

The Milkweed

Dairy's best information and insights

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“Float like a butterfly,
sting like a bee.”

— Muhammad Ali

Global & U.S. Milk Production Will Feel Weather's Impact

by Pete Hardin

Ahead: a major slow-down in global milk production. The three major dairy exporting regions of the world – the European Union, Oceania, and the United States – are all in the throes of difficult weather events threatening present and future milk production levels.

Oceania past “peak milk”

For Oceania and Europe, major weather challenges are extreme heat. In 2018, both Australia and Europe faced severe heat and drought.

Australian dairy farmers are struggling in the aftermath of last year's intense heat and drought. Recent months' milk production in Australia has been “double-digit down” – i.e., down more than 10% — compared to same-month, year-ago numbers. Last year, Australia saw prolonged temperatures climb to 115 degrees Fahrenheit in the midst of severe drought that hammered its dairy industry. Many dairy cows were killed by the extreme heat. Pastures were parched.

The impact of last year's intense heat/drought will be felt for years in the Australian dairy industry ... merely starting with death losses of dairy livestock. Another major concern: reproductive problems resulting from heat stress will be felt for years. When a pregnant cow's ambient body temperature is elevated above 104-105 degrees F., the fetus may be killed.

Taking Oceania as a whole – combining Australia's and New Zealand's milk production – that key exporting dairy region has probably passed “peak milk” and will have less volume of dairy commodities to offer for export in the coming few years. New Zealand's pastures turned dry in early 2019. Dairy Market News' international report for August 2 noted that New Zealand pastures are slightly drier than

would be desired, but grass conditions are generally okay. New Zealand's pasture-based dairy production season starts in August and rapidly escalates to peak output during the following several months.

EU coping with summer's second heat blast

Here in mid-summer 2019, Europe is struggling with the aftermath of two massive heat waves that pushed temperatures to 110 degrees F. ... and higher. Many European homes and businesses do not have air conditioning. Similarly, European dairy farmers' livestock facilities are generally ill-suited to protect animals from stresses associated with such extreme temperatures.

It's too early to have a longer-term gauge of how this summer's two intense heat waves will negatively stress Europe's milk production. Dairy Market News reported on August 2 that there was a fairly quick rebound from this summer's first European heat wave. But in the analysis of *The Milkweed*, it often takes longer for dairy production (and milk components) to rebound following subsequent, intense heat waves.

U.S. forage, corn crops stressed

Meanwhile, dairy farmers in numerous regions of the United States are facing serious challenges to crops and milk production. The northeast quadrant of the United States was particularly hammered with cold, wet conditions during planting of annual crops (such as corn and soybeans). Future corn supplies are a highly uncertain factor, due to extremely wet weather that delayed or blocked intended plantings this past spring. In late June, USDA issued a report that projected some 91 million acres in this nation would be planted to corn in 2019. That figure was complete baloney – based on early June data. Until much better data are available from USDA on the number of acres actually planted to corn this year, and the quality of those acres, many questions will remain about 2019's

corn harvest. Western dairy farms are particularly sensitive to increased corn costs ... particularly by the time rail freight costs are added to costs per bushel based in the Plains or Upper Midwest.

Further, wet conditions during much of the all-important, first cutting of forage in that same region impaired quality. In Wisconsin, for example, roughly 60% of a year's forage crop is harvested during the first cutting.

California dairy producers are seeing disruptions to normal dairy hay production. Much of the hay harvested in California is categorized as “low-test” for dairy purposes – i.e., measuring low in relative feed value. The balance of this year's hay supplies in California is a tough calculation. Hay exports to China have declined sharply, compared to prior years. But hay buyers from Saudi Arabia have been quite active, up until early July. This year has also seen significant diversion of water supplies from irrigating hay ground to sales of that water for alternate uses.

The high percentage of “low-test” hay in California means a reduction in milk production per cow in coming months. Dairy producers won't be able to supplement their rations adequately to offset the impact of lesser-quality hay on milk output in the months ahead.

On the whole, *The Milkweed* projects that weather influences upon 2019's hay and corn crops will further depress coming months' milk production numbers. Reduced-quality forages and the likelihood of significant increases in costs for purchased corn will both pull down milk output in the United States.

Severe drought to lower India's milk output

In a discussion of weather's influence upon global milk production, events in India must be noted. India is the world's largest milk-producing nation. But India historically has not been a major dairy exporting

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Trade War Escalates; China Halts Imports of U.S. Farm Products

by Pete Hardin

On March 2, 2018, President Donald J. Trump declared that, “Trade wars are good and easy to win.”

On May 12, 2019, Trump proclaimed that, “We are right where we want to be with China”

Unfortunately, trade wars are NOT easily won. And in this economically interdependent global economy, both those countries have each other firmly by the short hairs.

If such naïve declarations from the White House form the basis and rationale for the fast-deteriorating trade relations between the United States and China, then the whole world is in trouble. The specter of the world's two largest economies engaged in a serious trade war threatens the global economy's foundations.

In early August, China struck back at White House threats to impose a 10% tariff on virtually all goods entering this country from China, effective September 1, 2019. China's response: Halt all imports of U.S. farm products. Thus, China is retaliating against agricultural producers in America's Heartland – the Midwest and Plains. Years of (mostly) low prices for many major agricultural commodities – dairy, beef, pork, corn, soybeans, etc. – leave U.S. farmers financially vulnerable. That vulnerability has been made worse by difficult weather conditions for much of the past year in numerous farming regions of this country.

China's threat to ban all agricultural imports from the United States may not be fully feasible. *The Milkweed* suspects that such a threat, if imposed, would not, or could not, be absolute. However, the mere threat of China's retaliating against U.S. farm

product imports is enough to scare the bejeebers out of agricultural markets and many firms serving this nation's extended agricultural infrastructure. Whether or not the threatened 10% tariffs and counter-strikes against U.S. farm exports to China actually play out, a black cloud of uncertainty looms over the month of August, leading up to the September 1 deadline set by Trump for imposing 10% tariffs on all imported goods from China. Heading into the fall grain harvest season, the last thing U.S. agriculture needs is greater trade disruptions.

Ironically, heightened trade tensions between the United States and China come as the USDA is taking sign-ups from many of the nation's farmers for the second round of payments to compensate agricultural producers for lost income due to reduced export sales stemming from the various trade wars in which the Trump administration has engaged.

Rational or irrational bases for trade wars?

Historians will debate whether the trade wars started by the United States against a variety of major trading partners were rationally based ... or otherwise. Yes, China, more than any other nation, poses significant future challenges to the United States – politically, militarily, and economically. But the notion of the United States single-handedly entering a trade war with China ... without a coalition of international partners ... was a dubious strategy.

The original trade wars were sparked by the White House unilaterally imposing 25% import tariffs on steel products, as well as 10% tariffs on aluminum imports. The primary, intended purpose of those steel and aluminum tariffs was to supposedly chastise China. But that rationale rapidly evaporates with the facts.

China was only responsible for *two percent* of all steel imports entering the United States. Worse yet, for more than half a year following imposition of those steel tariffs, the United States waived the steel tariffs on about 40% of all Chinese steel im-

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ports. Thus, if the original purpose of the steel tariffs was to penalize China, why did our federal government waive the tariffs on nearly half of that nation's steel imports??? Other trading partners – Mexico, Canada, and the European Union – were harmed far more substantially than was China by those tariffs against steel and aluminum. Virtually no tariff waivers have been granted for steel imports from Mexico and Canada.

Rational or irrational? When the EU retaliated against the United States' original imposition of steel and aluminum tariffs, the top White House economic advisory, Lawrence Kudlow, professed to be shocked. Kudlow apparently didn't, or couldn't, anticipate our trading partners' counter-moves. (In the mid-1990s, Kudlow was forced out of a high-level Wall Street position after admitting a \$100,000-per-month cocaine habit. Hard to get good help these days.)

Devolving U.S./China relationships ...

During the past year, repeated negotiations between the United States and China to solve the trade differences have come to naught. Despite claims from President Trump that negotiators were close to finalizing matters, nothing has ultimately been achieved. If anything, the two countries are now at their worst state of relations in many years.

China's original response to the U.S. tariffs levied against steel and aluminum imports was to play the "food card" – imposing retaliatory tariffs against many farm products imported from the United States. Agricultural products – from commodities and finished foods to agricultural equipment and food processing equipment – represent perhaps China's biggest sector of imports from this nation. Many U.S. dairy products were impacted by those tariffs, including whey and cheese. Infant formula products were not originally included among dairy products hit with China's retaliatory tariffs. (Note: The Chinese are not dumb. A "subsidiary" of the Chinese military owns Smithfield Foods – this nation's largest pork processor. It's believed that Smithfield Foods' exports of pork products to China were not assessed the retaliatory tariff.)

In view of China's shortfall of pork production, it's hard to imagine China would shut off pork imports from a wholly owned U.S. subsidiary.

China's initial response to slap at imports of farm and food products was predictable ... and dangerous. Modern China's evolution during the past three (or so) decades has, perhaps most remarkably, upgraded the diets of hundreds of millions of its citizens. Many older Chinese recall the food shortages and starvation that plagued Chairman Mao's "Great Leap Forward" during the 1960s. Even today, China's leaders bury details of how as many as 20 million "comrades" starved to death during that "Great Leap Forward." Today, one of the greatest measures of China's societal stability is the adequacy of food supplies for its citizens, who are accustomed to greater quantities of meat and dairy products in their diets.

In the past two decades, China has strategically invested in global sources to provide supplemental food supplies for its citizens – in Africa, Oceania, South America, and North America. During the past year, China is facing a severe epidemic of African Swine Fever – a deadly contagion that threatens to kill well over 100 million swine in that country, if and when it's ever brought under control. Pork is the principle meat product consumed by the Chinese.

In summary, China's decision to play the "food card" in its trade disputes with the United States could prove to be a short-sighted policy, as weather events stress global food production. Time will tell.

Yes, China poses significant military and economic challenges to the United States in the future. Yes, many of China's actions merit tough responses. But no, trade wars are not easily won. And no, the White House doesn't "have the Chinese exactly where we want them."

China has been measured in its responses, so far. But watch out if China starts cashing in its U.S. Treasury notes: borrowers' interest rates would skyrocket!

Kraft-Heinz' Stock Thrashed

Kraft-Heinz stock prices paid a steep price for the company delivering a delayed second quarter earnings report that was laden with bad news. For the week ending August 9, Kraft-Heinz lost 17.7% of its stock price, closing at \$26.50 per share.

Bad news in the Q2 report included a continued investigation by a federal agency into the firm's accounting procedures.

During the past year, Kraft-Heinz' stock enjoyed a peak price of \$61.68. Thus, the closing price on August 9 represented only 42.96% of the previous year's peak. Kraft-Heinz suffers from many problems – including an aging product line of highly processed items that are falling out of favor with modern consumers. Further, the Kraft-Heinz philosophy under current ownership has focused on cost-cutting to the exclusion of innovative product development. Kraft-Heinz is so d _ _ _ d cheap that it pays.

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nation – most of India's milk production is needed domestically. However, most of India's milk production comes from herds totaling two or three cows – hand-milked and much of that milk not sold commercially.

Unfortunately, major areas of India are in the throes of severe drought. Twenty (or more) cities in India with populations over 1,000,000 residents are currently without normal water supplies. Farmers are being asked to irrigate less, in order to make more water available for urban areas. A slow-down in India's milk production, due to drought, is predictable. That means that India may be more dependent upon imported food supplies in the year ahead, including dairy.

Finally, China's dairy situation is worth mentioning. Rather than weather events, China's dairy production is struggling. Imports of forage from the United States have fallen dramatically. U.S.-supplied hay has been an important feed ingredient for China's dairy industry. It's important to note that China's dairy import demand patterns have been a major influence in global milk prices during the past 15 years.

U.S. will lag, due to trade issues ...

Throw all of the above-discussed factors into the mix and the result may lead to a single conclusion: the world's major dairy exporting nations face reduced milk supplies in coming months ... and perhaps years. The relative shortfall of milk production in the major dairy exporting countries is further intensified by severe drought in major parts of India, as well as China's economic struggle and falling milk production.

Currently enmeshed in a trade war with China, and trade disputes with several other major, historic dairy export destinations (Mexico and Canada) the U.S. dairy industry is positioned as a "tail-ender" for taking advantage of higher global dairy commodities when the impact of declining milk production starts to drive up global dairy commodities.

Disrupted trade has already cost U.S. dairy farmers many hundreds of millions of dollars in lost milk income since summer 2018.

Higher milk prices are coming, but how much higher would they be without trade wars?

Aug. Dairy Marketing Doldrums Will Give Way to Sept. Crazy

by Pete Hardin

Mid-summer is oftentimes the proverbial "calm before the storm" for milk marketing. That's precisely the case here in mid-2019, as dairy marketers gear up for uncertain supply/demand conditions in coming weeks and months.

Early- and mid-August feature the start of schools opening in the South. Historically, school milk has represented about six percent of all fluid milk sales in the nation. Historically, the opening of schools in the Southeast means that region's seasonally short milk supplies (due to heat) will require infusions of spot milk supplies from outside the region – from the Northeast, Midwest, and/or the Southwest. Already in August's first full week, *The Milkweed* is hearing of calls to northern dairy marketers seeking spot milk supplies to meet needs in the South. However, as dairy marketers consider supplying the Southeast spot milk pipeline as schools open, 2019 may just be a year when the "same-old, same-old" doesn't go as normally planned. Why? Struggling milk supplies in some other regions are compounded by long-distance milk transportation headaches.

Milk output slowing in Midwest, Northeast

Milk production is generally slowing in two major regions – the Midwest and the Northeast. Looking ahead, these already tight milk supplies will probably get tighter – given 2019's difficult crop conditions in both those regions. Thus, dairy marketers may be less willing to give up supplies to the distant Southern spot market, due to needs to keep their own

plants operating at efficient capacities.

The Northeast is a patchwork of milk supplies. Many dairy farms in western and central New York are producing good quantities of milk; their herds' output and components were not significantly impacted by the recent heat wave or by the lesser-quality of 2019's first-cutting forages. But further into the lower geographic regions of the Northeast – Maryland, Pennsylvania and Virginia – find serious declines of farm milk output in recent months (compared to same-month, year ago).

Transportation migraines ...

And even if the milk to fill distant spot demand were available, transportation difficulties will likely mean that the South's milk needs go unfulfilled. First of all, there is a shortage of long-distance milk transportation drivers. Second, new federal rules limiting how much time those drivers may be behind the wheel during a 24-hour period mean that long-distance milk runs will require two drivers ... or else the rig (in the case of one driver) has to sit for half a day, before heading home. Worse yet, some runs to the Deep South will require two drivers and still require some downtime for rest. All those considerations presume that the milk tank trucks will be available – which is a whole 'nother headache.

In summary, the Southeast's needs for supplemental milk this late summer and fall may not be fulfilled – due to shortages of milk, truck drivers, federal transportation rules, and not enough milk tank trailers.

