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It seems there is never a time where Idaho’s dairymen are not deserving of empathy. Ten days ago I was excited to have the tailwinds of strong milk prices as I wrote this article for our final newsletter of 2019. Then $5.00/cwt of milk price was wiped out with the largest one week movement in history for barrel cheese. That sentence by itself pretty much sums up the challenges of being a dairyman today. I am still

**Rick Naerebout**  
CEO, *Idaho Dairymen’s Association*
excited to share what we are accomplishing on behalf of Idaho's dairy farm families, it would have just been nice to see strong milk prices carry into 2020 to add to the optimism we see for the industry.

Most exciting is our success in advancing the Farm Workforce Modernization Act! We had a very large legislative win with this bill passing the House by a vote of 260-165. Congressman Simpson and his staff helped negotiate the legislation, along with Charlie Garrison representing IDA. We could not have asked to be any better represented in those negotiations than what we were. It is a bipartisan bill, with both sides having to compromise on some of their ‘wish list’ to get it to its final form. Though not perfect, it was a great step forward in the process and we appreciate the support of Congressmen Simpson and Fulcher in casting their ‘yes’ votes in support. We will be working closely with Senators Crapo and Risch after the holidays to advance this effort within the Senate. For more information on this historic legislation please see page 6 in Charlie Garrison’s article for more details.

IDA has also been engaging with the EPA and IDEQ regarding the recently released draft National Pollution Discharge Elimination System (NPDES) general permit that was published earlier this fall. The permit would provide dairymen protection from regulatory action if a discharge of manure into Waters of the US occurs under certain circumstances. We have long voiced our concerns with EPA that the permit is written such that it discourages dairymen from applying for it. Many of the requirements are impractical, unrealistic and do not reflect a true understanding of the day-to-day operations of our dairies. EPA, so we included them in our comments this permit cycle. We were able to arrange meetings with both agencies to walk through our concerns with the draft permit and encourage changes that would make the permit more practical for dairymen to apply for. Both meetings were productive and involved good dialog with those we work with face-to-face, but that does not guarantee we will see the same receptive audience from the Region 10 office in Seattle, where the final decision on permit language will be made.

Looking ahead to July of 2020, IDEQ will take primacy of the NPDES permitting activity from
Over the past couple years IDA and National Milk Producers Federation (NMPF) have partnered in developing the Workforce Development resources, mainly the Safety Reference Manual. This partnership has yielded great results, with Idaho being at the table in the development of programs that are implemented across the country. That position provides us firsthand knowledge as to program expectations and helps us be part of the development of those expectations. Our main goal in those dialogs is to find the balance between trying to meet consumer expectations, while not passing along unnecessary costs to dairymen.

We are looking to continue that proactive approach in our engagement with the Innovation Center for US Dairy and the goals they are setting for the dairy industry in the area of greenhouse gas emissions. There is no doubt that the dairy industry will continue to have pressures, from customers and consumers, to quantify, reduce and offset our greenhouse gas emissions. We cannot realistically stop that process. We can be at the table to have an influence on how programs are developed to advocate that the basis for what Idaho dairymen are asked to do be based in science and not personal belief. We also want to ensure a level playing field across the US, so our western style dairies are not put at a disadvantage.

Milk supply. It is rare to have a conversation within the industry today without talking about our current oversupply situation. We are in uncharted territory, with terms like base, shipping rights and balancing being commonplace in a state that has a fierce independence and an industry shaped around direct producer-processor relationships. The cooperative structure has often been discounted in Idaho and the service of balancing the market unrecognized. Co-ops have largely bore those costs and service, but as more and more plants fill up it is expected that the co-ops won’t be the only ones faced with pushing milk out of the area to balance the market. 2020 is looking as though it will be eventful in terms of balancing our market and finding homes for all the production that is expected to come our way.

IDA has been working with the Department of Commerce and the Department of Ag in trying to identify new processing to come into the area. We also have the communities of Burley, Heyburn, Jerome, Rupert, Twin Falls and others actively seeking out dairy processing businesses to come to their municipalities. We have the strong support of the local and state governments. We have the milk supply. It seems it is only a matter of time before we find the right partner to join Idaho’s dairy community and help ease the pressures of our oversupplied market. Idaho Milk Products and their expansion from earlier this year is featured on page 15. We are looking to feature additional Idaho dairy producers and companies that are stepping out and innovating in future editions of our newsletter. If you have ideas for us to consider, please forward them along to me at rick@idahodairymens.org.

Lastly, we wanted to leave you with a bit of levity with Sawtooth Law providing an article on hemp. This is a crop that was well discussed in the 2019 legislature and we expect will be well discussed in future legislative sessions. David Claiborne did a great job of outlining some of the history and key points around hemp as a possible Idaho crop and what value it may bring to a crop rotation. Kick back, relax, grab a snack and give that article a read on page 18.

