor in buying cheese, and others saying that

it only mattered “if it’s the same price” as conventional cheese. In the end the composite figures show that DCFM shoppers value organic certification more than Copps Food Center shoppers.

Question 5

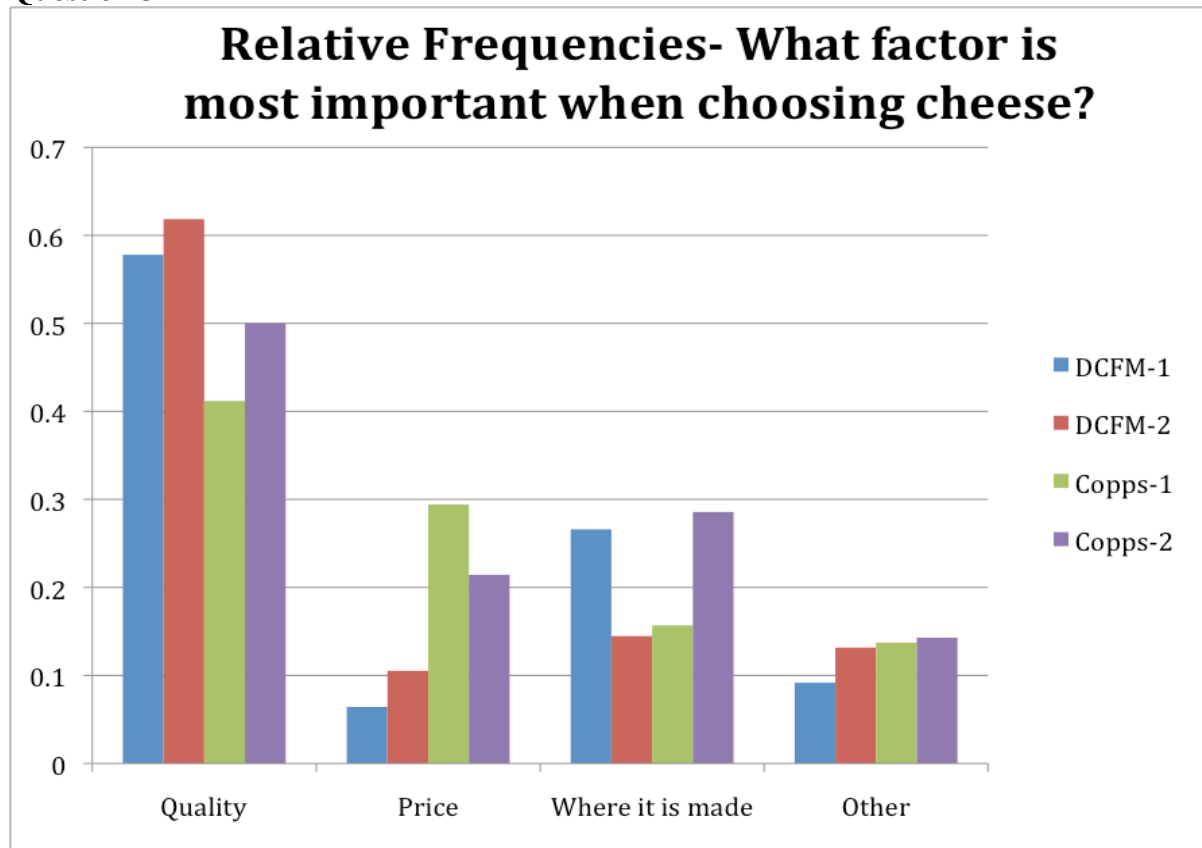


Figure 6. Question 5 relative frequencies by location

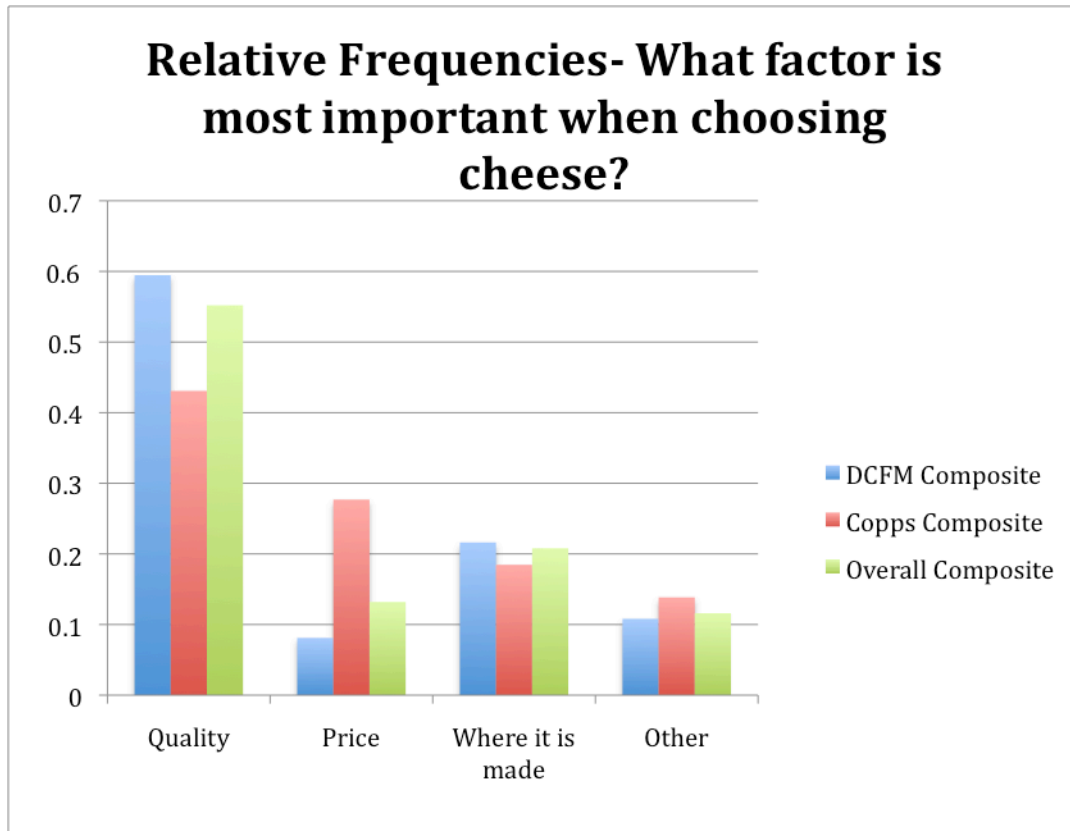


Figure 7. Question 5 relative frequencies, composite and overall

The results from this last question are full of information. First off, it is clear that shoppers at the DCFM claim quality as the most important factor more often than shoppers at Copps. With prices being generally higher and cheese coming from award-winning artisanal producers, the DCFM is a good place to go for high-quality cheese.

Shoppers at Copps responded that price was the deciding factor for them at a rate of around three times higher than shoppers at the DCFM (.08 at DCFM to .28 at Copps, composite scores).

Cheese prices are generally lower at Copps, and this data represents a clear difference in values when shopping for cheese.

Locality is generally important to both groups, indicating that local producers are sought out at both locations. Location of production as the most important factor varied widely between samples and was not consistent across survey locations. Looking at the composite graphs, “where it is made” is very close between the two survey spots.

Finally, the other category had consistent responses, with common write-ins such as variety of cheese and taste showing up often (8 and 19 times, respectively). Others mentioned rBGH-free, texture, or whether the cows were grass fed. Thus, important factors for choosing cheeses were variable and quite different, with no easy way to make generalizations about any one demographic or customer group.

Problems and Summary

Our surveys were conducted at different hours and at very different places. Time of day, weather and even our personal appearances could have skewed our data in ways unknown to us.

One problem may be that we only gave surveys to those people to had purchased cheese on site when we asked them. On November 6th, the Second Annual Wisconsin Original Cheese Festival was taking place at Monona Terrace, mere blocks from our survey site. Perhaps cheese fanatics weren’t able to take our survey due to the fact that they were waiting to buy cheese at the festival rather than at the DCFM.

While our demographics seemed similar in that shoppers seemed mostly above college age, the presence of Halloween festivities may have kept some college students away from the Capitol Square on October 30th. A language barrier was crossed at Copps when Anna interviewed a Spanish speaker in that language, but language proficiency at all locations could have kept some shoppers away. Cold weather, especially the snowy Saturday spent at Copps

