

Northeast Organic Dairy Producers Alliance

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FEATURED FARM: **MAHALKO DAIRY, GILMAN, WI**

An Inside Look at Wisconsin Grazing Specialist's Farm

By Tamara Scully, NODPA News Contributing Writer

'evin Mahalko operates a grazing dairy and raises steer in Gilman, Wisconsin, producing 100 percent grassfed milk under

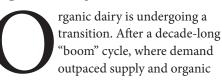
Organic Valley's Grassmilk® label, and 100 percent grassfed meat, which is sold into the commercial beef marketplace as well as direct to the consumer market. He farms with his parents, milking 45 cows on their 300 acre family farm. With 120 acres in permanent pastures, 130 in managed woodlands, and 149 - some rented - in hay,

continued on page 26

The Key Role of Forage Legumes in Organic **Dairy Diets: Effects on Your Bottom Line**

By Andre F. Brito, Maichel J. Lange, and Luiz H. P. Silva; University of New Hampshire, Department of Agriculture, Nutrition, and Food Systems

Why are Legumes Important to **Organic Dairy Diets?**



dairies could not be transitioned at a fastenough pace to keep product on grocery store shelves, the direction has dramatically turned. Now, with reduced demand for fluid milk and lower pay prices aggravated by COVID-19 as the potential new reality

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Message from NODPA President

pring always feels like it will take forever to get here, waiting for the grass to take off so we can get the cows out. This spring has felt even slower than usual with the COVID-19 pandemic hanging over everything. With all the uncertainty, a few things remain more certain than ever. The global food system has become far too concentrated, with huge companies controlling more of our production and processing than ever.

It seems like this might be one of our better chances to help push the country towards a more decentralized and resilient food system. I know I'm preaching to the choir here, but the issues we farmers deal with every day are more exposed than ever – the general public will really be able to see, in-person on store shelves, some of the pitfalls of the current system. The benefits of having 1000 small, local producers and processors, compared

to a single giant entity are more visible – food safety and labor issues, to name a few.

What the "get big or get out" mantra is best at is pumping out huge volumes of product, but leaves much to be desired when other metrics are added to the equation: resiliency, safe and equitable working conditions, and a food system that works for farmers and eaters alike. And who is better acquainted with these issues than us farmers?

Even amid so much uncertainty, this is a time of opportunity. But the outcome is not predetermined, as we will be fighting against the most powerful ag and food corporations in history.

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From the NODPA Desk:

By Ed Maltby, NODPA Executive Director

In these days of COVID 19 it's inevitable that everyone is feeling the stress of dealing with a variety of new regulations, both deliberately temporary and semi-permanent, and the threats to family and friends from a virus that appears to be able to move quickly through communities. From the frustrations of wearing masks in public and working environments (I've yet to experience wearing them in 80 to 90 degree days) which will probably be with us for a while, to delays in dealing with vendors and regulators. Those of you that do direct marketing, and have employees, there is the moral and regulatory requirement to protect both staff and consumers, especially with the extra workload due to consumers searching for new options for purchasing fresh food. Unfortunately, we can't quickly turn a spigot on for fresh vegetables, locally packaged milk, and meat. Increasing the food supply take time, money, space, and a consistent market. Recognize your own stress and deal kindly with others that are experiencing whole new ways of operating with no preparation and training. Perhaps you will not be able to capture that extra market because your slaughterhouse can't process your meat quicker or your supplier can not double their supply of seed. Both of you are going to be working together as the situation stabilizes and market opportunities become clearer. Right now, many don't want to hear your views on restriction of freedoms as you march into stores with no mask. You do not know how many in that store have lost friends and family to a virus that nobody really understands.

CROPP Cooperative announced on May 15th its fourth consecutive year of total sales exceeding \$1.1 billion and, after consideration of non-cash and non-routine expenses, a net loss of \$4.5 million. The non-recurring expenses included \$5 million butterfat and skim inventory revaluation expense and \$15 million deferred tax asset reserve expense. Sustainable Food News reports that CROPP recorded \$5.5 million in restructuring expenses, which are "generous severance packages and early membership termination agreements" due to the elimination of 62 staff positions, "and the departure of 54 employees, along with the departure of 14 farmermembers." Arnie Trussoni, president of CROPP Cooperative board of directors, is reported as saying in the La Crosse Tribune, "We weathered a changing organic food industry landscape, introduced innovative products to delight our consumers, and experienced transitions in leadership and restructuring. Through it all, we are proud that our cooperative upheld its mission of promoting economic stability for its farmer-members by maintaining a stable pay price with a \$12 premium over conventional prices-a notable achievement during a challenging year." CROPP has recruited top-level talent from across the country including Ty Brannen, executive vice president of Supply Chain, and Staci Kring, chief revenue officer. According to CEO Bob Kirchoff, the cooperative is continuing its 2019 focus on maximizing the value of its members' products, optimizing the supply chain, and realigning structures and processes to support continuing success. "We operate in a market that has always been challenging," Kirchoff said. "As the organic

industry has matured, competition has grown fierce, vertical integration has driven down prices, and more industrial methods of farming have made their way into organic. The shelf space we compete for is crowded by alternatives such as plant-based, pasture-raised, non-GMO, and cage- free. We know that in order to protect the foundation on which this cooperative is built, we must adapt to the changing marketplace while upholding our values." In the first three months of 2020, the cooperative reported a return to profitability that exceeded both planned goals and the net loss it reported for the comparable period of 2019. CROPP has benefited from reducing its supply which has meant less milk sold into the low price conventional market matching supply to demand. Unfortunately, CROPP is still measuring the benefits of organic dairy against a conventional pay price; misleading both for consumers and future producers of organic dairy. If the conventional pay price is \$17 per hundred and it costs \$22 per hundred to produce, this means the producer is making a loss. An organic pay price averaging \$29 (\$12 higher than conventional) for a product that has organic expense of \$35 does not mean that organic dairy production is, "supporting the cooperative's mission of ensuring its members' economic stability through a higher and stable pay price." (La Crosse Tribune from CROPP PR). Ben and Jerry's and Stonyfield Farm both stopped using similar arguments for their products when threatened by lawsuits and consumer complaints.

The NOSB went virtual for their spring meeting. From those who were able to tune into the meeting, it was technically successful and many more farmers had the opportunity to listen in when it was convenient for them. This was not a particularly active or controversial meeting, and the committed members of the NOSB went about their work with care and thought. The NOSB was deliberately created to be different from other advisory boards under the Federal Advisory Committee Act (FACA). Over the last two decades, it has functioned very publicly and reflected the intent of the Organic Foods Production Act of 1990 (OFPA) despite repeated attempts by the USDA to undermine its independence. The practice of having public meetings of the NOSB at different locations is very important to maintain the impact of Board decisions on the USDA NOP and continue the necessary transparency which is so important to the integrity of the program. While having in-person public meeting is more expensive and does restrict those that can afford to attend, they do create media impact which, while usually frustrating for the USDA, does ensure that public scrutiny holds the regulators to account. And, in-person public meetings do create relationships that have long term benefits in working together to solve problems and building trust in working together in the future. In a choice of in-person meetings and virtual meeting, I come down in favor of in-person meetings even though large portions of them can be boring. In an ideal world, we should have an in-person meeting that is available on the internet in real time.

As I write this column, the Origin of Livestock Final Rule is going through 'agency review', where the different Federal agencies review the Rule to ensure that it does not have an adverse effect on their constituencies. From there it goes to the Office of Management and Budget (OMB) for a final review. We will continue our advocacy to ensure we have a Final Rule in effect this year. \spadesuit

UPDATE: The 20th Annual NODPA Field Days

By Nora Owens, Editor, NODPA News

s I write this update for the 20th annual NODPA Field Days, life is anything but normal as we navigate through the COVID-19 pandemic. The good news is that we are continuing to plan for the NODPA Field Days to be held on September 24 & 25, 2020 at Wolfe's Neck Farm in Freeport, Maine. Unlike large conferences, fairs and events that take months and many manpower hours to plan and execute, that are being cancelled due to the uncertainty of these times, the NODPA Field Days is a relatively nimble event that we can continue to prepare for without the same liability of these large events. Field Days attracts a fairly consistent number of participants, so we are confidently able to plan to bring everyone together while maintaining a safe and healthy environment. We are very fortunate that Wolfe's Neck Center for Agricultural and Environmental Education will be partnering with NODPA to make this a great event.

The educational program is taking shape and will have something for everyone. Although we are still working to fill out the program, here are a few of the highlights. In an animal and agronomic/forage quality-focused workshop, Andre Brito, Veterinarian and Professor of Dairy Cattle Nutrition and Management, University of New

Hampshire, and Sid Bosworth, Extension Professor: Agronomy Specialist at the University of Vermont, will present on their research on the role of legumes in dairy cow diets. (To learn more, read Dr. Brito's article in this issue, on page 1.)

In these days of low milk prices and pessimism in the organic dairy industry, we will present three young organic dairy farm families, all from Maine, who ae taking a variety of creative paths to have viable farms. They will share their stories about their farms and families; describing the opportunities and challenges of organic dairy farming in 2020.

A member of the NODPA Field Days planning committee remarked, "There are many more little kids running around our farmer meetings these days, and that is very good news." So, we thought it would be timely to invite the following farm families to come tell us their stories:

Conor and Alexis McDonald, own Bo Lait Farm, an organic dairy farm in Washington, ME, that ships their milk to Organic Valley. First-generation farmers, the MacDonald's worked with Maine Farmland Trust in 2015 to purchase and protect their dairy farm, Bo Lait.

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Caitlin Frame and Andy Smith, together with their young son Linus, run The Milkhouse, Monmouth, ME. The Milkhouse (and Grace Pond Farm, their partner farm) dairy cows make the milk that they use to make yogurt. In addition to yogurt, they bottle milk, raise steers and pigs for meat, and laying hens for eggs. They market their farm products online, at their store and to local outlets.

Katia and Brendan Holmes own and operate Misty Brook Farm, a 600-acre certified organic farm in Albion, Maine. They took over

long-time NODPA member Henry Perkin's farm in 2013 after farming on a patchwork quilt of rented land in Central Massachusetts for eight years before that. Thy produce organic, 100% grass-fed raw Jersey cow's milk and cream, 100% grass-fed beef, milk-fed rose veal, grass-fed lamb, pasture-raised pork, soy-free eggs, and more.

Lee Rinehart, National Center for Appropriate Technologies (NCAT) Agriculture Specialist has been invited to speak on a range of topics, from Adaptive Grazing to Seaweed Farming opportunities. We are still working with Lee to determine the most up-to-date focus for his workshop. More information will be coming in the July NODPA News.

Wolfe's Neck Center for Agriculture and the Environment, hosts of our Field Days, will provide hay wagon tours of the expansive property, including a tour of their organic farm, while learning all about the numerous programs and projects, including their current research into kelp as a feed source. We will hear from their Dairy Grazing Apprentices, and learn how that program fits into their whole farm program.

The Thursday evening program will feature Maine Veterinarian Simon Alexander, Exeter Veterinary Services, Exeter, ME, who will share his knowledge and insights about the current and future course of COVID-19. But, since Dr. Alexander is also an excellent storyteller, he has agreed to share some of his favorite stories about dairy farming in Maine.

Thursday morning will feature a organic dairy farm tour, and in the July NODPA News issue, we will have all those details. We will also have more details about lodging, tent and RV camping at Wolfe's Neck, and a final program. In addition, we will be sending out information about sponsorship and trade show

opportunities in the next few weeks. Please contact Nora Owens, NODPA Field Days Coordinator, for additional information, and with any questions you may have. She can be reached at noraowens@comcast.net, or 413-772-0444.

In the meantime, please SAVE THE DATE and begin to make plans to join us on September 24th & 25th, 2020 at the beautiful Wolfe's Neck Farm, on the ocean in Freeport, Maine, for a unique, educational and entertaining 20th Annual NODPA Field Days.



