

Identifying and Developing Appropriate Processing Locations

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Abstract

Founded in 1988 as an organic produce marketing and distribution cooperative, Organic Valley/CROPP has evolved to a multi-product, national cooperative. The large dairy component of the product line, distributed nationwide, has created several challenges in developing an effective processing and distribution system located near production sites across the United States. Our current regional distribution processing network has been designed with backup plants and the ability to process milk into multiple products.

Locating a processor can take many forms, from looking at labels in the marketplace to the classified section in the newspaper or trade magazines. Once you have located a processor, call and schedule a visit. Do not waste their time by neglecting to plan ahead, keep conversations short and to the point. Different products pose different challenges, but with time and thought, mutually beneficial processing arrangements can be made.

Editors Note:

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Organic Valley/CROPP is a cooperative, originally established in 1988 by 50 produce members. Within the first year two of our produce members, who were also dairy farmers, thought that the organic model then being discussed (seven years conversion of land into organic agriculture, not the three that exists today) could be applied to dairy as well. Those two members rallied with five others to create a pool of seven dairy farmers who went on to establish the livestock standard that exists today

for organic agriculture.

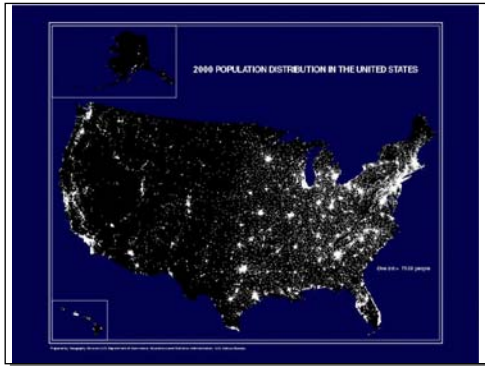
History In 1988, we began with seven dairy producers and by 2003 we had grown to 458 dairy producers. The produce program, which founded the cooperative was a diverse and lively group. It slimmed down and is now coming back to life. Produce is very difficult in the upper Midwest, with seasonality presenting some challenges. We attempted a beef pool in 1989, were shut down by the USDA for our organic claims; we reintroduced meat in 1998; finally, in late 1999 or early 2000, we were allowed to call it organic. Prior to this time we could not use Organic Valley as a brand name on the beef due to the laws. The egg pool started in 1993, and subsequently we developed poultry, pork and a Florida juice pool.

	Dairy	Egg	Beef	Poultry	Pork	Juice	Produce	Total*
1988	7	-	-	-	-	-	50	57
1989	8	-	1	-	-	-	25	34
1990	10	-	1	-	-	-	24	35
1991	12	-	1	-	-	-	18	31
1992	19	-	-	-	-	-	15	34
1993	29	7	-	-	-	-	12	49
1994	57	11	-	-	-	-	15	84
1995	68	15	-	-	-	-	16	100
1996	84	17	-	-	-	-	18	119
1997	163	20	-	-	-	-	30	193
1998	119	20	14	-	-	-	29	152
1999	160	21	25	4	6	-	28	244
2000	230	31	32	4	7	14	28	346
2001	264	34	58	4	8	14	32	414
2002	373	35	30	3	11	14	42	509
2003	458	49	20	4	10	14	58	613

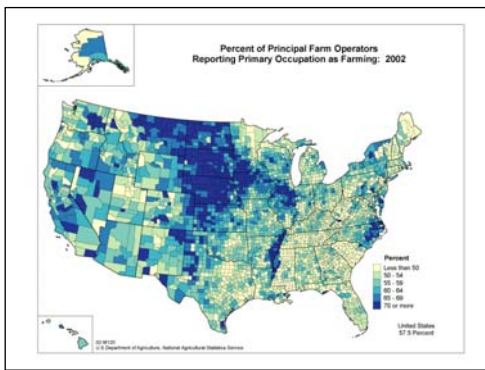
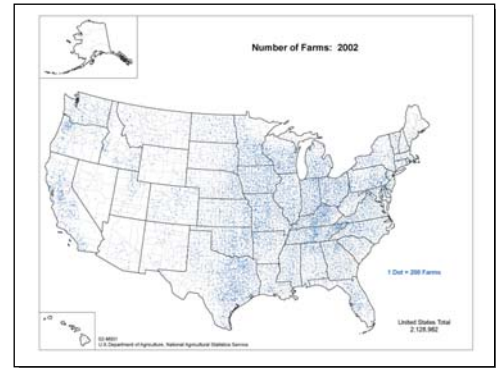
*Total may differ due to some members belonging to multiple pools.

