Food, Faith and Farming Network
Connecting Community, Land, and People

The Current State of Agriculture in Wisconsin (Updated in November 2024) by Roger T. Williams

The Dairy Farm Situation

For decades, Wisconsin has been known as "America's Dairyland;" in fact, our license plates proudly make this claim! Steven Deller, a UW-Madison State Extension Specialist, supports this situation with statistics in a recent paper entitled "The Contribution of Agriculture to the Wisconsin Economy (2022 update): on-farm dairy production and processing contributes $52.8 B or nearly 50% of the $116.3 B of Wisconsin's total agricultural production and food processing revenue.

Yet, Wisconsin is losing dairy farms at an alarming rate. We had about 180,000 dairy farms in our state during the peak in 1935, but that number dwindled to around 39,000 during the "farm crisis" of the mid-1980s and is below 5,500 today. We were losing about 500 dairy farms a year during the period from 2010 to 2020! It's largely a matter of economics: the pay price for milk just hasn't offset the rapidly escalating costs of farm expenses, including seed, fertilizer, fuel, pesticides, machinery, cattle and land. Most of these expenses are dramatically higher today than they were ten, twenty, thirty years ago. Yet there have also been dramatic changes in technology (breeding, herd health, milking equipment, feeding, and manure handling) as well as changes in labor and labor management that have made it difficult for many small and mid-size farms to compete.

The Covid 19 pandemic helped to shred the pay price for milk from 2019 to 2021. Approximately 90% of the milk produced in Wisconsin is made into cheese—especially mozzarella—and much of this cheese ends up on pizza. The closure of restaurants and schools and the suspension of other social activities greatly reduced the demand for milk **and** cheese, creating a glut of milk in our state. In 2020, many dairy farmers were asked to reduce their milk production; some dumped their milk, and others culled their herds to reduce their production by 20%. Milk prices rebounded briefly in 2022 due to these production cuts and the re-opening of schools and restaurants, but the pay price for milk has frequently fallen below the cost of production for dairy farmers, considered to be $20-$25 per hundredweight, depending on whether the farm has a mortgage and/or high levels of debt.

The underlying problem is an imbalance between our supply of milk, the demand for milk and milk products and the perishability of dairy products. Milk production per cow has more than doubled since 1970 due to genetics, better feeding and better management; our Wisconsin herd average is now 24,884 pounds of milk per cow per year. In addition, the average number of cows per herd has grown to 226 and the number of CAFOS (Concentrated Animal Feeding Operations) with over 1,000 cows has more than doubled from 146 in 2005 to over 327 today. We need to recognize that there are no real disincentives for producing more milk. Thus, when prices are low, farmers tend to seek

more income by producing more milk and when prices rise, they tend to produce more milk to capture the higher prices.

There are at least four recent initiatives aimed at improving the imbalance between the supply of milk and the demand for milk and milk products in Wisconsin. These can be briefly summarized as follows:

1) Mark Stephenson, head of UW-Madison's Center for Dairy Profitability led a Wisconsin Dairy Task Force to come up with recommendations "to maintain a viable and profitable dairy industry in Wisconsin." The group proposed 51 recommendations to strengthen our dairy industry, from "Recognizing the importance of exports" to "Increasing demand for fluid milk consumption in schools" to "Creating a UW Dairy Innovation Hub."
2) Senator Howard Marklein and Representative Travis Tranel introduced a bill in the Wisconsin Legislature to create a Dairy Innovation Hub that would promote university-based research and development projects at UW-Madison, UW-River Falls and UW-Platteville. The bill was passed and signed into law; Wisconsin is now supporting the Dairy Innovation Hub with nearly $8 million in funding annually.
3) The Wisconsin Farmers Union, in partnership with the Wisconsin Farm Bureau Federation and the National Farmers Organization, has launched a "Dairy Together" initiative that is creating a nation-wide coalition of dairy farmers in support of a milk supply management policy as part of a future Farm Bill. This initiative would do several things: be managed by dairy farmers, allow for new farmer entry, slow growth of milk production, enhance milk prices while reducing variation in prices, increase net farm income, make the U.S. a more consistent supplier of milk in the world market and not cause a significant increase in consumer prices. Dairy farmers and their allies will need to speak with a unified voice if the Dairy Together initiative is to be incorporated in a future Farm Bill; it is not part of the Farm Bill being discussed currently.
4) You may have noted that milk exports have been a theme in these developments. Interestingly, an October 2024 article in the **Wisconsin Agriculturalist** highlighted the fact that 16-18 % of the U.S. milk supply is now exported annually. Yet, because of the perishability of milk, 80% of milk produced on farms goes into manufactured products: cheese, butter, whey, yogurt, ice cream and non-fat dry milk. And it is primarily these products that are exported overseas. So, it is milk solids--butterfat and protein—that matter more to dairy processors "as consumers are more likely to eat than drink their dairy." A November 2024 article in **Wisconsin Agriculturalist** emphasizes that several new dairy processing plants are being built across the U.S., so processing milk into cheese, butter and other milk products will not be a problem. The key question is whether the balance between milk supply and milk product demand will be resolved.