NOSB Spring Meeting 2020 (four-day online meeting)

n Wednesday April 29 and Thursday April 30th the NOSB held its virtual Public Meeting. It was held live online, instead of in-person, to allow the Board to move forward with deliberations as scheduled in an open and public setting, without the need for travel and to allow for social distancing. Members of the public were able to hear discussion by the Board members and see slides used in the meeting but only members of the Board participated in the discussion. Video was used only for the opening of the meeting in order to maximize accessibility and minimize potential bandwidth issues for Board members and the public.

Dr. Jennifer Tucker gave a 45-minute presentation which included slides on

- Strong Organic Control Systems: Rulemaking; Training; Certifier Oversight
- Farm to Market Traceability: Equivalency Arrangements;
 Organic Import Certificates; Inter-Agency Organic
 Working Group
- Robust Enforcement : Mid-Year Review; Imports: Quantitative Methods; High-Profile Enforcement; Dairy Compliance Project
- Community Engagement: Call for NOSB Nominations;
 Conference Update; Online Compliant Form;
 Organizational Updates
- · ANSI Peer Review
- NOP Organizational Updates: For a learning center account: Write to: USDA-NOP@apvit.com; Website for COVID19 response – https://www.usda.gov/coronavirus
- Organic Control Systems Continue to Operate

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- The public-private partnership of organic certification is resilient and robust and continues to be engaged.
 Continuing operation oversight.
- Rulemaking Updates: Strengthening Organic Enforcement

 NOP has answered questions from the Office of
 Management and Budget –no firm date for publication of a
 Proposed Rule; Origin of Livestock the draft of the Final
 Rule is complete and moving through agency approval and then it will go to the OMB. No firm date on publication of a
 Final Rule
- NOSB Call for Nominations –Submission Deadline: June 1, 2020; USDA seeks to fill five vacancies: Two (2) individuals who own or operate an organic farming operation, or employees of such individuals; Two (2) individuals who represent public interest or consumer interest groups; One (1) individual who is a USDA-accredited certifying agent
- Staffing up in accreditation and compliance & enforcement mainly: the NOP goal is to reach 59 people and is in the low 50s by mid-May.

There was no discussion about hydro operations because of the ongoing legal case. There was only one vote at the meeting on the motion to classify "paper-based crop planting aid" as synthetic. The motion was to add to 205.2 Terms Defined: Paperbased crop planting aid. A material that is comprised primarily of cellulose-based paper, including pots, seed tape, and collars that are placed in or on the soil and are intended to degrade into the soil. Contains no less than 85% biobased content with biobased content determined using ASTM D6866 (incorporated by reference; see §205.3). Add to 205.601 (o) Production Aids: Paper-based crop planting aids as defined in 205.2. Virgin or recycled paper without colored or glossy inks. If these paperbased crop planting aids are commercially available with 100% biobased fiber content, these must be used. The Chair of the Crops Subcommittee Jesse Buie's recommendation is that the NOSB vote to refer this motion back to subcommittee for further discussion. The consensus was that the motion was very close to going to a vote but the commentators had raised enough minor tweaks that the motion needs to go back to subcommittee. The chair saw no reason that there wouldn't be a vote next fall for it, which would at least indicate the intent of the NOSB that Paper Pots should be allowed. The vote to send the motion back to the subcommittee was agreed unanimously. Dr. Jennifer Tucker, NOP Deputy Administrator clarified that given this vote and the fact that this will go back to subcommittee, the program will continue to allow paper pots during this time. The current status of temporary allowance will continue while the board continues its work. ◆



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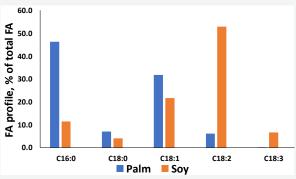


Figure 1 - Comparison of the fatty acid profile of calcium salts based on palm and soybean.

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NET UPDATE

Recent ODairy Discussions

By Liz Bawden, Organic Dairy Farmer, NODPA President

A producer was looking for an effective treatment for mange in his dairy herd. One farmer recommended Dr. Paul's Delice and Mange Spray, and suggested that the farmer feed an adequate amount of kelp to his herd. He felt that the "resulting hair coat shine (from the kelp), resulting from oils secreted by the hair follicles, creates a not-so-friendly environment for these critters". Others suggested dusting the affected animals with organic tobacco dust, gently working it in to contact the skin. A vet reminded us that there are "three types of "mange" in dairy cattle: chorioptic ("barn itch"), demodectic and sarcoptic ("scabies"). Sarcoptic is the most serious as it is transmissible to other animals, including people." He suggested a pyrethrin product like Pyganic as an organic therapy.

Frustrated with a cow nursing from other cows, a farmer turned to the group for ideas and suggestions. Several others have had the problem with individual cows in the past, especially those that raise calves on nurse cows. For some, those plastic nose pieces with the spikes worked. For more insistent animals, one farmer passed along this great suggestion: "The only thing I have found that works is to use a bull ring with 3 pieces of chain each three links long. When the cow goes to nurse the chain falls in her mouth and she pulls on the nose ring. But she can still graze without any issues."

A farmer posted pictures of a cow with a large, deep lesion that she had been treating for a week already with CEG tincture, homeopathic Hypericum and Arnica montana, and scrubbing the wound with betadine diluted in water then packing with wound spray covered gauze and more dry gauze. She asked if she should be using anything else. A vet suggested that she should have probably had the wound looked at and perhaps stitched a week ago, but that at this point keeping it clean is critical. He also suggested using some type of spray-on emollient several times a day to keep the flesh moist to help it heal.

A small grass-fed dairy was having problems with their freeze point, or cryoscope reading. It was sometimes less than .530, a red flag for added water in the milk. This farmer was asking the group

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www.nodpa.com/list_serv.shtml

for suggestions since he had been through his barn looking for low spots in the pipeline, and never added water to the tank by chasing the milk out with rinse water. He had used a consultant that found a correlation on his farm between high MUN levels and his low freeze point readings. A grazing specialist responded that she had seen this issue on many grazing farms in the early spring, when MUN's can be very high. Some recent research has shown that lush spring grass in the diet can cause the freeze point to go down.

In aiding one producer in his decision to spread lime (or not) on his farm, producers chimed in with their experiences. He asked if there was a reasonable return on the investment; all producers that responded felt that lime can add significant value. But it depends on what you have to begin with. According to one farmer, your results will be based on many factors:

- * Initial 'landscape' and need (do soil tests indicate need / deficiency?).
- *Other underlying conditions, such as the need for improved soil drainage.
- * Timing and Dose how/when the lime is applied, how much per acre, and the type of lime used (high cal vs. dolomitic)
- *Follow-up management subsequent crops/rotations, other soil health/microbial diversity practices, pasture management etc.
- "Lime, of course, adds calcium, but by raising pH, it changes plant availability of most other mineral nutrients which can be great in some cases, but may tie up other nutrients 'locally' if too much lime is applied at one time, or if calcium isn't actually deficient. We have often gotten better results using gypsum (Calcium sulfate) rather than lime (calcium-magnesium carbonate) because our magnesium levels are natively high, and our sulfur levels are low. Bottom line it's complicated, and results can be very 'local' depending on many other variables."



Organic Production

Soil Fertility Expert Weighs Costs, Benefits of Liming Low pH Soils

By Matthew Weaver, Capital Press

This article, reprinted by permission, first appeared in the Capital Press, March 31, 2020. Please note that it is not specific to organic production and notes a substance that is not allowed in certified organic production

rowers should immediately sample their soil to get a sense of how low the pH is and the effect it will have on their crops.

"It's knowing how big of a problem this is," said Clain Jones, soil fertility professor and extension specialist at Montana State University. "I think the most urgent thing, if it hasn't been done already, is to know the depth of the low pH, to know whether or not tillage could work and also to know the extent of it."

Jones spoke March 27 during a Washington State University Farmers Network web seminar on soil acidity and liming.

Jones began studying agricultural lime in 2017. Crop yields decrease as soil acidity increases, he said.

"The longer you wait to mitigate your soil pH, the more lime it's going to take, and likely also the more yield loss you might experience," he said.

Soil pH can drop as nitrogen fertilizer rates increase, especially when using ammonium-based nitrogens such as UAN, urea and anhydrous. [Editor's note: these ammonium based fertilizers are prohibited materials for certified organic production.]

Jones said the pH dropped faster in coarser-textured soil, which has less buffering than finer soil.

Growth issues begin when soil pH levels drop below 5.2. The lower the pH, the more acid soil is. A pH of 7 is neutral.

He said the impact of liming a field is long-lasting.

"Let's say we were to lime a silt loam soil to a fairly high level, 7.2 or so. It would take thousands and thousands of pounds of nitrogen per acre over time, probably 20 to 40 years, before we end up with a pH that we would consider to be a problem," Jones said.

Jones applied varying amounts of sugar beet lime, from no lime to roughly 6 tons per acre, to see how much it raised the pH in the top 4 inches of soil.

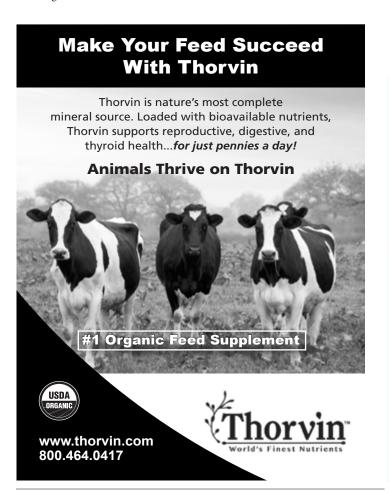
It takes less lime to bring soil pH up from 4.5 to 5.5 than it does to bring pH up from 5.5 to 6.5, Jones said.

The problem of soil acidity crept up on Montana farmers, Jones said.

The biggest challenge is that agricultural lime is fairly expensive, Jones said, but it pays for itself many times over.

He compared the \$100-per-acre cost of applying lime to the thousands of dollars of income that is gained.

continued on page 14







"For two years in a row, we bought the donated gallon of Udder Comfort™ at the Dairy Forward auction during the 2018-19 Central Plains Dairy Expos. The first year (2018), we bought it thinking we wanted to use it more. The more we use it, the more we love it," said Bryan Landsverk when he and Bridget stopped by the booth in 2019.

They have six robots milking 320 cows at Landsverk Dairy, founded by Bryan's grandfather near Fosston, Minnesota, which is Certified Organic since 1997.

"We keep this in the robot rooms and spray the SCC cows exiting. We use it on fresh cows, all fresh heifers especially. "Udder edema and robots are not a good combination. Softening udders with Udder Comfort works so well. We are so glad to have this product."

UDDER COMFORT Quality Udders Make Quality Milk

Keep the milk in the system

Call to locate a distributor near you.

For external application to the udder only after milking, as an essential component of udder management. Always wash and dry teats thoroughly before milking.

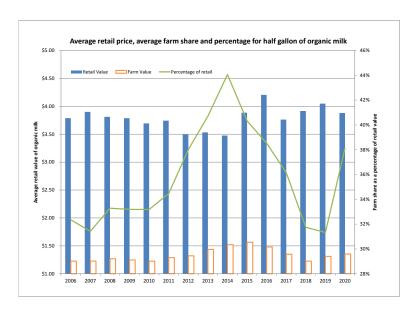
Pay And Feed Prices May/June 2020

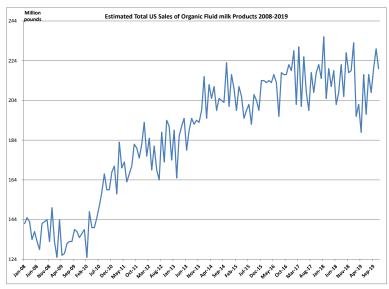
By Ed Maltby, NODPA Executive Director

nce again, we see the conventional dairy market collapse. Conventional milk is being dumped by the tractor trailer load into manure pits while many consumers are restricted in the amount of milk they can buy at supermarkets like Walmart. While the cause of the oversupply in the conventional market, this time, is something that was difficult to predict, the supply-side structure can only continue to function with massive amounts of milk being dumped. There was no capacity to deal with system-wide demand for processing resulting from a pandemic that has been predicted by the government for many years. For organic dairies, there have been no signs from buyers of a massive drop in demand, and no reported drop in pay price, which is already below break-even. The organic dairy market is not so reliant on institutions, colleges, restaurants, and exports as the conventional milk market so organic sales should not have seen the drops that conventional has and, logically, the more people are at home, the more organic milk they might drink.