From all of us at IDA, we hope you have a wonderful holiday season with friends and family. We could not ask to be working for a better group of men and women than we do. May you be blessed with health and prosperity in the coming year.
After another year of frustrating disruptions in some of the U.S. dairy industry’s most important export markets, and uncertainty about the farm labor force due to federal immigration policy, there may just be some reason to believe better things are on the way for Idaho dairy farmers in 2020. The U.S. Congress is making progress on both of these fronts in what would be a remarkable burst of legislative activity even if impeachment of the President wasn’t on the table.

Charlie Garrison
Policy Advisor, The Garrison Group
U.S. HOUSE PASSES AG LABOR BILL

It all started with conversations initiated by Idaho Congressman Mike Simpson with his colleagues very early in the year about the possibility of writing a bipartisan bill to address the farm labor crisis. Ten months later the U.S. House of Representatives voted 260-165 to pass a bill that effectively addresses the priorities of the state’s dairy industry in farmworker visa reform.

First-term Idaho Congressman Russ Fulcher joined Mr. Simpson in voting for the bill. IDA thanks Mr. Fulcher for that vote. And we thank Mr. Simpson for starting the ball rolling, working directly with his colleagues and devoting countless hours of time by his staff in the negotiations on bill language that led up to the successful vote.

The bill is HR 5038 “The Farm Workforce Modernization Act.” An important feature of this legislation that allowed it to build so much support in the House is that it offers options to both employers and workers. It offers legal status to the current workforce and allows immediate family residing with them to stay. Work status can be renewed every five years or, after meeting either four or eight years of future work requirements, workers may pay a $1,000 fine and apply for a green card. Employers cannot be prosecuted for providing documentation of work history. In addition, agriculture has the first right of refusal on an additional 40,000 green cards that employers could use to bring in workers on their farms. Employers cannot be prosecuted for providing documentation of work history.

The bill also streamlines the H-2A application process with a single online portal for seeking approvals by the necessary agencies. It also improves the program by removing the seasonal job requirement. Dairy farmers would now be able to petition for temporary workers for jobs done all year long. So the bill addresses the most immediate need on the Ag labor crisis with legalization of current workers. Expansion of H-2A would then provide new workers where they are needed now and in the future. The current temporary and seasonal H-2A program would continue uncapped but there is a limit of 20,000 visas per year for year-round work. That number is too low and IDA will be working to increase that number or eliminate the cap entirely. Finally, the bill requires farm employers to use the federal E-Verify system for new hires and workers with documents that expire. IDA has already begun working with Senators Mike Crapo and Jim Risch on a companion bill and we thank them for their willingness to jump in and help. This is also a good time to say thank you to the nearly 50 farm organizations and allies in Idaho who signed onto a letter encouraging support for the House bill. That was a gratifying outpouring of support at a critical time leading up to the vote.

REAL PROGRESS ON INTERNATIONAL TRADE

The Idaho Dairymen’s Association has worked closely with the state’s Congressional Delegation as they look to help get the U.S.-Mexico-Canada (USMCA) trade deal across the finish line. Following a year of delays, the USMCA sailed through the House on December 19th on a
vote of 385-41. Both Congressmen Mike Simpson and Russ Fulcher voted to approve the USMCA and IDA thanks them for their support.

The details of USMCA have been covered in the IDA Focus before. The topline benefit will be the certainty it provides our customers in Mexico that the U.S. will remain its best partner in keeping that market supplied with nutritious, delicious, top-quality dairy products at better prices than those of our competitors. The phrase, that’s kind of a big deal.

There are also gains from the USMCA for the U.S. dairy industry in our trading relationship with Canada. Canada has responded to market surpluses of dairy proteins there by adopting farm milk pricing that allowed dry products to be sold on the world market at below the cost of production. The USMCA requires Canada to discontinue that pricing known as Class 6 and Class 7. The agreement also gives slightly more access to U.S. dairy in the Canadian domestic market.

The USMCA also includes limits on our trading partners’ ability to agree to the demands of countries to exclusive use of Geographic Indicators (GI) or “place names.” The Europeans have been aggressive about trying to claim exclusive rights to many common cheese names, for example.

The USMCA got a big boost with the strong bipartisan House vote. It still needs the approval of the U.S. Senate and a vote in the Canadian Parliament. Both are expected to vote to ratify the agreement early next year.

Progress on international trade is also being made in other parts of the world. The U.S. negotiated a partial agreement with Japan earlier this year that provides access for many of our products in that lucrative market. A partial agreement with China was announced last week that delayed new U.S. tariffs set to go into effect this month. China reportedly agreed to major increases of U.S. farm product purchases over the next two years as a new agreement between the two economic giants is hammered out.

Even the trading picture with the European Union and Great Britain might have gained a little clarity near the end of 2019. National elections in Britain reaffirmed the “leave” referendum on the EU. The “Brexit” process is expected to play out in late January. Once that is done the Trump Administration plans to move quickly to negotiate new trade agreements with both the EU and the United Kingdom.