Additional Agricultural Enterprises

When I started out as a Vocational Agriculture instructor in Darlington, WI in 1967, I couldn't drive anywhere in southwest Wisconsin or other parts of the state without seeing dairy cattle out on pasture with the vast majority of farms. Now, it's becoming rare to see dairy cattle out on pasture since many of our dairy farms have disappeared and large numbers of dairy farms are CAFOS where cattle are kept inside rather than out on pasture. A more common sight these days is beef cattle or

heifers out on pasture and large acreages of corn and soybeans. So, a huge transition has occurred during my lifetime, partially because of the thin margins in dairy and because farmers don't want to be tied to milking cows two or three times a day. Unfortunately, the margins have been thin here as well and many beef, hog, corn and soybean farmers have been struggling financially. One of the biggest challenges is the erratic nature of commodity prices. Taking corn as an example, Wisconsin farmers received an average of $6.11 a bushel for their corn in 2022 but only $4.40 a bushel for their corn in 2023; that's a 28% reduction in corn prices in one year while expenses for seed, fertilizer, pesticides and fuel continued to escalate. Grain farmers with good storage and hauling options do have an advantage over dairy farmers since their product is considerably less perishable and, thus, can be stored in the hope of better prices. We also need to recognize that Wisconsin's agriculture is very diverse and includes: vegetables (potatoes, asparagus and other canning veggies), fruit (cranberries, apples, cherries, strawberries), poultry (chickens, turkeys, ducks), honey and sorghum, small-scale farming, and direct marketing of meat and vegetable products to consumers. Most of these enterprises have faced their own challenges; an example being the recent bird flu epidemic affecting poultry producers and dairy farmers.

Lack of Investments

Because margins have been thin and, in many cases, non-existent, many Wisconsin farmers have not been making regular investments in their farming operations. As a result, many are farming with decades-old farm machinery, with tractors that don't have Roll-Over-Protective Structures (ROPS) and with machinery that lacks appropriate guards for power take-off shafts. The U.S. Bureau of Labor Statistics considers farming to be the most dangerous job in America with 23 deaths per 100,000 workers. The job becomes even more dangerous without ROPS on tractors and appropriate guards for power take-off shafts. Investments in farm buildings have also suffered during this tight economic situation. Farm productivity, efficiency and safety are dependent on regular investments and modernization of buildings, other farming facilities and technology.

Climate Impacts

Climate issues have a dramatic impact on farmers. 2019 was declared the wettest year in recorded climate history in Wisconsin. This made it difficult for farmers to get their crops planted in the spring, harvest hay in the summer and harvest soybeans, corn and other crops in the fall; this created major shortages of hay during the winter of 2019-20. The last two years have been extremely variable with severe drought in the summer of 2023 and excessive rains in the spring of 2024. Both drought **and** excessive rain have impacts on crop production, and both create emotional turmoil for farmers since they have little control over climate issues. While Federal crop insurance is available for many crops, not all farmers want to expend the additional capital and insurance payouts, when they do occur, are often meager in relation to the actual crop losses.

Livestock Siting Regulations

A statewide livestock siting law was passed in 2004 to provide uniform regulations for new and expanding livestock facilities. Recent changes have updated the regulations for manure storage facilities, runoff from animal feeding lots and animal odors. These changes have been controversial. The Wisconsin Land and Water Conservation Association, along with other conservation groups and citizens, argued that the standards are critical to ensure farms are managed responsibly and in ways that protect water and air quality. The Dairy Business Association, Professional Dairy Producers of Wisconsin and Wisconsin Manufacturers and Commerce have argued

that the changes are unfair, largely unworkable, and can prevent expansion of dairy herds in Wisconsin. These livestock siting regulations are designed to protect our precious air and water resources, yet they are likely to be lightning rods for debate into the future.

Manure and Water Quality

On the issue of CAFOs and manure, it's clear that the liquid manure used in huge animal operations presents a threat to water quality, especially in the central sands area of Wisconsin and in areas where karst (semi-permeable limestone) is the bedrock underlying soil. Karst geology underlies much of southern Wisconsin, extending in a U shape along the western side of our state as far north as Polk County and along the eastern side as far north as Marinette and Door Counties. Liquid manure can leach through sand and karst into the ground water below, thus contaminating the water table with nitrates and coliform bacteria. This has been most evident in Kewaunee County where karst is the underlying bedrock and there are large numbers of CAFOS with cattle outnumbering people 5:1; more than 60% of wells sampled in Kewaunee County were contaminated with nitrates and/or coliform bacteria. Recent studies also show that 60% of private wells in Iowa, Grant and Lafayette Counties are contaminated. The Wisconsin Center for Investigative Journalism found that manure contamination is a public health problem for over 100,000 families in our state. Our Wisconsin DNR is responsible for licensing and monitoring CAFOS; it is a tough job since there are pressures from farmers, industry groups, environmental groups and citizens…each with their own agendas regarding water quality.

