

THE MODERN PRODUCER

WINTER 2023/2024

IN THIS ISSUE:

Prop 12 - What Does it Mean?

Farm Management Tips

What's Ground Breaking in Agri-Tech

Planning Your Next Build

+ More!

FROM THE EDITORS



TIM KURBIS

Another winter, another Modern Producer for you to enjoy. The Modern Producer has always strived to be, above all, a publication that leads with innovative thinking, solutions and technology while bringing you stories of personal interest. I believe we have succeeded in that endeavor once again.

As always, with time comes evolution and change. With this issue, we see the dedication and hard work of our new lead editor Ashley Graye. We want to thank Ashley for the work she does; and it is most assuredly an intense amount of work to put this together.

I trust you'll enjoy this issue. As always, feel free to reach out directly if you have ideas that can make us better. We love to hear from you, and especially look forward to the stories of people and places that we can highlight for your enjoyment.



KEVIN KURBIS

In this 11th edition of The Modern Producer, we welcome Ashley Graye as our new lead editor, she brings a unique vision and innovative approach to our publication. This edition marks not only a continuation of our commitment to quality and relevance in our industry, but also an exciting evolution as we blend time-honored wisdom with cutting-edge perspectives. With our new editor we are poised to capture the pulse of modern production, from technological advancements to shifting market dynamics. We invite you to dive in and explore the insights, stories, and trends that will define the next chapter of production excellence. Enjoy the read!



ASHLEY GRAYE

Issue number 11 - without our key Editor! I think we all underestimated the incredible amount of work that Jake Peterson dedicated to this endeavour, I know I certainly did! We're thrilled to share some exciting new products, partners, and possibilities with the Agriculture industry. We also have some fun new ideas up our sleeves for future issues - make sure you're subscribed to stay in the loop!

THE MODERN PRODUCER

Produced and Published By
AGRIHUB Inc.

Editors

Ashley Graye
AgriHub Marketing Team
Tim Kurbis
Kevin Kurbis

Design & Layout
AgriHub Inc

Special Thanks To Contributors
Neil Armer, Erich Lind, Roger Mills

Subscribe or Contribute
TheModernProducer.net

Advertising Inquiries
TheModernProducer.net/advertise

Cover Photo
Cullen Klassen & Topigs Norsvin Innova

The Modern Producer
Copyright 2024 All Rights Reserved.

Subscribe!
SCAN ME



WINTER 2023/2024 TABLE OF CONTENTS

4	Prepping for Prop 12
6	Planning Your Next Build
8	Automation Safety
10	Multi-Factor Authentication
11	Chore-Time Konavi Pan
12	The Wonderful World of BioGas
14	Chicken Tortilla Soup
15	Modern Producer Podcast
16	Takin' Care of Business
20	Old Elm Colony: Roots Run Deep
24	West Penetone
25	What's Groundbreaking in Agri-Tech?
27	Modernizing Your Wash Routines with Envirologic
28	Kids Corner: Word Search
29	Kids Corner: Pig Facts & Colouring Page

PREPPING FOR PROP 12

By Tanya Elrick

For many pork producers, especially in the United States, Proposition 12 seems like it will have a major impact on production and how they raise pigs, but we have to remember that we've been there before with regulations in Europe and with major producers like Smithfield and Maple Leaf announcing the switch to loose housing for hogs. We have been able to adapt barns in the past to be compliant with new regulations and we will be able to do it again, and without loss of production.

The primary objective of Proposition 12 is to ensure that farm animals are raised in humane conditions. For pigs, this means larger living spaces. Providing healthier and



more comfortable living spaces can lead to improved animal health and reduced stress which typically leads to faster growth and higher quality meat, which positively impacts a farmer's bottom line.

By complying with Prop 12, you have access to a wider share of the market. California alone accounts for about 15% of the pork consumed in the United States. By being compliant, you can tap into this market and even move into niche or specialty products that consumers are starting to demand be prepared more ethically.

Farmers who embrace the principles of Proposition 12 contribute to long term sustainability of their operations. The main focus of Prop 12 is a continued



focus on animal welfare and health. This may reduce the need for antibiotics and other medications, which can be costly. Sustainable farming practices not only protect the environment but can lead to reduced ongoing operating costs, benefiting your financial health.

One big advantage we can't forget of Proposition 12 is customer trust and loyalty. Prop 12 was in part driven by consumer's want for more humanely raised animal products, including pork. By complying with Prop 12

you send a message that you're meeting the latest in ethical farming practices and that sends a message to consumers that says to them that you truly have the wellbeing of your animals top of mind and want to produce the best quality meat possible.

While Prop 12 may seem like a lot of red tape and changes needed that could reduce production, past experience has showed that's not necessarily the case. Let us help you become Prop 12 compliant so that you not only meet regulatory standards but also have a more profitable, ethical and sustainable enterprise.

**TODAY:
ROUGHLY
~ 18 SQ FT
PER SOW**



**JULY 1, 2023:
MIN.
24 SQ FT
PER SOW**



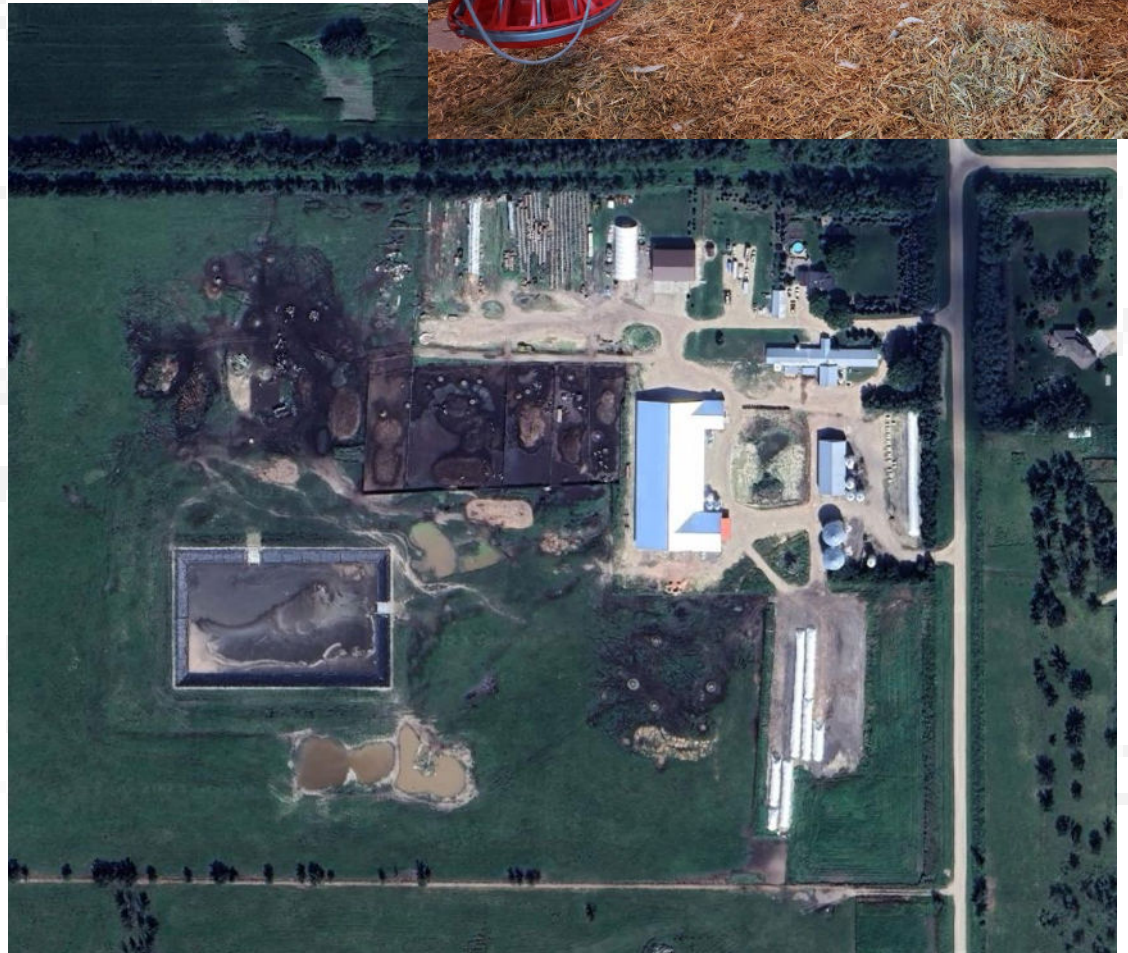
PLANNING YOUR NEXT BUILD

By Tanya Elrick

For many farmers, building a barn is one of the biggest investments you will make. It may even seem daunting, figuring out how large of a barn to build, what features to include or exclude. Fortunately, the expert staff at Penfor Construction have been building barns for hog, dairy, cattle, and poultry producers for (insert years). What can you expect though when you decide on a construction company for your new build?