As said earlier, this flurry of activity in the U.S. Congress in December could help set the stage for a better year for Idaho dairy producers in 2020. One bill would help solve the farm labor crisis and another that will improve U.S. dairy competitiveness in international markets – and both have bipartisan support. Many thanks to all four Members of the Idaho Congressional Delegation, Representatives Mike Simpson and Russ Fulcher, and Senators Mike Crapo and Jim Risch, for helping us get there.
IDAHO CAFE ADVANCES WITH $11 MILLION FUNDING BOOST

Carly Schoepflin, U of I College of Agricultural and Life Sciences

In October, U of I received a $1 million gift from J.R. Simplot Co. to bring the university commitment for the project to $10 million. This gave momentum to the release of the $10 million state appropriation to the university to begin the design and construction phase of the project.

“We support this project given the overall focus to improve the sustainability of agriculture across Southern Idaho through a deeper understanding of ‘how we farm’ and its impacts on our soil and water,” said Scott Simplot, chairman and chief executive officer for J.R. Simplot Co.

Led by U of I, the project’s footprint will span three counties with the research dairy located near Rupert, a discovery complex near Jerome, and collaborative food science efforts with other institutions like the College of Southern Idaho in Twin Falls.

“Projects like CAFE demonstrate the importance of our land-grant mission and the impact it has on the state,” U of I President Scott Green said. “The university is grateful to the Simplot Company for helping us release this funding and to the state of Idaho for its commitment in support of agriculture and our dairy research.”

U of I received Idaho State Board of Education authorization mid-December 2019 to begin design work on the research dairy. The timeline calls for construction to begin in mid-2021 with completion in 2023.

U of I College of Agricultural and Life Sciences (CALS) began work on building a large-scale research dairy in the Magic Valley more than 12 years ago at the request of the industry but progress stalled during the recession. CAFE was reinvigorated in 2017 with a plan to acquire the $45 million needed for the project from internal U of I resources, partners in industry and state funds.

U of I and the IDA partnered in early 2019 to purchase a 540-acre site for the dairy near Rupert from the Whitesides Family who donated an additional 100 acres to the project. The 640-acre parcel will be home to the research dairy and an agronomic demonstration farm.

“We are extremely pleased to reach this milestone and believe it reflects the many positive steps we have taken as a university,” said Michael P. Parrella, CALS dean. “Our partnership with the dairy industry and a wide range of other groups to plan and to fund this project underlines its importance to Idaho agriculture.”

Research at CAFE will address constraints on water usage and environmental quality while supporting the agricultural sectors of dairy, livestock, cropland, and food processing industries and exploring solutions for long-term sustainability.

Despite a completion date in 2023 for construction of the dairy, research has already begun including a recent project to collect over 800 soil samples at the dairy site to establish an environmental baseline for future research.

In June, CALS acquired the property in Jerome County for the discovery complex which will tell the story of all Idaho agriculture. The location will also include faculty laboratories and housing for visiting researchers and students.
Meeting consumer demands for sustainable dairy products will require more intensive management at the farm level. Feed management practices can have a significant effect on the environmental footprint of dairy farms. Both nitrogen (N) and phosphorus (P) are a concern from an environmental standpoint and can be better managed on farms for improved sustainability. Generally, higher concentrations of N and P in the ration result in greater excretion in urine (N) and feces (N and P). Overfeeding these nutrients can become a significant problem as excess excreted N and P can have negative environmental impacts. Excess P can accumulate in the soil and contaminate surface water when transported from the field via runoff and leaching. Excess N can leach into groundwater or be lost from the farm via volatilization as ammonia (NH₃). Ammonia loss from agriculture represents 80% of all NH₃ generated in the US and the contribution from dairy is approximately 25%. The N lost as NH₃ can cause eutrophication of surface waters, disturbance of ecosystems (i.e. increases in invasive species) and impair air quality via the formation of fine particulate matter in the atmosphere. Properly formulated rations will not only support high production levels but can also minimize nutrient excretion into the environment.

Phosphorus requirements have been revised with more recent NRC guidelines and are typically 0.38% to 0.42% of the ration dry matter for lactating cows. In the past, rations were often much higher in P than this. Farmers often overfeed P with the thought that (1) they will improve reproductive efficiency, and (2) the feed ingredient tables typically underestimate the amount of P in most ingredients. In Idaho, on-farm rations have been found to average approximately 0.49%. A lactating cow fed 0.49% P in the diet will produce approximately 52.6 lbs of P per year. Reducing the amount of P fed can significantly reduce the amount of P excreted. For example, feeding 0.38% P in the diet can reduce P excretion by 30% (36 lbs P/yr). Many commonly grown crops in Southern Idaho remove approximately 35 lbs of P/year, therefore at a P feeding rate of 0.38% P, a stocking density of 1 cow per acre is likely sustainable (Figure 1). If P in the ration is 0.49%, it would take approximately 1.5 acres per cow to maintain P balance on farm or you would need to grow and harvest a second crop each year (e.g. corn/triticale) to sustainably remain at a stocking density of 1 cow/acre.
Decreasing dietary crude protein (CP) is one of the most effective strategies to decrease N excretion and NH₃ emissions from manure. Of the N fed to dairy cows, only 21 to 38% is exported as milk or meat. That means 62 to 79% of the N fed to cows is for the most part excreted via urine and feces and susceptible to losses to the environment (Figure 2). On farm studies have demonstrated that reducing CP from 16.5% to 15.4% reduced NH₃ emissions from the barn by 58% without affecting milk yield. In addition, leaching losses have been shown to increase with land application of manure from cows fed high CP diets vs. low CP diets which can potentially have negative impacts on groundwater. Reducing CP intake of high-producing cows can be achieved by strategic use of undegraded protein sources and amino acids (lysine and methionine) under a variety of diet conditions. This allows the cow’s requirements to be met with a reduced dietary N content, thereby reducing N excretion.