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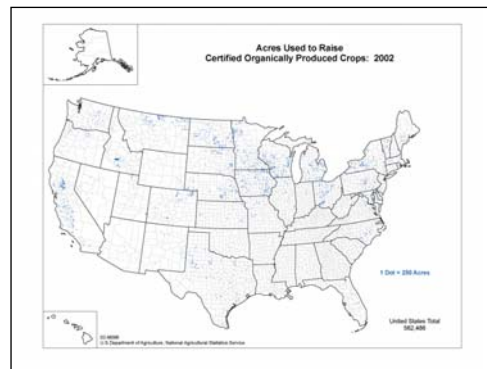


When we talk about agriculture, we need to look at consumer location. The darker map shows that the population resides on the coasts, with the majority east of the Mississippi. This needs to be contrasted with farm production location. On the lighter map, one dot represents 200 farms.



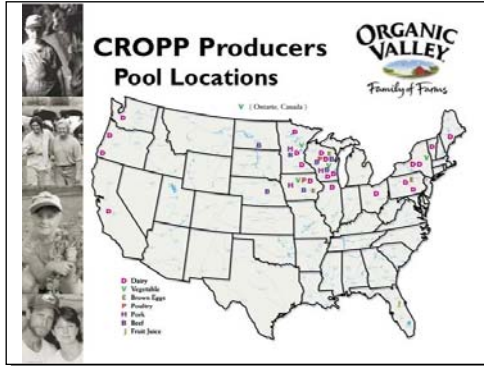
The next slide is very interesting. The darker the color, the higher the percentage of full time farmers as defined by farmers who declare that the farm is their sole source of income. We can see that there are higher percentages of full time farmers where the larger more arid farms are located. Here in our Midwest breadbasket, we see lighter colors. This demonstrates that Midwest farmers today need to find outside sources of income to keep farming.

The next map shows certified organic acreage documented in the 2002 Census of Agriculture. One dot is 250 acres, and we see more acreage in Ohio, Michigan, Wisconsin, Minnesota, Iowa and the plains states.



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The producer locations for Organic Valley are indicated on this map. D equals dairy, V vegetables, E brown eggs, etc. You can see that we follow right along with the previous map that showed organic acreage. These are the pools we manage today. We have producers starting in Colorado next month and in Texas in early spring. The Texas producers are currently in transition to organic.

Originally CROPP was a cheese cooperative. We had seven dairy farmers challenged with what to do with the milk and how to hold on to the milk long term. The seasonality of people's consumption patterns of dairy products is the dead opposite of when cows produce. Consumption of dairy products starts to increase in late August with school milk time and reaches a peak right around Christmas, it drops in January just a little bit, and then it comes back up Ash Wednesday through Easter. The week after Easter it drops a good 10%, and then it continues a slow decline until June. June is Dairy Month because of a cleverly developed marketing ploy to get people to consume dairy in the summer. If your cows are calving in the spring, you have the most of your milk coming in the spring and the summer, and then you are trying to figure out how to balance that milk as it starts to drop off in the fall just when people are looking to consume it more.

History

- Founded in 1988 7 dairy producers
- 1993 – 1.2 M Sales 26 Producers – All WI
- 1994 added MN Producers Start Bottling Fluid Milk
- 1996 Shipped milk to NE, Bottling in NE & MN
- 1997 Added producers in WA, & NY, VT
- Today Producers in 19 states

I started with CROPP in 1993, after working with the large national cooperative AMPI for ten years in Quality Assurance. In 1993, CROPP was a butter and cheese cooperative; in 1994 we added producers in Minnesota, close to Minneapolis, and started bottling fluid milk; in 1996 we began shipping milk to the Northeast, added bottling there; in 1997 we added producers in Washington State, New York and Vermont. Today we have producers in 19 states.