A significant advantage of working with Penfor is that they offer turnkey operations and are there to assist you every step of the way. Penfor works with partners at AgriHub to ensure that not only the building exactly the way you want it, but the contents of that building are the exact way you would like as well. Whether it be an aviary, a new barn with milking robots, or new Prop 12 compliant hog housing, the experts at Penfor will work with Penner Farm Services, New Standard Ag, and others to ensure that the space fits the equipment, and that you have all the right equipment for your needs.

Constructing a turnkey building comes with numerous advantages. Since Penfor Construction is a “one stop shop”, you’ll save time and stress by not having to coordinate multiple contractors or trades. This streamlined process makes it so much easier when building. There’s no worries about making sure that all the parts of your barn will work together or not. Since the whole thing is done by one organization, you can be assured that everything will fit in the space perfectly.



By selecting a builder with such vast experience in agricultural construction, you're getting tailored solutions and expertise in infrastructure. Penfor also has experience with other commercial buildings as well, making them suited for almost any sort of project.

Cost is going to be the main consideration when constructing or renovating a barn. Penfor sources materials direct from the manufacturer, saving time and money. Since Penfor is involved in the project every step of the way, arranging all the sub trades and, your project will be executed in a timely manner.

Penfor's buildings are also as unique as you are as an individual. They do not offer a one size fits all option, rather they take the time to listen to what your needs and wants are and design/build or design/renovate accordingly.

In terms of timing, expect a new build or renovation to take at least a year to do. The design and consultation process takes about 2-3 months to ensure everything meets your exact specifications and meets all building code requirements. Extra permits need to be pulled if you are planning on housing a certain number of animal units (based on manure output). Specialized equipment may need to be ordered. Delivery of equipment can take up to 5 months, while the actual construction can take 6-12 months, depending on the complexity of the project.

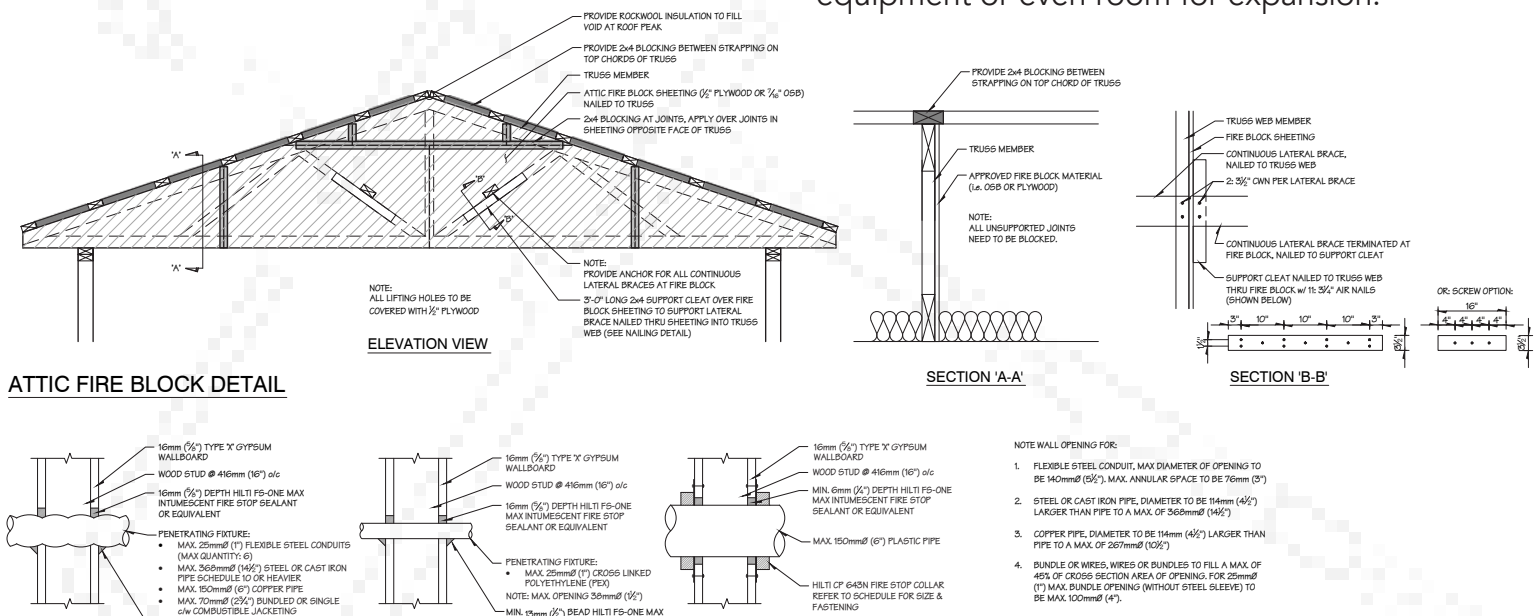
The first big step is site preparation and assessment. This includes a project site plan, soil test reports, a manure spread field map and other supporting documents. This goes onto a technical review, a process which can take several months, and includes a conditional use hearing.

Once your initial plans are approved, we can get down to building permits, stamped and engineered drawings, and approval from your local gas/electric company.

When building, keep in mind that it's best to do any concrete work in warmer weather, while other work such as framing has greater flexibility in its timing. There will be several inspections during the build phase, with the foundation, truss, roof, and wall framing all being examined. We always keep in mind the critical date, which is the day the animals are set to enter the building and work backwards from there.

One of the final advantages of working with Penfor Construction is that service doesn't stop once the build is complete. Being partnered with Penner Farm Services and the AgriHub group of companies, service is offered for the farming equipment in your build. Training is also offered on site for as long as you need, for you, your staff, and in some cases even your animals.

When all is said and done, you'll have the exact build you want, with the features you'll need for today and tomorrow, whether it be modern robotic equipment or even room for expansion.



AUTOMATION

SAFETY

By Neil Armer

Safety and Automation on the Farm

Automation and technology have changed the way we farm, changing the way crops are planted & harvested and how livestock is managed. These advancements have the potential to increase efficiency, reduce labor costs, enhance yields, and minimize environmental impacts. While automation can enhance our lives, it can also introduce new safety hazards we need to be aware of. Here are some key points to consider when it comes to farm safety and automation:

1. Equipment Safety:

- Ensure that automated farm equipment, such as autonomous equipment and robotics, meet safety standards and have safety features like emergency stop buttons, obstacle detection systems, and warning alarms.
- Have regular inspections and maintenance completed on automated equipment to prevent malfunctions that could lead to incidents.

2. Training and Education:

- Provide training to farm workers on how to operate and interact with automated equipment safely.
- Emphasize the importance of understanding the technology's capabilities and limitations.
- Train workers in emergency procedures and how to react in case of equipment failure or incidents.

3. Integration of Sensors

- Integrate sensors to enhance safety. For example, use sensors to detect hazardous gases, fires, or unusual temperature changes.

4. Safe Harvesting and Processing:

- Implement safety procedures in automated harvesting and processing operations. For instance, ensure that moving parts and machinery have safeguards to prevent injury to workers.

5. Emergency Response Plans:

- Develop and regularly update emergency response plans that address incidents, equipment failures, and natural disasters.



Meet NEIL

Neil has fifteen years of Health & Safety experience spending the last five years working in agriculture. Neil attended Utah State University majoring in Political Science and has a certificate in Environmental Health & Safety Management. He has been the Health & Safety Manager for AgriHub Inc since June of 2020. When not at work Neil spends most of his time hunting and fishing with his nieces and nephews on their farm and in the surrounding mountains of Northern Utah.



- Conduct drills and training exercises to prepare farm workers for various types of emergencies.
6. Continuous Improvement:
- Regularly review and update safety protocols and practices considering technological advancements and lessons learned from incidents or near-miss situations.

Farm safety with automation requires a proactive approach that combines technology, training, and a commitment to maintaining a safe working environment. Integrating automation responsibly and ensuring that it enhances, rather than compromises, safety on the farm is essential for the sustainable and efficient future of agriculture.



MULTI FACTOR AUTHENTICATION

In today's internet world, keeping your accounts secure is very crucial to data protection. Having a good password is one way to make sure it's harder to crack but as computers get better and faster, passwords are more and more in danger of being brute forced. Remember, any password with less than 8 characters could be cracked within a few minutes. This is where MFA comes into play. It's an additional authentication method, another layer of protection for your accounts.

MFA's principle: Something you know (password), something you have (cell phone, key), something you are (biometrics like a fingerprint). Using MFA will greatly reduce the likelihood of an attacker getting into your account even if your password is hacked since they will need at least one more method to authenticate. Most if not all online sites offer MFA. You may need to enable it on your account.

Add another layer of protection to your accounts using MFA so your data is safer!



There are several options you can use:

- Authenticator Apps
- Google Authenticator
- Microsoft Authenticator
- Two-Factor Authentication (iOS)
- Call or SMS via cell number
- Hardware Keys
- Yubikey
- SmartCards
- Biometrics
- Fingerprint
- Face
- Iris

KONAVI® Broiler Feeder

Give your birds a clean plate.