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Signup Begins for Trade Mitigation Payments

by Jan Shepel

The Trump administration is getting set to deliver another round of trade mitigation payments to U.S. farmers. But there have been some hiccups getting that program off the ground.

After it was first announced in May, USDA officials released a statement on July 29 noting that sign-ups for the second round of Market Facilitation Program payments would begin that day. The MFP is the program to help farmers who have been hurt economically by the Trump administration's trade wars and other nations' retaliatory tariffs. It took two months from the time USDA announced another round of trade bailouts to the end of July when the agency said sign-ups had begun.

But farmers who tried to sign up at local Farm Service Agency offices in late July and early August were told that the staffs hadn't been trained or received guidance on the program.

On August 7, the USDA sent out the same press release, stating that "signup opens today for the Market Facilitation Program (MFP)." However, that press still bore the July 29 date. Oops. Calls to local FSA offices revealed that they hadn't gotten enough information to sign farmers up for the program until August 6, when local agency staffers received more training and information to begin the signup. By August 7, county FSA personnel finally had enough information to start enrolling farmers.

Some farmers have enough information on hand in their county offices to allow them to sign up by mail. Staffers were also making appointments after August 6 for farmers to register in person. Alternatively, they could wait until they were scheduled to come in for other program sign-ups to get on board MFP's second round.

MFP's second round will provide up to \$14.5 billion in direct payments to impacted producers, as part of a broader trade relief package. The MFP sign-up period runs through Dec. 6.

The trade-mitigation payments to producers are the key component of the \$16 billion aid package the White House has offered as a way to compensate agricultural producers for lost and diminished export markets resulting from the trade wars.

Dairy economists estimate that dairy farmers have so far lost more than \$2.3 billion in revenues since tariff escalation began a little more than a year ago. Through much of 2018's first half, dairy commodity (and farm milk) prices had been rising in tandem with exports. In mid-2018, dairy farmers were hoping those trends would lift them out of three years of ruinous milk prices. Alas, the trade wars with Mexico, Canada and China quickly killed upwards movement in dairy prices and locked in another year of below-cost-of-production milk prices.

Soybean growers were also hard hit, since China was a key market for U.S.-grown soy. The MFP allows farmers to qualify for payments if they earn less than \$900,000 if they produce one of the products that has come under retaliatory tariffs. Payments from the program can be no larger than \$500,000.

In 2018's version of MFP, the program was criticized for making huge payments to "city slickers" who may have their name on a family-owned or corporately organized farm and who got large payments.

The program represents a conundrum for U.S. farmers – two-thirds of whom reportedly voted for Trump in the 2016 election. Most of them would rather get their income from the market and not have to rely on government handouts, but realize that without those payments, many farmers would be out of business. As tariffs hurt exports last year, the USDA estimated that U.S. farm income dropped 16% to about \$63 billion – about half of 2013's farm income in the U.S.

Political observers have noted that the new MFP seems designed to help President Trump avoid losing the support of a loyal base of supporters in rural America and farm country.

National Farmers Union President Roger Johnson said that the assistance from the MFP is desperately needed, but he criticized the "ad hoc rollout," adding that the "convoluted structure of these programs has caused significant confusion among producers.

"Long before this trade war even started, family farmers and ranchers were struggling to make ends meet," Johnson added. "Chronic oversupply and

slumping commodity prices have beleaguered the agricultural economy for six consecutive years, putting most operations in the red. But the unstable markets and rapidly fluctuating prices caused by this administration's trade policies have made matters even worse. Many farmers didn't even know what to plant this last spring because they couldn't begin to anticipate what might be profitable come harvest."

Dairy levels raised

USDA's new approach for the MFP's second round raises the level of aid to offered to dairy farmers, compared to last year's program, which dairy observers consider a step in the right direction.

MFP payments will be made in up to three tranches, with the second and third tranches to be determined as market conditions and trade opportunities dictate. (Tranche is a term denoting a slice or portion that is often used in the parlance of investments and securities. It's a portion of something – especially money.)

For dairy farmers, the payment rate is \$0.20/cwt., compared to a \$0.12/cwt. rate used in 2018 in the first round of these trade mitigation payments. The first tranche will include 50% of the total payment, which for dairy farmers should mean an initial rate of \$0.20/cwt. on half of their production history. The other 50% will be divided between the following two tranches. If conditions warrant, the second and third payments will be made in November 2019 and January 2020. (Translation, further payments will be made if the Trump administration and our trading partners can't find a way to forge an agreement. If the trade wars are called off, further payments won't be necessary.

Most commodity grain producers will be compensated based on a single county rate ranging from \$15 to \$150 per planted acre. For the first round of payments, they will receive a minimum of \$15 per acre and up to 50% of the county rate. Hog producers will receive a payment based on the number of live hogs owned on a day selected by the producer between April 1 and May 15, 2019.

The USDA said it will begin issuing the first payments in mid-to-late August.

Concern from House members

The day that the USDA released details on its second aid package for farmers hurt by the Administration's trade wars, the chairs of the four House Agriculture subcommittees (all Democrats) issued a joint statement, saying they are concerned about fairness and the equity of payments across crops and com-

modities, including specialty crops, dairy, and livestock products.

"We question how this program will affect our World Trade Organization commitments, especially given concerns raised by our trading partners after the first round of trade aid," said Livestock and Foreign Agriculture Chairman Jim Costa of California; Nutrition, Oversight, and Department Operations Chair Marcia L. Fudge of Ohio; General Farm Commodities and Risk Management Chair Filemon Vela of Texas; and Biotechnology, Horticulture, and Research Chair Stacey Plaskett of the Virgin Islands.

They also raised concerns about the long-term impacts of the trade war, as well as unintended consequences of payments to farmers under authority of the Depression-era Commodity Credit Corporation (CCC) Charter Act.

"Trade wars are not good, nor are they easy to win. While these second MFP payments will undoubtedly help farmers in tough economic conditions, those farmers continue to tell us loudly and clearly they want fair access to global markets, not one-off handouts from the Federal government," the lawmakers said.

The four House agriculture leaders said they are alarmed that this bailout will take resources away from USDA's implementation of programs in the 2018 Farm Bill and the recently passed Disaster Supplemental that help farmers in dire need, adding that they are "very troubled" that this second bailout comes alongside drastic cuts to nutrition programs for the country's most vulnerable citizens.

"The Administration needs to face the fact that its trade war isn't accomplishing anything but added pain for our farmers," the House Ag leaders added.

Dairy Culls +4.5% vs. '18

USDA data on dairy cow slaughter rates show that through the week of July 20, this year's number of milk cows sent to slaughter is 4.55% higher than for the same period in 2018. The actual dairy cull figure through July 20 is 1,809,600 cows. That's an increase of 78,000 head, compared to 2018's total.

Dairy cow numbers have been edging down throughout 2019. Some tough decisions lie ahead, for dairy farmers whose 2019 crop production has been seriously impaired by adverse weather.

Dairy cull data is gathered weekly in a collaborative project among three USDA branches: the Animal Plant and Health Inspection Service, the Agricultural Marketing Service, and the National Agricultural Statistics Service.

July Class III Price Jumps \$1.28, to \$17.55/Cwt.

USDA reported a significant upwards move for the July 2019 Class III (cheese) milk price in the federal milk order program. The July Class III climbed \$1.28/cwt., up to \$17.55 for farm milk testing 3.5% milk fat.

The July Class III milk price represents a multi-month upward trend since 2019's low-point for the monthly cheese milk price in February. Since that February 2019 low point, the Class III price has climbed a total of \$3.66/cwt. June 2019 was the only month since February when the Class III price slid backwards from the prior month's price.

Class II (cultured products) and Class IV (butter-powder) prices also climbed in July (compared to June's benchmarks). The Class II price increased by \$0.31/cwt. – up to \$17.61/cwt. And the Class IV price hit \$16.90/cwt., an increase of \$0.07/cwt. above the June 2019 Class IV price.

Stronger prices for Cheddar cheese and Grade A butter were reported in July during USDA's weekly survey of manufacturers' sales prices for dairy commodities. Each week, personnel at USDA's Agricultural Marketing Service survey manufacturers' prices for sales of Cheddar cheese, Grade A nonfat dry milk, Grade A butter, and whey. Those weekly price reports are converted into monthly averages. And those monthly averages are plugged into USDA's economic formulae to calculate each Class price for manufacturing milk.

Whey values continue to stumble. Export demand for our nation's whey products has demised, due to two events concerning China. First, China's hog population is being ravaged by a highly infectious disease – Asian Swine Fever. Big reductions in China's swine population mean less demand for whey – an important source of quality proteins in hog rations. Also, the continuing "trade war" between the United States and China means that a steep tariff is imposed on our whey exports to China – making our product less competitive, cost-wise.

Each one-cent change in USDA's monthly survey price for whey translates into a six-cent movement – up or down — in the monthly Class III (cheese) price formula for the federal milk order program.

The July 2019 monthly survey price for whey was \$0.3631/lb. – a \$0.1174/lb. decline from January 2019's average whey survey price. Thus, that 11.74 cent per pound decline has shaved roughly \$0.70/cwt. off the July Class III price. There are few signs in the whey complex to indicate price improvement any time soon.

For July 2019, USDA used the following values in determining that month's manufacturing milk prices:

Butterfat\$2.6858/lb.
Protein\$2.4032/lb.
Nonfat solids\$0.8628/lb.
Other solids\$0.1689/lb.

PRICES PER POUND	May '19	June '19	July '19	June-July Difference
Butter	\$2.2952	\$2.3663	\$2.3893	+2.30¢/lb.
Nonfat Dry Milk	\$1.0149	\$1.0431	\$1.0393	-0.38¢/lb.
Cheddar Cheese	\$1.6974	\$1.6910	\$1.8238	+13.28¢/lb.
Dry Whey	\$0.3784	\$0.3643	\$0.3631	-0.12¢/lb.

California Co-ops Funding Review of Quota Implementation Program (QIP)

by Pete Hardin

Late July in California featured four “Think Tank” meetings that reviewed the “hot potato” issue among Golden State dairy producers: How to resolve conflicting interests over the state’s Quota Implementation Program (QIP).

The meetings were held in Turlock, Petaluma, Tulare, and Ontario. Attendance at the four meetings totaled approximately 380 participants. Those meetings were bankrolled by three dairy cooperatives operating in the state: Dairy Farmers of America (DFA); Land O’Lakes (LOL); and California Dairies, Inc. (CDI). At issue: growing dissatisfaction among many dairy producers holding little or no Class I Quota. Starting late last year, a petition effort (“Stop QIP”) has aimed to gain a reauthorization referendum among eligible Grade A dairy producers in California.

In June, the California Department of Food and Agriculture (CDFA) denied the validity of petitions seeking termination. CDFA overseers claimed that the petition fell short of the requisite percentage of active Grade A producers. Critics of CDFA claim the state has no idea how many dairy producers are eligible to vote. CDFA has denied the petitioners the right to see the signatures that were not valid, basically stating, “you have plenty of signatures, but 90 weren’t any good and we can’t show you them.” Critics cite individuals who’ve been deceased for nearly a decade as being listed on CDFA records as active dairy producers.

The three dairy cooperatives sponsoring the meetings hired two industry consultants to try to resolve the most volatile issue confronting California dairy producers in many decades. Those consultants are: Marin Bozic, Ph.D. – University of Minnesota Assistant Professor; and Matt Gould – president of Dairy & Food Market Analyst and a principal of Wharton Street Investments, LLC.

The goal of these meetings is to try to defuse the warring sides of California’s Quota issue and come up with a solution to the controversy by the end of 2019. CDFA’s system of farm milk quota dates back to 1969. Quotas are based only on Class I (fluid) milk sales. Overall, California’s Quota program was valued at approximately \$1.2 billion – before the recall petition started circulating in late 2018 and early 2019. Holders of quota may list it as an asset, but the dairymen don’t list the liability on their books nor do the banks. The banks have never loaned money to buy quota exclusively in California. Quota has commonly been bought and sold.

Holders of quota receive payments of \$1.70 to \$1.40 depending on the RQA’s per hundredweight on all quota they possess, each month. Funds to pay quota holders that monthly premium are derived by deducts from all Grade A producers’ milk in California.

Nov. ‘18 arrival of CA fmmo showed QIP deduct

Until late 2018, many California dairy producers had no idea that their milk checks were being bled by \$0.38 per cwt on milk testing 3.5% butterfat to fund the \$1.70/\$1.40/cwt. payments to Quota holders. But on November 1, 2018, California’s regulation of milk prices shifted from CDFA to USDA’s federal milk order program. CDFA officials had administratively reconfigured the Quota system prior to arrival of federal milk regulation in that state.

But once the federal milk order arrived in California, Grade A dairy producers in that state started seeing huge, monthly \$0.38/cwt. deducts from their milk checks to fund the \$1.70/1.40 cwt. payments to Quota holders. Stated succinctly: deducting \$0.38/cwt. from all Grade A producers’ milk (3.5% test) to bankroll payments to Class I Quota holders is a case of “Robbing Peter to pay Paul” – the “have nots” and the “haves.” It’s estimated that deducts to fund Quota payments equaled about \$433,000 a day, or \$13,000,000 per month – up until June 1, 2019. That’s when CDFA was convinced the Quota program was running a surplus by deducting TOO MUCH money from Grade A producers’ monthly milk incomes. (See sidebar, this page.)

That late July round of dairy meetings across California set an aggressive timetable for solving the Quota problem. During August/September, the consultants will analyze feedback from the producer meetings. In September/October, they’ll analyze various proposals. In November/December, it is hoped they can forge consensus. That consensus aims to have a new system in place by January 1, 2020 – an aggressive timetable, given all the money that’s involved.

Various proposals to solve the Quota dilemma that are being kicked around range from immediately terminating the program, to using the current deducts to pay off/buy out current Quota holders’ value.

Dean Foods: New CEO, Bad Q2 Results

In late July, Dean Foods recently announced that CEO Ralph Scozzafazza had retired and his replacement is Eric Beringause. It’s probably merciful that Scozzafazza exited (voluntarily or otherwise) before the scheduled August 6 scheduled conference call with investment analysts. In early May, Scozzafazza’s unsubstantiated claims that metrics were looking better for Dean Foods proved to be total fabrications.

The Dean Foods team continues losing. For 2019’s Second Quarter, the firm reported negative earnings of \$0.36 per share. That result was more than twice the estimated losses per share that investment analysts had anticipated. Meanwhile, prices for Dean Foods’ branded sales increased by 4.5%. But the volume losses of -13.5% were nine percentage points worse than the industry’s erosion of branded sales. Dean Foods’ ability to engineer a financial turnaround looks more difficult, since raw milk costs are expected to rise significantly during the remainder of 2019 and into 2020.

News of Scozzafazza’s exit had driven up the company’s stock price to as “high” as \$1.50 per share recently. But the bad news from second quarter results quickly deflated the stock value. On August 9, Dean Foods stock closed at \$1.07 per share.

Beringause comes to Dean Foods from his position as CEO of Gehl Foods – a modest-sized, food co-packing firm based in Wisconsin. It’s a big jump from the minor leagues (Gehl Foods) to the big leagues (Dean Foods).