There are several feeding strategies that can improve nutrient utilization on farm.

- Balance the rations according to the latest NRC guidelines for CP and P.
- Group and feed animals according to their nutrient needs.
- Use protein supplements to allow the cow’s degradable and undegradable protein requirements to be met without overfeeding crude protein.
- Use tools such as milk urea nitrogen and nutrient monitoring software to track status.

Spend time talking with your nutritionist to make sure your feeding strategies are in line with your overall nutrient management goals. Reducing the amount of N and P imported with feed can be one of the most effective strategies for improving overall farm nutrient balances.
Summer is over, harvest is complete. There isn’t any water to change or crops to check. While things are slow in the fields, take the opportunity to tackle those nutrient management “to-do” and “need-to” tasks that have been pushed to the bottom of your list. Here are five boxes to start checking:
Before it really starts to snow, inspect all berms on your liquid containments. Look for cracks, leaks and rodent damage. Be sure to build up any weak spots before major storms start to hit later this month and through the first of the year.

Check the facility for leaky hoses and taps. Water from leaky taps add more liquid to your lagoon and will add to your water bill. A leaky faucet dripping at a rate of one drop per second can add up to nearly five gallons of water loss each day. Storing for 180 days could mean there is an extra 900 gallons of water in your lagoon – and that’s just one tap.

Organize your files and documents so that everything can be found in one place. Gather load receipts out of the trucks and compile them into a single book. Find all of your soil tests, manure sample results and third-party export documents to store together as well.

While you have all the documents out, calculate application rates. How much byproduct was applied to each field? Does it match your NMP? Did you over or under apply? Do you have all of the contact information for your third party receivers? These are some of the questions you can find answers to while everything is being collected and organized.

Review your NMP for next year. Compare this year’s crop yield to those listed in your plan. Your nutrient management planner can correct them for you if they don’t match. Record your third party exports next to their name in your plan so the information doesn’t get lost. Read up on next year’s application rates and estimate truckloads/acre ahead of time. Make sure your crop rotation matches your plan. Big changes in crop rotation can change the amount of exports you will need in either direction and could have a big impact on your farm’s nutrient balance.

Checking off these items will relieve a little more stress and make your winter and spring that much more enjoyable. If you ever need help with your nutrient management, feel free to reach out and give me a call. Enjoy your holiday season with friends and family and be safe in the snow.

Tanya Oldham
Nutrient Management Technician | 435.660.9501 | tanya@idahodairymens.org
FARM PROGRAM UPDATES

Following our panel discussion at the Annual Meeting with National Milk and the National Dairy Farmer’s Assuring Responsible Management program team, we will include regular FARM updates in this newsletter to keep Idaho dairymen informed of program changes. The FARM program is pleased to provide the following updates on Animal Care and Workforce Development.

ANIMAL CARE VERSION 4.0

The FARM Animal Care Program will roll-out Version 4.0 beginning January 1, 2020.

The fourth iteration of the FARM Animal Care Program’s standards supports closer farmer-veterinarian relationships, requires continuing education for all employees and adds a new standard for pain management when disbudding animals. As with previous versions of FARM Animal Care, a robust suite of materials that include templates, FAQs, continuing education videos and other resource tools will be made available to help producers meet the outlined standards. These resources are available to producers through their cooperative or processor and can be found on the FARM Resources web page.

FARM Animal Care is updated once every three years to ensure relevance to current industry management best practices and scientific research related to on-farm animal care. Farmers nationwide, dairy veterinarians and animal-welfare experts and dairy-industry leaders are all represented in drafting and approving new standards through the Technical Writing Group, the NMPF Board of Directors, or the more than 370 submissions received during public comment.

Significant changes to the program that will go into effect beginning January 1, 2020 include:

- If tail docking is found to have continued to occur, immediate action must be taken to cease the practice.
- Standards that generate a Mandatory Corrective Action Plan - ranging from veterinarian engagement (veterinarian/client/patient relationship and herd health plan review), calf care, non-ambulatory, euthanasia and fitness to transport management practices, and disbudding prior to eight weeks of age - will need to be addressed within nine months of the evaluation.

For additional specifics around the standards updates, please visit this site.