Food Center on December 4th, surely had some effect on consumers' willingness to stop and fill out a survey (either pity for the cold students conducting the survey or a need to flee for their own warmth).

In sum, the survey provided much insight into consumer tendencies and preferences. Cheese consumers report eating cheese at very similar rates in all three surveys. But shoppers at the DCFM tend to spend more on cheese and try to buy organic food more often than shoppers at Copps. Interestingly, composite analyses show that there is broad interest in locally produced foods at both survey locations, but interest at the DCFM is almost unanimous. Finally, shoppers at the DCFM largely focus on quality as the most important factor in choosing cheese. Though price is the deciding factor more often for Copps shoppers, the origin of cheese is not necessarily the deciding factor for any consumers. Marketers could benefit from this information in many ways, especially if they made a strong effort to label Wisconsin cheese as such.

Conclusion

Since settlers began moving to the western United States from New England and the cheese-producing countries of Europe, dairying has been an important part of Wisconsin's history and culture. The end of wheat farming in the region meant that homesteaders needed to find a new livelihood. Many turned to dairy farming, which led to cheese making and experienced much success. For the rest of the 19th century and over the course of the 20th, Wisconsin cheese makers proved themselves to be the best, developing new technology and improving the quality of their product. These producers dominated the U.S. cheese market until

the 1990s, when a big change in the dairy industry came about. Smaller factories were forced either out of business or into selling their product to large conglomerates like Kraft Foods. Even after a century of market domination, the state was in danger of losing its status as America's Dairyland to California. California did overtake Wisconsin as the country's leader in milk production in 1993, but has not been able to do so with cheese. More importantly, Wisconsin has been the center of high-quality, unique cheese making. The resurgence of small-scale artisanal production in the last decade has saved Wisconsin's reputation as the leader of cheese making in the United States, and participants in the industry work hard to ensure that the state will retain that title for years to come.