Big co-ops seeking damage control ...

The Quota controversy is just one aspect of unrest among California dairy producers following the arrival of federal milk price regulation. Other grips include:

- Disappearance of transportation credits under the CDFA system. That loss has dumped more marketing costs on top of producers’ milk checks.

- Massive de-pooling Class II and Class IV milk from November 2018 through February 2019. That de-pooling caused tens of millions of dollars to disappear from the California milk order’s market-wide pool. Only the cooperatives know where that money disappeared to.

In the final analysis, California’s major dairy cooperative leaders have no one to blame but themselves for the problems growing out of the advent of fmmo milk regulation in November 2018. The California state milk order is the creation of the co-ops – they requested the specifics, such as unreasonably loose pooling regulations. And the co-ops failed to include hauling credits to replace CDFA’s system. (Note: Very recently, DFA and CDI have announced plans to create a marketing agency in common for the California federal milk order.)

And perhaps the greatest sin of all — the advent of federal milk order pricing in California showed dairy producers, on their milk check stubs, exactly how much was being deducted from their milk checks.

CDFA Reduces QIP Deduct to \$0.32/cwt.

by Pete Hardin

Effective September 1, 2019, the California Department of Food and Agriculture (CDFA) reduced the deduction to fund the Quota Implementation Program from \$0.38 to \$0.32/cwt. That deduct is extracted from all Grade A milk producers’ milk checks. The CDFA had \$5 million left over in the old State pool that the USDA is now running. The CDFA’s calculation for how much would be needed to pay the quota holders, was off the other \$7 million and so the Producer Review Board voted to drop the deduct from \$.38 to \$.32 until the 12 million dollar surplus is gone.

Why the shift? It turns out that CDFA had consistently kept the deduct at \$0.38/cwt., despite the fact that the percentage of sales of Class I (fluid) milk had dropped lower and lower for years. At \$0.38/cwt. deducted from January 2019 through May 2019, CDFA had rung up a “surplus” of approximately \$5 million dollars. When challenged on that mounting “surplus,” CDFA has scaled back the deduct for the remainder of 2019 to even out the deductions from all Grade A milk producers’ checks to better match the \$1.70/cwt. pay-outs to Quota holders.

Good question: If CDFA’s \$0.38/cwt. deduct generated a \$5 million surplus during the first 6 months of 2019, then try to calculate the overpayments made by all Grade A shippers for the past 25 years, because the Class One sales didn’t go up, but instead went down. But CDFA collected all the same \$13,000,000 a month just the same?

Q&A with Craig Gordon

#1: In your opinion, why are the major cooperatives engaged in trying to find a solution to the QIP unrest?

Craig Gordon: They want to see a united dairy front to confront the issues that face the dairy industry as a whole. We have water, pricing, labor, and environmental issues. We can never be united when a small majority of dairymen are taking a billion dollars every 6 years out of our pocketbooks and giving us nothing in return.

#2: If a bailout of QIP holders’ interest occurs, should California taxpayers be asked to foot the bill?

Craig Gordon: Absolutely not. This is a dairymen issue. We created it, and we will get rid of it. Although I thought a creative idea that was mentioned at the Tulare meeting to fund the bailout should be looked into. A dairymen said that since they call their product milk, we should tax Almond milk to fund the bailout.

#3: Please describe your “Reverse Quota” proposal and why you think it’s an equitable solution.

Craig Gordon: The Reversal would be when the quota holders would pay \$1.70/40 depending on RQA’s for every pound of quota they own, and the Grade A shippers would get \$.38 cwt. for every cwt. of milk they ship.

Why - The quota was issued as I understand it as an incentive for those dairymen who had the profitable Class 1 sales contracts to join the pool. They were given this quota for free, and the higher Class 1 price initially was enough to pay the newly issued quota payments. So by sharing their Class 1 sales by joining the pool and they didn’t have to worry about other dairymen coming to take away their contracts, the quota system was born. Problem was, the Class 1 sales decreased instead of increasing and there wasn’t enough money in Class 1 sales to pay the quota payments. So instead of lowering the payments to put them in line with the Class 1 sales the state began to dip down into the Class 2 sales and even went so far as taking money out of Class 4 sales to make that 13 million dollar monthly payment to the quota holders. When Class 1 sales are 12% and quota milk is 23% you can see an overpayment of roughly 6 million dollars per month. You start adding up that amount of money and in 12.6 years the quota holders would have been paid a billion dollars in overpayments and that doesn’t include interest. So a simple solution to that problem, would be to keep the QIP tax in and just reverse the payment for the next 12.6 years until the money is paid back and then terminate the QIP. Or even leave it in place after reversing it back to where the quota holders start receiving the \$1.70/40 again after adjusting it to the Class 1 Sales.

If the QIP Tax is equitable, then certainly the QIP Tax reversal would be equitable as well.

St. Albans Co-op Members OK DFA Merger

by Pete Hardin

On July 29, by a 99-9 vote, the members of the St. Albans Cooperative Creamery attending a special meeting voted approval of the proposed merger with Dairy Farmers of America, Inc. (DFA).

Like white scours rocketing through a sick calf, DFA announced the merger was “closed” on August 1. As part of the merger, St. Albans’ 300+ dairy producers will become direct members of DFA. Three businesses owned by the St. Albans Co-op will become wholly owned subsidiaries of DFA. Those businesses include: McDermotts – a struggling milk hauling firm, the St. Albans Cooperative Creamery plant – a milk-powder facility in need of upgrading, and the St. Albans Cooperative store.

The closing of the St. Albans co-op represents the disappearance of the last indigenous dairy cooperative in Vermont. Merging St. Albans into DFA continues a long-term pattern of DFA consolidating smaller cooperatives in the Northeast into its, clutches. DFA is the nation’s largest milk producers’ cooperative, with some 8,000 dairy farmers shipping milk to it ... often by hook or by crook.

Some reckoning yet to be done ...

Despite the announcement that the DFA/St. Albans merger was closed on August 1, there’s still some accounting to be performed ... perhaps painfully so to the St. Albans’ members, who blindly entered the merger with no firm idea of what their local co-op was

worth. According to the merger plan, once St. Albans’ members approved the merger, an accounting of the St. Albans co-op’s assets and liabilities will be conducted. Following that audit, St. Albans’ active and retired members will learn the dollar value that their equities in their local cooperative are actually worth. Post-accounting of St. Albans’ assets and liabilities, that co-op’s members’ equities will be transferred – dollar for dollar (or cent for cent) into DFA equities.

New DFA Capital Plan requires: \$3.50/cwt.

St. Albans co-op members now joining DFA will be required to meet obligations of DFA’s newly hatched Capital Plan equity requirements. In early July, DFA announced that it would DOUBLE members’ Capital Plan investment to \$3.50 per cwt. on all milk marketed in a year’s time. DFA members may reach those Capital Plan goals by three means: transfer of current equities, retention of 80% of DFA’s annual earnings, and/or deductions on monthly milk marketings ranging from \$0.10 to \$0.20 per hundredweight.

At a Vermont Senate Agriculture Committee hearing in mid-July, senators sought testimony on the merger. Speakers were generally favorable. St. Albans’ manager Leon Berthiaume gave a good explanation of the challenges of capitalizing a small operating cooperative in a global market. However, the St. Albans manager failed to note that for the past 16 years, St. Albans has tied its fortunes on raw milk sales to DFA’s dictates, through membership in Dairy

Marketing Services, Inc. At that hearing, Brad Keating – who heads DFA’s operations in the Northeast – promised that DFA would invest \$30 million to upgrade the St. Albans’ processing plant, as well as \$5 million in the milk hauling subsidiary. Total: \$35 million in promised DFA investments in Vermont!

Of course, with St. Albans co-op members producing about 1.2 billion pounds of milk annually, their combined equity requirements to DFA would equal about \$42 million (1.2 billion lbs. of milk X \$3.50/cwt.). Ha! DFA snookered the little guys again!

Another reckoning: Dissidents’ claims

Vermont laws require merging cooperatives (plural) to notify active and retired members who hold financial interests in those cooperatives of terms of the merger, as well as other information. Under Vermont laws, active and retired members who formally dissent to the merger (ten days prior to the meeting at which the merger vote is conducted) have the opportunity to request fairly prompt return of their investments in the merging cooperatives (plural).

To the best of *The Milkweed’s* ability to discern, DFA failed to contact those present or retired equity holders about details of the St. Albans merger. As noted earlier in this article, DFA announced the merger was closed as of August 1, 2019. **Did DFA fail to comply with Vermont state law by not providing merger information to present and retired individuals with Capital Plan accounts in DFA???**

Latest Foolishness – DFA’s 50/50 Dairy/Plant Beverages – Exposed in Farmshine

by Pete Hardin

Say it ain’t so, “Tricky Rick.” Say it ain’t so.

Agricultural writer Sherry Bunting recently exposed the latest foolishness foisted on the U.S. dairy industry: a 50/50 blended beverage consisting of cows’ milk and liquids derived from plant materials (almonds and oats). Bunting’s article appeared in the July 26, 2019 issue of *Farmshine*, a weekly paper based in Browntown, Pennsylvania. The website for *Farmshine* is:

www.farmshine.net

These products are being initially marketed to consumers at 300 or so food retailers in Minneapolis as Live Real Farms’ “Dairy + Almond” and “Dairy + Oat.” Live Real Farms is a subsidiary of Dairy Farmers of America, Inc. — the nation’s largest milk producers cooperative.

You gotta wonder???. Is DFA breaking out the

milk/plant blended beverages to make its dairy farmers think there’s something good emanating from DFA’s diving into processing plant-based beverages that compete with honest dairy products at the super-market dairy case?

Rolling out these new consumer products extends DFA’s adventures into plant-based beverages. In early January 2019, DFA shelled out \$947 million to acquire the outstanding 53% portion of Stremick’s Heritage Dairy that DFA did not already possess. Most of that purchase price was borrowed. At the time of DFA’s purchase, Stremick’s website listed the following primary product lines that it processed and marketing as: oat “milk”, soy “milk”, and almond “milk”

(Note: Stremick’s even had the gumption to label these products as “milk.” Manufacturers’ calling plant-based beverages as “milk” is a hot topic in dairy right now. The National Milk Producers Federation

(NMPF – dairy co-op’s lobby in Washington, D.C.) has been pleading with the federal Food and Drug Administration to disallow plant-based products being labeled and marketed as “milk.” The word “milk” has a federal standard of identity with a narrow range of ingredients allowed in products labeled, “milk.” Almonds and oats are not among products allowed in FDA’s standards of identity for “milk.” Curiously, DFA is the single largest member of NMPF.)

It gets worse: DMI invented 50/50 blend ...

Dairy Management, Inc. (DMI – which coordinates much of the national dairy promotion effort funded by producer check-offs) — is taking credit for helping DFA develop the dairy/plant blended beverages. One of DMI’s areas of endeavor is developing new “dairy” products ... for better or worse. Did DMI directors affiliated with DFA recuse themselves when voting for this project?

DFA’s “50/50” Almond Milk & Oat Milk Beverages NOT Class I Products

by Pete Hardin

Credit Dairy Farmers of America (DFA) with creating another head-scratcher: marketing products that amalgamate, on a 50/50 percentage basis, low-fat, lactose-free milk with plant-derived beverages. Under the “Live Real Farms” logo, DFA is marketing beverages that blend cows’ milk either with almond or oat-derived liquid materials.

Worse yet: Dairy Management, Inc. – the national dairy promotion entity – invested dairy farmers’ check-off funds to develop that “50-50” crap.

Aside from debate about the merits of such questionable consumer products, one major question pops up: **How is the cows’ milk in these “50/50” dairy/plant blended beverages regulated by the federal milk order system?** Answering that question isn’t necessarily a black and white proposition ... depending, of course, on the complex rules governing USDA’s regulation of dairy through the federal milk order program.

Currently, according to information posted on the website of a DFA subsidiary, Live Real Farms, these amalgamated products are being marketed at 300 supermarkets in Minnesota. It’s presumed that the products are being processed at one of DFA’s Kemp’s subsidiary plants in Minnesota.

A source at USDA’s Agricultural Marketing Service in Washington, D.C. noted that these relatively new products – composed of half-cow’s milk and half-almond or half-oat derived materials – pose some regulatory questions about how to classify the cows’ milk portion of these products. The first question that arises: Is the dairy plant at which DFA’s “Live Real Farms” dairy/almond or oat beverage produced currently a pool plant regulated by the regional federal milk order. Yes, it would appear, DFA’s

Kemp’s facilities in Minnesota are pool plants. (Note: If the dairy/almond or blended beverage were produced at a non-pool plant, then it might take several months before federal regulators were able to ascertain the ultimate oat disposition of the farm milk used in such products.)

Clearly, the product does not conform to FDA’s standards for fluid milk. Thus, the federal milk order program cannot regulate that “stuff” at the highest value – Class I (fluid). Since “Live Real Farms” dairy/plant beverages are clearly not cheese (Class III under federal milk pricing rules), it cannot be Class III. Using that same logic, since the “Live Real Farms” beverages are not butter-powder, they cannot be classified as Class IV.

Class III Spot Premiums Rising in Midwest

by Pete Hardin

Farm milk supplies are tightening in the Upper Midwest – sparking premiums paid by manufacturing plants and more field persons traveling down rural roads, trying to solicit more producers for their plants.

Factors pulling down milk supplies include some farms exiting production, higher cull rates, lesser-quality crops that must be fed to dairy animals, fewer replacement heifers, and hot/humid weather that somewhat knocked down milk volumes and components.

Cheese plants in the Upper Midwest are starting to vigorously search for and pay for additional milk supplies. Will this tighter supply/demand situation trickle down to farmers’ milk checks showing fewer marketing costs and deductions???

The August 5-9 issue of USDA’s Dairy Market News reported that:

Thus, by default, USDA’s current wisdom appears to be to regulate the cows’ milk portion of these “50-50” products as Class II. Products specifically included in the Class II category include; yogurt, ice cream, sour cream, other cultured products, and eggnog. Perhaps eggnog is a good example to use – a beverage use that does not conform to FDA’s standards for beverage milk due to presence of non-dairy materials (other than flavorings) such as ... eggs.

In late August 2019, the federal milk orders will convene an every-other-year conference involving market administrators and other FMMO personnel. It’s estimated that the topic of products such as DFA’s “50/50” blends will be the subject of some discussion among regulators.

“Early in the week, spot milk trading offers were quiet. More reported prices, at higher premiums, began to trickle in by midweek. The reporters spot milk price range was from Class III to \$1.75 over. For some perspective, last year during this week spot prices were \$.50 under to \$1 over, while in 2017 prices ranged from Class III to \$1.50 under. More milk loads are headed from the Central Region to the East. Upper Midwest milk is reportedly headed into the Mid- and Northeast, while milk handlers in the lower half of the region are shipping milk Southeast.”