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1988

- Establishment of beginning Standards
- Located local Cheesemaker
- Sold product at Organic Pricing
- Sold only block cheeses – minimal value enhancement
- As a Cooperative, paid themselves the blend of conventional and organic premium

In 1988, CROPP established early organic standards and located a local cheese maker to manufacture cheese. We established what we considered to be fair farm prices for organically produced products, which at that time was \$17.25 per hundredweight. When we sold a pound of cheese, which requires ten pounds of milk, we would record \$1.75 of the sale for the farmer. Whatever it cost us to market, sell or to move that cheese out to the consumer, would be recorded as a business expense. We had one set of books but

we distinguished very clearly for every sale, the farmers' payment and the business expenses. We still do this today. For every single pound of product we sell, the first thing we do is pay the farmer. For instance, if we are selling a ten pound equivalent for \$2.00, we put \$1.75 on the farm side of the books and 25 cents on the other side of the books for running the co-operative; it is very clear that the farmers are always receiving what they earned. Conventional agricultural cooperatives often take money in, pay their expenses, and then divide what's left among the farmers. That's one of the real critical differences between CROPP, conventional and other dairies.

In 1990 CROPP established a need for cheese cutting. We could not find a processor who would handle our small volume of cheese. We bought an AMPI plant in LaFarge, which had been closed; sold the equipment out of the plant to pay for the down payment; signed the papers and had the equipment buyer scheduled to purchase. When we got the check for the equipment, we quickly cashed it to make the down payment. At that time we had part time employees and we worked with Westby Creamery, a local dairy, and a consultant to learn how to create our organic Swiss style butter.

1990

- Established a need for Cheesecutting
- Bought abandoned dairy plant and converted to cheese cutting operation.
- Had only part time employees
- Worked with local dairy and consultant to create organic butter

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1992

- Located a buyer for fluid milk.
- Product line now consists of cheese, butter, Nonfat Dry Milk, bulk tanker milk
- Blended pay price Averages \$15.13

In 1992 we found a larger buyer for organic milk, Horizon Organic Dairy. Horizon was then owned by two gentlemen, Paul Repetto and Mark Retzloff, with a vision to create an organic dairy line. They started with yogurt made in Bancroft Dairy in Madison. We supplied them with skim milk to make yogurt, which left us cream to make butter, creating a good synergistic relationship; which helped us sell more farmers' milk. A critical consideration is the market and supply balance; if you don't have the market and your supply is more than the market,

how are you going to pay that higher premium to the farmer? At that point we were really proud that we had actually been able to obtain our blended price of \$15.13 which is a far cry from the \$17.25. Yes, we were selling cheese and returning the \$1.75 or \$17.25 to the farmer, but we needed to sell a lot of milk conventionally. When we had to sell some milk at \$11.00 and some at \$17, the blend is somewhere in that \$15 range. The next decade was focused on how to increase organic sales so that we could return more of the \$17.25 to the farmer.

By the end of 1993, the year I joined CROPP, we grew to 29 dairy producers. I was the 22nd employee in June of 1993, and we then had 21 dairy producers. The one to one ratio is what it took to manage the complexity of the business. We had contracts with two cheese plants, one non-fat dry milk plant that would dry skim for us, and one butter plant. All of these folks would receive the milk and we would pay them a co-processing fee to make our products. As a cooperative we finance the milk part and the processor then doesn't have to have the financial wherewithal to finance that milk while he is converting it into cheese and other products for us.

1993

- Grew to 29 dairy producers
- Contracts with 2 cheese plants – American Style and Italian Style
- Contract with 1 NFDM plant
- Contract with 1 butter plant that also served as a reload facility
- Began shipping fluid milk to Iowa that was bottled and shipped to California

Also notable in 1993, Horizon started out with their fluid milk program. We shipped milk into Des Moines, Iowa, where it was bottled and then shipped to California, the costal market for organic milk.

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Another factor to consider when locating processors is the distance you plan to move your product to market. Fluid milk plants for instance have to be certified by the interstate milk shippers, which are run by the FDA. If you are processing meat, you have to be certified by USDA to sell across state lines. Those are things to consider when you are setting up a processing plant or a relationship with an existing processing plant. There are small dairies that still exist in nearly every state today; just not as many as there were

ten, fifteen and twenty five years ago. But if they aren't licensed by the FDA or interstate milk shippers, then they can only sell that milk within their state. If you are looking to sell a small volume, that might be ideal.

In 1994 we began bottling milk in Minneapolis. Our primary markets were the Northeast and Northwest; the Midwest market has not embraced organic agriculture or sustainable agriculture the way the coasts have; in part this is due to the population distribution; there is almost a Midwestern arrogance: that our food is good enough, and whatever the government says is good enough. As a result, organic is much slower to grow here in the Midwest per capita.