WORKFORCE DEVELOPMENT PUBLIC COMMENT PERIOD

FARM Workforce Development (WFD) is the FARM Program’s newest initiative. It focuses on human resources and safety management and has brought together stakeholders from the entire dairy value chain to create educational materials for U.S. dairy owners and managers. FARM WFD has greatly benefited from a partnership with IDA to build out the safety component of the program.

FARM WFD is developing an on-farm evaluation tool that FARM Participants can choose to implement with their dairy producers. The tool is meant to help farms:
• learn about HR and safety management best practices;
• identify which best practices will be most useful to implement on their farm; and
• track improvement over time.

Also, by performing on-farm evaluations, FARM Participants can provide important assurances to supply chain customers: our dairy buyers and retailers. The evaluation tool was developed in consultation with the FARM WFD Task Force and Working Group members, along with subject matter expert input.

Currently, the FARM Program is inviting all feedback from stakeholders on the draft second party evaluation tool. The Public Comment period will be open for 45 days, from December 6th 2019 through January 20th 2020. All comments will be considered. The FARM Program encourages all stakeholders in the dairy supply chain to participate. To review the draft evaluation tool and provide feedback, please visit this link.

FARM is also getting direct feedback from dairy producers through a pilot program that runs through the end of 2019. Ten cooperatives have volunteered to test the evaluation with a total of about 50 dairy producers, who will fill out a feedback form.

FARM will refine the evaluation tool based on feedback from the pilot and public comment. The FARM WFD Task Force will review the evaluation tool. Then, pending NMPF Executive Committee and NMPF Board approval, FARM hopes to make the evaluation part of the FARM program in early 2020.

The FARM WFD evaluation would be a voluntary part of the FARM program, similar to the FARM Environmental Stewardship. Individual cooperatives and proprietary processors would determine whether to implement the evaluation with their dairy producers.

For more information about FARM, please contact the FARM team at dairyfarm@nmpf.org or 703.243.6111.
Taylor Walker
*Idaho Dairymen’s Association*

Few gambles are as precarious as those made during a recession, but in 2009, a partnership between a small group of Idaho dairy families formed with their sights set on delivering the highest quality dairy ingredient products and most reliable service to food formulators around the world. At a time when milk prices were some of the lowest in the decade, the group was facing an uphill battle.

“These dairy families risked everything,” said Idaho Dairymen’s Association CEO Rick Naerebout. “They rolled the dice, put everything on the line that their families had built for generations.”
Despite the state of the dairy industry at the inception of Idaho Milk Products, CEO Darah Maccabee said the company has generally experienced more demand than they can keep up with.

After nearly ten years in business, Idaho Milk Products now processes more than 1.1 billion pounds of milk every year, with a focus on milk protein concentrate and isolate, milk permeate, and cream. That heavy production load has now culminated in one of the company’s most prestigious milestones: a $30 million plant expansion in Jerome, Idaho.

**WHAT’S INCLUDED IN THE EXPANSION?**

The plant expansion allows Idaho Milk Products to increase processing capacity by nearly 30% from 3.4 million pounds of milk per day to 4.4 million. This jump in processing potential is welcomed alongside increased warehouse space, greater packaging capabilities and a new research and development pilot plant.

Chenchaiah Marella, Idaho Milk Products vice president of research and product development, said the new research pilot plant will help Idaho Milk Products support its customers with state-of-the-art equipment, a product characterization lab and 1,500 square feet of processing area.

Maccabee said the research and development facility includes technology capable of testing mouth feels, consistency, taste, shelf life and more. These tools will help address client needs and problems by mimicking how customers use proteins and permeates in ready-to-drink beverages, ready-to-eat products, yogurts, ice cream, protein bars, retort processing and more.

“At Idaho Milk Products we have a strong belief in science-based innovation,” said Marella. “Innovation is key to keep ahead of the competition.”

While the innovation at Idaho Milk Products may advance the company’s bottom line and ability to provide premium solutions to their customers, it also has a large economic impact on the surrounding area. Jerome City Administrator Mike Williams notes that, in addition to providing job opportunities that are attractive to Magic Valley youth, the company also helps support Jerome financially through taxes because the facility has a taxable value of more than $100 million.

**IMPACT ON OUR DAIRY LANDSCAPE**

According to a recent U.S. Department of Agriculture report, Idaho milk production has increased 3% in the past year, and oversupply continues to dampen profits during the current milk glut.

Expansions like this play a part in addressing the overproduction problem, but because of the company’s business model, the impact is indirect.

“Any increase in dairy processing is welcome, but one expansion doesn’t solve the milk glut problem,” said Naerebout. “We still need more capacity and we’ve got a lot more milk coming.”

Although the venture was risky at its inception, its model of vertical integration with local dairymen is at the forefront of the industry. By obtaining its supply within a 45-mile radius of the plant, Idaho Milk Products continues to benefit farmers in the Magic Valley. Maccabee said the company intends to bring value to milk for many years to come.
The first week of December was busy with NRCS local working group Meetings. NRCS is restructuring to allow for Environmental Quality Incentives Program (EQIP) funds to be better distributed. EQIP is a cost share program that helps producers address natural resource concerns on their farms. The meetings are for the producers in the each district to help NRCS decide how to distribute EQIP funding on the local level.