What a difference a year makes. Wisconsin cheese production has declined for seven straight months (vs. year-ago totals). Little cheap milk from Oder 33 (Mid-East) is now available, unlike one year ago.

Dr. Robert Cropp Predicts (Slightly) Higher Milk Prices

by Jan Shepel

After record milk prices in 2014, dairy farmers experienced four plus consecutive years of depressed milk prices — with 2018 being the lowest. In 2014, the Wisconsin all-milk price stood at \$24.56 for the year (oh the good old days!) and in 2018 the price averaged \$16.42 per cwt — the lowest since the disastrous year of 2009, when the dairy industry suffered along with the rest of the economy in a global financial meltdown.

During a Dairy Exchange meeting in Madison on July 23, University of Wisconsin dairy economist Bob Cropp noted that milk prices are improving but dairy farmers are looking in the rear-view mirror at four years of low prices and unprofitable margins.

Milk prices in 2018 were headed upward until a trade war developed, reducing dairy exports. That was when the Trump administration, citing national security concerns, implemented tariffs on steel and aluminum from Canada and Mexico and some goods from China. At that point all three countries placed retaliatory tariffs on U.S. dairy products. Cropp notes that prior to that initial volley in what has become a full-fledged trade war, dairy exports had been increasing to well above year-earlier levels. Exports fell off after the retaliatory tariffs were put in place. The trade war depressed farm milk prices since late summer 2018.

Dairy farm & milk cow numbers down

For all of 2018, Wisconsin's all-milk price was well below the prices farmers were paid in 2017, with the lowest prices being set in July. Given the ongoing financial losses, loss of equity and financial stress, Wisconsin lost more than a "normal" number of dairy farms in 2018, and Cropp said he expects to see more exits in 2019.

When 2014 began, there were 10,541 dairy herds in the Wisconsin. At the beginning of 2018, that number was down to 8,801 and by January 2019, there were 8,110 dairy farms left in the state. That was a loss of 691 herds in 2018 — or the equivalent of 7.9%. In addition, he noted that Wisconsin has lost 212 herds since January 2019.

Overall, the United States had 40,199 dairy herds in 2017 and 37,468 in 2018 — a loss of 2,731 or 6.8%

Cropp notes that several factors will help determine milk prices in 2019 — level of U.S. milk production, domestic sales of milk and dairy products, dairy exports and milk production in other dairy regions of the world.

Loss of equity will likely dampen U.S. dairy herd expansions and that, coupled with the loss of so many dairy operations, will bring down production, he said. In addition, slaughter cow prices are improving and cow slaughter is up 6%. Milk cow numbers have been declining since June 2018, Cropp said, and that decline has continued through 2019. Increases in milk production per cow have been hampered by unfavorable returns over feed costs through the first half of this year, he added.

Milk cow numbers have been declining since June 2018; they declined 10,000 head from February through March and are 86,000 head lower than year ago numbers.

In Wisconsin, 2018 marked the first decline in milk cows since 2005, Cropp said and he predicted that cow numbers are not likely to increase in the state during 2019. "Depending on milk per cow, 2019 milk production may increase by less than 1%," he said.

Domestic and export demand make up the total demand for milk and dairy products. Domestic demand normally can handle no more than a 1% increase in yearly milk production to maintain favorable milk prices. Fluid milk sales declined in 2018 and butter and cheese sales had modest growth, with total sales up just 0.7%. (Since 2000, fluid milk sales have dropped by 8.5 billion pounds — that's 15.2%)

"Any milk production above 1% needs to be exported to maintain favorable milk prices," he said.

As for domestic sales in 2019, the economy is expected to continue to grow, but probably at a slower pace. Wages are higher, unemployment is low and the Consumer Confidence Index is positive, although weaker. The decline in beverage milk sales is expected to continue. However sales of whole milk are bucking that trend — they are up 1.9% (from January to February.) During that same period skim milk sales were down 9.2%.

Cropp noted that dairy exports set a new record in 2018 at 15.8% of milk production yet milk prices fell. According to the U.S. Dairy Export Council, sales of non-fat dry milk/skim milk powder were up 18% in 2018 over 2017. Cheese sales were up 2%, butterfat sales were up 61%, lactose sales were up 9% and milk protein concentrate were up 40%.

Trade wars pull down exports, prices

But it's a tale of highs and lows, divided in mid-year (2018) by the trade war. Dairy exports were robust for the first half of the year, but were dampened in the second half as key U.S. dairy export markets imposed retaliatory tariffs on U.S. dairy product imports. The result was that on a milk-fat equivalent basis, exports in the first half grew by 18.9% but declined by 8% in the second half of the year.

"Unless the trade disputes with Mexico, China and Canada end soon, which doesn't seem likely, dairy exports are likely to be lower than in 2018," Cropp said. "The USDA is forecasting exports on a milk-fat equivalent basis to be down 6.7% and on a skim solids basis, down 5.4%."

On the positive side for dairy exports, Cropp pointed out that the growth in worldwide milk production has slowed. With a drought in the European Union plus tight margins, milk production there is flat. Drought in Australia has reduced milk production by 6.4% from July through February. Flooding in Argentina has impacted their milk production. "I don't look for strong world production," he said. "There are still opportunities to grow exports."

Also in the EU, the large intervention stocks of skim milk powder have been reduced. World prices of dairy products are increasing — there have been 10 con-

After record milk prices in 2014, four consecutive years of depressed milk prices with **2018 the lowest milk prices.**

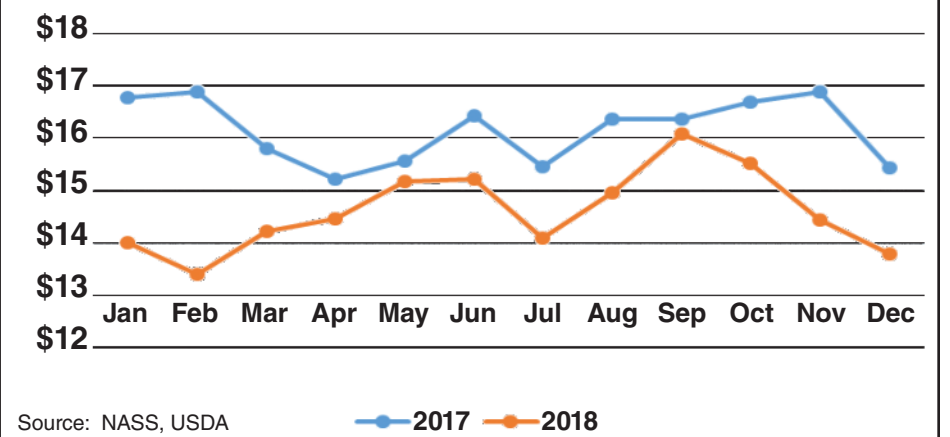
Year	Class III average	Class IV average	WI All Milk Price
2014	\$22.34	\$22.09	\$24.56
2015	\$15.80	\$14.35	\$17.79
2016	\$14.87	\$13.17	\$16.78
2017	\$16.16	\$15.16	\$18.13
2018	\$14.61	\$14.23	\$16.42
Four year average	\$15.36	\$14.21	\$17.28

The **milk price in 2018 was the lowest price since the disastrous year of 2009.**

Source: AMS, USDA

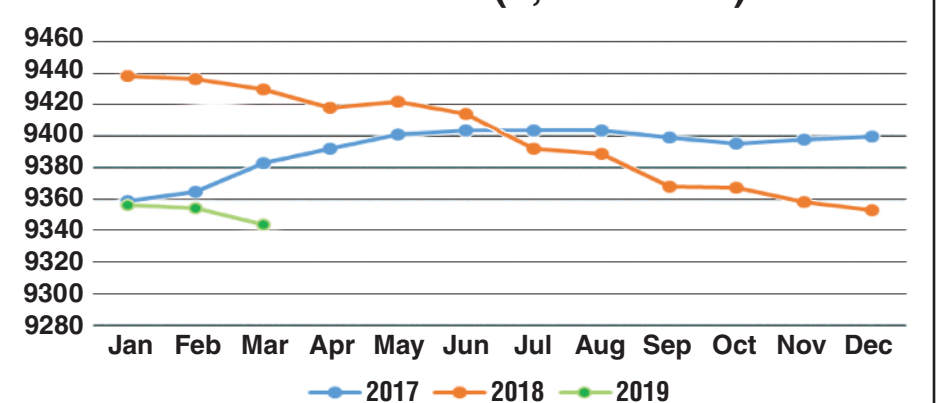
In 2018, farmers experienced the lowest prices for milk since the ruinous prices of 2009 and it marked the fourth consecutive year of depressed milk prices. Dairy economist Bob Cropp sees 2019 holding more promise for better milk prices than last year, but they might not be as good as they were in 2017. That's when Wisconsin's all-milk price was \$18.13 per cwt. No one sees prices on the horizon like 2014, when record highs were set.

Class III Price Per Cwt.



This graph compares Class III milk prices (cheese milk) in 2018 to the prices farmers received in 2017. Thanks at least in part to trade disruptions, milk prices last year lagged behind 2017's Class III price, which were set before the trade wars began. In 2018, prices were starting to rise through May, but tariffs and trade disruptions spelled trouble the rest of the year.

U.S. Milk Cows (1,000 Head)



Milk cow numbers have been declining since June 2018; declined 10,000 head February to March are 86,000 head lower than a year ago or -0.9%.

Milk cow numbers in the United States have been declining for more than a year and stand at 86,000 head lower than last year — almost 1% lower. Dairy economist Bob Cropp notes that cow slaughter prices are up, leading cow slaughter to rise 6%. In addition the United States has lost 2,731 dairy herds or 6.8% and some of those cows simply went to slaughter.

secutive increases on Global Dairy Trade — which is good news here because it makes U.S. prices competitive.

Citing U.S. Dairy Export Council numbers from January 2019, Cropp noted that total whey product exports were down 28%, lactose sales were down 6% but milk protein concentrate sales were up 22%. Exports to China were down 41% from a year ago with a 54% drop in whey exports. As *The Milkweed* has reported, China's hog population has been decimated by African Swine Fever and whey is a key feed for those hogs that no longer exist.

In addition, cheese exports to Mexico were down 20%. In January, exports as a percent of U.S. milk production stood at 12.5%

In February, cheese exports turned around and were at their second-highest level ever — just under March 2014 levels. Sales to South Korea were up 71% and up 9% to Mexico. But whey exports to China were down 58%, the lowest since February 2011. Export sales as a percent of U.S. milk production stood at 14.3% for February 2019.

His analysis of all the factors leads Cropp to believe that Wisconsin's all milk price will be around \$17.76 per cwt — better than 2018's \$16.42 but not as good as 2017's \$18.13. The USDA has forecast an overall U.S. price of \$17.25 to \$17.75. Cropp points out that Wisconsin's farm milk prices run higher than the U.S. average.

Conventional & Organic CAFOs Giving Dairy Producers a Black Eye

by Mark Kastel

In June 2019, the animal welfare group Animal Recovery Mission (ARM) released a high-profile exposé on what appear to be gross abuses at one of the country's largest dairy production complexes, Fair Oaks in Newton County, Indiana. ARM focused on the Fairlife brand of filtered milk, supplied in part by Fair Oaks, packaged and distributed nationally in partnership with the Coca-Cola Company.

ARM followed the revelations concerning the milk going into the premium-priced Fairlife products with an organic encore: targeting one of the largest certified organic milk producers in the country — Natural Prairie Dairy Farms, LLC, (located in Hartley, Texas).

Natural Prairie, with upwards of 14,000 milk cows and four free-stall barn/parlors, supplies private-label milk to major U.S. supermarkets — including the country's largest supermarket chain, Kroger, and Meijer's (a regional superstore chain based in Michigan).

An ARM investigator working at Natural Prairie shot video footage documenting images showing undisputed serious, inhumane practices. "There's really no difference between this organic operation and conventional CAFOs," said Richard Couto, ARM's founder.

Natural Prairie is owned by Donald and Sherri De Jong — second-generation dairy producers from California, who built a number of conventional operations in West Texas and New Mexico, before also entering into organic milk production.

At least a portion of the milk from Natural Prairie has been trucked to the Aurora Organic Dairy plant in Platteville, Colorado. Aurora is the country's leading packager of private-label, certified organic milk. Kroger and Meijer both acknowledged that Natural Prairie is a supplier — an indication that Aurora might also be packaging milk as a contract processor.

ARM stated that its investigators followed three semi-loads of Natural Prairie's milk to Aurora's plant in Colorado in a single day. Since Aurora also sells packaged milk to Walmart, Costco, Target, and other grocery chains, it is unknown whether milk from Natural Prairie has been co-mingled and delivered to other retail customers.

Kroger stated its suspension of purchases from Natural Prairie was pending an audit by the National Milk Producers Federation's FARM auditing program (Farmers Assuring Responsible Management). However, it should be noted that the NMPF's FARM program was already certifying both Fair Oaks and Natural Prairie, assuring their wholesale customers that these industrial-scale operations were operating humanely.

Connecting the Dots

Fair Oaks owner, Mike McCloskey was a co-founder of Select Producers Cooperative, where Natural Prairie's Donald De Jong currently serves as vice chairman. McCloskey, according to the Indianapolis Star, is politically connected to the Trump administration as well as Indiana's governor. The McCloskeys have contributed hundreds of thousands of dollars to state and federal political campaigns. According to the newspaper, while he was building up Fair Oaks, the Federal Trade Commission accused him and three others of illegal insider trading. McCloskey had purchased thousands of shares of Dean Foods stock after learning of its pending merger with Suiza Foods in 2001.

Fair Oaks, with its amusement park-type agri-tourism complex, has 10 separate free-stall barns, each with a rotary parlor milking 3,000 cows. Fair Oaks also has upwards of 1,000 organic milkers in a separate facility.

Now, Natural Prairie is in the process of building another CAFO in Newton County, Indiana. Initial plans project that new dairy will hold over 4,300 cows and it is intended to be certified organic. Although the dairy industry might welcome the further development, some neighbors and one of the state's environmental groups, The Hoosier Environmental Council, are not so confident that the De Jong's expansion will add to northern Indiana's quality of life.

The Environmental Council has filed three separate legal actions against Natural Prairie, charging the company has misled county and state regulators and has already violated federal environmental law.

"The CAFO is being built on the Kankakee Sands which is an environmentally sensitive and historic site," said Kim Ferraro, a staff attorney for the public interest group.

Local neighbors see the CAFO as a threat due to the high aquifer and hydric soils in the area. "It's a former lakebed that was drained," explained Ferraro.

Bait and Switch

Consumers think that when they invest in premium-priced organic milk they are supporting superior environmental stewardship, a more humane model of animal husbandry, and fairness for the farmers who produce our food.

If the allegations documented in investigations by ARM prove to have merit, it would seem that organic consumers are being defrauded. Class action lawsuits have already been filed against Fair Oaks and Fairlife.

As consumer demand shifts to plant-based beverages — oftentimes featuring grossly inferior nutritional profiles — adverse publicity stemming from these kinds of videos give the marketplace competitors to dairy many powerful points to attack the dairy industry ... complete with graphic videos.