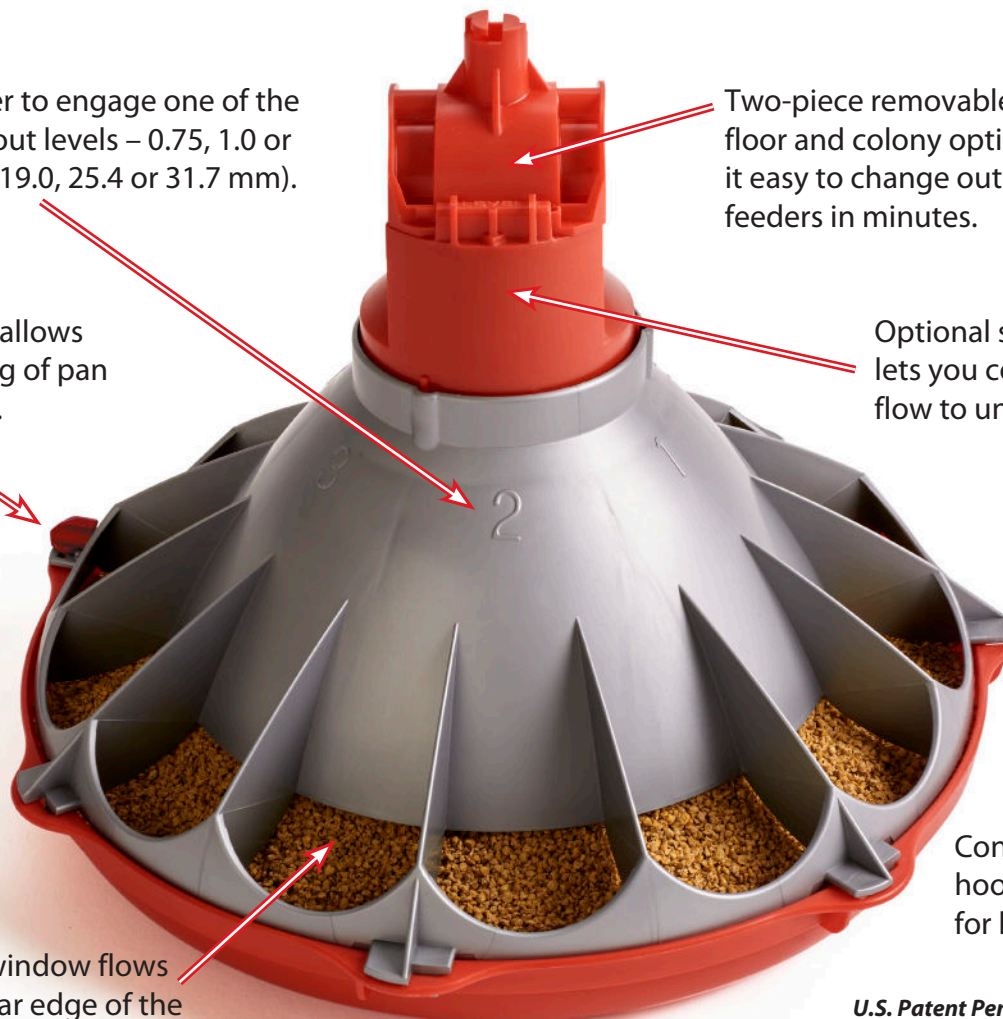
Let's grow together®

Rotate feeder to engage one of the three grow-out levels – 0.75, 1.0 or 1.25 inches (19.0, 25.4 or 31.7 mm).

Two-piece removable top with floor and colony options makes it easy to change out damaged feeders in minutes.

Single lever allows easy opening of pan for cleaning.

Optional slide shut-off lets you control feed flow to unused pans.



High flood window flows feed to the far edge of the pan in a full 360 degrees.

Cones include hooks (not shown) for hanging pans.

U.S. Patent Pending

Contact us today for more details.

Chore-Time Authorized Independent Distributor

United Agri Systems

2365 West Railway St,
Abbotsford, BC
604-859-4240

Penner Farm Services

64, 27211 Hwy 12
Lacombe, AB
403-782-0675

Western Ag Systems

876B 60th St E
Saskatoon, SK
306-382-0700

New Standard Ag

140 Panet Road
Winnipeg, MB
204-233-2503

Penner Farm Services

10 Penner Dr
Blumenort, MB
204-326-3781

Penner Farm Services

3287 32 St N
Lethbridge, AB
403-380-4941

Western Ag Systems

1551 Chaplin St W
Swift Current, SK
306-773-7999

New Standard Ag

1724 18th St N
Brandon, MB
204-728-7563

New Standard Ag

1200 E Robur Dr
Sioux Falls, SD
605-496-9696

CT-2676-202003

THE WONDERFUL WORLD OF BIOGAS

By Olena Yurchenko

Discover the fascinating history and immense potential of biogas, a renewable energy source with ancient origins that now revolutionizes farming practices worldwide. From its historical roots to its modern-day applications, biogas promises farms a cleaner, greener, and more sustainable future.

AgriHub biogas systems mean new revenues for farms and recaptured nutrients to reduce fertilizer costs. This can be implemented simply and at a low cost. At proper scales, capital can be provided so that farmers aren't paying out of pocket if so desired.