There is independent data on retail sales through USDA AMS, but the last figures published for that were in November 2019, which showed only continued growth in whole milk sales at about 5% year-over-year, and a slight decrease in Reduced Fat Milk (RFM). According to a USDA AMS representative, the Dean and Borden bankruptcies had disrupted reporting.

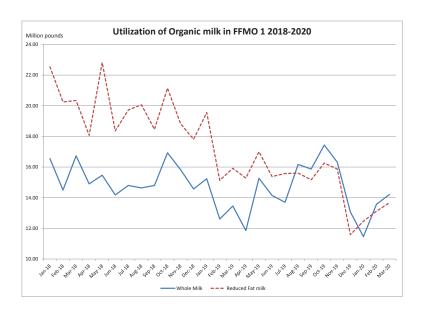
In the absence of national data on sales from USDA AMS, there is the Northeast Federal Milk Marketing Order 1 (FMMO) which publishes utilization of milk in that area. In March, Whole Milk (WM) utilization was up 5.5% over 2019 with Reduced Fat Milk (RFM) dropping by 15%. In February, WM was up 7% and RFM was down 13%. In the private label category, Aurora Dairy is a leader in supplying product. Sonja Tuitele, director of communications for Aurora Organic Dairy, is reported in the Missourian as saying that their Missouri processing plant has experienced an increased demand for milk. Aurora Organic Dairy processes and bottles milk from large scale organic farms in Colorado and Texas. "Our milk plant in Columbia is working hard to build inventories so that we may continue to meet the demand of our customers," Tuitele said. Travis Forgues, Executive Vice President of Membership for CROPP Cooperative commented that "We are seeing strong

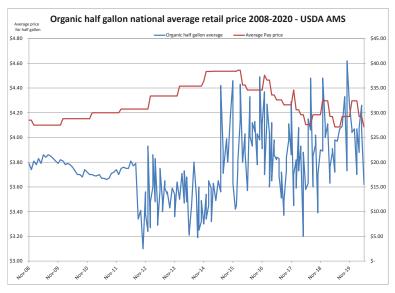




demand spike driven by Covid-19, but that isn't something anyone should be banking on long term." The most recent report from CROPP on pay price is that it will not change from 2019, but it will no longer be made public. Travis Forgues said, "Organic Valley is not putting our pay price out on the website anymore currently, as the information was then used to try and get cheaper pricing from our customers." CROPP Cooperative has initiated an increase in hauling. Instead of \$180 per month, it has now moved to \$220 a month, plus \$0.05/cwt.

Travis Forgues also commented on my question about Californian dairies, "In California, we did not drop producers. We went through a through process with the Humboldt group about the realities of the market in their region. We did offer an early exit financial package if folks wanted to go elsewhere. We





had 18 producers make that decision and took the incentive. We have 8 producers still in Humboldt with Organic Valley today, and look forward to holding that relationship moving forward."

On May 1, 2020, a majority of Dean Foods' assets were purchased by Dairy Farmers of America (DFA) as they completed a \$433 million acquisition of Dean Foods properties after reaching an agreement with the U.S. Department of Justice. The dairy cooperative closed on a deal to buy 44 properties that handle fluid and frozen dairy products from Dallas-based Dean Foods. Among the assets associated with the transaction with DFA are the four facilities that were processing HTST products marketed through Organic Valley Fresh, LLC, the 50/50 joint venture between CROPP Cooperative and Dean Foods. Effective with the closing of this transaction, the joint venture between

CROPP Cooperative and Dean Foods has been dissolved. However, in conjunction with the dissolution of the joint venture, CROPP Cooperative has entered into contracts directly with DFA for processing and delivery services of HTST products through the same four facilities. The HTST milk business, formerly under the umbrella of the joint venture, is now serviced directly by CROPP Cooperative and its broker network. Liz McMullen, CROPP spokesperson, said that, "Our cooperative does not expect any material disruption to our HTST business, and anticipates engaging in a smooth transition for all customers seeking Organic Valley branded HTST products. Organic Valley remains strong, and our business overall has been bolstered by new innovations we've brought to market, including Ultra, the first organic ultrafiltered milk."

In a Wisconsin Examiner article by Marc Eisen about the CROPP Cooperative virtual annual meeting, he reports that Organic Valley lost money for the third straight year in 2019. He quotes Elizabeth McMullen, Organic Valley's public relations coordinator, as saying in a written statement that "People are eating more at home, and that is driving more in-store retail organic dairy purchases." McMullen, while acknowledging that 2019 ended in the red, declined to give a dollar figure, saying they were unaudited draft numbers. His full article can be found at https://wisconsinexaminer.com/2020/04/20/organicvalley-struggles-then-surges-in-turbulent-dairy-market/. It's very unusual to release unaudited figures five months into a new year, especially without official explanations for a predicted loss. If there is a surge in retail demand, it hasn't yet shown up in utilization of organic milk in FMMO Area 1 (the Northeast) (year-to-year comparison based on seasonal demand) which is home to two of the hottest markets for organic sales. An associated concern

with an increase in demand and an unpredictable market is where CROPP and Danone will look for supply. Hopefully, they will not turn to the spot market or large dairies to satisfy the increased demand but rather invest in the existing producers and member owners by encouraging a controlled expansion.

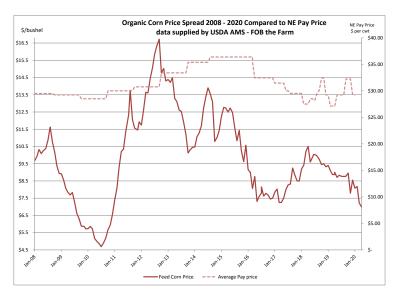
Shane Grant has been named executive vice president and chief executive officer of Danone North America, headquartered in White Plains, NY. Mr. Grant joins Danone from the Coca-Cola Co., where he held various leadership roles in marketing, commercial and general management over nearly two decades. Most recently, he led Coca-Cola's non-carbonated beverage

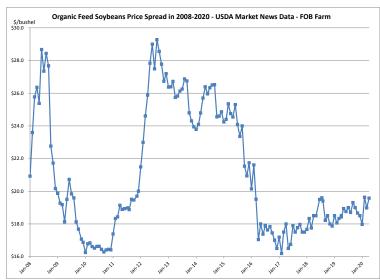
Pay And Feed Prices

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business in North America. His appointment was announced as Danone revealed plans to operate its Essential Dairy and Plant-Based (EDP) business in North America separately. The global segment was formed three years ago when Danone acquired Silk soy milk maker WhiteWave Foods, Broomfield, Colo. Brands in North America include Dannon, Oikos, Activia, Light & Fit, Horizon Organic, International Delight, So Delicious Dairy Free, Silk, Vega and Wallaby Organic. Additionally, Danone said it will create a Plant-Based Acceleration Unit to unlock further growth opportunities and expand into new geographies outside of North America as well as new product categories, such as coffee and baby food. The unit will be led by Francisco Camacho, executive vice president of EDP International. It's anybody's guess what the future holds for producers supplying Danone, but their decision to outsource their procurement and field services does not bode well for the future.

Trade activity on organic corn and soybeans has been light as demand has slowed with the closure of meat packing plants. Slaughter of organic poultry and beef has been slowed down with the closure of the slaughter and packing plants, and demand for organic grain has been affected by retention of animals and lack of space to rear replacements. The consequences of the COVID 19 pandemic will also affect the level of imports. Prices have remained stable at \$7 per bushel for organic corn and \$19 per bushel for organic soybeans. •





Benefits of Liming

continued from page 10

"The return is quite a bit higher than the cost," he said, pointing out that bankers need to understand that it is really a capital investment.

Liming a field "should benefit you at least a decade, maybe two decades, and there should be a very large return on investment," he said.

But with the high cost of lime, Jones advises farmers to apply it only to the areas that need it.

He used the example of a grower who knew his fields well enough to identify the areas that had no growth, likely due to low pH. He recommended using aerial imagery.

Some farmers might see an economic benefit in the first year, but for the most part the effects of liming will take two to five years, Jones said.

Sugar beet lime is the least expensive lime form but more is required to have the same benefit as pure agricultural lime, Jones said.

It takes many years for surface-applied lime to impact acidified no-till soils, he said.

Jones said a one-time, non-aggressive tillage to incorporate the lime did not reduce soil organic matter. Doing it once every 10 or 20 years will probably not have much impact on soil organic matter and carbon, he said.

Also, he said phosphorus fertilizer can have a beneficial effect on yield similar to lime, countering acidity to a degree.

However, it doesn't work in every case, Jones said. The lower the pH, the higher the potential for a benefit, he said.

He recommends managing nitrogen rates, picking crop rotations that require less nitrogen, leaving more stubble on the surface and considering adding phosphorus.

Phosphorus won't pay off as fast as lime, Jones said, but it may work well for a farmer who is leasing land or doesn't have a spreader to apply lime. Most direct seeders have a way to add phosphorus.

"This would be an option to get you through a few years until you can figure out a liming practice," he said. ◆

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NAVIGATING COVID-19 RELIEF FOR FARMERS

This guide was created to help you navigate the challenging circumstances sparked by COVID-19. Assistance from federal and state programs can make a difference for farmers in this crisis. The next few pages outline current relief programs related to COVID-19 and how they apply to farmers. As you review the programs that may be of help to you, the following issues are important to remember:

PROGRAM DETAILS ARE RAPIDLY CHANGING

COVID-19 relief is constantly evolving. Be sure to check with the relevant agency for changes in details from those listed here, as the rules for some programs have yet to be released, while others have already changed.

DOCUMENTATION IS CRITICAL

Some of the programs that can help you require documentation. Details matter. Have your records handy and start taking detailed notes that capture your price or market losses and tell the story of what is unfolding on your farm.

CONTACT AGENCIES AND LENDERS RIGHT AWAY

You should contact the agencies and lenders related to COVID-19 relief programs as soon as possible. Keep a record of all your contacts with agencies, insurance companies, lenders, contractors, and anyone else officially involved in the recovery effort.

YOU MAY NEED A FARM NUMBER

Most farm programs administered by USDA require farmers to register their farm with the Farm Service Agency and obtain a farm number. This process is free. Contact your local USDA Service Center (see next page) to obtain one.

DEADLINES WILL COME FAST AND MAY CHANGE

Most COVID-19 relief programs have deadlines. Some of them come very quickly, and in some cases funding could run out before the deadlines. The accompanying table includes deadlines when they exist, but you should double check with agency offices to make sure the dates have not changed.

SOME PROGRAMS HAVE APPEALS PROCESSES

Some relief programs include an appeals process. If you are denied from a program, know that "no" is not always the final answer.

RECOVERY IS A LONG AND OFTEN STRESSFUL PROCESS

Recovery from any disaster or emergency will be a long process. As is the case with other traumatic experiences, people tend to go through stages as they recover from a crisis. Be patient and caring with yourself and others. Attending to the mental health of everyone involved is essential. You can find related resources on the next page.

SCAM ARTISTS WILL COME AROUND

Unfortunately, scam artists always arrive soon after an emergency strikes. Be careful. Be especially wary of loan or debt modification scams arising during this time of COVID-19.

