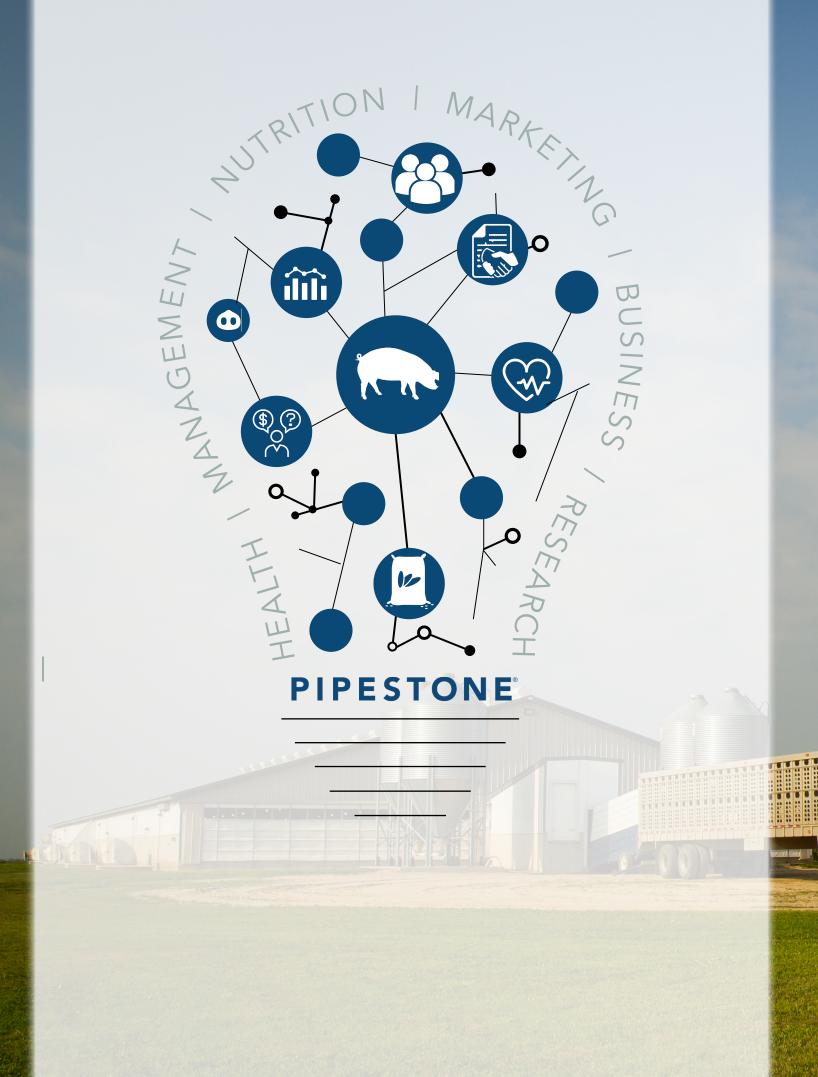
PIPESTONE[®] Winter 2021 JOURRNAL

INNOVATIONS



PIPESTONE[®] Winter 2021

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A TET A PREAMER

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Don't miss out on our monthly podcast, SwineTime! Available on www.pipestone.com, Spotify, Apple Podcasts, and more!



Editor's Note

Welcome to the *Pipestone Journal*, the premier pork journal featuring and serving producers just like you. The challenges and speed of business that independent producers face today are different than the generations before them. By utilizing Pipestone's world-renowned resources and expertise, we can work together to create the farms of tomorrow.

We are committed to providing you top-notch, timely information and research in the areas of Health, Management, Nutrition, Marketing and Business.

Editorial Comments



nnovation. Innovation is in every corner of every day life: the newest tractor in the front yard, completing the same job with less water, or the automated machine that feeds individual diets to pigs.