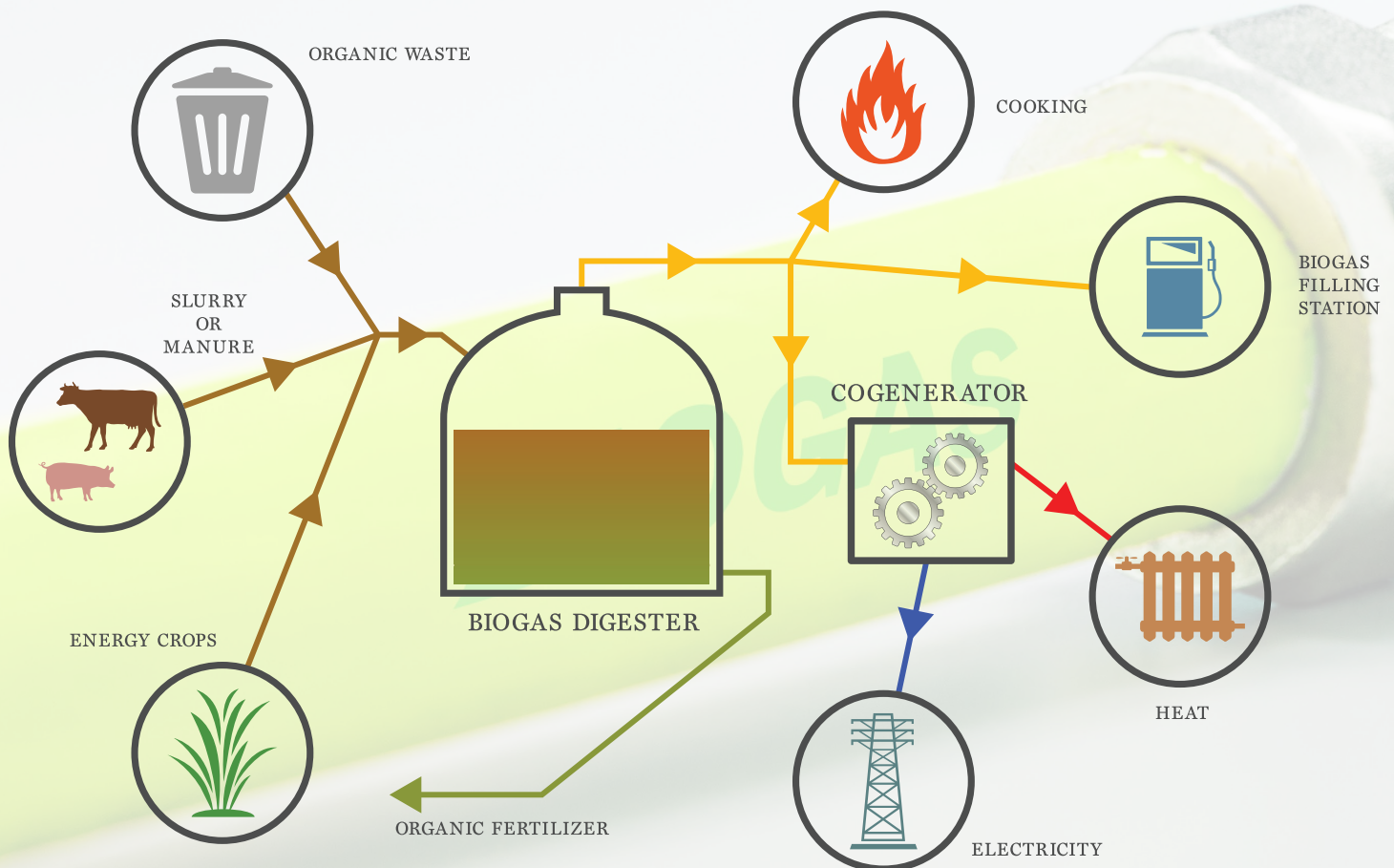
The Historical Journey of Biogas

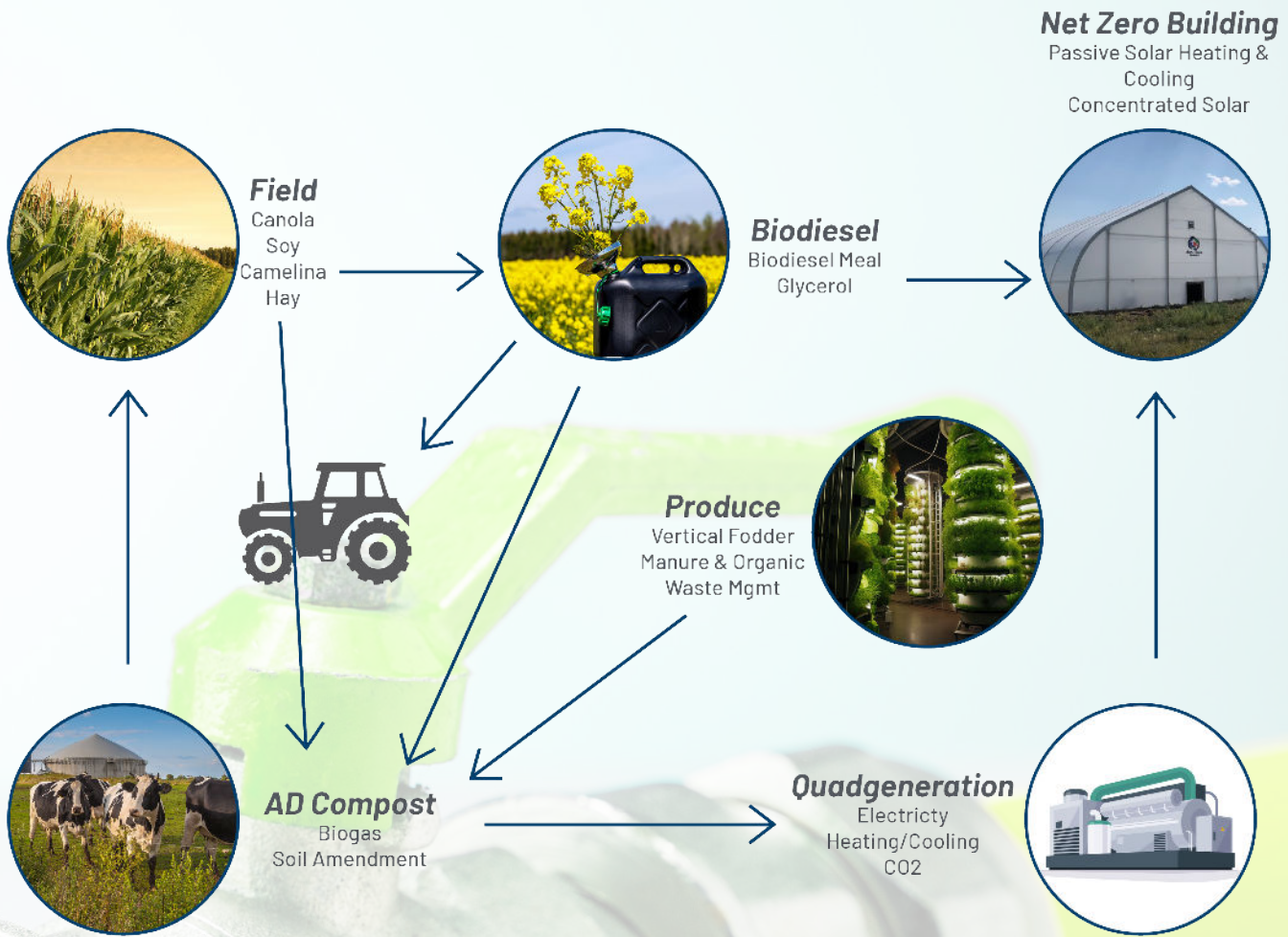
Anecdotal evidence indicates that biogas was used to heat bath water in Assyria during the 10th century

BC and Persia during the 16th century. In the 17th century, Jan Baptist van Helmont identified flammable gases arising from decaying organic matter, setting the groundwork for modern biogas research. Count Alessandro Volta's 1776 discovery of the correlation between organic decay and combustible gas further paved the way for biogas exploration.

Biogas in Modern Farming

Fast forward to today, and biogas has become a game-changer for farms worldwide. In Pakistan and India, small-scale biogas facilities, known as "gobar gas," are a staple in rural households, providing a clean and sustainable energy source using animal manure. The Deenabandhu Model, popular in India, offers affordable and efficient biogas production for smaller farms.





Biogas: A Solution with Boundless Advantages

The benefits of biogas extend far beyond energy generation. It offers an intelligent solution for organic waste management, reducing odors, pathogens, and environmental impacts. A biogas-derived digest is a nutrient-rich fertilizer, promoting soil health and reducing reliance on chemical alternatives.

Cost Considerations and Challenges

While large-scale digesters have found their place on farms with 500 cows or more, the economics of smaller farms may limit biogas adoption. Nonetheless, exploring innovative digester designs can unlock the potential for biogas on smaller farms.

The Science Behind Biogas Production

Understanding the anaerobic digestion process is crucial for successful biogas production. Ideal temperatures between 30°C (86°F) and 35°C (95°F) foster methane production, ensuring higher

energy content. The final slurry left after digestion is an excellent fertilizer, contributing to sustainable agricultural practices.

Overcoming Biogas Recovery Challenges:

Historically, some biogas recovery projects faced challenges, including inadequate training, incompatible system designs, and insufficient financial returns. However, with proper planning, biogas can present numerous opportunities, such as renewable energy generation and reduction of greenhouse gas emissions.

The journey of biogas from ancient civilizations to modern farms is a testament to its undeniable potential. As we work to address environmental concerns and seek renewable energy alternatives, biogas emerges as a beacon of hope for a cleaner, greener, and more sustainable future in farming. With innovative approaches and strategic investment, the wonderful world of biogas is poised to revolutionize the agricultural landscape, benefiting both farmers and

RECIPE

CHICKEN TORTILLA SOUP

Recipe by: Tanya Elrick

Ingredients:

1 tablespoon olive or avocado oil
5 cups chicken stock or broth
1 can (14.5 oz) diced tomatoes, undrained
1 medium onion, diced
6 cloves garlic, finely minced
2 teaspoons chili powder
2 teaspoons cumin
1 teaspoon paprika
1 teaspoon ground coriander
1.5 lbs boneless skinless chicken breast
1 can (14.5 oz) black beans, drained and rinsed
2 cups frozen corn kernels
1 tablespoon lime juice



Optional toppings: cilantro, tortilla chips, diced avocado, shredded cheese, sour cream, guacamole, salsa

Directions:

1. Set your instant pot to sauté on low.
2. Add olive or avocado oil and diced onion and sauté for a few minutes until they start to become translucent.
3. Add garlic and sauté for another 30 seconds to a minute. Turn off the pot.
4. Add the chicken stock and tomatoes to your instant pot.
5. Place the chicken breasts on top and sprinkle the spices on top of that.
6. Last, add the black beans and corn on top. Do not stir.
7. Place the lid on, lock it and cook the mixture on manual high pressure for 5 minutes (Note: it will take several minutes to build pressure)
8. Let the pressure naturally release for 10 minutes then quick release the rest using the release lever.
9. When the pot has depressurized, remove the chicken and shred it.
10. Return the chicken to the pot and add lime juice for additional flavour.
11. Top with whatever toppings sound good!

Note: you can substitute boneless skinless chicken thighs, just increase the cook time to 13 minutes.

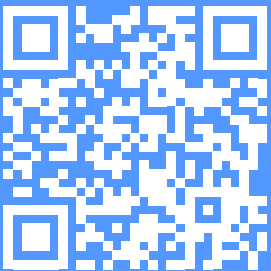
Quick tip: To shred your chicken with ease, place the cooked chicken breasts or thighs in a bowl and use your hand mixer. Leftovers (if there are any!) can be frozen and enjoyed later.