DISCRIMINATION IS ILLEGAL

The programs described below are available to all who are eligible. Discrimination is illegal. Each agency should have a discrimination complaint process.

YOU CAN CALL FARM AID

Navigating these programs can be overwhelming as you rebuild. Please know that you can call 1-800-FARM-AID at any time if you need support. Farm Aid can connect you to someone near you to help you figure things out.

FARMERS' GUIDE TO COVID-19 RELIEF

For more details on the programs described below, access the latest version of the *Farmers' Guide to COVID-19 Relief*, created by the Farmers' Legal Action Group, Inc. (FLAG), at www.flaginc.org/covid-19-guide/.

KEY CONTACTS FOR NAVIGATING COVID-19 RELIEF

U.S. DEPARTMENT OF AGRICULTURE

Find your local USDA Service Center: https://offices.sc.egov.usda.gov/locator/app. Note that your local Service Center may be in a nearby county.

USDA Information Hotline: For USDA-related questions, please contact (202) 720-2791.

SMALL BUSINESS ADMINISTRATION

SBA Coronavirus Relief Options: https://www.sba.gov/funding-programs/loans/coronavirus-relief-options

SBA Disaster Assistance Customer Service Center: For help with SBA's Disaster Loan Assistance website, https://disasterloan.sba.gov/, contact 1-800-659-2955 | TTY: 1-800-877-8339.

Lenders for PPP: https://www.sba.gov/document/support--paycheck-protection-program-participating-lenders

SBA EIDL Application: https://covid19relief.sba.gov/#/

DEPARTMENT OF LABOR

Find Your State Unemployment Office: https://www.dol.gov/coronavirus/unemployment-insurance#find-state-unemployment-insurance-contacts

STRESS AND MENTAL HEALTH RESOURCES

SAMHSA National Helpline / 1-800-662-4357 a 24/7 free and confidential referral and information service line

SAMHSA Disaster Distress Helpline / 1-800-985-5990 to speak to a counselor trained in disaster response.

National Suicide Prevention Lifeline / 1-800-273-8255. The Lifeline provides 24/7 free and confidential support for people in distress, and prevention and crisis resources for you or your loved ones.

To find a mental health counselor in your area, refer to https://www.psychologytoday.com/us.

NON-GOVERNMENTAL SUPPORT

FLAG's Farmers' Guide To Covid-19 Relief: www.flaginc.org/covid-19-guide/

Farm Aid Hotline: 1-800-FARM AID or farmhelp@farmaid.org













SUMMARY OF COVID-19 RELIEF FOR FARMERS MAY 4, 2020						
PROGRAM	AGENCY	WHAT IS AVAILABLE?	ELIGIBILITY	FARM ELIGIBILITY?	APPLICATION and DEADLINE INFORMATION	OTHER
	I	F	RELIEF BASED IN CARES ACT	l .	<u>I</u>	<u>I</u>
Economic Impact Payments (aka Recovery Rebates for Individuals)	Internal Revenue Service (IRS) www.irs.gov/coronavirus /economic-impact- payments	\$1,200 payment per eligible person, plus \$500 per qualifying child.	Payments reduced once an income threshold is passed (675 kf or individuals; \$150k for joint returns). See IRS help on receiving payments here: https://www.irs.gov/newsroom/how-to-use-the-tools-on-irsgov-to-get-your-economic-impact-payment.	Yes.	In theory, payments are automatic for those who file federal taxes or receive Social Security or federal benefits. For those who don't, basic information must be provided to the IRS.	Some lenders can seize payments.
Paycheck Protection Program (PPP)	Small Business Administration (SBA) https://www.sba.gov	Loans cover 8 weeks of payroll costs. Loans can be forgiven.	Farms; small businesses; nonprofits; tribal small business concerns; veteran's organizations; other self- employed individuals; and independent contractors.	In general, yes.	Application deadline is June 30, 2020. Must apply via a lender. Lenders have applications or use: https://www.sba.gov/sites/default/files/2020-04/PP9%20Borrower%20Application%20Form.pdf.	First come first serve. Off and on availability due to funding shortages. Impossible to know if and when funding might permanently run out.
COVID-19 Economic Injury Disaster Loan (EIDL) Program	Small Business Administration (SBA) https://www.sba.gov	(1) Loans for small businesses; and (2) Emergency advances of up to \$10,000 that do not need to be repaid.	Small agricultural enterprises and businesses of under 500 employees; private nonprofits; small agricultural co-ops; sole proprietorships; and tribal small business concerns.	Yes. Originally not eligible, but made eligible on April 24, 2020.	Program available until Dec. 31, 2020. Initial funding ran out, but new funding is available and SBA resumed taking applications from farms on May 4, 2020. Must apply directly on SBA's website: https://covid19relief.sba.gov/#/.	First come first serve. Availability has been off and on due in part to funding shortages. Possibly will continue as an on-again, off-again program.
Pandemic Unemployment Assistance (PUA) Program	Department of Labor_ https://www.dol.gov	Unemployment insurance available for jobs lost due to COVID-19. Normal payments increase by \$600 per week, and assistance extended to 39 weeks of benefits.	Available to "unemployed self-employed." Must be unable to work due to one of several reasons related to COVID-19 crisis.	Yes, as a self- employed unemployed person.	Apply with state unemployment insurance office. Find state office: https://www.dol.gov/coronavirus/unemployment-insurance#find-state-unemployment-insurance-contacts.	State unemployment office may not realize farmers can be eligible.
Foreclosure Moratorium and Forbearance	Various. Not clear who will enforce it or how.	Forbearance and foreclosure moratorium for residential home mortgages. Forbearance means not making payments for a time.	Only government backed residential mortgages are eligible (i.e. if federal agencies made or guaranteed a loan, or if Fannie Mae or Freddie Mac are involved).	For mortgages that include a home and little else.	Contact the lender. For more information see Consumer Financial Protection Bureau: https://www.consumerfinance.go v/about-us/blog/quide-coronavirus-mortgage-relief-options/.	To date, it does not appear that farm mortgages are eligible even if the mortgage includes a residence.
Coronavirus Food Assistance Program (CFAP): Direct Payments	U.S. Department of Agriculture (USDA) www.usda.gov.	Direct payments for actual losses due to prices and supply chains affected by COVID-19, and payments for lost demand and oversupply caused by COVID-19. Additional details unknown.	Not known. USDA is expected to want evidence of losses.	Yes, designed for farmers.	Details unknown.	\$16 billion in funding.
Coronavirus Food Assistance Program (CFAP): Farmers to Families Food Box Program	U.S. Department of Agriculture (USDA) www.usda.gov	USDA purchases fresh produce, diary and meat. Distributors and wholesalers provide box of food to groups serving those in need.	The government will purchase fresh produce, dairy, and meat from farmers.	Yes, as sellers of fresh produce, dairy, and meat.	Details unknown, USDA has sought proposals.	\$3 billion in purchases of food from farmers.
Bankruptcy	Contact an expert.	Court supervised.	Varies. Chapter 12 is for family farmers; under the CARES Act, COVID-19 payments do not count as income for Chapter 7 or 13 bankruptcies.	Yes.	No single deadline.	
			OTHER RELIEF	T		
Court System	State, federal, and tribal courts.	Delays on certain matters; temporary suspension of fines and fees, etc.				Find some court information here: https://www.ncsc.org/~/media/Files/PDF/Newsro om/Coronavirus-News-Updates-Roundups/Coronavirus %20and%20the%20Courts%20State%20Profiles %204-10-2020.ashx
Farm Service Agency (FSA)	USDA Farm Service Agency (FSA) www.fsa.usda.gov	Accelerations and some foreclosures suspended for FSA Direct Loans. For Guaranteed Loans, servicing considered by FSA.	Current borrowers.	Yes.		Information on USDA's actions in response to COVID-19: https://www.farmers.gov/coronavirus
Federal Crop Insurance	Contact the farmer's insurance provider.	Indemnity payments.	Must have previously bought crop insurance. COVID-19, by itself, does not create an insurable loss.	Yes.	Contract has details. Often short deadlines to report losses.	Crucial for farmers to follow crop insurance agreements and inform and work with insurance provider in advance about changes to farm plans that have been affected by COVID-19.
Noninsured Crop Disaster Assistance Program (NAP)	USDA Farm Service Agency (FSA) www.fsa.usda.gov	FSA program similar to crop insurance, and available when crop insurance is not available.	Must have previously signed up.	Yes.	Varies. Applications for payment: must file within 60 days from last day of coverage for the crop year.	Crucial for farmers to follow NAP agreements and contact FSA before making changes to farm plans that have been affected by COVID-19.
			GUIDANCE	1		
Regulator Guidance for Financial Intuitions	Various.	General guidance that lenders should be willing to modify loans and work with borrowers. This guidance does not provide direct relief for individual farmers.		Yes, although no direct relief for individuals.		

The Key Role of Forage Legumes in Organic Dairy Diets: Effects on Your Bottom Line

continued from page 1

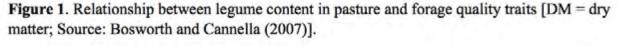
for organic dairies, the need to enhance production efficiency, feed quality, and milk components becomes even more critical to ensure organic dairy remains profitable. Legumes are key to addressing several critical challenges facing the organic dairy industry today, including (1) maximizing forage yield, (2) successfully implementing high-forage diets to capitalize on "grass-fed" and other specialty milk markets, and (3) optimizing forage quality and energy:protein balance to improve production of milk and milk fat and protein.

Legume persistence and proper energy:protein balance in forages are the primary challenges impacting pasture quality and productivity, thus limiting farmers' ability to successfully implement forage-based diets. Perennial legumes provide a crucial, low cost nitrogen (N) source in diverse pastures and are critical to the energy:protein balance of forages, which ultimately affects milk productivity, quality, and animal health. However, a University of New Hampshire (UNH)-led research conducted with 14 organic dairies across the Northeast revealed that grasses made up most of the species (67%) used for grazing, whereas legumes only contributed 26% (Hafla et al., 2016). Note that maintaining legumes in pastures or hayfields is not simply an agronomic management issue; climate, soil fertility, herd management, and grazing practices interact to impact the longevity and maintenance of the legume composition of fields

as well. While managing N for productive pastures or hayfields is paramount, this must be balanced with the need to maintain high-energy forages, as forage-based diets can decrease N utilization in dairy cows due to excess N intake and consequent excretion of N to the environment leading to water and air pollution. Another tradeoff of feeding high-legume rations is that increased fiber intake can elevate enteric methane ($\mathbf{CH_4}$) emissions, which not only represent an environmental concern, but also energy losses that otherwise would be available for producing milk protein and fat.

Importance of Legumes to Improving Forage Quality and Milk Production

Legume-grass mixtures generally provide more consistent and higher forage yields across a range of environments than grass or legume monocultures. Research done at the University of Vermont showed positive correlations between legume inclusion in pastures and forage quality traits like crude protein and net energy of lactation, and negative relationship with fibrous compounds. As shown in **Figure 1**, approximately 30% legumes in pasture was needed to promote desirable forage quality characteristics including increased protein content and less neutral and acid detergent fiber. Data from a recent metanalysis, which combined results from studies conducted in



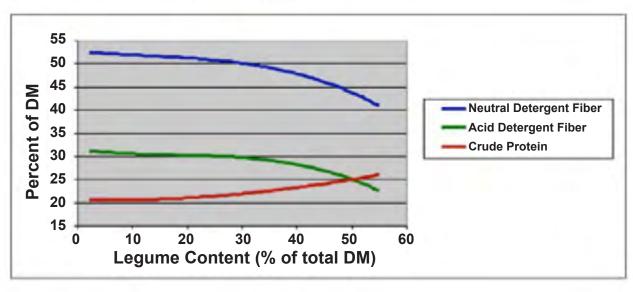


Table 1. Effect of grass vs. legume silages on production and digestibility in dairy cows fed high-forage diets

10 miles	Silag		
Item	Grass	Legume	P-value
Dry matter intake, lb/day	40.3	43.2	< 0.01
Milk production, lb/day	54.0	57.5	< 0.01
Energy-corrected milk, lb/day	53.6	55.8	< 0.01
Organic matter digestibility, %	70.4	67.9	0.01

Adapted from Johansen et al. (2018).