1994
<ul style="list-style-type: none">• Began bottling milk in Minneapolis• Primary Markets MW, NE, NW
1996
<ul style="list-style-type: none">• Began bottling milk ESL Milk in Binghamton NY, Shipping National• Primary Markets MW, NE, NW

In 1996 we began bottling extended shelf life (ESL) milk in Delhi, New York, and shipping nationally. One of the challenges we face is the distance between the supply and the market for our product. This is a negative because we use diesel fuel and are adding expense to the system; but it is part of the farm and marketplace separation. The location of the farm production as compared to the location of the consumers is very important. You could have all the farms in the world but if you don't have people to buy the products, it doesn't do you any good.

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So what's the most economical way? We are working on a model. It's not ideal and you will certainly see some flaws. In our early days, we were just trying to survive. The flaw is that we had producers in Wisconsin and Minnesota and a bottling plant in Minnesota but it was not an ESL plant with 19 days of code. We bottled at Schroeder Milk; and we had good freight and distribution lines to the west coast so we were able to ship milk there and to the northwest. We also shipped tankers of

milk from Westby Creamery to Ultra Dairy in New York, where we bottled ESL milk. In the retail store ESL looks the same, packaged in a gable top carton. By going to ESL, we could legally code that milk with up to 90 days; we do not because vitamins really start to drop off after 65 days in the carton. Milk is a living thing. We haven't killed it; there are still good things going on in that milk. We code all our milk with 56 days, even though with the ESL we could add more synthetic vitamins to counterbalance the nutrient loss. We elect not to do that.

In 1997, we converted from the centralized national plant to try some forms of regional distribution. We added bottling plants in the Northwest. In the Midwest we found an ESL plant that would work for us.

1997

- Converted from Centralized National plan to Regional Distribution
- Added Bottling Facilities in NW
- MW Region also now includes ESL as well as HTST bottling
- Centralized distribution for specialty dairy products such as butter, cheese, sour cream



In 1997 we were no longer sending as many tankers from the Midwest to the West coast; as we had producers in the Northwest that were producing milk for that region. It was a little bit of an improvement, but still not perfect.

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Since 1997, we have been augmenting our regional bottling. We continue with centralized distribution for specialty products -- creams, cheeses, and butter. 100 pounds of milk makes 10 pounds of cheese so that is more efficient to ship from the Midwest; 100 pounds of milk makes four pounds of butter and nine pounds of non-fat dry milk. We produce these products which are more durable and have a longer shelf life primarily in the Midwest, where 50% of our milk resides, and then we ship them to the coast. Because they have a longer shelf life, we can ship them once a week, or once every two weeks to assure entire truckloads when we go to the coast for distribution.

2004

- Augmentation of Regional Fluid Bottling
- Continued with Centralized Distribution of specialty items, such as quarts of milk, Half and Half, Heavy Whipping Cream, Juices, Butters, Powdered Milk



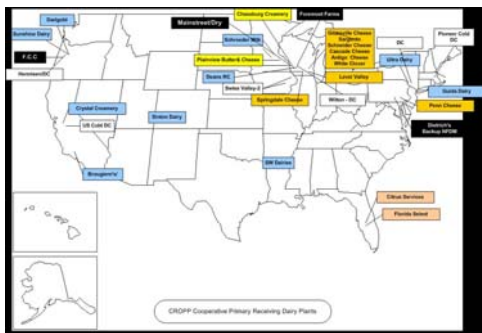
This is what the fluid bottling system looks like today and early in 2005. We still have dairy plants in the Northeast. In this region we have two dairy plants that we work with, Ultra Dairy, now owned by Dean Foods and Guida Dairy, a family owned fifth generation dairy plant in Connecticut. We work with Cumberland Dairy in New Jersey, a fourth generation dairy plant. Smith Dairy in Ohio processes single serves for a pool of producers in

Ohio and eastern Indiana; they will also begin bottling our half-gallon milk giving us regional distribution in this area. Schroeder Milk, our first founding plant, continues to be our core facility. That is a fourth generation family owned facility. They have put in ESL capacities for us. We also process at Deans in Richland Center as a regional back-up facility. Sunshine Dairies, a third generation family dairy, and Dairigold, a dairy co-operative, both produce for us in the Northwest. Crystal Creamery, a fourth generation family dairy in Sacramento, bottles for us and handles our California distribution. Broughton's is a very small glass bottler in Southern California. Sinton Dairy, in southeast Colorado, is owned by National Dairy Holdings and covers the southwest for us. Southwest Dairies, in Tyler, Texas, a family owned corporation with ties into the grocery chains, will be bottling for us starting in April 2005.