THE MODERN
PRODUCER
P (📡) D C A S T

**EXPERT TALK ON
LIVESTOCK
HOUSING AND
ANIMAL
HUSBANDRY
LISTEN TODAY.**



SCAN ME

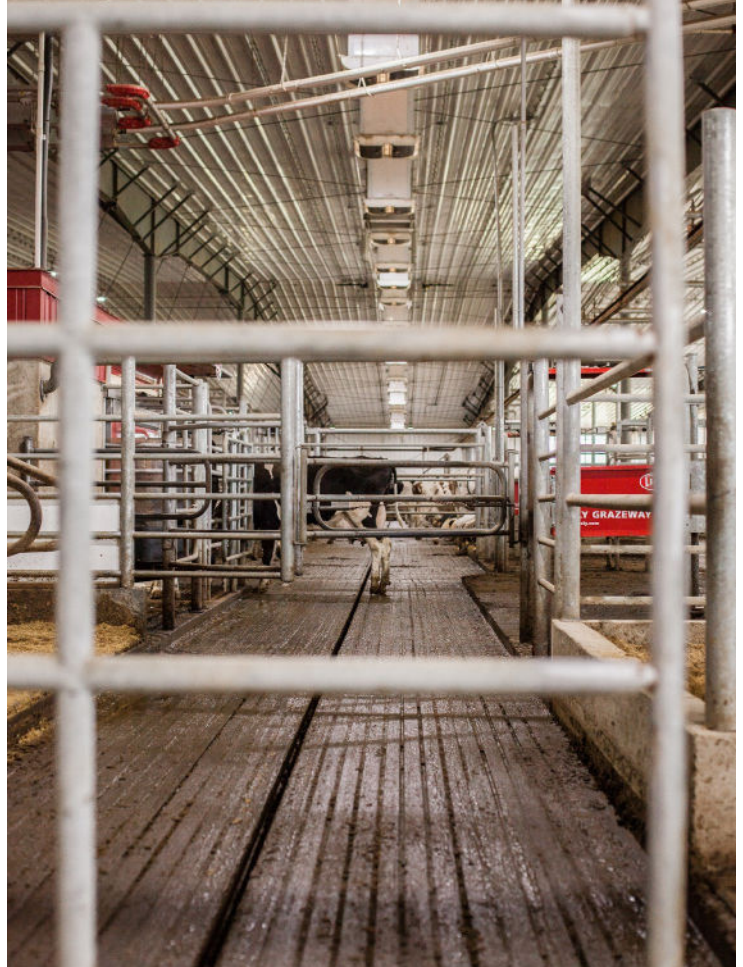


**DO YOU HAVE A
QUESTION FOR OUR
EXPERTS?**

**MESSAGE US YOUR QUESTION,
PROBLEM, OR INSIGHT AND
YOU MIGHT BE FEATURED ON AN
UPCOMING EPISODE.**

TAKIN' CARE OF BUSINESS

Contributed Content from Roger Mills of
Manitoba Dairy Farm Management Group



Farming has always been considered a “way of life” and a “great place to bring up kids”. In that respect, generally, it still is, but any ag business has to be treated primarily as a business venture these days. That business must generate sufficient revenue to cover all the Operating Expenses, the debt payments and provide an adequate living expense for the owner/manager, just like any manufacturing or service industry in town. Most enterprises in any ag sector will currently have a sizeable asset value, due mainly to the ever-increasing value of land; buildings; machinery; or, in the supply managed sectors, quota. As has been the case for many years, farmers are often correctly considered *Asset Rich but Cash Poor!*

It is very important that the accounting and record keeping in any business is current. Whether the “books” are completed by a family member or an outside source, the owner/manager should be using up-to-date information on which to base his/her decision making. Whether it is a pre-paid expense for crop inputs or a small capital investment that is planned; the current financial position will indicate the availability of cash to justify such a decision. The lender may likely ask for the current business position before discussing further loans for a livestock purchase or for a longer-

term capital investment. The bank account does not always tell the whole story, as trade debt could be accumulating unbeknown to the lender. Machinery loans, financed through an equipment dealer may have also been recently arranged. The Balance Sheet should show the full financial position of the business.

What small business in town could afford not to know their financial position at any specified time? Cash accounting is generally quite adequate for most farm businesses, but where cashflow is a problem and trade debt is used as an additional cash source, accrual accounting would be the preference. This form of sourcing extra cash should only be used as a short-term measure, as in time of course, the higher interest rates normally associated with this form of debt become burdensome to the business. So, to maintain a healthy business, it is necessary to optimize the cashflow by maximizing the revenue source(s) on the farm. In dairying, it is so important to optimize the quota allocation by shipping all the milk possible within the system at any one time. By utilizing the quota credit system where allowed, the producer does have some flexibility in matching production to the established calving pattern within the herd.

Bookkeeping options

There are individuals who place all their papers into a shoebox and deliver that on a monthly basis to the accountant's office. This can work, but it does have limitations, in that it likely means the producer may not be fully in touch with all the detailed information needed to make those current decision. Some businesses only use spreadsheets, which can work perfectly OK and certainly not something to be condemned. Accounting software programs continue to improve as they are developed and updated, which provides the increasing number of producers investing in the technology an opportunity to look at reports that will provide a partial or complete analysis of the business at any given time. In the dairy sector specifically, a regular check on the purchased feed expense and the milk revenue, will give a good indicator of the current trend for operational profit. There are many other expenses, of course, such

as vet, breeding, dairy supplies, as well as hoof care and DHI, but as with other intensive livestock enterprises, the purchased feed cost is by far the highest operational expense. The way that the software program is set up will determine how useful the system is in decision-making. It is especially important that the chart of accounts contains a full list of all the categories of expense, so that the items can be separated properly. For instance, our benchmarking clients are asked to separate some extra categories which can help provide improved advice on micro-managing the operation. Drugs from the vet that are used in breeding programs would be a fitting example. They may be purchased from the vet, but they are a definitely a breeding expense, as is the semen and any breeding supplies etc. There are expenses in all ag sectors that could be separated to allow a more detailed cost analysis. Splitting up machinery/equipment repairs into specific categories could help determine when a



piece of equipment needs replacing. As far as the level of expense is concerned, it is worth noting the Operating Expense Ratio [OER]. This is derived from dividing the total operating expenses by the total gross revenue. It is very worthwhile to keep a check on this parameter, which can be affected by both the level of revenue as well as the expense total. Here again is another reason for maximizing the revenue source to optimize the cashflow position. Having dealt with some of the reasons why it is necessary to keep the books updated, I make a point of encouraging those producers who struggle with the accounting side of the business to engage the services of a bookkeeper. If the management team considers their time in the barn or the field to be much more valuable than sitting in the office, then this is strongly recommended. Employing a custom operator to harvest the forage and grain crops is a similar situation. Many producers hire a professional hoof care specialist to look after that side of things. Employing a bookkeeper should be considered in the same light. You are bringing in a professional to complete a task that does not fall within your level of expertise. Where there are a team of owners/managers, farm accounting completed by a professional bookkeeper may even be considered to have more credibility.

Their monthly visit to the farm will ensure that the task is completed efficiently and maintains that current aspect of accounting. On completion of the visit, they will then generate reports that they feel are useful to the producer, or as requested. As a manager, (s)he should go through those reports with the bookkeeper to frequent himself/herself with the information, using this opportunity to evaluate and maybe act upon any upward trend of expense, or even the falling unit value of production revenue. At yearend, the file can be handed over to the accountant for tax preparation purposes. The bookkeeper provides the producer with a detailed report that can reliably be used for management purposes, whereas the accountant prepares a report for tax purposes. There is a significant difference when it comes to using each form of this information to make management decisions. Inventories are at the top of the list for other records that need to be maintained. Keeping a regular inventory of cattle numbers, forage, purchased feed,

supplies and cash crops means the business can produce an up-to-date and meaningful balance sheet at the push of a button. This would likely be required if the producer was seeking further longer-term loans with the lender.

Reduced profitability

For the last several years many of the ag sectors have seen a reduced operating margin due to rapidly increasing costs, even through the period of cheap borrowing and the associated lower debt payments. In most sectors, revenue has not covered those higher expenses. In the last 2 years interest rate hikes have put a lot of pressure on producers' businesses, with increased debt payments which have negatively affected the overall profitability of many farms. Looking back 10 years, interest rates were around 8% and yet the industry was able to cope with that rate of borrowing. Operating expenses were so much lower then and most farms' cashflow were able to manage the principal and interest payments associated with those rates of borrowing. Currently, interest rates haven't reached those previous levels, but many producers are already experiencing lower profit margins with current debt payments, together with the significantly higher costs. That could certainly become more burdensome when existing loans are up for renewal or new loans are applied for. Producers who are experiencing tighter (perhaps negative) cashflow would be advised to talk to their lender as soon as they see that the business will be entering into a difficult period, especially if there are large seasonal payments due. It is extremely important that lines of communication are always kept open, so that the lender can offer help before the situation deteriorates further. Having a lender that understands your business and shares your vision for your short, medium and long term goals will benefit your business big time!