The Next Generation of Farmers

Three of the biggest issues raised at Rural Listening and Networking sessions sponsored by our Food, Faith and Farming Network (FFFN) in the spring of 2018 were "Transitioning farms from older farmers to the next generation," "Providing young farmers access to land and resources," and "Providing mentors to new/young farmers." There was great concern about where the next generation of farmers would come from, how they would obtain the land and other resources needed for farming and how the knowledge base of older farmers might be transferred to the younger generation. These concerns become even more significant with the now rapid exodus of dairy farmers due to low milk prices and rapidly escalating farm expenses.

Lack of High-Speed Internet in Rural Areas

Over 25% of rural residents lack access to high-speed internet and this limits opportunities for equal participation in our modern, internet-driven world. This became especially apparent during Covid 19 when large numbers of rural residents were working or schooling from home and the limits of their internet were severely tested. Farmers are impacted in powerful ways since many of their inputs now need to be ordered online from machinery dealers located quite some distance from their farms. This was another issue raised at our FFFN Rural Listening and Networking sessions.

Lack of Access to Food in Rural Communities

Another significant issue raised in our FFFN Rural Listening and Networking sessions was "The existence of food deserts in small, rural communities." We usually think of food deserts as an urban issue, but we learned that Richland County only has one grocery store—a Walmart Supercenter—in the entire county. In many counties, rural residents must travel great distances to purchase food at large chain grocery stores in urban centers or accept the food options available at Dollar stores or "quick marts" affiliated with local gas stations. Thus, another significant issue raised in Rural Listening and Networking sessions—"Granting local farmers access to local food markets"—is such an important issue for local farmers as

well as for consumers in small, rural communities. Our Seed Money initiative has been supporting Farmers Markets in various parts of the state to aid local farmers and offer local and sustainably produced food in rural communities.

Mental Health/Wellness Initiatives

The many challenges associated with farming have triggered depression and suicidal thoughts in many Wisconsin farm families as well as initiatives to respond to these mental health issues. The Southwest Community Action Program is providing a farmer wellness and suicide prevention service in southwest Wisconsin (FarmWell, WI) offering counseling and peer support services for farm families in that area of the state. A Farmer Angel Network is offering educational and peer support to farm families in southwestern Wisconsin, aimed at enhancing farmer well-being and preventing farm suicides. Both initiatives have received Seed Money grants from our Food, Faith and Farming Network to support their important work. Another statewide resource is available to farm families as well. The Wisconsin Farm Center within the Wisconsin Department of Agriculture, Trade and Consumer Protection offers professional mental health counseling services through their 24/7 Farmer Wellness Hotline; they also offer tele-counseling, counseling vouchers and farmer peer support groups.

The Future of Farming in Wisconsin

Given the number of challenges facing Wisconsin farm families, why do farmers continue to farm and where will the next generation of farmers come from? Farmers continue to farm for several reasons: there is a pride and independence associated with farming; farmers are their own bosses, not beholden to others; there is a love of the land and the pride of being the fourth or fifth generation of farmers on their land; there is a love of working with their hands in the outdoors, experiencing sunrises and sunsets as well as sorely needed rains; there is a desire to see their kids grow up in the natural world and take on added responsibilities as they grow older; and there is the love of experiencing new life with each new crop in the spring and each new animal born on the farm. With these largely intangible benefits, we are likely to see many Wisconsin farmers continue to farm.

Yet we need to recognize that many Wisconsin farms are staying afloat due to off-farm employment. Employment off the farm has been common for many years, often as a source of health insurance for farm families. Still, Wisconsin farm families have become increasingly dependent on off-farm income. A USDA Agricultural Resource Management Survey found that, in the five-year period from 2018 to 2022, 79.3% of Wisconsin farm family income came from off-farm sources. This was especially true for small to mid-size farms. This is an incredibly shocking statistic, and it raises questions about the viability of small to mid-sized farms in our state!

We will need to find ways of encouraging new people to enter the field of agriculture: new farmers with access to land and other resources and with knowledgeable people to help mentor them in successful agricultural techniques. It would be helpful if state and/or federal resources could be allocated to this cause but, in the absence of such resources, existing farmers will need to work at transitioning their farms to family or non-family members who share an interest in and commitment to farming. The University of Wisconsin-Extension and the Wisconsin Department of Agriculture, Trade and Consumer Protection offer resources for helping with farm transitions in our state. Farm transitions are complex; Wisconsin farm families need to be aware of these resources and tap into them if we are to see successful farm transitions in the state!