With "organic" milk from Natural Prairie in Texas being shipped long distances to a processing plant, and further, long distances to retailers — that model would seem to be environmentally questionable in the eyes of many organic consumers. Allegations of animal abuse and environmental degradation undermine key, foundational precepts for dairy — both conventional and, particularly organic.

Natural Prairie representatives allegedly presented the dairy as being managed organically when it applied for a zoning variance in Newton County, Indiana. They also stated the company would not be building a manure lagoon, nor would it be spreading manure. Instead, Natural Prairie in Indiana planned to use a Trident manure dewatering system to produce bagged fertilizer for commercial sales.

Authentic organic farmers view dairy manure, which is commonly composted, as a highly valuable commodity in a regenerative livestock system. Natural Prairie's intention in Indiana to sell dewatered manure as fertilizer for commercial sales seems like a disconnect from normal organic dairy farming practices.

However, the real disconnect, according to the Hoosier Environmental Council, is the fact that when Natural Prairie simultaneously applied for its state environmental permitting, the owners reportedly said nothing about operating organically and having cows on pasture (as required by USDA organic standards). Natural Prairie's manure management proposal showed land spreading, from a newly constructed lagoon, on 2,600 acres without any cow pies adding to nutrient loads.

And if that alleged subterfuge isn't enough, one of the environmental group's lawsuits charge that Natural Prairie has violated federal statutes by filling in ditches, without required Army Corps of Engineers permits, in addition to filling in wetlands.

Mark Kastel's personal commentary: I have long contended that although the federal organic standards are scale-neutral, *IF* those standards were enforced by the USDA, they would in fact be scale-limiting. To suggest that an "organic" dairy producer can milk 14,000 cows, three times a day, and move them in and out of facilities while obtaining any appreciable amount of the federally-mandated dry matter intake from fresh grass (especially in the desert-like conditions of West Texas), is really challenging to comprehend.

It will remain to be seen whether regulators step in to level the playing field, or whether educated consumers flex their muscles and shift market share to clean up this mess in conventional and organic dairy. So far market share is shifting from organic milk to non-dairy, plant-based beverages. The black eyes created by unethical operators hurt all dairy producers of every scale.

Mark Kastel, a longtime organic dairy industry observer and watchdog, is a former development consultant, registered lobbyist on behalf of family-scale farmers and was co-founder of The Cornucopia Institute.

Sassy Cow's Organic Status in Jeopardy

Repeated violations of USDA's organic rules by two related Wisconsin businesses — Sassy Cow Creamery, LLC and Baerwolf Dairies, LLC — leave those firms on the verge of forfeiting their organic status. Sassy Cow Creamery is a producer-handler based near Columbus, Wisconsin — northeast of Madison.

On July 30, 2019, Bruce Sommers, Administrator of USDA's Agricultural Marketing Service, released a decision that denied an appeal by Sassy Cow Creamery and Baerwolf Dairies of the determination by those firms' organic inspection service to remove those firm's organic status. The firm inspecting Sassy Cow Creamery/Baerwolf Dairies is the Midwest Organic Services Assn. (MOSA).

USDA's July 30 decision leaves Sassy Cow Creamery/Baerwolf Dairies one month to file a final appeal of the determination to suspend organic status. However, the USDA decision listed those firms' long history of repeated violations and warnings from MOSA. Such violations cited include: widespread failure to keep proper records, improper transitioning of livestock from conventional to organic status, failure to meet USDA's organic rules for days on pasture and failure to have cows obtain their requisite 30% dry matter intake from fresh pasture.

Barring a successful appeal, the organic certification of Sassy Cow Creamery/Baerwolf Dairies will be suspended. USDA's decision allows for those firms to submit a request for reinstatement of the certification. But that request must be accompanied by evidence demonstrating correction of each noncompliance.

[Editor's comment: The long history of failure by Sassy Cow Creamery/Baerwolf Dairies to comply with organic standards is detailed in the USDA decision dated July 30, 2019. However, it seems somewhat ironic that a small operator in Wisconsin is likely to lose its organic licenses, while so-called "organic" mega-dairies in arid regions (such as Texas) keep flooding the organic milk markets and busting prices for honest organic dairy farm families. Six "organic" dairies in Texas produce more milk than Wisconsin's 450 (or so) family organic dairy farms.]

USDA's Ibach & Purdue Hurting Organic!

by John Bobbe

Earlier this year, I wrote in *The Milkweed*, "Reports are that Greg Ibach [USDA Under Secretary] is a major road block for common sense advancement of organic. He is reportedly micro-managing the National Organic Program."

The intent to do what pigeons normally do by Ibach to organic became readily apparent in his testimony on July 25, 2019 when he testified before a House Agriculture Subcommittee on the subject of "Enhancing Organic production."

A FoodDive brief (July 29, 2019) reported it this way: "USDA Undersecretary of Agriculture Greg Ibach testified before the House Agriculture Subcommittee this month that plants grown with the aid of genetically modified organisms and gene editing could be allowed to be certified organic in the future."

"I think there is the opportunity to open the discussion to consider whether it is appropriate for some of these new technologies that include gene-editing to be eligible to be used to enhance organic production and to have drought- and disease-resistant varieties, as well as higher-yield varieties available," Ibach said.

Since passage of the Organic Food Production Act in the early 1990s, genetically modified organisms have been excluded and a non-starter for both organic farmers and consumers. Consumers don't want genetically modified materials in their food or in production of organic food.

Both Ibach, who is a shill for Big Ag from Nebraska, along with his boss — USDA Secretary Sonny Perdue (another corporate stooge,) — have totally screwed up conventional agriculture with farmers filing for bankruptcy at rates

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WI Towns Safeguarding Water Find Uniform Frustration Under State Law

by Tony Ends

Rural Wisconsin residents today find pathways to ensuring safe drinking water can take many years.

A pair of townships about 200 miles apart are now linked in legal struggles for clean water. Some Green County Town of Sylvester residents are closely watching very similar concerns for Keweenaw County's Town of Lincoln, now before the state Supreme Court.

Each town filed petitions (years apart) for administrative judges to review state Department of Natural Resources (DNR) waste permits for Concentrated Animal Feeding Operations (CAFOs).

Yet Sylvester's petition regarding DNR permitting last year of Pinnacle Dairy's 5,800 milk cow waste operation just got its scheduling order in late June. Lincoln Township's petition over DNR waste permitting of Kinnard Farms' 8,200 cows evolved over 6 years into oral arguments before Wisconsin's Supreme Court next fall or winter.

Sylvester's three-person Board of Supervisors, as reported in *The Milkweed's* July 2019 issue, is still conferring with legal counsel about which of eight permit concerns to carry forward. The DNR granted to let all eight a year ago July go to a 7-day contested case hearing. That hearing is set for Feb. 24 to March 3, 2020.

Yet Kinnard Farms is challenging two of the same issues, i.e., whether the DNR can cap numbers of animals and require water monitoring at land-spreading sites in a waste permit, will be before the state Supreme Court about the same time.

Complicating the situation further for Sylvester, the town's newest supervisor, Mike Witt, announced on July 12 that he must answer citizen complaints before the Wisconsin Ethics Commission.

Witt began that night recusing himself from DNR waste permit discussion or decision, even leaving town hall meetings well ahead of any voting. Recently elected Town Chairman Dan Moehn called the July 12 special session to ask the other town supervisor, Dave Schenk, to recommend the town get an attorney to defend Witt against the state ethics charges.

Schenk, along with a number of the 25 citizens present for the Town's June board meeting, raised conflict-of-interest issues regarding Witt. Witt openly admitted he grows silage for the CAFO whose state permit the town is challenging. He also harvests and hauls silage from neighboring fields for Pinnacle Dairy and hauls liquid manure from its slurries as part of Pinnacle's land base.

Yet at that point in June, Witt refused to recuse himself from discussion. He motioned and voted with Moehn's support to disassociate the town from all but one waste permit challenge. That issue questions whether the permit is reasonable because it does not demonstrate separation of the base of Pinnacle's 20 acres of waste facilities from water saturation on the former wetlands site.

At the July 12 special meeting, Schenk begged off Moehn's appeal that the town stand by Witt in face of state ethics charges. Schenk sought advice from the Wisconsin Towns Association, whose staff advised the town can only expend money for the people's benefit.

Citizens also sought advice, on the town's paying legal fees against their complaints, from both the association and the state Ethics Commission. One attorney told town residents their town risked allegations of misappropriating funds if it were to pay Witt's personal legal fees against conflict-of-interest complaints from its own townspeople.

With Witt now legally defending himself against the state ethics complaints on his own nickel(s), Schenk and Moehn held a closed session July 29 with town legal counsel regarding the contested case proceeding. Witt recused himself from the discussion and left the town hall.

In open session following the closed meeting, Schenk motioned the town drop its well-monitoring issue with Pinnacle Dairy from the contested case proceeding. He also recommended that the town authorize its legal counsel to enter into negotiations with Pinnacle Dairy to allow third-party monitoring of the wells at the 125-acre CAFO property. Moehn supported both motions.

Witt told the town in June that both the Green County Land and Water Conservation office and the state DNR were not getting Pinnacle well monitoring data, pending the town's contested case proceeding.

Well water safety is a growing concern for hundreds of Wisconsin townships now seeing state permits granted to more and more CAFOs. The CAFOs are often milking thousands of cows, producing tens of millions of gallons of waste.

Reports around the state in August showed troubling numbers of private wells in southern Wisconsin with fecal contamination. Another study in Kewaunee County in 2017 showed well contamination linked to both cattle — especially during wet conditions — as well as ineffective septic systems, according to the *Milwaukee Journal-Sentinel*.

Wisconsin Geological and Natural History Survey and the U.S. Agricultural Research Service also conducted work showing 42 percent of 301 wells did not meet standards for bacteria or nitrates in January. Grant, Lafayette and Iowa counties funded that testing.

Constructing livestock waste facilities more expansive than big city sewage treatment plants, CAFOs are often operating for years before waste permit protections are conclusively determined. State laws, state agencies, administrative rules, court rulings and appeals prescribe timeframes for citizens that petition CAFO waste permit changes.

Midwest Environmental Advocates (MEA) has been helping Town of Lincoln press for greater DNR waste permit protections with Kinnard Farms throughout its six years of legal proceedings. MEA reported in June that the Wisconsin Department of Justice filed a motion with the state Supreme Court, indicating that its position in this case has changed and that the Department now supports the findings of the lower courts. Wisconsin Attorney General Josh Kaul, who took office last January, had pledged to more strictly enforce water quality standards.

"In other words, the Justice Department now appears to agree, at least in part, with our position that DNR has the authority to require CAFOs to comply with additional permit conditions that protect water resources," MEA stated on its website.

"This good news has been tempered by the legislature's request to intervene in the case. Republican lawmakers, who have hired private attorneys paid for by taxpayers, continue to argue that DNR and other regulatory agencies ought to be prohibited from imposing permit conditions unless they are explicitly authorized by state statute or administrative code," MEA stated.

The Wisconsin Department of Agriculture, Trade and Consumer Protection is holding hearings around the state in August, seeking public input from citizens regarding the rules that govern large livestock facilities. State lawmakers set in motion those rules back in 2004 to make permitting CAFO conditional use permits uniform under state control. Towards that end, Wisconsin laws were changed to remove CAFO zoning approval powers from towns and counties.

Now the DNR is struggling with a backlog of accompanying waste permits. Its website shows 72 of 308 CAFOs operating with expired 5-year permits. For Sylvester and Lincoln townspeople, pressing for stronger DNR permits is taking years of legal process as well.

Emory University Study Probes Drug, Growth Hormone Residues in Milk

by Pete Hardin

Researchers from Emory University's Department of Pediatrics recently published a study of conventional and organic beverage milk samples that were collected from around the country. This study is one that dairy leaders will try to wish away.

The journal article appeared in late June 2019, with Jean A. Welsh of Emory University's School of Medicine as the lead author. The title of the article summarizing that research is, "Production-related Contaminants (Pesticides, Antibiotics and Hormones) in Organic and Conventionally Produced Milk Samples Sold in the USA."

The study found prevalent antibiotic contamination of milk samples, with multiple samples exceeding federal limits. Further, conventional milk samples had residues of bovine growth hormone (bGH) and Insulin-like Growth Factor-I (IGF-I) far in excess of organic milk samples.

The samples were collected in 2015 from nine regions around the United States — for both 2% and Whole milk. A total of 69 samples were collected and tested — 34 organic and 35 conventional.

Residues of pesticides were detected in 60% of conventional milk samples, but zero such residues were found in organic milk samples. Meanwhile, the Emory University researchers found at least one antibiotic present in 60% of conventional milk samples. But no antibiotics were detected in organic milk samples.

The presence of bovine growth hormones and their secondary hormone residue (IGF-I) were also

tested — with interesting results. The researchers correctly acknowledged that all cows' milk contains natural levels of bovine growth hormones. However, the researchers suggested that the higher levels of bovine growth hormone in conventional milk, compared to organic milk, likely represented residues from injections of recombinant bovine growth hormone — a veterinary drug used to stimulate cows' milk production. Median bGH levels in conventional milk were 9.8 nanograms per milliliter, compared to 0.5 ng/ml for conventional milk. That represents a difference of nearly 20 times more bGH residues in conventional milk.

IGF-I is a secondary hormone generally produced in mammals' livers in response to levels of growth hormones in blood. IGF-I is identical in cows and humans; it is found in greater quantities in milk from cows injected with recombinant bovine growth

hormone, and is not dissipated by commercial pasteurization. IGF-I's relationship to cancer development has been the subject of thousands of medical and scientific studies. IGF-I levels found in conventional milk samples by the Emory University researchers were 3.2 times greater than results from testing organic milk supplies.

Quickly, heads of dairy trade associations condemned the Emory University study. (It's worth noting that the CEOs of National Milk Producers Federation and the International Dairy Processors Assn. are both former Monsanto lobbyists. Monsanto commercialized recombinant bovine growth hormone and began selling the product to U.S. dairy farmers in February 1994.) Among criticisms leveled at this study was the year that the samples were collected (2015) and the number of samples (69-34 organic and 35 conventional).

UN Report: Climate Changes Mean Future Food Shortages

A United Nations report paints deeply concerning outlook for global food supplies, due the challenges of changing weather and climate patterns

The UN study concludes that continued warming temperatures will reduce global agricultural productivity, and as the world's population expands, it will be difficult to have enough food for everyone. A summary of that study was released on Thursday, August 8 by the Intergovernmental Panel on Climate Change. The task force which completed that study consisted of about 100 scientists from 52 countries.

If global temperatures continue to climb, food production will be challenged by numerous events, including: floods, drought, and other storms. The Earth's soils are reported as heating up at twice the

rate as the Earth at large. The report also noted that soil erosion threatens global food production. The fertile topsoil resource is eroding at rates 10X to 100X greater than soils may be replaced.

Media coverage cited the study's authors' concerns about "multi-bread basket" catastrophes occurring simultaneously.