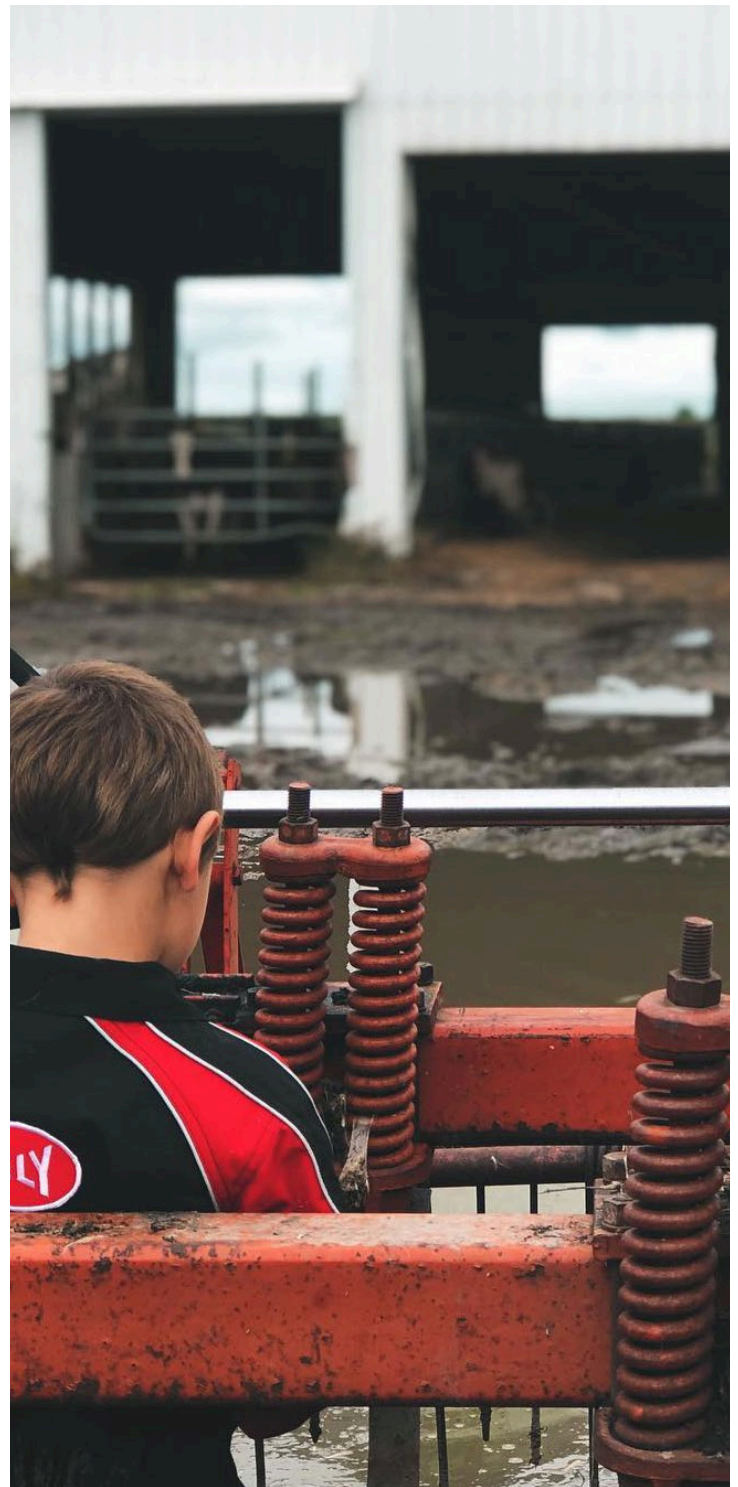
Finding Efficiencies

It has always been essential to operate at the highest level of efficiency in any sector of agriculture. The level of efficiency of your operation is key to keeping expenses to a minimum. In the dairy benchmarking program that our producer group uses, operating at

the most efficient production unit is key. These are the main criteria considered;

- Optimizing quota fill with the highest quality of milk
- Producing the highest amount of milk per cow, whether its measured in Kgs of BF or litres, to optimize the feed that the cow is consuming
- Maintaining a reasonable level of culling
- Maximizing the repro status of the herd; calving interval, days dry, preg rate etc.
- Calving heifers at an early age (but mature animal) to move them from an expense to revenue producing.
- Keeping only the number of heifers required as replacements.

Farming, like any other business, is based on profitability. This message will have been heard before: What you can't measure, you can't manage. Having the ability to measure your own production efficiencies with those of other producers, or the average of a group of producers of a comparable unit size, can be a huge step forward to correcting efficiencies in your operation and improving its profitability. The business model suggests that the manager measures several different criteria before making a management decision.



Key Takeaways

- *Maintain up to date accounting*
- *Make decisions based on the reports from the current accounting position.*
- *Consider using the services of a professional bookkeeper.*
- *Dealing with reduced profitability and increased debt payments*
- *Looking for efficiencies within the operation*



Old Elm Springs Colony sits on the East banks of the James River, just south of Highway 42 and North East of Parkston, South Dakota. Once the thriving livelihood of Hutterite settlers who migrated from Russia, it is now the site of decaying stone foundations and overgrown orchards and lore.

So what happened? Was it abandoned? Tim Kurbis and I (Jake Peterson) had the chance to tour Old Elm and visit with Joseph. Joe is self-described as "being sweet 16 with 70 years of experience". Joe was a wealth of knowledge on the history of Old Elm and the current New Elm Springs Colonies.

Some Name Context

Before we get into Old Elm Springs's history, we want to clarify a few things. First, today there is still an Old Elm Springs that is fully operational, but it is simply a namesake and was named in honor of the original Old Elm Springs Colony; in this article, when we refer to Old Elm Springs, we are referring to the original, now abandoned Old Elm Springs Colony.

To further clarify, New Elm Springs is much older than the current operating Old Elm Springs. New Elm Springs construction began in 1890 as a new colony with members from Old Elm Springs and Rockport Colonies.

Confused? Here is a timeline to help clarify a bit.

Original Old Elm Springs - 1876-1929 approx.

New Elm Springs - 1890 - Today

I hope that helps clarify things a bit; it is understandable why confusion often arises.

Settling Old Elm Springs

The migration of the Hutterite people was prompted in 1871 when the Russian government decreed that Russian be the language of instruction in all schools. Also, at that time, the Hutterite and Mennonites' exemption from military service was revoked. Over 6 years, from 1876-1882, the Hutterites left Russia for the United States.

They ultimately settled at Bon Homme in Yankton County, Dakota Territory. As more families moved, more colonies, were established. The first sister colony established was Old Elm Springs in 1877.

Tour of Old Elm

As we drove across the James River, structures began to come into view. Joe pointed out the first buildings on the road's Northside. The barns housed cattle, sheep, hogs, and chickens. With their proximity to the river, I asked about flooding, and to Joe's knowledge, those barns never flooded.

Crossing the bridge, we began to see more structures to the south, mostly ruins at this point. Then, with Joe's help, he began to paint a picture of what the Colony used to be like.

We slowly made our way down the remnants of what used to be the main road. To our right, along the banks of the river, were the remaining foundations of the horse barn, the wash house, bake house, blacksmith shop, and a house.

To our left was another barn, the "long house," as

Joe puts it, "it's like a normal house but longer." The kitchen, a cellar, a school, and more homes. Just a short way down, the road ends, and Joe points out where there used to be an orchard and various other buildings; some of the buildings have already been reclaimed by trees and brush or have been washed away when the James River floods.

We backtracked and continued down the main road up the hill to the upper portion of Old Elm Springs, which is now operating under the same name but with modern structures.

Joe showed us where the original grain elevator stood. He explained how you could guide your horse-drawn wagon into the elevator. You'd connect a hoist and turn a crank that would lift the wagon box and dump the grain down. Joe remembers turning the wheel as a child.

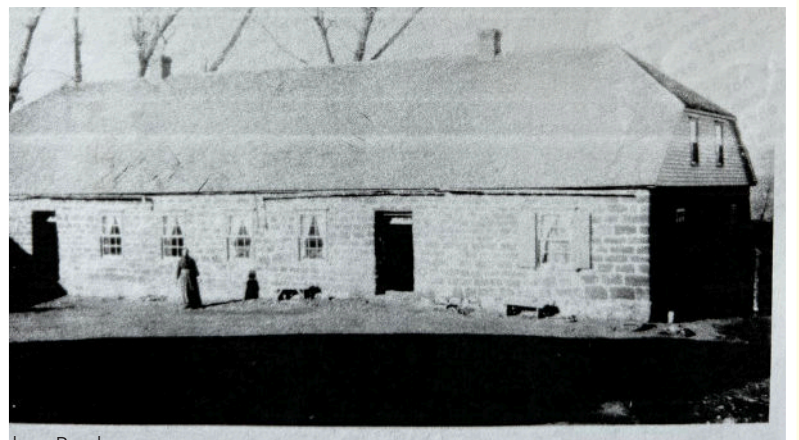
At the top of the hill, there was also a mill. According to Joe, the mill was hydro-powered. There was a windmill on top of the hill, which would pump water that would then be used to turn the mill and process the grain into flour. Even back then, the idea of harnessing wind for power was used.

Disease and Loss

The Old Elm cemetery is at the top of a bluff overlooking the James River Valley. The scenery is beautiful. At the center of the fenced-in cemetery is a memorial listing who has been laid to rest here. Some of the original Hutterites immigrants are buried here. At the bottom of the sign is a somber reminder of the difficult life in the late 1800s and early 1900s; 80 children were also laid to rest here. We asked Joe what had happened, and the reality is diseases like Cholera took a heavy toll on people, especially children.

War

The beginning of the end for Old Elm Springs began with the break of war in Europe. World War 1 began in 1914, but in April 1917, the United States became very involved. Ironically, one of the deciding factors that drove the Hutterites from Russia came into play as the United States passed the Selective Service Act, meaning all men aged 21-31 could be conscripted into



the army.