Future Research

Our study of Wisconsin's cheese industry, its struggles, and its triumphs, is far from comprehensive. If given more time and resources, we could have expanded and improved our interview process, included other variables in our discussion of the history of the state's cheese, and read more literature from the rich supply that our University and the rest of the state has to offer.

The sample of producers we interviewed is small compared to whole population that exists in Wisconsin. Ginsberg-Schutz counts 127 cheese plants in the state (mad mag); we interviewed three. We did not have a complete list to begin with, and instead gathered names from literature and organizations' websites. Our criteria in choosing producers were that they be located relatively close to Madison (within 2 hours or so) and that they have email access. None

of our group members owns a car, which limited our availability. For those reasons, we do not expect that our sample is representative of the state as a whole.

It would have been interesting to interview people who participate in the industry in ways besides as consumer or producer. Some examples would be representatives from WMMB or the DBIC and dairy farmers. Dairy farmers are especially necessary for cheese making to occur at all, and their input would undoubtedly have been valuable.

Our goal was to have an approximately equal amount of consumer responses from the two sites where we conducted surveys. Though we collected an adequate number, if we had more time we could have gotten more from Copps. Surveys could have been handed out at more than two places to get a wider array of consumer backgrounds. We did not follow a strict script for administering questions, and so responses may have been influenced by the different ways we approached and conversed with respondents. Judging by the small amount of qualitative data we collected from this part of our project, it would have been interesting to conduct some longer interviews with consumers since their activity is important to the success of Wisconsin cheese as well.

Lastly, we would have liked to be able to actually make some cheese of our own. Talking about and eating so much of it made us curious about what production actually entails. Unfortunately, we did not find any feasible ways to do so within the constraints of the semester.

Future research related to ours could take a number of different approaches. Our project focused on the role of policy and individual and collective efforts to keep Wisconsin cheese alive. Other variables could be informative in telling the story. Cheese production technology has changed a lot over the past 150 years. Surely it plays a role in determining who succeeds where

and when. Another factor mentioned by some of the individuals we talked to is the position of the milk industry and relationships with dairy farmers. Future researchers could look into milk pricing, power relations, and dairy industry structure to augment the small amount of this type of information we were able to include.

One thing we considered investigating in our report but left out because of time and logistical restrictions is the social issue of the racial makeup of Wisconsin's cheese industry. When we visited Roth Käse we arrived as the employees were finishing the day's batch. While it would be unfair to assume anything about their birthplace, legal status, or the way that company treats its workers, several of them were clearly of Latino descent. It presents the question: what does the cheese-making workforce look like throughout the state? A recent study found that much of the dairy workforce is composed of immigrants, many of them undocumented (Harrison et al. 2009; Clarren 2009). Indirectly, this also means that cheese has the same people to thank for its survival, no matter the demographics of employees in cheese factories. This could be a study in and of itself.

Finally, one of the things we observed during our research was that a lot of the people who make Wisconsin's cheese and participate in its celebrations are a few generations older than us. At Cheese Days, held in Monroe Wisconsin September 17-19, most of the individuals involved in performing traditional dance and music and running the ceremony were our grandparents' age. Future research could be about students' as well as other young people's involvement in Wisconsin's cheese heritage. As students, it is not easy to spend extra money to buy nice cheese, but will there come a day when we will step into their shoes and dance the dance of Monroe and the greater Wisconsin cheese culture?

Appendix

1. Survey

We are conducting a research project for an undergraduate geography course through the UW-Madison.

To help us learn more about cheese consumption in Wisconsin, please answer the following questions:

1. With about how many meals a week do you eat cheese?
2. How much do you spend on cheese in an average shopping trip? \$ _____
3. Do you try to eat locally produced foods? Y/N
4. Is organic certification important to you when buying cheese? Y/N
5. What is the most important factor when choosing cheese for you? Quality
Price Where it is made Other

Thank you for your participation!

2. Producer Interview

Why should we buy your product instead of your competitors'?

How would you convince someone to buy (producer name) Cheese over another brand?

Who do you consider to be competitors of your business?

What is your strategy for competing with larger cheese producers?

Do you think lawmakers should play more of a role in regulating quality, pricing?

How long have you been in operation?

Have there been drastic changes to your cheese making process and/or business model (distribution, marketing etc.) since its founding?

How would you separate aging times between mild, medium, and sharp cheddar?

Why have you/ haven't you chosen to go with a business plan in the organics industry?

What are your strengths and weaknesses as a business?

How have you seen the market change in recent years? (Local food movement raised demand? Or steady?

Declining during recession?)

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