Media stories summarizing the report note that shifting consumer behaviors are recommended, including less reliance upon meat and dairy. Such proposals will likely spark backlash from established agricultural interests like dairy and beef association. Ruminants — dairy and beef cattle — are cited as serious culprits in the production greenhouse gases (GHGs). Dairy must constructively face such headwinds.

Dairy Livestock Markets Flat at Best

by Pete Hardin

Despite stronger farm milk prices, many farmers are skittish about acquiring additional dairy livestock at this time. Why? First of all, cash flows are still tight, with plenty of bills to pay following spring planting expenses. Also, serious concerns about the quantity and quality of winter feed inventories (hay and corn silage) is currently holding down buyers' interests in bringing home too many additional head.

When dairy livestock prices start moving upwards, that trend will be led by springing heifers. That's because livestock buyers mostly want to add critters that will make money for them promptly.

Looking ahead: *The Milkweed* foresees stronger milk prices in the fall and winter months – extending through 2020. Farm milk supplies will be limited due to long-term, poor farm milk prices and a shortage of replacement heifers.

During the past two years, dairy farmers have adopted alternate breeding and sales strategies for dairy livestock. On one hand, many dairy heifers have been purchased for placement in beef feedlots. Also, a surprising number of dairy heifers and milk cows have been bred to Angus semen – to take ad-

Brush Livestock of Colorado (Aug. 1): Prices off \$125 from last month's top sellers. Average for monthly sale about \$50 below per head vs. early July results. All top-selling Holstein springers consigned by Empire Dairy: Top springer: \$1,210. 2nd top seller: \$1,175. 3rd top seller: 6 animals at \$1,150. Top 16 springers: \$1,135 avg. Top 44 springers: \$1,080 avg. Top 76 springers: \$1,010. **Short-Bred heifers:** No test. **Open heifers:** 6 Jerseys – 466 lb. avg/\$60/cwt. 5 Holsteins – 604 lb. avg./ \$79/cwt. 9 Holstein heifers: 738 lb./\$76/cwt. **Next sale:** September 5 – 10 a.m.

Rosebush, MI (Aug. 7): Light buyer interest. Prices for baby calves nosedived. #1 Holstein springers: Range — \$900 to \$1,100. Extreme top: \$1,400. Fresh cows: Extreme top — \$1,450. 3 herds sold: One herd with 70 years A.I. — \$1,500 top cow, avg. \$900 for milkers. **Baby calves:** \$20 to \$50. Virtually no interest among buyers. **Smallest number of open heifers in years consigned this day:** 300# — \$.080/lb. 500-600# — \$.060-\$0.70/lb. Breeding age heifers little stronger: around \$700. Short-bred heifers (1-4 mos. preg.) — \$700-\$800. **Separate sale previous week:** 300 milking cows, fine herd – 80# milk/day. Avg. \$1,000.

Kidron, Ohio (Aug. 8): Lesser quality animals offered for sale this week. #1 springers: Top — \$1,100. Range for #1 springers: \$850-\$1,100. #2 springers: \$700-\$950. **Cull cow prices strong:** Top – 67.5 cents/lb. **Bull calf prices:** \$70 to \$120. Many bull calves in \$70-\$75 range. **Aug. 8 hay sales (small square bales):** 2nd cutting (\$210-\$410/ton). 3rd cutting: \$300-\$400/ton. (Note: Kidron is a market where current hay demand is strong for both small square bales among Amish and local horse owners.)

vantage of higher values paid for “black” calves. Thus, the dairy industry is facing a shortage of replacement heifers in the next couple years, in the analysis of *The Milkweed*.

A producer in southeast Wisconsin reports that the market for dairy bull calves, as well as for “black” dairy/beef crosses, has nose-dived in late July and early August.

These Dairymen VERY Unhappy with Dairy Revenue Protection

by Jan Shepel

When farmers in some Wisconsin offices of the Farm Service Agency started to sign up for the new Dairy Margin Coverage (DMC) – the federal “safety net” program for dairy farmers enacted in the most recent farm bill – many vented to staff their unhappiness with the other new dairy program — Dairy Revenue Protection (DRP). DRP was designed to work sort of like crop insurance programs, except for dairy.

DMC is obtained through county offices of the Farm Service Agency. But DRP is obtained through crop insurance agents. American Farm Bureau Insurance Services, Inc., which has been involved in crop insurance programs since 1995, helped create the program and sells the coverage through its insurance agents. DRP is also available through any firm that sells crop insurance. Staffers in the FSA offices had to explain to dairy producers that the two programs are separate and unrelated, and that the outcome from the insurance-like program doesn't impact what happens through the DMC.

Bob Froelich, a Sullivan, Wisconsin dairy producer, said he thought he was “pretty smart” when he signed up for the Dairy Revenue Protection, which is based on quarterly performance of dairy prices. As it turns out, he now tells *The Milkweed* that “it's another one of those worthless programs where they've got their hand in our pocket.”

He joined a couple of his dairy farming neighbors in signing up for the coverage, believing that with the \$13 milk price they were facing, they would come out ahead by three to four dollars per cwt. “My lender kept telling me it's another tool in your toolbox to protect your price,” he recalls.

Froelich now wonders out loud why the government condones a program that guarantees the insurance company a 14% profit with this program (as it does with crop insurance programs.) “Why don't they bypass the insurance company and give us the 14%,” he asks rhetorically. “If there are any losses [to producers], the taxpayer foots the bill and the insurance company is still guaranteed a profit.”

This Jefferson County farmer milks 135 cows in a parlor he built 10 years ago, just a few years after building a new freestall barn. An NFO shipper, his milk goes to a cheese factory in southwest Wisconsin. He milks Holsteins but gets a fairly high component value on their milk and signed up for coverage based on those component values.

He signed up for coverage throughout this year and believes now that he won't see any payback on it. “That's a \$1,000 shot in the butt. I could have used that money to pay a bill,” he says. The salesman for the coverage was high on it at the beginning, he adds, based on the way the futures prices looked in the marketplace.

“Will I sign up for it next year? I don't think so,” he said definitively. “They put this out there as a golden parachute and we're not going to get anything from it.”

His experiences with crop insurance and with the Revenue Protection coverage for dairy have left him with a bad taste in his mouth. “They are guaran-

teed their profit,” he says of the insurance companies. “Where's ours? It bothers me that everyone seems okay with that.”

Froelich grew up on his farm, which has been in his family since 1875 but he believes he is the last generation who will farm it. Part of that concern is that dairy farmers cannot make a profit. “In the world market, every other business builds their profit in, and we can't do that. Something's got to change or there won't be any of us left,” he says.

Ohio farmer disillusioned

Another farmer in another region of the country who is very unhappy with the DRP insurance program is Jeff Ring, who milks from 312 to 350 Jersey cows in northeast Ohio, just a couple miles from the Pennsylvania border.

His lending agent from Farm Credit brought in an insurance agent in to see Ring about the new program. “This Farm Credit rep from Orwell, Ohio pulls his laptop out and showed me how much I would get

if the triggers were met. There's also a 1.5 factor, meaning I could get half again as much. I thought I'd be crazy not to sign up,” he told *The Milkweed*.

Ring now says he wishes he had taken a snapshot of that screen, where the agent showed him what he could expect as a payback on his premium because it hasn't come close to that number. Ring covered production of 1.2 million pounds for three months (the revenue coverage insurance is sold by the quarter) and was expecting something in the neighborhood of \$93,000 on a \$2,000 premium (half of which is subsidized by the federal government – so his share was about \$1,000). Instead, he got a \$6,500 return.

That was for the first quarter of 2019. His premium is due for the second quarter coverage and he hasn't paid it yet. When he talked to his crop insurance agent (different agent, different agency) about his frustration with DRP, that agent told him when it was presented to them, they decided not to sell it. As Ring recalls it, that agent's exact words were, “This is stupid.

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June 2019 Milk Production

State	Milk Cows ^{1,2}				Milk Production ^{1,3}			
	June		April - June		June		April - June	
	2018	2019	2018	2019	2018	Percent change from 2018	2019	Percent change from 2018
		(thousands)			(million lbs)	(percent)	(million lbs)	(percent)
AL	--	--	5.5	5.0	--	--	18.0	-14.3
AK	--	--	0.3	0.2	--	--	0.5	-28.6
AZ	206	196	208.0	198.0	413	-4.6	1,242.0	-5.0
AR	--	--	6.0	5.0	--	--	17.0	-19.0
CA	1,735	1,728	1,735.0	1,728.0	3,305	1.2	10,463.0	1.7
CO	177	187	176.0	185.0	382	6.0	1,208.0	4.9
CT	--	--	19.5	19.5	--	--	108.0	-2.7
DE	--	--	4.9	4.3	--	--	19.2	-23.5
FL	120	115	121.0	115.0	201	-3.0	614.0	-4.2
GA	82	82	83.0	83.0	141	--	453.0	-0.2
HI	--	--	2.1	0.8	--	--	0.8	-92.5
ID	610	619	609.0	619.0	1,278	2.0	3,925.0	2.3
IL	93	84	93.0	84.0	160	-8.1	454.0	-9.7
IN	184	177	184.0	178.0	347	-2.6	1,045.0	-3.1
IA	220	217	220.0	217.0	435	-0.5	1,323.0	-0.5
KS	159	162	158.0	162.0	308	1.6	960.0	1.7
KY	--	--	56.0	51.0	--	--	250.0	-8.1
LA	--	--	11.5	10.5	--	--	37.0	-14.0
ME	--	--	30.0	30.0	--	--	166.0	3.8
MD	--	--	46.0	43.0	--	--	219.0	-10.6
MA	--	--	11.5	10.5	--	--	49.0	-7.5
MI	423	425	423.0	425.0	948	2.2	2,918.0	1.7
MN	453	447	454.0	448.0	831	0.8	2,522.0	0.5
MS	--	--	9.0	8.5	--	--	34.0	-5.6
MO	--	--	83.0	79.0	--	--	303.0	-9.6
MT	--	--	12.5	11.5	--	--	65.0	-7.1
NE	--	--	60.0	58.0	--	--	352.0	-4.1
NV	--	--	32.0	33.0	--	--	190.0	2.2
NH	--	--	12.5	11.5	--	--	62.0	-4.6
NJ	--	--	6.0	4.8	--	--	26.0	-10.3
NM	332	321	333.0	321.0	707	-2.8	2,100.0	-2.6
NY	623	627	624.0	627.0	1,277	0.2	3,869.0	1.2
NC	--	--	44.0	43.0	--	--	234.0	-4.5
ND	--	--	15.5	14.5	--	--	83.0	-2.4
OH	260	246	261.0	248.0	468	-4.3	1,377.0	-4.7
OK	--	--	40.0	42.0	--	--	192.0	3.8
OR	121	122	121.0	122.0	212	1.4	654.0	1.9
PA	521	490	523.0	493.0	896	-6.5	2,589.0	-6.9
RI	--	--	0.7	0.7	--	--	2.8	-6.7
SC	--	--	14.5	12.0	--	--	55.0	-16.7
SD	122	123	121.0	123.0	229	0.9	692.0	0.7
TN	--	--	38.0	32.0	--	--	145.0	-14.7
TX	536	565	535.0	564.0	1,083	-5.6	3,511.0	5.9
UT	101	98	100.0	98.0	-199	-3.0	579.0	-2.9
VT	127	126	127.0	126.0	227	-0.4	687.0	0.4
VA	84	75	84.0	76.0	135	-8.1	387.0	-9.8
WA	277	278	277.0	278.0	568	0.2	1,721.0	0.5
WV	--	--	7.0	6.0	--	--	23.0	-20.7
WI	1,274	1,268	1,274.0	1,269.0	2,586	-0.5	7,771.0	-0.1
WY	--	--	6.0	6.0	--	--	36.5	2.0
23 State Total	8,840	8,778	--	--	17,336	0.1	--	--
U.S. ^{4,5}			9,418.0	9,329.0			55,752.0	-0.1

¹ Preliminary. ² Includes dry cows, excludes heifers not yet fresh. ³ Excludes milk sucked by calves. ⁴ Includes states for which individual monthly estimates are not available. ⁵ Milk cows will not add due to rounding. Source: U.S. Department of Agriculture, National Agricultural Statistics Service, *Milk Production*, (July 2019).

Key Commodity Markets

Cheddar Cheese Chicago Mercantile Exchange

	40-lb. Blocks	500-lb. Barrels
July 12	\$1.7850 (-6.25¢)	\$1.7400 (-4.00¢)
July 19	\$1.7800 (-0.50¢)	\$1.7050 (-3.50¢)
July 26	\$1.8250 (+4.50¢)	\$1.7200 (+1.50¢)
Aug. 2	\$1.8200 (-0.50¢)	\$1.6925 (-2.75¢)
Aug. 9	\$1.8675 (+4.75¢)	\$1.7200 (+2.75¢)

Prices in dollars per lb. Weekly change () in cents per lb.

USDA/AMS

40-lb. Cheddar Blocks: \$ per lb.

	Weighted Price (\$/lb.)	U.S. Sales (lbs.)
July 6	\$1.8204	11,449,331
July 13	\$1.8452	14,201,935
July 20	\$1.8636	13,411,556
July 27	\$1.8599	15,379,678
Aug. 3	\$1.8386	13,379,129

USDA/AMS

500-lb. Cheddar BARRELS: \$ per lb.

	Weighted Price (\$/lb.)	U.S. Sales (lbs.)
July 6	\$1.7072	9,257,204
July 13	\$1.7703	12,046,109
July 20	\$1.7919	11,909,406
July 27	\$1.7715	11,088,526
Aug. 3	\$1.7603	11,245,112

Comments: Cheese prices are strengthening due to good domestic demand and concerns about future supplies as farm milk production is constricting. Milk powder markets are softening. Butter prices at the CME have declined about 10¢ per pound during the past monthly.

Nonfat Dry Milk

Extra Grade & Grade A 'Mostly'

	Central/East	West
July 12	\$1.0300 – \$1.0500 (NC) (-1.00¢)	\$1.0300 – \$1.0500 (-0.50¢) (-0.50¢)
July 19	\$1.0200 – \$1.0500 (-1.00¢) (NC)	\$1.0200 – \$1.0500 (-1.00¢) (NC)
July 26	\$1.0100 – \$1.0500 (-1.00¢) (NC)	\$1.0100 – \$1.0500 (-1.00¢) (NC)
Aug. 2	\$1.0100 – \$1.0500 (NC) (NC)	\$1.0100 – \$1.0500 (NC) (NC)
Aug. 9	\$1.0100 – \$1.0500 (NC) (NC)	\$1.0100 – \$1.0500 (NC) (NC)

Prices in dollars per lb. Weekly change () in cents per lb.
Source: Dairy Market News

Grade AA Butter Chicago Mercantile Exchange

July 12	\$2.4125	(+0.75¢)
July 19	\$2.3975	(-1.50¢)
July 26	\$2.3700	(-2.75¢)
Aug. 2	\$2.3200	(-5.00¢)
Aug. 9	\$2.3150	(-0.50¢)

Weekly change () in cents per lb. Prices in dollars per lb.