The Hutterites did approach the government for exemption but to no resolve. Ultimately the choice was to serve or be imprisoned. Four young men from the neighboring Rockport Colony were arrested and sentenced in 1917 to serve at Alcatraz in California. Tragically due to the extreme conditions and treatment, two became very ill and were transferred to a military hospital in Fort Leavenworth Kansas, where they died.

Migration

With the difficulties of war and the looming draft of more young men into military service, the Hutterites looked to the North for refuge. During this time, the Canadian government sought settlers and welcomed the Hutterites with open arms, allowing them to keep religious freedom and exempting them from military service.

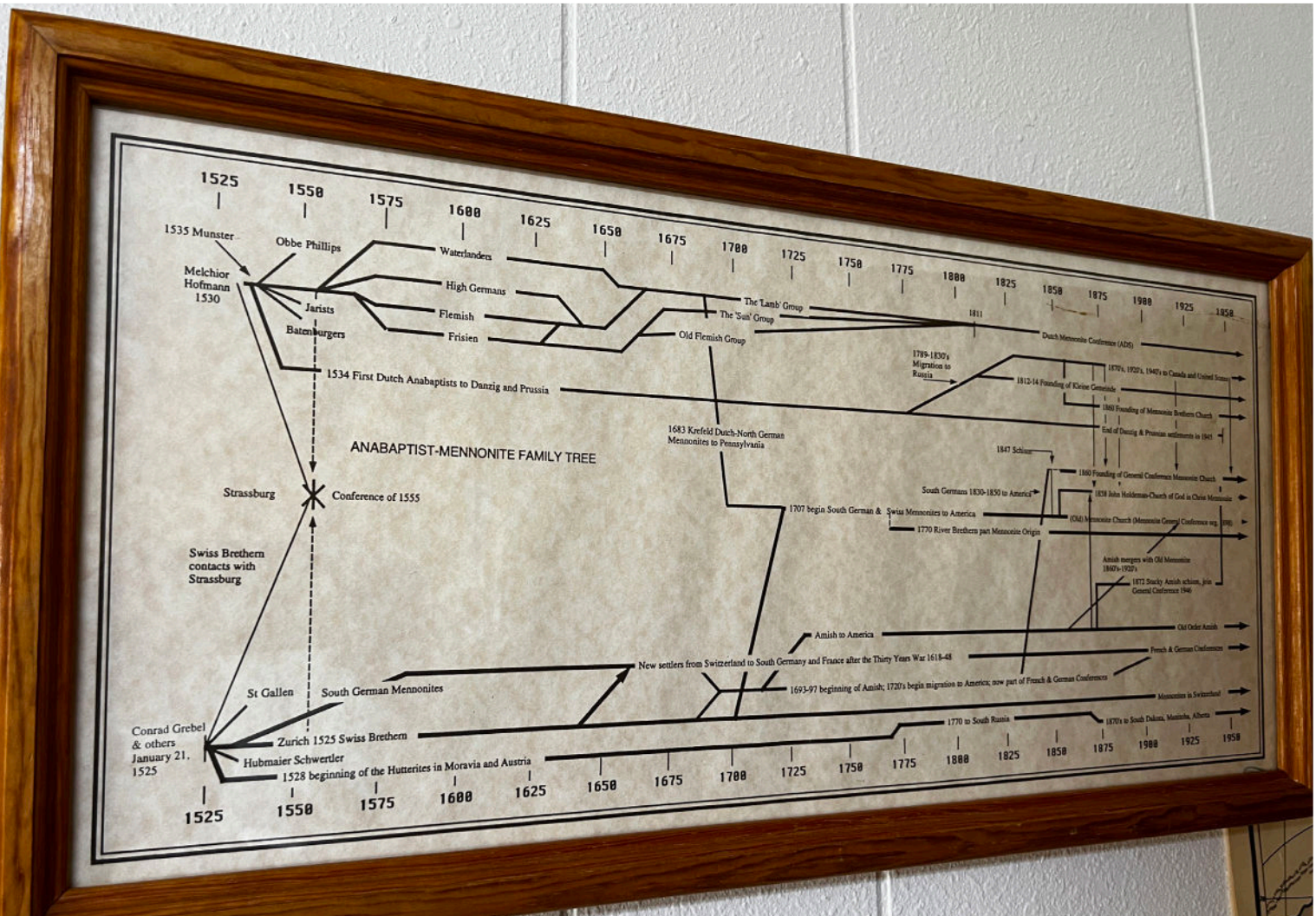
Bon Homme was the only colony that remained in the United States during this period. People from Old Elm migrated to Canada along with the other colonies at that time.

In 1936, amnesty was granted for the Hutterites in the United States, and the Colonies started returning and resettling, although many of the newly founded Canadian colonies stayed.

Today

Today, the Old Elm Spring land is mainly used for cattle and grazing, with an electric fence surrounding most of the ruins. Some of the buildings remain and are used as extra storage, with some of the foundations used to park farming equipment.

The life and spirit of the Hutterite people are certainly alive and well, as represented by the thriving New Elm Springs.





SERIOUS CLEANING ACTION WITH **HIFOAM** AND **GLUQUAT 300**

1 CLEAN



HIFOAM

- Abundant, lasting and thickening foam
- Biodegradable
- EDTA free
- High alkalinity
- Non-chlorinated
- Phosphate free

2 DISINFECT

GLUQUAT 300

- 12,5% glutaraldehyde
- 6,7% quaternary ammonium
- Extremely efficient and fast acting
- Effective in warm, cold and hard water
- Non-corrosive
- Wide virucidal and microbiocidal spectrum



Contact our specialists for our whole range of safe products for all your farm cleaning needs.



What's Ground Breaking In Agri-Tech?

Contributed Content from Jordan Roberts of Cortex Agritechnology

Using AI tools to maximize carcass value: Precision Meat Quality Management

Scientist Biography

Jordan Roberts holds a Master of Science degree in Biological Sciences from the University of Calgary, with four publications in animal physiology. After graduating Jordan worked as an integrated meat biologist at the Lacombe Research and Development Centre where he is named as an author on 12 meat quality and food safety related publications. After this, he spent five years in the integrated pork production and processing industry where he worked in various capacities in research and development, quality assurance, food safety and animal welfare. Jordan is now Principal Scientist at Cortex Agritechnology, an Agri-Tech and manufacturing leader, where he leads scientific development for new products in meat processing.

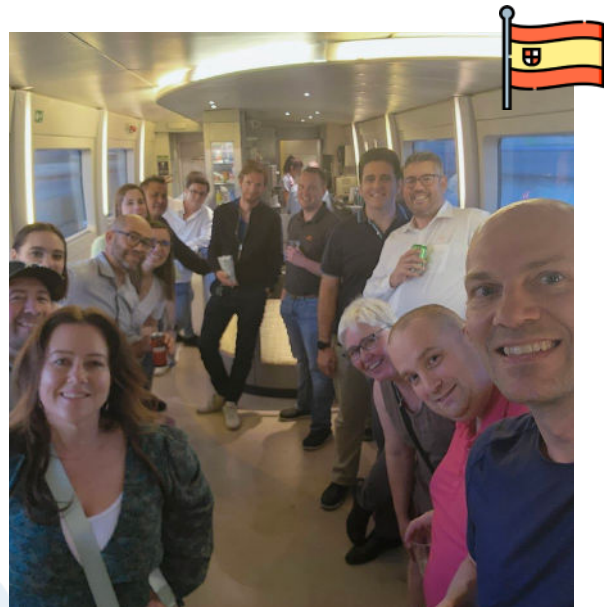
“AI models that predict important carcass traits...”

Abstract

Pork quality and yield surveys from industrial participants show wide variation in key economic traits like shrink loss, pH, and yield across their production. It is well understood there are many factors that influence these traits such as: animal stress, carcass cooling rates, air flows and humidity. In large-scale settings, these principles are only applied at broad levels due to limitations in ongoing analysis for facility optimization. Cortex Agritechnology is developing a precision Meat Quality Management system (MQM) to allow these factors to be optimized at plants on an ongoing basis to maximize carcass



AgriHub Family of Companies retreat in Pinawa, MB



value. Starting at the receiving yard, a plant may follow a first-in first-out slaughter sequencing and schedule their receiving to target ideal rest times, however, factors such as barn distance, barn historical performance, arrival state of pigs, among others, may indicate meat quality outcomes may be improved by sequencing based on predicted stress levels. Further, rapid chilling of muscle pre-rigor slows pH decline leading to better meat quality outcomes. However, carcass cooler environments are not uniform due to factors like different expansions and spacing constraints. There is an opportunity to utilize the data from these plant environments and develop AI models that predict important carcass traits to achieve the following outcomes: slaughter sequencing to reduce stress, unit specific cooler programs to increase average cooling speeds, optimal cooler placement to mitigate predicted stress. Together the modules of MQM supported by these AI models will allow slaughter operations to maximize value within their existing infrastructure.