I was able to participate and learn about the process during three of the local working group meetings. My conclusion on the event was that those who attended had their voices heard. I strongly encourage you to attend one if you are interested in or plan on applying for NRCS EQIP funding.

Dairy has seen little funding from NRCS in Idaho, which is surprising considering the significant amount of dollars spent on dairy in other states. The good news is that the State Conservationist, Curtis Elke, is aware of the lack of funding for dairymen in the state. He has created a state initiative for the Dairies/CAFOs/AFOs. This created a new pool of funds that producers have access to. His hope is to have more dairy involvement in NRCS and to help address important resource concerns on dairies in the state. The cutoff date for 2020 has not been announced and there is still time to apply for those dollars.

The application process is tedious, and producers are required to have a Comprehensive Nutrient Management Plan (CNMP) with their state Nutrient Management Plan. The whole process can be overwhelming for producers and has impacted dairy producer participation in the past. The good news is I am here to help.

I have become certified to write CNMPs for NRCS as a Technical Service Provider and can help assist in the entire process. My goal is to provide dairymen with resources when it comes to knowing which steps to take and how to tackle some of the projects. I hope to be able to bridge the gap between dairymen and NRCS staff.

Next year, each dairy will have another chance to meet at the Local Working Group meeting in their area. I urge anyone who is interested to attend. I will keep an eye out for announcements, and you can always call your district office to join the mailing list. If you are thinking about a project on your facility that you want to work with the NRCS on, feel free to give me a call. I am always open to discussing projects and can help assist in the application process. I am happy to answer questions and hope to be an important resource in the process.

Tanya Oldham
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Hemp has been a hot topic in the news recently, and it was a hot topic during the 2019 Idaho Legislative session. It is expected to again be an important issue during the 2020 Idaho Legislative session because no new legislation resulted in 2019. Last year’s session ended with the two houses divided – the House desiring legalization of hemp, while the Senate being opposed. As it stands presently, hemp cannot be grown or cultivated in Idaho, although the most recent national Farm Bill legalized hemp from a federal perspective. However, a state must adopt a hemp plan and regulatory standards
before the crop can be grown in any particular state. Idaho failed to act in 2019. It remains to be seen what will transpire in 2020, but presently it is not legal in Idaho, although given the federal Farm Bill Idaho must allow its interstate transport. This article explains what the crop is, and how its product might be used.

WHAT IS HEMP

Industrial hemp, known as Cannabis Sativa L., is a commodity fiber crop specifically grown for industrial uses of its derived products. It is distinguishable from Cannabis Indica L. (the drug commonly called marijuana) and C. Ruderalis Janisch (the wild strain). Hemp is a distinctive strain of cannabis that has low concentrations of THC (the psychoactive component used as a drug) and higher concentrations of CBD (cannabidiol, which actually decreases or negates psychoactive effects).

The Farm Bill requires that THC concentrations in the cultivated crop be no more than 0.3 percent on a dry weight basis. Use of the crop dates back thousands of years, and most recently from the mid-1800s to the mid-1930s was a widely cultivated fiber crop in the United States. It is resurging in this century as modern genetics have made it increasingly possible to propagate the crop while at the same time using selective breeding to reduce the THC components found harmful and regulated as a controlled substance.

PROPAGATION OF HEMP

Industrial hemp is considered a temperate region crop and generally thrives between the 42nd to 45th parallels. The 42nd parallel is Idaho’s southern border with Utah and Nevada. The 45th parallel transects Idaho just north of New Meadows. Hemp prefers well-drained, fertile soils. It fits well as a rotation crop with wheat, barley, corn, and alfalfa. Hemp is typically planted between March and May, and matures in three to four months. It is sown by seed drill or similar equipment to a depth of ½ inch to 1 inch. Organic fertilizers are encouraged for optimal plant growth.

The plant grows tall, at 6-7 feet mature, with thick foliage and density, and as such is successful in smothering weeds and other undesirable vegetation. The water need of the crop is around 9 acre inches. Roots grow to a depth of about 3 feet. The crop uptake of hemp is 178.4 lbs. of Nitrogen/acre, 96 lbs. of P2O5/acre, and 225 lbs. of K2O/acre. In comparison, corn uptakes 183 lbs. of Nitrogen/acre, 68 lbs. of P2O5/acre, and 186 lbs. of K2O/acre. Triticale uptakes Nitrogen at 166 lbs./acre, 65 lbs. of P2O5/acre, and 302 lbs. of K2O/acre.

The mature crop is harvested in different ways depending on the crop use. But, it can be harvested by cutter-binders, or simple cutters, within inches of the topsoil. The cut hemp can then swathed and laid to dry, and eventually bailed for use as a fiber crop or for use in animal agriculture.