Since the beginning of agriculture, farmers have been innovating. Developing new ways to be more

efficient, increase production and improve labor, farmers continue to grow and improve every single day. Serving our mission of Helping Farmers Today Create the Farms of Tomorrow tells great innovation. Pipestone is innovative and strives to be in all aspects of the swine industry. Among our objectives, we are working together to develop new products, reduce our impact on the environment, improve labor efficiency, and improve animal care.

Innovation is on-going, but it includes more than just the newest technology advancement or product push. Innovation is about improvements in our every day world, improving on-farm performance, on-farm efficiency and all around safety for our employees and animals. Today, Pipestone continues to remain innovative. In this, the second issue of the Pipestone Journal, we provide you with the newest Innovation in the areas of Health, Management, Nutrition, Marketing, Research, and Business.





JOURNAL Winter 2021

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On the cover: Idlenot farms are recognized for their efforts in Innovation! Photographed is the Moser family.



We asked our customers to submit questions for Dr. Luke Minion, CEO at Pipestone. The Q&A session is available on SwineTime Podcast. Here are some of the questions and answers...

Dr. Minion grew up in southwestern Minnesota and began his career with Pipestone Veterinary Services in 2000 after graduating from the University of Minnesota's College of Veterinary Medicine.

Dr. Minion's areas of interest include production animal medicine, management, and serving as the CEO of Pipestone, Chairman of the board for Wholestone Farms, and Chairman of the board for RiverStone. Dr. Minion and his wife, Betsy, enjoy golfing and keeping up with their son, Landon and twin daughters Claire and Lauren.



How viable is the industry? Will producers make money in 2021 and do you think there will be profitability in the next 5+ years?

The U.S. pork industry is mature with many strong producers and is becoming increasingly reliant upon the export market. The industry will continue to remain profitable, but I believe those that will obtain a greater share of the profits will become more fully integrated within the value chain. While our industry will experience volatility, there are two big issues on the demand side we need to be concerned with. The first is exports and the second is pork consumption by consumers both in the U.S. and globally. What is one of the biggest challenges of running a farm and how do we overcome that challenge?

The biggest challenges for farmers have always been the same four things...

- 1) Revenue generation and risk management
- 2) What is our future strategic plan
- 3) Ability to obtain adequate labor
- 4) Transition planning on ownership

If you look back 20 years, what major advancements or changes has Pipestone or the Swine Industry adapted? What impact has this made on swine production today?

There have been smaller incremental changes and advancements within the industry over a period of time, chief of which have involved in genetics. The ability to manipulate and edit the genome is profound and understanding the technological improvements regarding air filtration to mitigate disease. Barn design has remained the same over time, incrementally improving business practices as we continue to have greater cumulative effects upon the industry as time goes forward. What's next for Pipestone? Where do you see Pipestone heading in the next 10 years?

Without our producers, Pipestone couldn't accomplish anything. We are directed and guided by the needs of farmers. Because of that, I expect continued growth and deeper partnerships with our customers as we look to address additional needs and concerns of producers.

Listen in to SwineTime Podcast featuring Dr. Luke Minion. Available on www.pipestone.com, Spotify, Apple Podcasts, and more!



Online Agriculture Resources For Your Kids!

Whether students are in the classroom or learning virtually at home, Ag in the classroom incorporates STEM lessons from the farm. Agriculture based lessons are a great way for kids to learn about all the fundamentals of math, science, reading and critical thinking.

Here are a couple great options of online ag resources for your kids.

National Ag in the Classroom

This online program provides teachers in K-12 the materials they need to create engaging agriculture-based lessons for students. Many states such as Minnesota and South Dakota have their own Ag in the classroom programs, make sure you check them out at: www.agclassroom.com





American Farm Bureau Foundation for Agriculture

Agriculturally-based lesson plans, games, books, and videos are a great source for students to learn more about where their food comes from.

Join in the fun at: www.agfoundation.org.

Pipestone Virtual Farm Tour

Take a tour of a PIPESTONE sow farm and see why each room in the barn is different and all the work that goes into taking care of the pigs on the farm. Learn how pigs are fed and watch a piglet arrive into the world.