July 2019 Federal Order Class Prices (per cwt.)

Class II: \$17.61 (+\$0.31); Class III: \$17.55 (+\$1.28);
Class IV: \$16.90 (+\$0.07)

July 2019 Product Price Averages (per lb.)

Butter: \$2.3893 NFDM: \$1.0393
Cheddar: \$1.8238 Dry Whey: \$0.3631

Class II Butterfat: \$2.6928 Class III/IV Butterfat: \$2.6858

Nonfat Solids: \$0.8628; Protein: \$2.4032; Other Solids: \$0.1689

Federal Order Class III (Dollars per cwt.)

	2017	2018	2019
Jan.	\$16.77	\$14.00	\$13.96
Feb.	\$16.88	\$13.40	\$13.89
Mar.	\$15.81	\$14.22	\$15.04
Apr.	\$15.22	\$14.47	\$15.96
May	\$15.57	\$15.18	\$16.38
Jun.	\$16.44	\$15.21	\$16.27
Jul.	\$15.45	\$14.10	\$17.55
Aug.	\$16.36	\$14.95	
Sep.	\$16.69	\$16.09	
Oct.	\$16.88	\$15.53	
Nov.	\$16.88	\$14.44	
Dec.	\$15.44	\$13.78	

Federal Order Class I Prices (3.5%) \$ per cwt.

Order	July '19	Aug. '19
Northeast	\$20.43	\$21.14
Appalachian	\$20.58	\$21.29
Florida	\$22.58	\$23.29
Southeast	\$20.98	\$21.69
Upper Midwest	\$18.98	\$19.69
Central	\$19.98	\$19.89
Mideast	\$19.98	\$19.89
California	\$19.28	\$19.99
Pacific Northwest	\$19.08	\$19.79
Southwest	\$20.18	\$20.89
Arizona	\$19.53	\$20.24
All-Market Average	\$20.00	\$20.71

International

(U.S. \$ per lb.)

	Oceania	Europe
Cheddar	\$1.7355-1.7922	NA
Butter*	\$1.9850-2.0417	\$1.7355-1.9283
SMP**	\$1.1343-1.2137	\$1.0095-1.1030
WMP***	\$1.3725-1.4406	\$1.4065-1.4859

Prices from USDA as of 08/02/2019

*82% butterfat **SMP = Skim Milk Powder

***WMP = Whole Milk Powder

Oceania = New Zealand, Australia

Dairy Commodities: Cheddar Stronger, Butter Declines, NFDM Weaker

Chicago Mercantile Exchange Dairy Commodity Prices Friday, August 9, 2019
40-lb. Cheddar Blocks \$1.8675/lb.
500-lb. Cheddar Barrels..... \$1.7200/lb.
Grade AA Butter..... \$2.3150/lb.
Grade A Nonfat Dry Milk \$1.0275/lb.

by Pete Hardin

The current dairy market picture features two different types of uncertainty – domestic and foreign. And overriding both those sectors is future uncertainty as global economies cool and trade wars threaten to shift into currency wars.

Domestically, sales of cheese – particularly Mozzarella and its off-grade “cousin” — pizza cheese – are spectacular. June 2019 saw Mozzarella output jump 5.8% over June 2018’s volume. That spectacular gain was the biggest monthly gain for Mozzarella production so far in 2019 – a year during the first half of which saw Mozzarella production increase by 4.9%.

But export markets are troubling, and will likely further deteriorate. Forget rhetoric about higher sales of U.S. exports in May 2019. Yes, prices per unit may have been higher, but the number of tons of U.S. dairy exports was down. Very recently, China has announced it will accept no imports of U.S. farm products. Sales of U.S. dairy products to China were already problematic, due to the trade war between the two nations.

As the U.S. and China intensify their trade war, other nations are running for protective cover, fearing that shrapnel from the U.S./China conflict will damage their economies. Reports indicate that New

Zealand is moving to weaken its currency – a move that would give the Kiwis a further advantage over the United States in selling dairy products globally.

Globally, severe weather events pose a definite threat to continued volumes of farm milk output. Dairy producers in the three major dairy exporting regions of the world (the European Union, Oceania and the United States) all face weather-induced challenges to crops and animal well-being.

Cheddar/Cheese: Cheddar prices continue their upwards climb at the Chicago Mercantile Exchange (CME). 40-lb. block Cheddar closed at \$1.8675/lb. on August 9. During June, U.S. plants produced 307 million lbs. of Cheddar (a 1.9% decline vs. June '18). For 2019’s first half, the nation cranked out 1.852 million lbs. of Cheddar (-2.7% vs. June '18):

Mozzarella is the shining star for cheese ... indeed, for the entire dairy industry. June 2019 saw the U.S. produce 375.8 million lbs. of Mozzarella and pizza cheese (+5.8%). During 2019’s first half, Mozzarella/pizza cheese output totaled 2.244 Billion lbs. (+4.9%). That spectacular, first half growth follows equally spectacular gains for Mozzarella during all of 2018.

Total cheese production in June was 1.072 billion lbs. (+0.6%). During January-June of this year, the Total Cheese category came in at 6.478 billion lbs. (+0.8%).

Looking to inventories, USDA’s Cold Storage report for June 30 listed Natural American cheese stocks (including Cheddar) totaling 784.9 million. That’s only a 3 million lb. decline from the May 31 total. Those Natural American Cheese inventories came in about 16 million lbs. below the late June 2018 total.

Butter: The nation’s butter plants churned 146.5 million lbs. of butter in June (+3.1%). For the year’s first half, our nation’s butter output was 999.8 million lbs. (-1.9% vs. 2018’s first half).

USDA reported butter inventories were 327.8 million lbs. as of 6/30/19. That figure represented an increase of 14 million lbs. over the May '19 inventory figure.

Dairy Protein Powders: Nonfat Dry Milk volume totaled 155.6 million lbs. in June (+2.2%). Buyer interest is lighter. January-June nonfat milk powder volume was 98.8 million lbs. (no change from 2018’s first half). Manufacturers’ stocks of nonfat dry milk were reported at 288.7 million lbs. on June 30. That’s a gain of about 4 million lbs. compared to June 2018 inventories.

Skim Milk Powder (SMP) – SMP output in June was 44.4 million lbs. – a 76.4% increase over the previous month’s total. Virtually all SMP produced in the United States is done for export orders. So it’s a good sign that SMP volume has increased. USDA does not provide data on SMP volumes in storage.

Whole Milk Powder (WMP): For June '19, U.S. plants produced 13.5 million lbs. of WMP – virtually all for export. That figure represents a decline of about 4 million lbs. from the May '19 SMP total. Manufacturers’ holdings of WMP as of June 30 were 39.9 million lbs. – that’s nearly a three-month supply, using June’s output as a benchmark.

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If you want additional copies of The Milkweed to give out at dairy meetings, call Pete Hardin at:

608-455-2400

Strategies for our future soil and food sustainability

U.S. agriculture potentially holds many solutions to lessen or deflect some of the challenges that Mother Nature is throwing at our country, *IF* we adjust our policies and practices. What's needed: Combating the weather/climate challenges to our nation's food system through a new vision of farmlands' roles in sustaining soils, easing flooding, and carbon sequestration. The extended Mississippi River basin, from western Pennsylvania to Montana, ought to be viewed as an expanse upon which solutions can be applied.

The future generally may be wetter and wetter for some, and more arid for others. Ocean temperatures and the atmosphere are warming. Warmer oceans cause greater water evaporation. That moisture rises into the atmosphere, to be re-deposited as precipitation (snow/rain). Warmer ocean water temperatures = more precipitation. That's a modern and future climate fact. And warmer air temperatures increase the atmosphere's moisture-holding capacity.

In February 2018 at the MOSES organic farming conference in La Crosse, a weather expert from a branch of the University of Minnesota offered a future perspective for northern states in the U.S., using historic weather trends. What's ahead? Winters will be warmer, and will feature more precipitation as rain. Additionally, there will be increased stretches during which soils are open (no snow cover) and not frozen. More rainfall and more time with thawed, bare soils is a disastrous prescription for increased soil erosion and flooding.

Farmlands offer great potential for helping solve future weather challenges, if we use our noggin. How?

• **Fund federal crops incentives to boost soils' organic matter.** THE primary focus of federal crop/soil programs should be topsoil conservation and increasing soils' organic matter content. Each 1% increase in soil organic matter boosts the water-holding capacity *per acre* by 16,000 gallons, according to analyses of USDA data. (That's the equivalent of nearly three large tank trailers of water, per acre.) We should view increased soils' organic matter content as building a better sponge. Thus, federal incentives to boost soil organic matter in watersheds can at least partially help hold moisture that would otherwise be headed downstream to flood, when fields are not frozen. But how?

• **Mandate winter cover crops for fields planted to annual row crops.** Winter cover crops have several important functions, including: soil retention, moisture retention (both during fall and spring), and boosting soil organic matter (carbon sequestration). Plowing down the cover crop – or simply just leaving the fibrous root systems – will boost soil organic matter. A further advantage: winter cover crops are able to absorb more nutrients (manure) in both the fall and spring. What are potential downsides to such a proposal? Planting longer-maturing varieties of corn and soybeans, for example, might have to be

USDA's Ibach & Purdue

Continued from page 8

not seen since the Great Depression. Now Ibach and Purdue want to throw the fastest-growing sector of agriculture, "organic" under the bus.

That these two incompetent bozos would want to screw up organic agriculture comes as no surprise. In July 2018, *Sustainable Food News* reported, "U.S. Agriculture Secretary Sonny Perdue isn't hiding his disdain for the concerns among small American organic food producers that the interests of larger corporate operations are eroding the integrity of the USDA's organic seal.

Asked by Bloomberg News recently about those concerns, Perdue said with a chuckle, "If you believe in socialism, you probably ought to export your operation somewhere."

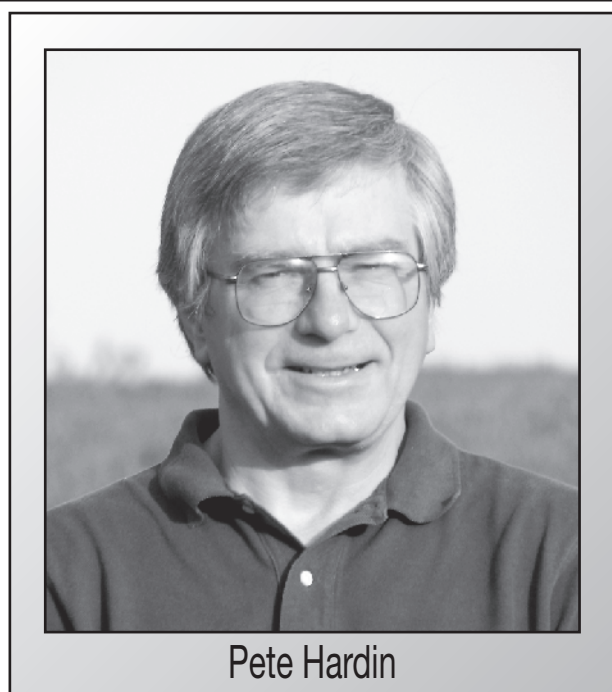
Both these guys were going to lead the charge for prosperity in agriculture like never has been seen before. Instead they have laid waste to thousands of farmers and the livelihoods of rural communities across the country. Here they come for organics. Maybe the Scottish farmers were onto something when the Scottish Constitution was written that farmers here could learn from. It was surmised that any farmer in Scotland should be able to travel to the Parliament by public transportation, horsewhip the appropriate public official and get back to do the chores in the evening.

scaled back – for adequate time at the end of the growing season to establish a winter cover crop. Result? Reduced yields for such row crops. Alternately, demand for seed for cover crop seeds might shift a few million acres from corn and soybeans production of appropriate local seed varieties for cover crops. Increased acreage for cover crop seed production would reduce row crop acreage – further limiting supplies of corn and soybeans (and hopefully driving up prices).

• **Create a 25-year federal program, funded by tax-free bonds, to revise flood control programs.** Talk about a needed investment in infrastructure, if properly done. As currently exists, our nation's systems of levees, dams, etc. is a patchwork, with little cohesive planning. One set of levees designed to protect a city might sluice floodwaters towards unfortunates communities downstream. What's probably needed: "sacrifice zones" – lands to which waters could be diverted during flood emergencies.

• **Plant trees. Nurture trees.** Strategic planting of hundreds of millions of trees would help solve several issues – moisture retention, carbon sequestration, and windbreaks (to help reduce soil erosion), snowbreaks, and cover for wildlife. The fencerows of this nation's farmlands should be a managed resource for planting trees. Locally appropriate varieties of trees would be best – no repeating the New Deal's mistaken monocultural planting of softwoods. The residual value of forestry to society cannot be overstated. Hardwoods will capture and sequester carbon, as well as absorbing and storing moisture. Deforestation ultimately leads to soil loss and drought, period. It's important to understand that planting trees is a partial, but not complete solution to deflecting weather/climate challenges.

• **Same-old, same-old won't suffice.** 2018 was the wettest year in recorded history for the greater Mississippi River basin, stretching from the headwaters of the Ohio River in western Pennsylvania to Montana. Not every year may be as wet in America's heartland as 2018 and 2019 (so far). But a realistic, future perspective must conclude that this nation should seriously attempt to wisely buffer acknowledged threats from greater precipitation events in the Missouri, Mississippi and Ohio watersheds (and their tributaries).



Pete Hardin

We cannot afford the soil loss, if this nation is to feed future generations. We cannot afford repeated devastation from flooding. Failure to act will likely mean more devastating flooding – threats to our homes, businesses, agriculture and transportation.

The downstream costs of flooding may be eased if more moisture can be retained in the soils, upstream. (Note: Blaming agriculture for the dangerous hypoxia that has closed beaches in Mississippi this summer is short-sighted. Many municipal sewage treatment systems were compromised by this spring's flooding – contributing to the overload of nutrients heading downriver.)

Our nation's farmlands can help combat changing weather events – in great part by sequestering carbon in soils and along fence rows. Honest future vision and investment are required. Farmland values could be solidified by investing in state/federal programs to sequester carbon and control flooding. Currently, our nation's agricultural policies are based on heavy exports of commodities, generally yielding lowball prices to the majority of farmers along with massive soil erosion.

Reconceptualizing our nation's farmlands to retail soils, control flooding, and sequester carbon is critical for this nation's future stability. It's a matter of national security!

DFA, DMI & "half-crap" milk/plant beverages

Here's my theory: Dairy Farmers of America has recently unveiled marketing of its "Live Real Farms" milk/plant blend beverage products as a smokescreen to try to fool the cooperative's members, while DFA produces massive quantities of 100% plant-derived beverages through its affiliates. There must be some real moo-la in making those plant-derived beverages that are knocking down sales of REAL dairy products.

DFA's 12/31/18 annual financial report noted that as a subsequent event, on January 4, 2019 the cooperative paid \$949.7 million to obtain the outstanding 53% ownership of Stremick's Heritage Dairy. Most of that nearly \$1 billion purchase price was borrowed. But don't worry: DFA reported its prior 47.2% share of Stremick's would appreciate in value by \$626 million!