AGRICULTURAL USES OF HEMP

While hemp is widely known and used in many consumer markets, it also has agricultural uses for soil aeration, phytoremediation (to remove heavy metals from soils), and crop rotation. The fiber is useful as a biodegradable mulch additive (only paper biodegrades faster), for animal bedding, and as a litter. The woody core of the plant, called the hurd, is best used for these purposes. As a bedding material, it is found to be super-absorbent (at 4x its own weight for moisture retention; twice
as absorbent as straw), producing lower dust than traditional bedding materials, and providing better odor control than wood chips or sawdust. Hemp bedding also contains antibacterial and anti-fungal properties.

As a feed, hemp cannot presently be used as an animal feed or additive in the United States. It is, however, used in that way elsewhere throughout the world. Outside the United States hemp seed and hemp oil meal is used as stock fodder. The seed provides 23.9% crude protein and 16.5% crude fiber, while meal provides 32.3% crude protein and 29.1% crude fiber. Other benefits of hemp as fodder include essential amino acids, and omega-6 and omega-3 fatty acids. Experiments among Dutch dairies have found use of hemp fodder to result in better overall health and increased milk production.

As an income producing crop, assuming the farmer retains the fiber for on-farm uses, the income crop is the oil, derived from seed. One acre of hemp typically yields 700 pounds of grain, then pressed to about 22 gallons (or 183 pounds) of hemp oil. At a price of $3.07 per pound for crude hemp oil biomass, the yield is $561.81 per acre. This leaves an average of 5,300 pounds of hemp straw for use in mulch or animal bedding. Of course, spot prices and yields vary.

CONCLUSION

Hemp cultivation and use is growing rapidly in the United States. It can be expected that Idaho will soon, in some way, open up hemp as an agricultural product. As cultivation grows, so to will the available science, which unfortunately is not widespread yet. However, preliminary indications show the crop has potential to be fruitful in southern Idaho’s growing regions. Its use and availability as a rotational crop is worth exploring as the opportunity presents itself, particularly where the seed harvest can be used as an income-producing crop and the fiber retained for on-farm agricultural uses as bedding and mulch.

REFERENCES

What is Industrial Hemp? [https://catalog.extension.oregonstate.edu/em9240/html]
Hemp [https://en.wikipedia.org/wiki/Hemp]
Industrial Hemp Production & Mgmt. [https://www.gov.mb.ca/agriculture/crops/production/hemp-production.html]
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Other Agricultural Uses For Industrial Hemp [https://hempgazette.com/industrial-hemp/agricultural-uses-hemp/amp/]
Hemp Benefits for Animals [https://phytoanimalhealth.com/hemp-benefits-for-animals/]
Oil Seed Crops: Food and Energy [http://www.oilseedcrops.org/hemp/]
Hemp Production [https://www.texasorganicersearchcenter.org/organic-research-page/Hemp-Production_sq13678.htm]
Several years ago, we reached out to the Idaho Department of Corrections to see if there were opportunities to employ those that need a second chance in life. The hands on, outdoor, nonstop nature of our dairies is a great outlet for someone who wants to get their life back on track through steady, dignified work. We have worked with Kevin Rheder from the Idaho DOC to put together dairy education for inmates at the North Idaho Correctional Institution.

Recognizing Idaho dairymens’ need for knowledgeable, bilingual employees as well as the employability skills needed by inmates, Kevin developed a certified dairy program. Kevin is not only an instructor at the Robert Janss School at North Idaho Correctional Institution, but also co-owned and managed a 100-head dairy farm for 25 years. Kevin completed his dairy science studies at Utah State and earned his education credentials from the University of Idaho. He also served on the United Dairymen’s of Idaho board of directors in the mid-1980s.

Ryan DeWit
IDA Consulting Services, Inc.
While configuring and formatting the parameters and objectives of the class, Kevin relied heavily on the guidance of Mandy Damman, the Workforce Training Program Coordinator from Lewis Clark State College, IDA Executive Director Bob Naerebout, Ryan DeWit, Idaho Dairy Worker Training and Safety Director, and Dr. Temple Grandin, professor of animal science at Colorado State University and consultant to the livestock industry on animal behavior. Moreover, to ensure the class’ validity, Kevin relies on the opinions and input from an advisory group that meet twice a year to establish goals and enact procedures to enhance the program.

Through their leadership, he developed his dairy science class, centered on every aspect of the Employability Skills Framework and in accordance to the certification requirements as stipulated by Idaho SkillStack®. It also assists with assuring the accreditation of the class regarding secondary career and technical education (CTE) standards and certifications.

The class syllabus addresses basic areas of education for the dairy industry, many of which provide a good background knowledge for entry level work:

- Milking barn safety
- Milking procedure
- Safe animal handling and stockmanship
- Calving assistance
- Record keeping
- Nutrition
- Reproduction

A pre-requisite to enroll in the dairy science program is a high school diploma or a GED. The 20-hour class includes online coursework, plus participation in teacher-lead weekly dairy forums, addressing real world dairy problems. Kevin also requires students to complete a 1,000-word research paper. Additionally, to refine and strengthen student knowledge and understanding, Kevin has recruited four local veterinarians as guest speakers.