Check out the virtual farm tour here: https://www.pipestone.com/virtual-tours/pig-tour/.



County 4-H extension offices, National Pork Board Pork Checkoff, and National Dairy Council provide a number of resources that also follow STEM curriculum. These credible sites are great places for children to learn about agriculture. They are created by farmers to share their knowledge and passion about raising safe food.



We have all heard the old adage- if it ain't broke, don't fix it. We also continue to hear how we need to innovate to stay relevant and competitive in an ever-changing global market. How do we balance these stark contrasts?

Growing up on my family's farm, I quickly learned the mentality of creating more with less-more bushels per acre, more product with less resources, and more work completed in a day with the same number of people. I also learned how competitive agriculture is, and sadly witnessed that if you don't subscribe to the continuous improvement philosophy, the industry doesn't wait for you, and your generation will likely be the last on the farm. I learned the real recipe for success was to embrace innovation to stay competitive and sort out what brought value versus just cost and complexity. I also realized how innovative farmers already are.

The Right Philosophy

At Pipestone, we subscribe to the help-youwin philosophy. We strive to help you raise more pounds of pork with less water, feed, antibiotics, and labor. We understand that innovative tools come with a cost and must be compared to the return on investment they provide. We also know how busy you already are, and how overwhelming it can be sorting through all the new gadgets, concepts, and products available.

Areas we are focusing on for you:

in Health

1) Items that prevent injury—both for the pig and the people who care for the animals.

2) Items that save time and reduce the need for labor. 3) Paradigms, practices, and products that allow us to

raise pigs with less, while not compromising performance.

In this issue, we will share what we are putting our own money forward to investigate, what seems to work, and what brings value to the people, the pigs, and the bottom line instead of just bringing headaches.

How we WIN together

Innovation is thriving in pork production. Independently owned sow farms have been replaced with larger, multifamily owned farms that provide health benefits and economies of scale otherwise not obtainable. Plaqued diseases we thought we had to live with have been successfully eradicated or contained with innovative health strategies and custom vaccine technologies that did not exist five or ten years ago. Together, Pipestone and family farms continue to shift paradigms to show more can be done with less-- all in the effort to help you compete, remain independent, and further support the innovative spirit that fuels our famer blood.

The farms of tomorrow

The White 2-135 tractor I grew up driving wasn't broken, but it was replaced with a self-driving version (which I'm no longer allowed to drive) that did make life a whole lot easier. This technology has allowed my family to remain competitive. That same desire to help independent family farms is the fuel that feeds us at Pipestone, and that shared competitive spirit is what motivates us to seek and embrace the next great paradigm because no one else is positioned to do it better than you. Together, we will help the farms of today continue to create the farms of tomorrow.



By: Hannah Walkes, President, Pipestone Veterinary Services

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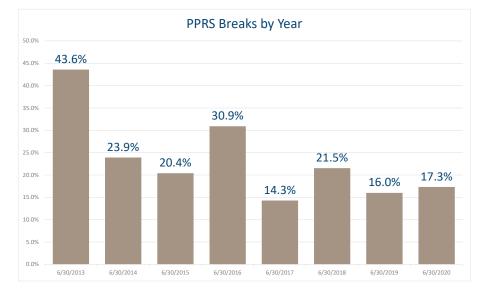


Pivot to Meet Ever-Changing Pig Care

This year marks 30 years that the sow farm Hiawatha Gilts was constructed in Pipestone county, Minnesota birthing what would become the Pipestone System and change modern swine production. Most intriguing is what Hiawatha represents as we think about innovation and the progression of health management. Hiawatha started as a multi farmer-owned farrow to finish gilt multiplier that would deliver genetically superior animals and a lower cost to the 36 farmers that owned it. Today, Hiawatha is a PRRS, Mycoplasma, and PEDV negative air-filtered commercial sow farm integral to its owner's family farming operation. Sounds like a simple path forward but let's dive into some of the many innovative turns that helped us get to today.