Europe and US, revealed that that dry matter intake (+7%) and production of milk (+6.5%) and energy-corrected milk (+4%) were all higher in dairy cows fed high-forage diets containing legume than grass silages (**Table 1**). Despite organic matter digestibility being lower in legume vs. grass silages (**Table 1**), rumen passage rate of fibrous materials is faster when feeding legumes compared with grasses. This stimulates feed intake and more milk production in cows fed legume-based diets.

Effect of Different Legume Sources on Milk Production and Composition

Alfalfa has become the "gold standard" for production of silage, baleage, and hay in the US. Both alfalfa and red clover are commonly used in northeastern organic dairies. It should be noted that a large proportion of alfalfa protein is broken down to ammonia, amino acids, and peptides during ensiling, thus reducing efficiency of protein utilization in cows fed alfalfa. In contrast, protein from red clover is protected against degradation in the silo and rumen due to the enzyme polyphenol oxidase present in red clover tissues that binds to proteins. However, several studies showed that cows fed alfalfa produced more milk than those fed red clover, but alfalfa-fed cows also had higher MUN and N excretion to the environment. Birdsfoot trefoil, which is not as prevalent as alfalfa or red clover in the Northeast,

has been shown to be more effective than alfalfa and red clover to milk production and reduce urinary N excretion in dairy cows likely modulated by condensed tannins present in birdsfoot trefoil. Based on a recent meta-analysis, silages made from white clover and birdsfoot trefoil were best for milk production, while white and red clover resulted in the greatest digestibility of organic matter in cows fed high-forage diets (**Table 2**). Despite numerous studies done with alfalfa and red clover in the past as the sole forage source in the diet, there is scarce information looking at baleage made from mixtures of alfalfa or red clover with grasses made to balance the energy:protein supply in organic dairy diets. Results from a feeding trial conducted at UNH are presented next.

Results From the UNH Winter Feeding Trial

A winter feeding trial was conducted at the UNH Burley-Demeritt Organic Dairy Research Farm (Lee, NH) to investigate the effect of different legume-grass mixtures harvested as baleage on milk production, milk fatty acid profile, plasma concentration of essential amino acids, and N utilization in Jersey cows. This project was funded by USDA NIFA Organic Transitions Program. Twenty mid-lactation Jersey cows were

continued on page 20

Table 2. Effect of grass vs. legume silage types on production and digestibility in dairy cows fed highforage diets

	Silage type					
Item	Grass	White clover	Red clover	Alfalfa	Birdsfoot	P-value
Dry matter intake, lb/day	41.7 ^b	44.1ab	44.1a	46.3a	48.1ab	< 0.01
Milk production, lb/day	57.8°	65.3ª	60.2^{b}	61.1^{b}	69.2ª	< 0.01
Energy-corrected milk, lb/day	56.7 ^d	61.9ab	57.5 ^{cd}	59.5bc	67.0^{a}	< 0.01
Organic matter digestibility, %	71.5ab	73.6a	69.4 ^b	66.0°	67.2abc	< 0.01

Adapted from Johansen et al. (2018).

abcdValues in the same row with different superscripts differ statistically at P < 0.05.

The Key Role of Forage Legumes in Organic Dairy Diets: Effects on Your Bottom Line

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assigned to 1 of 2 diets in a randomized complete block design. Two fields were planted with alfalfa- or red clover-grass mixture with a 79:14:7 legume:meadow fescue:timothy seeding rate (% total). Second- and third-cut legume-grass mixtures were used in the study. The botanical composition (dry matter basis) of second-cut alfalfa- or red clover-grass fields averaged 65 vs. 80% legume, 17 vs. 15% grasses, and 18 vs. 5% weeds, respectively. Third-cut alfalfa- or red clover-grass mixture botanical composition (dry matter basis) averaged 84 vs. 96.5% legume, 3 vs. 2.3% grasses, and 13 vs. 1.2% weeds, respectively. Diets contained 65% second- and third-cut alfalfa or red clover-grass (32.5% of each cut) and 35% concentrate. The study lasted 7 weeks with sample collection done at weeks 4 and 7. Diets averaged 18.8 vs. 18.1% crude protein and 30.5 vs. 31% neutral detergent fiber for alfalfa-grass vs. red clover-grass, respectively.

No statistical differences between diets were observed for dry matter intake, production of milk and milk protein, and percentages of milk fat and protein (**Table 3**). In contrast, production of 4% fat-corrected milk, energy-corrected milk, and milk fat significantly increased with feeding alfalfa-grass vs. red clover-grass (**Table 3**). However, cows fed alfalfa-grass had higher MUN than those receiving red clover-grass, indicating poorer

utilization of dietary protein in the alfalfa-grass diet (**Table 3**). As mentioned above, the presence of the enzyme polyphenol oxidase in red clover prevents protein degradation in the rumen, thus contributing to improved N utilization in dairy cows. Despite improved N utilization, cows fed the red clover-grass diet decreased production of milk and milk fat, which agree with previous research.

We were also interested in better understand the effects of legume-grass mixtures on milk fatty acid profile. There is a growing consumer interest in purchasing products rich in omega-3 fatty acids and organic milk is known to have a healthier fatty acid profile than conventional milk. The percentage of milk α -linolenic acid, which is the major omega-3 fatty acid present in milk fat, was significantly higher in cows fed red clover-grass than alfalfa-grass diet (Table 3). Likewise, total percentage of omega-6 and omega-3 fatty acids increased significantly with feeding red clover-grass vs. alfalfa-grass (Table 3). In addition, the omega-6/omega-3 ratio was lower in the red clover-grass compared with the alfalfa-grass diet (Table 3). These results confirm that the red clover-grass diet promoted a healthier fatty acid profile in milk fat than the alfalfa-grass diet. Note, however, that the percentage of CLA in milk fat did not differ between alfalfa-grass and red clover-grass diets.

Table 3. Effect of feeding diets containing alfalfa-grass or red clover-grass baleage on milk production and composition and milk fatty acids (% total fatty acids) in organic Jersey cows (UNH winter feeding trial)

	Baleage type		
Item	Alfalfa-grass	Red clover-grass	P-value
Dry matter intake, lb/day	43.7	47.8	0.18
Milk production, lb/day	47.8	45.9	0.11
4% fat-corrected milk, lb/day	58.9	54.5	0.05
Energy-corrected milk, lb/day	62.6	58.0	0.06
Milk fat, %	5.48	5.30	0.18
Milk fat, lb/day	2.65	2.40	0.05
Milk protein, %	3.68	3.59	0.50
Milk protein, lb/day	1.74	1.65	0.21
MUN, mg/dL	13.0	10.3	< 0.01
Milk α-linolenic acid, %	0.64	0.86	< 0.01
Milk omega-6 fatty acids, %	2.17	2.46	0.02
Milk omega-3 fatty acids, %	0.70	0.94	< 0.01
Milk omega-6/omega-3 ratio	3.13	2.62	< 0.01
Milk CLA, %	0.44	0.40	0.37

Table 4. Effect of feeding diets containing alfalfa-grass or red clover-grass baleage on blood plasma essential amino acids in organic Jersey cows (UNH winter feeding trial)

	Balea		
Essential amino acids	Alfalfa-grass	Red clover-grass	P-value
Plasma methionine, µM	23.7	22.2	0.47
Plasma lysine, µM	93.1	95.1	0.76
Plasma histidine, µM	36.8	55.1	< 0.01
Plasma leucine, µM	142	178	0.03
Plasma isoleucine, µM	144	154	0.37
Plasma valine, μM	253	295	0.06

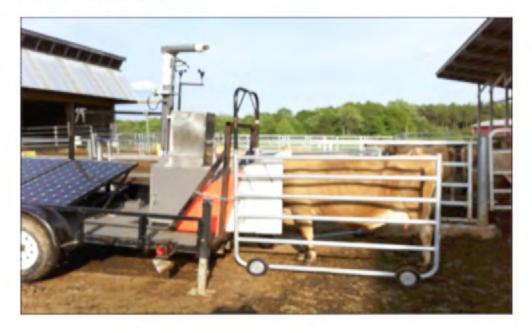
We also looked whether feeding alfalfa-grass or red clover-grass diet would change the blood plasma concentration of essential amino acids. It is well known that the essential amino acids methionine, lysine, and histidine are the most limiting amino acids for production of milk protein in dairy cows. Moreover, the branched-chain amino acids leucine, isoleucine, and valine can be also limiting for milk protein synthesis in dairy diets. Therefore, it is important to understand how methionine, lysine, and histidine and branched-chain amino acids are affected by feeding alfalfagrass or red clover-grass diet. Our results showed that plasma methionine, lysine, and isoleucine were statistically similar between diets (Table 4). In contrast, plasma histidine, leucine, and valine acids either increased or tended to increase significantly in cows fed red clover-grass vs. alfalfa-grass diet. Even though

production of milk protein was not affected by diets (**Table 3**), red clover-grass appears to be more effective than alfalfa-grass to elevate plasma concentration of essential amino acids.

Dairy accounts for about 4% of total greenhouse gas emissions and 25% of enteric CH4 emissions in the US. The global warming potential of CH4 is over 30 times higher than that of carbon dioxide, and CH4 production represents 2 to 12% dietary energy losses, justifying the need to better understand how different legume-grass mixtures impact enteric CH4 emissions. Methane emissions in the UNH winter feeding trial was measured using the GreenFeed system (C-Lock Inc., Rapid City, SD; Figure 2).

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Figure 2. The GreenFeed system being used at the UNH Organic Dairy Research Farm for methane measurements.



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The GreenFeed unit operates by automatically releasing a pellet feed every 30 seconds for a total of 5-min measurements several times throughout the day triggered by a RFID ear tag worn by each cow and equipped with built-in sensors to measure CH4 fluxes near real-time. Our results revealed a statistically significant interaction between diet and sampling week for CH4 production; cows fed the red clover-grass diet had lower enteric CH4 emissions than cows fed the alfalfagrass diet in week 4 of the study (157 vs. 218 grams/day, respectively), but no statistical difference was observed when measurements were taken on week 7 of the experiment (182 vs. 200 grams/day, respectively). We also measured urinary N excretion to gain insights on N use efficiency in our cows. A statistically significant interaction was also observed for urinary N excretion expressed in grams/day and as percentage of N intake. Compared with cows fed alfalfa-grass, feeding red clover-grass significantly decreased both the output of urinary N (218 vs. 157 grams/day) and urinary N as a percentage of N

At Upstate Niagara Cooperative, Inc. our member dairy farmers work passionately to ensure delicious, high-quality milk. In 2006, we introduced an Organic Program to our members. We have proudly produced organic dairy products ever since.

intake (27.5 vs. 33.8%, respectively) during week 4, but not in week 7 of the trial for these 2 variable responses. Together with MUN, decreased urinary N excretion suggests improved N use efficiency in cows receiving the red clover-grass diet likely mediated by the presence of the enzyme polyphenol oxidase as discussed earlier.