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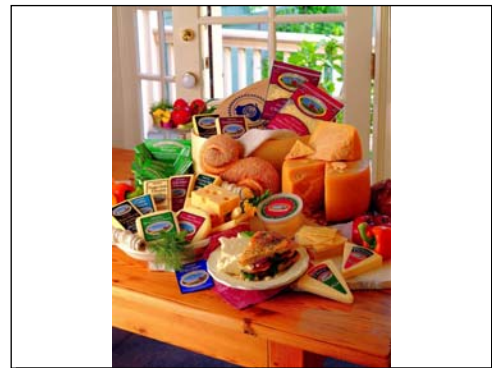
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Our product line includes skim, 1%, 2%, whole and chocolate milk plus buttermilk. We have non-homogenized milk in certain regions. We produce gallons of milk, non-fat dry milk powder, whipping cream and half-and-half. All of that is part of balancing. You need to sell all of the 100 pounds.



This gives you an idea of the 45 primary processing plants that we use. There is a great concentration of cheese plants in the Midwest. Gibbsville Cheese is a fourth generation family plant. Sargento is a bigger, but still family owned business. Schneider Cheese and Cascade Cheese are both third generation cheese plants. Antigo is an employee owned cooperative and White Clover is a family owned plant. We try to work with family owned processors, people who are very interested in their livelihood, and desire to continue growing with the dairy industry.

Our cheese line features some nice aged cheeses: Cheddars, Parmesan's, and Romano's. We sell milk under our brand because we believe that can help our farmers have a sustainable market in the future. By building branded sales nationally we can support the organic price. That's part of our strategy. We also sell ingredients to other folks who are making products, we sell bulk milk as we did in our early years to Horizon, and to Stonyfield Farms, who have organic yogurt made from 100% CROPP cooperative milk in the Northeast.



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Eggs, butter, and cream cheese were added because of distribution requirements as we built the market, we needed to provide more products for customers in the market place. Getting things out in distribution is slow. You will find mass market has Organic Valley fluid milks and creams, but not a lot of Organic Valley cheese, butter, or eggs at this time.

How do you find a plant?

Periodicals

For instance in meat if you are a small producer and you want to find someone to slaughter your cattle for you periodicals can be a good source of information. If you are handling the whole thing yourself, you have to raise your animals, get them produced into a product, and then get them to a market place. There are a number of periodicals dealing with meat quality, meat processing, food quality, and dairy processing that can be located on the internet. Often classified sections will include ads from people interested in processing to fill their plant capacity. It's a growing commodity that's actually out there. It's very hard when you are small. That's always a challenge.

Resources

- Periodicals
- Government Documents
- Marketplace Labels
- Census Maps – Processing plants are in proximity to Livestock

Government Documents

The Federal Government has a pasteurized milk ordinance list that comes out quarterly in both on-line and paper versions. There is also a USDA list of meat and egg processors.

Marketplace

Another place you look is at the labels in the marketplace. If you look at the label on meat, it has an establishment number, telling you where it was processed. Then you can go to them and have a conversation about them processing for you.

Census Maps

Looking at the census maps is useful because they tell you where the animals are located, which is where processing infrastructure is likely to be supported.

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What Next

- Organize Thoughts,
- Get on the Telephone – Call and ask to make an appointment to visit.
- Be sure to be aware of their busy time and work to meet their schedule instead of demanding yours.
- Visit – You will want to see the plant that may be processing your goods.

What next? You found a processor or more and you have created a list of people you want to call. These are very common sense things. Organize your thoughts; make sure that you are concise. I find it's very useful, even after doing this for 11½ years, to write down what I am trying to achieve when I call someone on the phone. The processors and managers are usually very friendly; they will take the time to take your call but you need to be concise and very clear about what you want. You need to be on and off that phone inside five to ten

minutes, these people have a business to run. The smaller processors are just like farmers; they are doing the work themselves, they don't have a huge staff, it helps to be very organized and thoughtful. Be aware of their busy schedule and ask them when is a good time if you want to visit.

Don't be afraid to make cold calls. Guida Dairy in the northeast would not take my telephone calls. I finally got on a plane went out there and showed up at the door, "There's someone here from Wisconsin to see you" they let me in. It took me three of those visits and now they are processing for us. In your plant visit be direct, be concise; common sense manners are very much in play. Remember that when you are a small specialty business, you need them more than they need you. That was maybe the biggest shock I had when I went from AMPI, a large cooperative, to CROPP with 21 farmers hiring me to take care of their processors. I kind of had an attitude, "Well, now I am on the other side of the coin. Now I'm the customer." It doesn't quite work that way when you are small.