In addition to completing the dairy science course, students are recommended to complete 20-hours of National Center for Construction Education and Research (NCCER), with emphasis on basic safety, tool safety, communication, construction math, and employability skills. They are also required to complete an OSHA program focused on safety and construction math. Furthermore, they earn CPR/First Aid certification through completion of a 5-hour course. Because Dairy Science is an elective class, inmates also are required to complete anywhere from 50 to 120 hours of program treatment, according to their offense(s). Another stipulation for enrollment requires students to be infraction free while completing their time at NICI; thus, upon release, those applying for employment within the dairy industry will be knowledgeable, trustworthy and an asset to any dairymen. The power of a second chance in anyone’s life is immeasurable.

After two years of development, NICI’s dairy science class was approved through SkillStack® in March of 2018. Since then, 50 inmates have earned certification, and at present time, 30 inmates are enrolled in class and working towards certification.

Lewis Clark State College’s Mandy Damman said, “The aspect that impacts the consideration for SkillStack® first is the need by industry. The Idaho Dairymen’s Association acknowledged a need for training and confirmed this class meets the standard for an entry level position.”

Therefore, kudos not only to Kevin Rehder for his forethought, commitment, and time in developing a recognized dairy science class, but also to the collaborative efforts of Mandy Damman, Bob Naerebout, Ryan DeWit and Dr. Temple Grandin.

Ryan DeWit
Dairy Worker Training and Safety Director
806.265.5390
ryan@idahodairymens.org
Matthew Sturzen joins Sawtooth Law Offices

Sawtooth Law Offices is pleased to announce the addition of Matthew Sturzen as an associate attorney in its Twin Falls office. Matthew graduated from the University of Idaho College of Law in May 2019 and is joining Sawtooth Law in December 2019.

Originally from a farm in northern California, Matthew and his family moved to Southeast Idaho where they continued to farm alfalfa hay and grain crops. Coming from a farming background, he developed a passion for agriculture and the outdoors which led him to attend the University of Idaho where he earned his bachelor’s degree in agricultural business. During his undergraduate studies, Matthew continued to help his family farm and interned at a hay export company in southern California.

At Sawtooth Law, Matthew will continue to follow his passion for agriculture by serving the needs of fellow farmers and ranchers. When he finds time, Matthew spends his time outdoors fishing and hunting and enjoying what he considers God’s Country.

Matthew may be contacted at 208.629.7447 or by email at matt@sawtoothlaw.com. To contact or read more about all of the attorneys at Sawtooth Law Offices, please visit www.sawtoothlaw.com.
You are invited to attend the upcoming IDA District Meetings. This year we are changing things up the schea bit. The morning program will inclucde industry updates from IDA, IDA Consulting Services and Dairy West. The afternoon program will include dairy facility and processor visits and industry discussions that we hope you will find of interest. IDA will provide transportation to and from each of the facility visits.

**JANUARY 7, 2020 - MAGIC VALLEY**

Fine Arts Auditorium at Elevation 486 | 195 River Vista Place, Twin Falls, Idaho 83301
We will visit Oak Valley Dairy and Gossner Foods in Burley with the 2019 Leadership Idaho Agriculture class. Dinner with the LIA class will be at The Mountain View Barn beginning at 6:30. The bus will return to Twin Falls prior to dinner for those that do not plan on attending dinner.

**JANUARY 16, 2020 - TREASURE VALLEY**

Boise Centre | 850 West Front St. Room 200, Boise, Idaho 83702
Speaker Bedke will join us for lunch followed by a meeting scheduled with Governor Little. After both meetings, we will tour the Capital building and possibly join an ag related Committee meeting. Business attire is recommended for this meeting.

**JANUARY 22, 2020 - MAGIC VALLEY**

Heglar Creek Dairy | 22 N. Yale Road, Declo, Idaho 83323 (look for the big red barn)
We will visit Heglar Creek Dairy for a tour of the robotic dairy and discuss their innovative cropping rotations using cover crops and other alternative crops.

**FEBRUARY 11, 2020 - EASTERN IDAHO**

Holiday Inn Express & Suites | 200 Via Venitio, Pocatello, Idaho 83201
We will be touring Driscoll TopHay facility and hay press in Pocatello.

You are welcome to attend your preferred meeting of interest, regardless of what district you’re located in. **Meetings will begin promptly at 10:00 am and will end near 3:00 pm.** Lunch will be provided.

**RSVP**
Megan Satterwhite | 208.420.6795 | megan@idahodairymens.org
UPCOMING EVENTS

JANUARY 7  IDA District Meeting  Twin Falls
JANUARY 15  Ag All Star Banquet  Boise
JANUARY 16  IDA District Meeting  Boise
JANUARY 22  IDA District Meeting  Declo
FEBRUARY 11  IDA District Meeting  Pocatello
FEBRUARY 17  Idaho Strolling Dinner  Boise
FEBRUARY 18  IDA Board of Directors Meeting  Boise
MARCH 10  Idaho Legislative Banquet  Boise
MARCH 10-11  IDA and Dairy West Board of Directors Meetings  Boise

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