Take Home Message

Results from several studies summarized in a recent published meta-analysis revealed that silage made from legumes such as alfalfa, red and white clover, and birdsfoot trefoil resulted in more production of milk and milk components compared with grass silages. Data from UNH confirmed previous results that alfalfa appears to be more effective than red clover to promote production of milk and milk fat, but less environmentally friendly due to increased urinary N excretion, which can pollute water and air. Interestingly, feeding the red clovergrass diet decreased enteric CH4 production even though this response was not consistent over time. Cows receiving red clover-grass also produced milk with a healthier fatty profile (i.e., more omega-3 and lower omega-6/omega-3 ratio) vs. cows fed alfalfa-grass. Agronomic and soil research is needed to better understand decreased persistence of legume forages in pastures and hayfields in the Northeast. Research is also needed to gain knowledge about the tradeoffs between increased legume intake and reproductive performance of organic herds as legume forages, particularly red clover, are rich in phytoestrogens that may negatively affect fertility of dairy cows.◆

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Adaptive Grazing: Improve Your Pastures and Profits

by Lee Rinehart, Sustainable Agriculture Specialist, National Center for Appropriate Technology

ack in the late 1990s I was a new county Extension agent in Texas. I was just getting the lay of the land and visiting the various ranches in my southeast Texas county with my mentor, a seasoned agent who taught me a lot about connecting with ranchers, designing research plots, and managing the intricacies of the county 4H program. In our travels I met a Brangus rancher who became a friend and research cooperator on several result demonstrations, and I pitched him a topic that immediately interested him.



High stock density removes grazing selectivity thereby utilizing forages more efficiently, and returns large amounts of carbon back to the soil through trampling of uneaten forage. (Photo source: Understanding Ag, LLC.)

It was a concept that I and other agents in our region had been introduced to at a field training that year, where we visited a ranch in central Texas that had a very peculiar set-up and intriguing management system. The pasture was laid out with fences that resembled a wagon wheel if seen from above, and the brindle cattle were rotated through the various subdivisions every few days to new grass. The idea was that grazing could be managed more easily, and forage regrowth could be encouraged while the cattle were on a different paddock. This was my introduction to rotational grazing, or management-intensive grazing (MiG) as it was called. But what really excited me, and was the impetus that sent me off on a new career direction, was when the rancher said, in response to a question I had raised, that he didn't have a weed problem, even though I had identified several weeds in his paddocks. The cows took care of that, he said. From that moment, my life was different.

I took the idea to my new cooperator and he was every bit as excited as I was. We set about designing our system. A 3-acre pasture next to the heifer barn would be our study area, and we divided it with a single strand of electrified wire into 11 paddocks where 24 heifers would spend two days on each, and then move

to another the following day, giving us about 22 days of rest. This rest period was OK in this southeast Texas spring, where moisture was available to allow regrowth of the annual ryegrass-white clover pasture we had planted. Water was placed by the barn and was accessed by an alley fenced off by electrified wire. We finished setting up the fencing and then turned out the heifers, and I started to observe.

The lightbulb went on in my head one morning when I went to check the heifers. I looked about the paddock to assess how much they had

grazed, and I noticed that all of the curly dock had been stripped bare. Not a single leaf remained, and the stems stood upright against the green of the ryegrass. What I had observed was a change in grazing behavior, caused by a controlled grazing system that decreased the heifers' grazing selectivity. Now I knew why the central Texas rancher said weeds weren't a problem.

Fast forward to 2020, and the landscape of managed grazing has changed. MiG grazing was about managing for grass monocultures with maybe a legume added for forage quality (a forage specialist once told me white clover is like having range cubes distributed throughout the field), keeping grass vegetative, and timed animal movements, which were key principles in early MiG philosophy. Now, we have a better understanding of soil processes, nutrient cycling, and the benefits of animal impact on pasture ecology. We understand we are dealing with a biological system that doesn't respond well to the calendar, and have come to see that healthy ecosystems are driven by diversity. We have taken the powerful principles we learned from MiG grazing and refined a system of livestock production that can actually regenerate the soil, the water cycle, and the land.

Adaptive Grazing: Improve Your Pastures and Profits

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Many ranchers across the country are focusing on plant and animal diversity to build resilient agroecosystems. These systems are supported by biology, and biology has the power to regenerate land that has been overgrazed or used intensively with chemical inputs and monocultures. Instead of building a static system and focusing exclusively on livestock productivity,



This pasture is a perfect candidate for high-impact, high-density, short-duration grazing. Livestock will pick through and eat many of the plants in this field, including the weeds, and will trample the rest into the soil. A few years of this treatment can turn the pasture into a productive, diverse pasture composed of various grasses, legumes, and forbs. Some ranchers who've done this have even observed the return of warm season native grasses. (Photo source: Lee Rinehart, NCAT.)

regenerative graziers and the systems they develop are characterized by adaptation. Change happens throughout the grazing season, and by being able to adapt to change, through observation and implementation of various practices, graziers can repair worn-out soils, increase ecosystem diversity and resiliency, and maximize livestock productivity.

Grazing with multiple paddocks, frequent moves, and long rest periods to provide full plant recovery is a proven method of increasing the resiliency of pastures: building soil organic matter, increasing soil water infiltration, promoting water conservation, and decreasing surface runoff. Coupled with the use of stockpiled pasture and stored forage, the possibility of year-around grazing and forage-finishing of livestock becomes feasible in more parts of the country. In addition, this kind of grazing makes it possible to feed livestock without concentrating wastes in manure pits and lagoons, thereby maintaining nutrients within the pasture ecosystem and preventing them from becoming pollutants in our waterways. When combined with flexible management, this type of grazing has come to be known as adaptive grazing. This grazing technique improves forage availability and ecosystem functioning. For example, when an adaptive approach is taken, producers can often double the number of livestock they normally graze while restoring grazing landscapes.

Renovating Tired Pastures

Pastures are the foundation of a grazing enterprise and managing for resilience and long term sustainability is key to success. If the pastures are weedy, sparse, compacted, and lack diversity, or if too many animals remain on pastures for an extended period of time, pasture decline will result and parasitism will decrease animal productivity. One of the best ways to renovate pastures is to use managed animal impact. This contributes organic matter to the soil and feeds soil microorganisms, thereby increasing nutrient cycling and system resilience. For example, one thing that producers do to use animals in pasture renovation is to feed hay in a pasture that needs help. This concentrates the animals there in high density for a period of time to consume hay, deposit urine and manure, and trample the rest of the hay into the soil as a carbon source to feed the soil microorganisms. The pasture is then rested for a long period of time to regrow. Many times what regrows is weeds, and this can be discouraging to farmers. But then, the animals can be confined on the weedy paddock again, in high density, to eat some of the weeds and trample the rest into the ground, further incorporating organic matter. Then the animals are moved off, and the pasture is allowed another long period of rest. Farmers who have done this have noticed, over the course of a few years, that what returns is a diverse field of native and adapted plants from the native seedbank in the soil. From then on, the pastures can be grazed appropriately based on the principles of adaptive grazing.

Allen Williams, a leading expert in regenerative, adaptive grazing, and co-founder of Understanding Ag LLC, recommends providing extended periods of rest between short, high stock-density grazing periods on diverse pastures. This allows for optimum recovery of forages and increases overall forage dry matter production. It also contributes significantly to soil health through the addition of organic matter. Adaptive grazing is a flexible, goal-oriented strategy that focuses on stock density and not stocking rate, uses frequent animal movement and adequate pasture rest for plant root-system recovery, and relies on temporary electric fencing. Producers who use adaptive grazing techniques see improved forage availability and ecosystem functioning, where grazing landscapes are strengthened with diversity and resilience.

Free multimedia resources on adaptive grazing are available from NCAT's ATTRA Sustainable Agriculture Program. The collection can be found at www.ncat.org/adaptive_grazing/ and includes a five-part video series of Allen Williams describing the details of adaptive grazing, two short videos on spring pasture management, and a short video on dairy grazing filmed at Greg and Forrest Stricker's Spring Creek Farms in Pennsylvania. The collection also includes two podcasts. In the first I discussed with Dr. Williams

how adaptive grazing techniques could increase the supply of livestock on the market as it helps solve many issues currently associated with animal agriculture. For the second, Rinehart sat down with fellow NCAT agriculture specialist and sheep rancher Dave Scott of Montana to discuss regenerative grazing techniques. Related publications are also available from ATTRA Sustainable Agriculture, including *Pasture*, *Rangeland*, *and Adaptive Grazing*, published in 2020. Producers who would like the adaptive grazing publication mailed to them can contact ATTRA at 800-346-9140 to receive a free copy.

Refer to the resources above and reach out to us at ATTRA to discuss your operation. ATTRA specialists can research specific topics and write detailed responses to your questions. And, if interest is shown on a topic, we may write follow-up pieces. To let us know what your needs are, go to www.attra.ncat.org and "Ask an Ag Expert," or call 800-346-9140. Best wishes for your success!

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the small operation builds upon generations of family heritage, his mother's love of birds, and his father's early forays into woodland conservation.



Kevin himself traveled a long and winding path to dairy farming, leaving the family farm for college at the University of Wisconsin - Stevens Point, first studying wildlife and natural resource conservation, then business and German. He spent a semester abroad in the lands of his ancestors - various German principalities, and Galicia in former Austria Hungary. Here, he found a renewed interest in small family farming, and particularly in grazing, which he brought home to the family farm.

Wisconsin has been home to generations of his family, who settled the land to log it and farm it. Many of his relatives remain in the dairy business, which has been a constant in the family's legacy. Today, Kevin continues that tradition and grows deeper roots through his involvement in conservation and grazing education. He is the River Country Resource Conservation and Development Council's grazing educator, working in conjunction with the Dairy Grazing Apprenticeship. That DGA program began as an initiative of the non-profit Grassworks, Inc., where he serves as the President of the Board of Directors.

Growing Grazing/Going Organic

During the 1980s, Kevin's dad had used AI to carefully select genetics and breed their Holsteins, and was proud of the milk the herd was making primarily from high-quality forages and green chop. They fed very little corn silage or corn, and passively pastured the cows. The herd had been a closed one for many years, and still is, with cows being sold, but none coming into the herd since the 1950s. They had low SCC counts and very little disease issues.

At the same time, the dairy industry's focus was on producing more milk per cow. The high-quality hay and green chop the

cows were consuming helped to keep their production levels up, but their nutritionist was adding ingredients into the ration to further enhance production, which increased their feed expenses. Combined with the time and energy they spent harvesting and storing the forages, and the pressure to get big, dairy farming was becoming less appealing as Kevin approached young adulthood and faced a choice whether or not to return to the farm.

"We're not wearing these cows out," Kevin and his father agreed, as herd longevity was always a point of pride. They opted to explore alternatives to the consolidation and high production models of dairy farming being pressed upon the industry, to see if they could, indeed, survive while farming in a less intensive manner.

A neighbor had been farming seasonally, buying spring cows at auction that looked less than optimal, and grazing them in a managed system. By the end of the season, those cows were robust. This led to an epiphany that dairy cows could graze, remain productive and stay healthy, and they could become more efficient and spent less money by allowing the cows to harvest their own feed, keep cows living longer, and stop chasing increased production.

His uncle, a seed salesman, began learning of some dairy farmers intent on managing grazing cows intensively, and suggested they attend The Grassworks Grazing Conference in Stevens Point. The results they saw during pasture walks, and resources these "happy farmers" shared led to the growing realization that the cows could do their own harvesting, cutting costs and keeping the herd healthy. As they visited grazing experts during the 1990s, they began seriously implementing intentional grazing strategies on the dairy, and began to organize others in their local region to explore grazing.

"The ecological aspect of grazing" was appealing to the family, Kevin said; and working with early graziers "made farming a lot of fun. It made it interesting."

With friendly, low-stress cows and a growing belief in farming naturally, the move towards organic dairying came next.

They had not used chemicals on their pastures for years, so the idea of going organic was primarily hindered by concerns that



herd health could take a hit if they could no longer use antibiotics. Yet the controversy around growth promoting hormones, antibiotic use and GMOs "made us interested in organics," and by 2000, they were very slowly transition towards organic production methods.

By 2008, they were next on the list to supply milk to Organic Valley in their region. When the recession hit, they spent over a year waiting to be accepted into the Organic Valley supply pool. They survived by selling heifers, and managed to stay afloat until 2011, when they were finally able to ship their milk as certified organic, and receive the price differential. By 2013, they were 100 percent grassfed, and part of the Grassmilk® label.