- Plant visit – be direct and concise.
- Common sense manners are always in play.
- It is important to remember when you are a small specialty business you need them far more than they need you.

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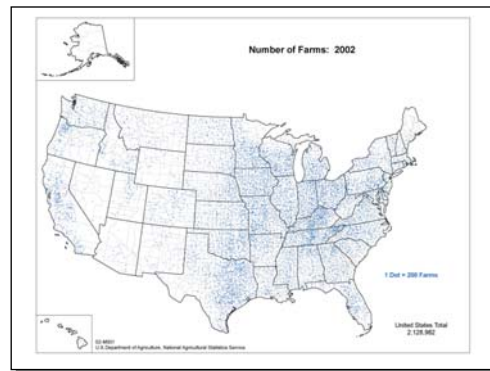
Challenges to be faced

- Small Processing Runs
- Segregation of product
- Assessment of Financial Status
- Federal Marketing Orders
- Regional State and Local Laws

Among the challenges to be faced are small processing runs. This is not as much at play for meat because of the natural segregation; it's more at play for eggs. When we first started out processing eggs, we were four minutes on the processing line! In dairy, a pasteurizer runs so many gallons per hour and we were at processing time only 20 minutes. You have small runs which give you big line loss especially with the segregation of product. Then they want to know if you can financially pay for it. Additionally there are

federal milk marketing orders or the meat orders and then you have regional, state and local laws. That does not mean it cannot be done, because it can; it just means that you have to go in with the attitude that this is going to be a challenge, and you are going to move forward and sometimes little steps are better than no steps; when you look back ten years later you say, "Oh my goodness! What have we done? We have done quite a bit!"

This map illustrates the distribution of farms across the United States.

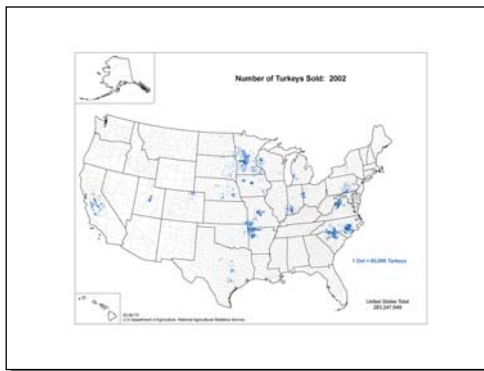


This map indicates where beef cattle are concentrated. Much of this industry is vertically integrated.

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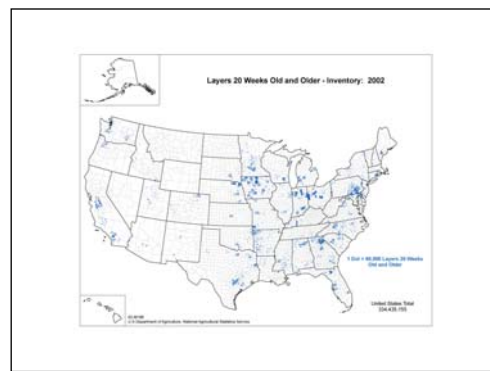
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Hogs and pigs are also vertically integrated. That means the farmer is directly tied to his processor, who is directly tied into the retail distribution stream, which is what we are trying to get away from.



Turkeys. I think the location of turkeys is interesting. The turkey plant here in central Michigan is fairly friendly. We have had conversations with them about processing turkeys for us. We actually use Wapsie Produce in eastern Iowa to process our turkeys.

I would say the hardest place to get in on processing is processing organic eggs. The poultry industry is extremely vertically integrated. You go from chicken to egg to packing plant within the size of this building, or very nearly. 95% of the people selling eggs are vertically integrated, raising their own organic chickens. We have a different model; we work with 25 producers. We drive around with a truck just like we do with the milk, we pick up the eggs, we weigh the eggs, we leave a ticket for the eggs and then we take them to a processor who washes the eggs, candles and packs them for us.



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Milk cow inventory shows where you will find your dairy plants. This solid streak is where the majority of the cheese plants are established. We also have processing plants here as you saw earlier.

Organic Valley/CROPP Cooperative is founded on relationships. First is the relationship with our member owners, but equally important is the relationship with our co-processors who take our raw agricultural commodities and convert it to consumer goods.

The ability to find co-processors is dependent upon persistence, networking and good manners. Thank you!