Modernize your washing routines

your washing robot for pig barns



Available through:



Lacombe, AB **Lethbridge, AB**
64 27211 Hwy 12 3287 32 St N
403.782.0675 403.380.4941

Blumenort, MB
10 Penner Dr
204.326.3781



Saskatoon, SK **Swift Current, SK**
2327 Faithfull Ave 1551 Chaplin St W
306.382.0700 306.773.7999



Brandon, MB **Winnipeg, MB**
1724 18th St. N 140 Panet Rd.
204.728.7563 204.233.2503

Sioux Falls, SD
1200 E Robur Dr
605.496.9696





WORD SEARCH

Do you have what it takes to find all the words below?
Don't forget to check off the words you find!

L	I	C	E	C	R	E	A	M	E	M	R	P	C
Y	E	C	P	O	P	C	O	R	N	T	F	O	O
O	E	H	C	O	S	H	B	S	G	G	E	R	R
G	D	E	H	E	R	T	B	A	J	C	A	K	E
U	E	K	I	S	T	K	E	P	C	H	R	T	K
R	Y	A	C	C	A	T	C	A	E	O	C	E	B
T	K	H	K	C	M	U	C	H	K	K	N	N	U
O	R	S	E	U	E	T	S	O	O	U	A	D	T
A	E	K	N	E	R	S	E	A	H	P	C	E	T
T	J	L	W	O	A	T	L	K	G	U	H	R	E
M	F	I	I	R	O	A	S	T	R	E	E	L	R
E	E	M	N	K	O	T	C	I	T	O	E	O	O
A	E	C	G	C	O	A	I	G	I	O	S	I	N
L	B	C	S	W	C	E	R	E	A	L	E	N	E

- POPCORN
- MILKSHAKE
- PORK TENDERLOIN
- BEEF JERKY
- BACON
- SAUSAGE
- OATMEAL
- CHICKEN WINGS
- STEAK
- ROAST
- YOGURT
- ICE CREAM
- CEREAL
- CHEESE
- BUTTER
- PORK CHOP
- EGGS

CHALLENGE: Can you find all the words in 5 mins?

PIGLETS LOVE TO SNUGGLE: Baby pigs, called piglets, are very social animals. They enjoy cuddling and snuggling with their siblings and even with people. It's their way of staying warm and showing affection.

©INK, ©INK! Pigs communicate with each other using different sounds. They can make soft grunts, squeals, and, of course, the famous "oink" sound. Each sound has a different meaning, like calling for food or warning about danger.

PIGS HAVE GREAT NOSES: Pigs have an incredible sense of smell. They can smell things underground and are often used to help find truffles, a type of delicious mushroom that grows underground.

ROLLING IN THE MUD: Pigs love to roll in the mud, but it's not because they're messy! They do it to cool off and protect their skin from the sun. The mud acts like sunscreen and helps them stay comfortable.

CURLY TAILS: Many pigs have curly tails. They can even use their tails to express their emotions. When a pig is happy and relaxed, its tail will be curly. If it's upset or agitated, the tail will straighten out.

SMART PIGGIES Pigs are quite intelligent animals. They can learn tricks, solve puzzles, and even be trained to do some tasks. Some people even keep them as pets and teach them tricks, just like dogs!



TRADESHOWS & CONFERENCES

2024 JAN - JUL

Banff Pork Seminar	Jan 9 - 11, 2024	Fairmont Banff Springs	Banff, AB
40th Western Canadian Crop Production	Jan 9 - 11, 2024	Prairieland Park	Saskatoon, SK
South Dakota Pork Congress	Jan 10 - 11, 2024	Ramkota Exhibit Hall	Sioux Falls, SD
Iowa Pork Congress	Jan 24 - 25, 2024	Iowa Events Centre	Des Moines, IA
Interlake Holstein Club Dairy Day	Jan 30, 2024	Teulon Rockwood Centennial Centre	Teulon, MB
Central Club Dairy Seminar	Jan 31, 2024	Carman Community Hall	Carman, MB
Manitoba Ag Days	Jan 16 - 18, 2024	Keystone Centre	Brandon, MB
Pacific Agriculture Show	Jan 25 - 27, 2024	Tradex	Abbotsford, BC
Manitoba Swine Seminar	Feb 7 - 8, 2024	Victoria Inn & Convention Centre	Winnipeg, MB
Minnesota Pork Congress	Feb 12 - 14, 2024	Mayo Clinic Event Center	Mankato, MN
St. Isidore Dairy Day	Feb 13, 2024	St Isidore Recreation Centre	St. Isidore Rec Centre, ON
EMHC Dairy Seminar	Feb 14, 2024	Friedensfeld Hall	Friedensfeld, MB
Kemptville Dairy Day	Feb 14, 2024	North Grenville Municipal Centre	Kemptville, ON
Crop Connect	Feb 14 - 15	Victoria Inn & Conf Centre	Winnipeg, MB
Saskatchewan Livestock Expo	Feb 22, 2024	Kinetic Exhibition Park	Swift Current, SK
Alberta Chicken Producers AGM	Feb 27, 2024	TBA	Red Deer, AB
BC Egg AGM and Conference	Feb 29 - Mar 1, 2024	Fairmont Vancouver Hotel	Vancouver, BC
Manitoba Pork AGM	March 2024	The Fairmont Winnipeg	Winnipeg, MB
Manitoba Egg Farmers AGM	March 2024	TBA	
40th Western Canadian Dairy Seminar	March 5 - 8, 2024	Westerner Park	Red Deer, AB
Saskatchewan Poultry Industry Conference	March 6 - 7, 2024	Delta Hotels Saskatoon Downtown	Saskatoon, SK
Foster's Peace Country Classic Agri-Show	March 7 -9, 2024	Evergreen Park	Grande Prairie, AB
Ottawa Valley Farm Show	March 12 - 14, 2024	EY Centre	Ottawa, ON
World Pork Expo	June 5 - 7, 2024	Iowa State Fairgrounds	Des Moines, IA
Ag in Motion	July 16 - 18, 2024	Discovery Farm Langham	Saskatoon, SK
Alberta Poultry Industry AGM	TBA	TBA	Red Deer, AB
Thunder Bay Spring Farm Show	TBA	TBA	Thunder Bay, ON
BC Dairy Industry Conference	TBA	TBA	Vancouver, BC
BC Poultry Conference	TBA	TBA	Vancouver, BC
Ontario Pork Congress	TBA	TBA	Stratford, ON

AGRIHUB

We Build Farms.

PROJECTS | EQUIPMENT | SERVICE | SUPPLY



Penner Farm Services is a leading provider of livestock equipment, supplies, and services. Since 1956, livestock producers have relied on Penner Farm Services to provide their entire scope of automated equipment for efficient farm management. Locations: Blumenort, MB, Lacombe, AB, Lethbridge, AB, Thunder Bay, ON

Western Ag Systems established in 2005, has a strong following with the Hutterite Brethren community within the prairies. While their focus has largely been Hog, Grain and Poultry, since joining AgriHub they have expanded to serve the Dairy industry as well with Lely Automated solutions. Locations: Swift Current, SK Saskatoon, SK

United Agri Systems is a prominent name in the Poultry industry, setting standards for Poultry houses, controls, ventilation and more. Established in 1998, they are a well respected and pivotal partner in poultry, grain and dairy. Locations: Abbotsford, BC

New Standard Ag was founded in 2006 in Manitoba, Canada, setting the industry standard for group housing within the Hog sector. Since then, they have expanded into poultry, becoming the trusted providers to Hutterite Colonies in both Canada and the United States. Locations: Winnipeg, MB, Sioux Falls, SD, Brandon, MB

Dundas Agri Systems Is an established, family owned, and operated company launched in 1981 to serve Dairy Producers of Eastern Ontario. As a prominent provider of Lely and Boumatic systems, and well-regarded expert in milking, DAS currently is privileged to serve over 250 dairy farms in the Eastern Ontario region. Locations: Brinston, ON

Penfor Construction provides General Contracting services specializing in Agricultural and Commercial buildings. Since 1995, Penfor Construction has designed, built and renovated Hog Barns, Dairy Barns, Poultry Barns, Horse Facilities, and Commercial projects.

Palmlite Industrial Services, established in 2012, offers a wide selection of generators, transfer switches, pumps and electric motors for industrial, commercial, and agricultural applications as well as residential solutions for home and cottage owners. Locations: Blumenort, MB

Horizon Livestock & Poultry Supply Since 1996, Horizon Livestock & Poultry Supply has provided quality products and services to the local agricultural industry. Our experienced and knowledgeable staff partner with you to select the best product lines to maximize animal care, operating efficiency, and return on investment. Locations: Steinbach, MB

Cortex Agritechology is a data driven, farmer first, technology solutions provider for producers of any size. Whether producers are looking for software to assist in feed planning, or the ability to connect their legacy equipment for insights into their data, Cortex can help.



We Build Farms.

From concept through production, our experienced team of agriculture experts are there for you. We have built a legacy of knowledge and reputation by helping producers run an efficient operation, first by understanding your business and providing you with state-of-the-art system design, durable equipment, reliable service, and supply.