Just Grass

The farm had already been perimeter fenced, and the primary need they had in order to get the cows out on the pastures was laneways and internal fencing for the paddocks. They were able to obtain assistance from the NRCS EQIP program to put in the infrastructure needed. The pastures were already growing high-quality forages which they had been using for hay and green chop.

They had first set up pastures with steel wire, which was not at all successful. Polywire fencing was their saving grace.

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They turned the Holsteins onto pasture, selling those who didn't adapt. The herd adjusted nicely to grazing, and they began breeding with genetics selected from bulls who had strong legs and feet, and a wide frame. Soon the herd was comprised of medium build cows, solid and strong, with large rumens and "not a lot of air space. As wide a Holstein as you can basically get," Kevin said. These cows get a lot of exercise, and are robust.

Although they were initially concerned that they could see an increase in mastitis, that never occurred. Twenty-five years into grazing, they have lower SCC than when they were conventional, running about 65,000 consistently. They've rarely had to use any organic treatments on the cows, and rarely have lost a cow to mastitis. They do regular milk testing, and can flag higher cell counts, and divert that milk for calf feeding. They use some liniments and essential oils when needed for mastitis, which is about two cows per year. An effective preventative health measure is the liberal use of iodine teat dip on the udders immediately after milking.

They no longer push cows for production. The cows aren't stressed, so they don't have udder issues, Kevin said. They are still milking some cows which are 10 years old. Cow longevity

is "a huge part of this whole system. We want to keep them low stress, and as comfortable as possible. Just by doing the right kind of grazing, and having the right diversity... there's hardly any herd health issues."

They did see some drop in milk per cow when switching to 100 percent grass, but they had traditionally been primarily feeding grass, and that was not a major concern. The herd now averages between 40 and 60 pounds of milk per cow, per day depending on the status of the pasture. Milk fat averages 4.1, and protein about 3.0. They are optimizing omega 3 production, which the co-op tests. They want those fats that make great butter, so they focus on high-quality forages.

"We want to be on the high-quality side of our co-op, marketing as a specialty producer," Kevin said.

Grazing Plan

Legumes are a big part of that, with clover playing an essential role in their pasture mix. They want a diversity of species on pasture. The primary grasses are quackgrass and bluegrass, along with timothy, brome, meadow fescue and ryegrass. Pastures have been no-till since the early 1990s, and they do some seeding of clovers, to keep that population at 30-40 percent. They don't have much need to renovate, and the permanent pastures are relatively uniform.



"It can be these 'weed species,' but through management, they are really good, or at the bare minimum, acceptable," he said.

There are usually 80 -120 cows per acre, not as high as some high-intensity stocking densities. Visual inspection of the paddock tells him when to move the cows. When the cow pies have hoof marks, it's time to move them. They move cows every twelve hours, and heifers at least once a day. They use fencing intensively to prevent overgrazing, and to promote good regrowth.

"I like to graze a little taller, about 12 -18 inches," Kevin said. "It's a whole balance of having the plant start to have seed heads, but still vegetative enough to be palatable energy."

He does not let the cows back in to eat the paddock again, but uses a leader/follower system where the heifers clean up the paddocks two days after the milking herd leaves. This prevents him from having to mow the paddocks - which he does occasionally - to get regenerative growth. Their average DMI from pasture grazing is 95 percent, with hay and minerals, fed at milking, making up the remainder.

With almost half of the farm in permanent pasture, the grass can get ahead of the cows. If they can't efficiently graze a paddock, they'll go in and make hay, cutting one week prior to Memorial Day. They have excess pasture for grazing set aside each year, so there is flexibility built into the grazing plan. If the pasture gets too old for the cows to graze, they'll make hay throughout the season. They also have dedicated hay acres.

Twice per day, the cows are brought into the stanchion barn, which has been adapted for comfort with mattresses, for milking. They breed cows for higher udders for this reason. It's a comfortable environment for the cows, and there is extra height from the floor level to make it easier for milking. When the crops demand more time, they'll put the cows on a every 18 hours milking schedule. At each milking, the cows receive high quality hay or haylage.

During the winter, the cows are outside daily. The length of time outdoors depends upon the weather conditions, but they are normally bale grazed outdoors. The area does get some extreme cold - as low as -40°F, so the animals are rarely outside overnight during the non-grazing season. The grazing season itself typically runs from mid-May through early December.

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The frozen ground in the winter paddock becomes "cowcrete," so bales can be placed on it without suffering too much from heavy use. Alternatively, they intentionally freeze the paddock to get the same effect. They can gain a little bit of time in the spring by doing so, and the cows can continue to bale graze without too much mud. Sacrifice paddocks are reseeded as needed in spring. Otherwise, the pastures are touched up via surface tillage and reseeding only if necessary.

Baleage - primarily large square bales and some round bale silage - is fed during the winter. The large square bales are easily fed out, as they are already "sliced" to a high degree, This makes them easy to feed without additional work, and the cows tend to eat more feed. They do still use one silo as well. Dry bales are also fed in the barn.

Manure from the barn is scraped up and spread onto fields as needed. Pastures all have a pipeline system, using well water from two wells. The pipelines are operational for three seasons, but in winter the cattle have access to water tanks.

Other Management Concerns

Vaccines are an important part of the herd's health. In the region, wildlife and the disease they carry, such as rabies, are a major concern. Pink eye is a primary concern, too. They have a robust spring and fall vaccination program, and focus on prevention with the guidance of their veterinarian, with those born during wet and rainy calving seasons receiving extra care.

Calves are kept in the barn in individual pens for the first month, then moved to group pens. The calves are next moved to a cement barnyard with a feed bunk, and a bedded pack, while training for pasture. The calves are pastured in moveable pens made by attaching cow panels together, and moving them as needed to fresh grass daily.

Heifers, dry cows and steers all graze together, and combined number about 75 per season. Their beef grades as select or low choice, but they've switched to primarily using local processors and marketing freezer beef directly to consumers, due to being docked for "yellow fat," - an indicator of high omega 3s - in the traditional beef sales venues. They raise 70 percent of their bull calves.

While they have their own equipment for their dry square bales, as well as chopper for silage, they also hire custom for the large square bales. Their custom operator can efficiently wrap these large bales, and is more cost-effective. Kevin handles all of the milking

and grazing, while his dad works with him on the cropping and hay management. They do not have non-family employees, but have good neighbors who helped when asked!

Conservation

As far back as 2001, they were enrolled in the Conservation Stewardship Program. They participate in several conservation measures aimed at increasing bird and pollinator habitat. They keep areas available for grassland birds to nest by delaying any cutting until summer. Pollinators are encouraged through pasture species diversity. Chicory, clovers, and plantain are some of the plants allowed to flower, through grazing management, to encourage pollinators.

They also maintain pollinator habitat and habitat for edge species around the pasture boundaries and into the woodland. The woods are managed for rare woodpecker species, and are in tree conservation programs.

"We try to have bird houses along laneways and the perimeter," and the pastures lure bobolinks and meadowlarks. "They are absolutely a magnet for those birds," Kevin said of their pastures.

They do have data showing that bird populations have increased due to the conservation measures they've put into place.

The farm is in the Yellow River watershed, so keeping fields in pasture, with minimal soil erosion and no chemical use, or manure runoff, is environmentally important.

Their rented hay acres keep agriculture lands in production. They are asked by neighbors to keep this farmland productive, and are taking old fields and rejuvenating them through good soil health management.



Community

The Mahalko's have participated in grazing leadership for decades. They have, through the years, led in organizing, along with many others. During the 1990s, they worked both to promote grazing and to protest against cooperatives and processors who had "pitted farmers against farmers," and to bargain for a more sustainable milk price, Kevin said. They continue to make appearances at the State Capitol, to promote organic dairy farming and grazing.

The farm is open to members of the public for special events, including pasture walks, consumer events, and an ongoing partnership with public health officials. Nursing students have been welcomed onto the dairy each season for the past decade, to learn about the nutritional aspects of organic, grassfed milk as well as to see how the cows are raised, and maybe even to milk a cow themselves.

"It really has been tremendous to host them," Kevin said of the

student nurses. The program is a way "to build conversations with people in the health industry."

Informing the community about the connections between healthy animals, a healthy environment, and healthy food is even more significant now that the world is facing a global pandemic, food supply chain disruptions, and economic devastation.

"If we had more farmers doing this kind of farming," biosecurity of the food supply, meaningful work for more people, and better nutrition for consumers would help all of us," Kevin said. "The triple bottom line of sustainability is important. Take care of people, the land and the livestock, and everyone wins and we have happy consumers who value farmers! There is no better place to live than on a vibrant farm."

Kevin Mahalko, Mahalko Dairy, 34717 State Highway 64, Gilman WI 54433-9556, can be reached at 715-314-0338 or by email: <u>kevin.mahalko@yahoo.com</u>

Classifed Ads

ANIMALS

WANTED: COWS Looking for 3-4 Holsteins, springing or fresh, contact <u>warren@shawfarm.com</u>.

Location: Eastern MA

WANTED: Jersey cow for home milking. This person, working through MOFGA's Dairy Specialist, Jacki

Perkins, hopes that someone has a nice little Jersey cow to sell. They weren't comfortable sharing their name or location on such a wide forum, so if you'd like to contact them, their email is

emcrute@live.com

WANTED: Organic Holstein milkers. We are expanding our milking herd and looking to add on 30-50 young quality

milk cows with low SCC. Contact us at Nestle Nook Farm: jcbranon@gmail.com, 802-393-0380.

002 000 0000.

Location: Fairfield, VT

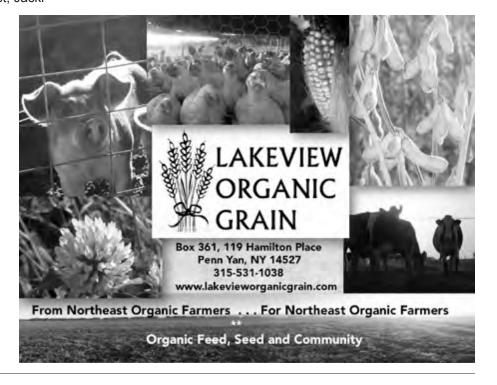
WANTED: Cows. Looking for certified organic, 100% grass-fed Jersey cows or Jersey crosses. Richard Larson RichardRobertLarson@gmail.com, 802-884-5288.

Location: Wells, VT

WANTED: Cows. I am transitioning to organic dairy and looking to purchase about 50 short bred heifers. Contact Mike Northrop, manorthrop@yahoo.com, 315-777-3023.

Location: Adams Center, NY

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Calenda

Due to the COVID-19 pandemic, there are no current in-person meetings, conferences or webinars. However, there are a number that are recorded and can be accessed with the links noted below. The webinars are listed by organization.

WEBINARS BY eORGANIC

There are no upcoming webinars but the following are archived and can be enjoyed any time. Learn the latest in organic farming practices and research by attending or watching an eOrganic Webinar. Sign up for upcoming webinars to watch slides, listen to the presenter, and type in questions during the live events. To receive notices about upcoming webinars, and find out when we post the archived sessions, sign up for the eOrganic newsletter. Register for upcoming webinars or You can also find the webinar recordings of past webinars at the links below or on the eOrganic YouTube channel. We now use Zoom for all webinars.

For a list of archived webinars that you may have been too busy to watch in the past go to this link: https://eorganic.org/node/4942

Food Animal Concerns Trust (FACT) Webinars

We've curated a short list of relevant webinars from our archives.