In early January 2019, Stremick's website listed its major product lines as oat milk, almond milk and soy milk.

So, how to try to convince DFA members that blowing up the co-op's debt to about \$2 billion – that's roughly \$250,000 per member – to buy a company that primarily makes plant-based beverages? Come out with a "50-50 blend" and hope that crap sells.

Worse, Dairy Management, Inc. (DMI – the milk promotion bozos) claims that its employees *researched*

and developed DFA's 50/50 beverage crap. Last time we heard DMI crowing about creating a new dairy product was in 2015, when DMI claimed full ownership for creating McDonald's "Mozzarella Sticks." When tested at a certified lab at the request of *The Milkweed*, those products continued nearly 4% starch. Starch is an illegal ingredient in a consumer product labeled "Mozzarella" – which enjoys a federal standard of identity. No worry, DMI's Gallagher, a few years ago, claimed that dairy needed to get rid of standards of identity for dairy foods, because those standards inhibit creativity in developing new products.

Sorry, Mr. Gallagher, but if the best DMI's researchers can create is the likes of DFA's "50/50 beverage swill" and McDonald's adulterated "Mozzarella Sticks," then maybe we do need standards of identity for dairy products ... and deep-six Tom Gallagher.

So, DFA members. Don't ask questions about why your co-op is buying up companies that process plant-based products that are digging into sales of honest-to-goodness fluid milk – you know, the true M-I-L-K that dairy cows produce. There's nothing illegal about plant-based beverages, as long as they aren't called "m-i-l-k." And DFA members shouldn't ask about how much debt their co-op now has (hint: an average of \$250,000 per member). Don't ask. Don't ask. Don't ask.

Correction: Incorrect author attributed

Oops. The July 2019 issue of *The Milkweed* contained a serious error on page 12.

The by-line for the excellent, thought-provoking article titled, "Mother Nature's Warning Shots over the Bow?" was authored by Paris Reidhead, not Pete Hardin. Apologies to Paris and anyone who thought the editor-publisher was capable of an article so steeped in biblical history and environmental wisdom.

How do such things happen? At the last minute of finalizing that issue, I noticed that the article had no

by-line. The computer design fellow imported from another page my by-line, with the intent of changing it to Paris Reidhead. But some distraction intervened and we failed to complete the intended task.

Important to note: Paris Reidhead's father – Paris, Sr. – was a Presbyterian minister well known for his sermons. Clearly, some of those same skills were inherited by his son.

Long Range Forecast: Cornell Climatologist Comments

by Paris Reidhead

In the Northeast and upper Midwest, the spring of 2019 was one of the slowest in recent history to warm up ... and dry up. Cold, wet soils seriously delayed the planting and growing seasons this past spring.

For instance, in most locations, folks accustomed to starting corn planting on May 1 saw that target date delayed by four weeks. Top soils took what seemed like forever to warm up to the minimum 50 degree Fahrenheit target temperature required for efficient seed corn germination.

Perennial forages fared better. Alfalfa hit bud stage around June 10 in upstate New York, compared to the more usual May 25 of most years. By contrast, fall-planted winter forages (still referred to as cover crops by some) awakened as soon as snow finally melted on the meadows. The winter versions of rye, triticale, wheat, barley, and speltz appeared to be asking: what cold slow spring? The answer to that question merits serious future consideration.

Trying to get a better grasp on growing season 2019 for myself, as a crop consultant, I contacted Jessica Spaccio (jlr98@cornell.edu), a climatologist at Cornell University's Department of Earth and Atmospheric Science (EAS). EAS is part of the Northeast Regional Climate Center (NRCC). Over the last few years, she has graciously answered many questions for me in the climate/weather arena. Following, in question-and-answer format, is the on-line interview that I had with Ms. Spaccio (from July 1 through August 1, 2019).

Reidhead: Hi Jessica, I haven't directed questions your way in several months. I have to make up for lost time. The biggest (and first) one is what's your take on sunspot activity as an influence on weird northeast weather?

Spaccio: Changes in the sun's magnetic field have little to no effect on our weather. While the Northeast did have a cool and wet spring, it's important to remember that we are one small part of the Earth. Globally, March and April both ranked as the second warmest in the 140-year record; May was the fourth warmest on record.

Reidhead: About three weeks ago (on June 10) the daughter of one of my customers had someone photograph her standing next to some field corn that was shoulder high (she's about 5' 4"). I wrote back: when and where? She replied: Southern Pennsylvania. Meanwhile, in Central NY, fields were still soggy, and very little corn was a foot tall, a lot barely emerging. Normally southern PA corn is about a foot taller than central NY corn. Why would the southern PA corn be that much higher?

Spaccio: Some areas have been drying out. We're keeping an eye on conditions. Check out our DEWS Dashboard:

<http://nedews.nrcc.cornell.edu>

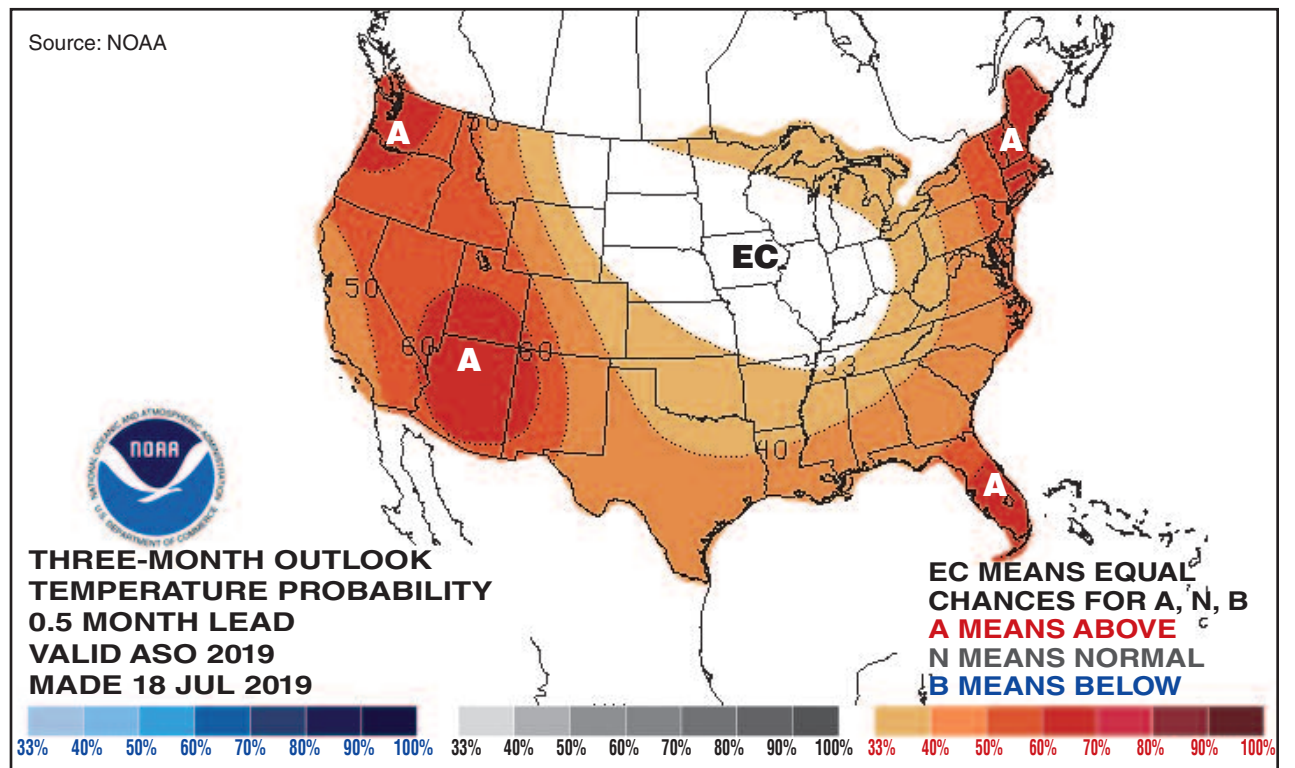
Just today, (August 1) we have entered peak hurricane season (Aug – Oct), though there are currently no tropical cyclones in the Atlantic. Summer precipitation can be very hit-and-miss, with thunderstorms bringing heavy rain to some and completely missing others. [Author's note: At the official start of the hurricane season (June 1) the National Oceanic and Atmospheric Administration (NOAA) predicted that Hurricane Season 2019 would be gentler than 2018's. NOAA forecasts for 2019: 12-14 tropical storms, 4-6 hurricanes, and 2-4 major hurricanes. During the second week of July, Category 1 Hurricane Barry pounded the Gulf Coast. Thus, at this writing we can expect another 3-6 hurricanes in 2019.]

Reidhead: Any other comments you wish to make are greatly appreciated.

Spaccio: Currently, a weak *El Niño* is present, with a transition to ENSO-neutral (neither *El Niño* nor *La Niña* conditions) expected in the next month or two and lasting through our fall and winter. (Author's note: ENSO stands for *El Niño* Southern Oscillation.) Sunspot activity has little to no impact on weather and climate. There are many forecast tools available, but this is not one of them.

Reidhead: Any thoughts on long range weather forecasts, 60 days out, 90 days out? A lot of areas that were too wet in mid-spring, particularly the upper Midwest and Northeast, have gotten pretty dry in recent weeks.

Spaccio: We use the Climate Prediction Center's (CPC) long range outlooks. The Aug/Sept/Oct outlook favors above-normal temperatures for the Northeast. The precipitation outlook calls for "Equal Chances", meaning equal chances of above-, below-



, or near-normal precipitation.

https://www.cpc.ncep.noaa.gov/products/predictions/long_range/lead01/off01_temp.gif

https://www.cpc.ncep.noaa.gov/products/predictions/long_range/lead01/off01_prpc.gif

Tom Kilcer's Crop Comments

In his August 2019 on-line newsletter (*Advanced Ag Systems' Crop Soil News*), Tom Kilcer titled that edition "Not Your Ordinary Harvest". Quoting Kilcer, "For many it will be very different from the past. A number of farms are growing sorghum or sorghum species for the first time. Its harvest timing is very different than corn silage if you want to get it right. In addition, there was a lot of corn silage planted in June and July (due to the protracted cold, wet spring)." He writes that with any chance of early frost or hard freeze... should such occur... there will be problems with the immature/late planted corn. He says that immature corn silage (something he expects to be commonplace in 2019) is a lot like sorghum or sorghum-Sudangrass hybrids. These feeds will be wet, higher sugar, lower starch forages. Kilcer strongly advises against chopping such roughages with short length cut, and, particularly against processing. He says that such mechanical over-handling will produce forages the consistency of applesauce or soup.

Quoting Kilcer again, "This is not beneficial to good fermentation, high milk components, or preserving nutrients (lost leachate is 100% digestible)."

Kilcer is very impressed with how favorably brown-mid-rib (BMR) sorghum, BMR sudangrass, their BMR hybrids, and BMR pearl millet compare to good corn silage, in terms of supporting milk pro-

duction. Seed costs per acre with these hot climate summer annuals (HCSAs) — most of which originated in equatorial Africa — run about a quarter to a third of what modern corn hybrids cost. And when moisture is extremely limited, these HCSAs need about half as much water to form a pound of roughage dry matter, compared to corn plants destined to become whole plant silage (this according to University of Texas research).

To ensure success — particularly for farmers embarking on a maiden voyage with HCSAs — Kilcer suggests adjusting the chopper for 1.14-1.25 inch cut length. He advises the shorter the cut length, the more nutrient-laden leachate (silo juice) forms, seeping away into uselessness (and pollution). Also, don't use a silage processor. Most HCSAs that haven't headed will be way less than 30% dry matter (if not wilted). In fermentation, those really wet feeds drift toward butyric acid (away from lactic and acetic). To avoid stinky butyric acid fermentation... and to minimize spoilage in general... he shouts in print:

"The USE OF A HIGH QUALITY HOMO-LACTIC BACTERIA IS CRITICAL."

That means it's important to utilize a silage inoculant at harvest time. Tom cited two additional more pluses for the HCSAs: first, the sorghums form prussic acid (certainly not an asset for ruminants grazing this forage, if it's less than twenty inches tall); prussic acid found in sorghum roots will carry over into the next year and kill corn root worms, if the grower follows sorghum with corn. Secondly, these HCSAs have fibrous root systems (unlike soy and corn), and, as such, slowly, but surely help rebuild wounded soils.

Dairymen VERY Unhappy, con't

Continued from page 9

Why would I try to talk anybody into buying this?"

Ring's contact with the agent who sold him the DRP coverage has consisted of the farmer telling the insurance guy that he was a "liar and a crook," Ring now says. Ring said his only consolation is that "in the fine print there's a number to call if there are any concerns or complaints. I plan to do that."

Ring grew up on his family's farm and started helping his dad when he was a kid in the 1960s. Eventually he bought his parents out in 2011. His mom still lives in the home farm's house.

His dad started out with a small herd of Holsteins but they soon switched to all Jersey cows. Today the herd is all Jersey with total animal numbers running about 930 cattle — 560 of them under two years of age.

In June 2018 Ring invested in six robots to help save on labor costs. He's sure now that the DRP program won't be helping him very much as he tries to pay his bills. "If it sounds too good to be true, it is," he says.

Authorized program

The DRP program was authorized under one arm of the USDA, like earlier crop insurance programs. One of its creators is American Farm Bureau's chief economist John Newton, who traveled dairy country for two years, talking to farmers while the program was under development. The DRP program became effective October 9, 2018.

During sessions in Wisconsin last fall, Newton explained that Congress was interested in getting rid of "direct payment" programs to farmers, preferring to

get farmers to "put skin in the game" as they do with the DRP and with crop insurance. Another similar program is the Livestock Gross Margin for Dairy (LGM-Dairy) which is a different insurance-type program (and is also privately owned.)

In the world of crop insurance, 90 % of crop policies are revenue-based. When the new dairy insurance product was created it was designed to offer protection against declines in milk price, milk yield and revenue. DRP is offered in quarterly coverage and can be sold by insurance agents up to five quarters out, based on futures market prices. The farther out in time a farmer wants to get coverage, the higher the premiums are because there is more risk.

Under the DRP there are two pricing options — the first is class pricing, based on an index of state-level revenue based on Class III (cheese) and Class IV (butter-powder) milk prices. The producer can choose the percentage of Class III and Class IV used to establish their price guarantee per hundredweight to tailor their operation. The second option is component pricing — revenue protection based on milk component production, including butterfat, protein and other solids. The producer can select the desired butterfat percentage and protein percentage. The other solids percentage is fixed at 5.7%. The policy can be purchased in increments of .05 % butterfat.

Premiums in this program are subsidized by the federal government through a law passed in 2014. Ninety to 95% coverage is subsidized at 44%; 85 to 89% coverage gets a 49% subsidy; 75 to 84% coverage gets a 55% subsidy; 70 to 74% coverage gets a 59% subsidy.