A complete list of all our previously recorded webinars is available on our webinar page (https://foodanimalconcernstrust.org/farmerresources-covid19)

- Strategies for Online Farm Sales
- 3 Steps to Your Profitable Farm
- Create a Farm Website That Sells
- Find & Engage with Customers on Social Media
- Improve Quality of Life on Your Profitable Farm
- Creative Marketing for Humane Farms
- Operating a Meat CSA

CUSTOMIZED HANDOUTS + GRAPHICS

Not specifically about COVID-19 but helpful to educate your customers and promote your products online. We've created a series of handouts about the nutritional benefits of pastured-raised food (https://foodanimalconcernstrust.org/nutritional-benefits) that can be downloaded, printed, and shared in-person or online. The pdf versions are ideal for printing and linking to online, while the image files are good graphics for posting on websites and social media.

Farmers can request customized versions of any of these documents by submitting a request form (https://form.jotform.com/92305033773150) and upload photos from your farm. We will insert your photo at the top of the handout and provide you with a file you can print, post and share!



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DFA Northeast is pleased to provide continued support to NODPA and organic farms.











ORGANIC FARMERS ASSOCIATION WEBINARS

There are no upcoming webinars but the following webinars were recorded on the dates noted, below, and can be viewed at any time.

Advocating for Organic Feb 18, 2020 02:00 PM Eastern Time (US and Canada)

Host: Patty Lovera

How can we get Congress to support organic farmers? Learn how to make your voice heard in the legislative process during this webinar about how to lobby your elected officials. Get ready for meetings with your members of Congress in Washington, DC or at home in their district offices. We'll cover how to schedule a meeting, what to bring, what to say, and how to create ongoing communication with elected officials. Link: https://www.youtube.com/watch?v=ns1VSqg-QMk

How Corn and Soy Imports Impact US Production Feb 13, 2020 02:00 PM Eastern Time (US and Canada)

Host: John Bobbe

Fraudulent imports have been undercutting our U.S. organic farmers. U.S. organic farmers and consumers deserve better protection from our government. Join us for an overview of US organic corn and soy production and how imports affect these crops, along with insight on fraudulent imports over the last 5-years. Link: https://www.youtube.com/watch?v=Dn2Qa-R 5xo

The Debate on Hydroponics in Organic Jan 9, 2020 02:00 PM Eastern Time (US and Canada)

Host: Dave Chapman

Hydroponics, or a method of farming without soil, are changing farming as we know it. So, where do these water-based farms fit into organic farming? Generate an insight on the timeline of the organic hydroponics debate and see the impact on US growers. Link: https://www.youtube.com/watch?v=VEFxEofeLKg&feature=youtu.be

The Organic Dairy Crisis Dec 13, 2019 02:00 PM Eastern Time (US and Canada)

Host: Mark McAfee and Ed Maltby

We have an Organic Dairy Crisis on our hands. Learn more about the failure in both Pasture Rule and the Origin of Livestock and how these are impacting our organic dairy farms. See why we need to put pressure on the National Organic Program. Link: https://www.youtube.com/watch?v=5iFCM2s5C-g&feature=youtu.be

Immigration Reforms Effects on Organic Farming Nov 7, 2019 02:00 PM Eastern Time (US and Canada)

Host: David Runsten

Immigrants have been critical to meeting the agricultural labor demand. In this webinar, David Runsten will be giving updates on immigration reforms, such as the H2A temporary agricultural program for guestworkers, and the way they affect organic farming. Link: https://www.youtube.com/watch?v=KaCsG5Ei6c0&feature=youtu.be



From the MODPA Treasurer

Greetings from northwest Wisconsin. As I am writing this, the world that we once knew doesn't seem to exist anymore. The peace and tranquility of what was is no more. COVID-19 is the only thing that seems to be on anyone's mind. Hopefully, none of you have contracted this dreaded disease. A farmer about 20 miles from me did contract it but was able to overcome it. The isolation and quarantining of people is something new for most of us. The long term effects on the economy will be felt for a long time. Many of the small mom and pop shops in my area have been closed; some will remain closed permanently. The devastation in the ag sector is sending shock waves across the country. Most of the meat markets in my area have been limited and the prices are well below the cost of production. There's plenty of cheap meat if you can find someone to process it. Most shops are booked into the fall.

The dairy markets are a disaster. Many farmers have been forced to dump their milk. I am one of them. It is hard to watch your day's work run down the drain. Organic dairy has weathered the storm okay so far but we must not think that we will be immune to such action in the future. We need to learn from these lessons and be prepared as much as possible. Having a limited number of options for processing is not a good thing. Industrial agriculture has shown its weakness. Lack of flexibility and adaptability is costly to all, especially the farmer. Most of us are planning for the year ahead, so stopping in one's tracks and taking a different course is not easy. We, as farmers, must take more responsibility to plan for these things and also to take more control of our product. We cannot go on producing more and more without making sure that we have the rest of the pieces of the puzzle in place. We cannot trust someone else to be solely responsible for the processing and marketing. As busy as we all are, we need to do one more thing if we are to stand a good chance of avoiding the situation that conventional dairy is in right now, if not, we will soon be in the same situation. The choice is ours.

The weather in my neck of the woods has been cool. Corn is going in but the ground temperature is still too low for my personal taste. Why take a chance on having to replant? The grass in the pasture is coming along slowly; warm weather will do wonders for it. The cows should be on pasture already but they will go out in the next week. Hopefully, the pasture season is a good one for all of us. I love the low cost of pasture milk and suspect that many of you do too. The new grass for the season has usually been an opportunity to start showing a profit from our milk. The reduced labor of not having to constantly feed and clean is also a nice bonus. The next few months will hopefully be good for all of us.

Keep your heads up and stop and smell the clover once in a while.

Bruce Drinkman, MODPA Treasurer N14264 490th ST Ridgeland, WI 54763 715-977-1314

About MODPA

The Midwest Organic Dairy Producer Alliance (MODPA) represents organic dairy producers in WI, MN, ND, SD, IA, NE, KS, MO, IL, IN, OH, & MI with the mission "to promote communication and networking for the betterment of all Midwest organic dairy producers and enhance a sustainable farmgate price." To ensure a fair and sustainable farm gate price.

- 1. Keep family farms viable for future generations.
- 2. Promote ethical, ecological and humane farming practices.
- 3. Networking among producers of all organic commodities.
- Promote public policy, research and education in support of organic ag.

MODPA Board

Wisconsin

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Ohio

Ernest Martin, Director 1720 Crum Rd Shiloh, OH 44878

Phone and Fax: 419-895-1182

Become :	Member 1	of MODPA!

Member dues are \$35 per year, for which you receive our newsletter and become part of our team working for the best interests of all organic dairies.
Name:
Address:
City:
State: Zip:
Phone:
Email:
Certified Organic Dairy? Yes No # of cows:
Transitioning:
I wish to support MODPA (check whatever applies):
By becoming a state rep or director.
By supporting MODPA with a %/cwt check-off.
By providing a donation to support the work of
MODPA. \$ enclosed.
Please send this form to: Bruce Drinkman, MODPA Treasurer,

N®DPA News

Northeast Organic Dairy Producers Alliance

Website & E-Newsletter Advertising

Website Advertising

NODPA.com receives over 2500 visits each month navigating to an average of 3 pages/visit.

E-Newsletter Advertising

Two banner ads are located at the top of each E-Newsletter, going out monthly to over 2,000 individuals through our E-Newsletter, the NODPA-Odairy discussion forum, and NODPA's Facebook page.

Discounted rates for commitments of 6 months or more.

Interested in one or both of these opportunities? For more information, contact Nora Owens at:

Email: noraowens@comcast.net
Phone: 413-772-0444

Advertise With Us!

NODPA News is Published Bi-Monthly January, March, May, July, September & November

Join as a **Business Member** and receive an additional 5% off all advertising. To learn more about Business memberships and the Web Business Directory, go to **www.nodpa.com/directory.shtml** or contact Nora Owens.

2020 Ad rates and sizes listed below.

Deadline for advertising in the July 2020 issue is June 15, 2020.

Full Page Ad (7.5" W x 10.25" H) = \$660 1/2 Page Ad (7.5" W x 4.5" H) = \$340

1/4 Page Ad (3.5" W x 4.75" H) = \$190 1/8 Page Ad/Business Card: (3.5" W x 2.25" H) = \$100

Commit to a full year of print advertising and get 10 percent discount: Full: \$600, Half: \$306, Quarter: \$171, Eighth: \$90.

Classified Ads: Free to organic dairy farmers and business members. All others \$20 for the first 30 words; \$.20 per word over 30

For advertising information call Nora Owens: 413-772-0444 or email noraowens@comcast.net.

Please send a check with your ad (made payable to NODPA). 30 Keets Rd., Deerfield, MA 01342

Classifed Ads

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WANTED: We are looking to add cows, looking for good quality bred heifers or young cows that are recently fresh... must be jerseys! Contact rogersfarmstead@gmail.com

Location: central VT

COWS FOR SALE: 30 certified 100% grassfed organic cows & first calf heifers for sale. Due in May. Mostly Holstein/Milking Shorthorn crosses. Good grassy genetics from a low SCC herd. Mike Geiser: Call/Text: 570-404-6221. Landline/Voicemail: 570-549-2319

Location: Mansfield PA

OXEN TEAM CALVES FOR SALE: We have two wonderful sets of Jersey/cross bull calves for sale as an oxen team. Same Sire, born SAME DAY. These calves are best buddies and ready for your TLC and training. These calves would also make wonderful 4-H projects. Call/text 802-582-9026 or email ron@bedrockfarmvt.com for details.

Location: Albans, VT

FEED, GRAIN, HAY FOR SALE/WANT TO BUY

FOR SALE: Hay, First Crop Round Bales, Certified Organic, 3'x4' Good MOFGA-certified first crop hay, never rained on, stored in the barn. Our bales weigh around 300 lbs. and are a mix of timothy, clover and other grasses. Call or text 207-322-3173 to set a pick-up time (sorry, no delivery available at this time). Seth Yentes & Anna Shapley-Quinn, North Branch Farm, northbranchfarm.monroe@gmail.com, northbranchfarm.org

Location: Monroe, ME

CERTIFIED ORGANIC GRASSLAND AVAILABLE FOR ROTATIONAL GRAZING:

Joseph Beiler, <u>beilerjoseph@yahoo.com</u>, call for more info. 717-385-0015.

Location: Westport, NY

FOR SALE: NOFA-NY Organic DRY HAY - Round 4 x 4 1/2. Stored inside - never rained on. Good Heifer or Horse Hay! Also, BEDDING HAY - same size. Stored outside. Contact Jeff @ Mitchell Farm (Avoca, NY - Steuben County) 607-566-8477 or Mitchellorganics@hotmail.com

Location: Avoca, NY

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Northeast Organic Dairy Producers Alliance (NODPA)

c/o Ed Maltby 30 Keets Road Deerfield, MA 01342 NON-PROFIT ORG U.S. POSTAGE PAID SPRINGFIELD, MA PERMIT NO. 935



Northeast Organic Dairy Producers Alliance

Classifed Ads

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EMPLOYMENT OPPORTUNITIES

HELP WANTED:

Full-time position to assist with milking, calf care, and some field work. Housing is available and a second part-time position may also be available. Two Loons Farm, South China, Maine, is a 500 acre, 50-cow farm. Call or text Spencer Aitel and Paige Tyson, 207-441-4169.

Location: South China, ME

EQUIPMENT

MACHINERY FOR SALE:

18.4-38 DUALS - Clamp On, Kovar TINE WEEDER 12', Gehl Hi Throw BLOWER, John Deere Hay/Grain ELEVATOR 30', Ford SICKLE BAR MOWER. Contact Jeff @ 607-566-8477 or Mitchellorganics@Hotmail.com.

Location: Steuben County - Avoca, NY

REAL ESTATE

FOR SALE: 100 Acre Farm in Wales, Maine

Posting for our neighbor. Any questions contact him directly:

https://mainefarmlink.org/mfl-listing/farm-id-3010/

Location: Wells, ME