PRRS Management:

When Hiawatha was constructed in 1990, few pigs inhabited the area. 30 years later, Pipestone County ranks as the 9th most densely pig-populated county in the nation. We all know increasing pig density brings health challenges, and Hiawatha was no exception. We needed to innovate to maintain the high health status that justified the farms initial construction and in 2013 air filtration was added as part of the health management system. While not perfect, air filters on sow farms provide a great disease mitigation tool and solid return on investment. We estimate that the operation cost for a filtered farm to be \$1-\$1.50/wean pig. Compare that to a well-known Iowa State University estimated cost of PRRS to a sow farm at \$8.00/wean pig, filtration can be a very good investment for farms today.



The above graph displays the percentage of PRRS breaks by year for Pipestone managed sow farms. Since the implementation of air filtration in 2013, PRRS breaks have decreased drastically.

Mycoplasma Management:

Once an ever-nagging disease, Pipestone System farms are more frequently moving towards a Mycoplasma-negative status through elimination strategies. Today, we understand the epidemiology of the pathogen better and are able to better use the tools that we have to eliminate this disease and maintain a negative status in sow farms, especially those with filtration as an added layer of bio-security. Innovative methods of exposure and testing are used today to improve our approach and drive success in our elimination efforts. If successful, the payback for this is less than 6 months, but the value can extend forever for farms remaining negative.

Oldies but goodies:

Strep suis and Glaesserella parasuis are diseases that are not new to the industry, but shifts towards higher health herds and changes in genetic herds over time in the industry have caused these two bacteria to become greater problems. Fortunately, through innovative advancements in custom vaccine technologies, we have found new ways to combat these diseases. We continue to challenge placement of vaccines and specifically, for Strep, many challenges can be controlled at the sow level, reducing need (and cost) for individual piglet control. New vaccine tools allow us to shift our focus from treatment to prevention of disease and reducing the reliance on antibiotics, ultimately improving the health and profitability of the pig.

Pivoting for the future:

We find ourselves in an industry with far greater consumer and societal influence on how we raise pigs. This comes with pressure on antibiotic use, swine genetics, sow housing, welfare standards, and sustainability. Like it or not, these trends are here to stay. Most often, consumer preferences are faced with producer reluctance from fear of increased cost. At Pipestone, we believe with a greater emphasis on health and a system designed for optimizing, we can meet many of these societal concerns with better cost. Redesigning family farms to embrace high health and high efficiency sow farms weaning 24 day old pigs, and shifting to all in – all out wean to market facilities comes with a cost, but can improve cost of production easily by \$14/pig or more.

The magnitude of decisions to take these leaps are never easy, but the value and return on investment have been realized repeatedly, with more competitive operations as the outcome.

The story of Hiawatha is one of innovation to initially change a production paradigm, but also one that continued to pivot to meet the ever-changing need of the pig and the farmer over time. Hiawatha only lasted a short period in its original form until converting to its current state and is well positioned to adjust to meet the next great opportunity. As your family's needs change and the industry continues to evolve, Pipestone is here to help. Contact you Pipestone veterinarian to discuss how we can help you create the farm of tomorrow.



By: Dr. Adam Schelkopf, Swine Veterinarian

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Management



The Pipestone Technical Services Team focuses on improvement and out-of-the-box opportunities in sow production- challenging the status quo in nutrition, veterinary medicine, reproductive physiology, and production protocols.

The tech service team works to challenge current production protocols, evaluate new ideas and technology, and provide real data to make decisions. Utilizing actual sow farms, we can conduct large scale field research trials in actual production conditions. This helps to gain valuable information to implement in Pipestone System sow farms.

New products are introduced every day, and often we see over-promised technology, with little to no return on investment. It is the job of tech service to identify the biggest challenges in farms, or the easiest task to automate, and look for a solution to make the daily work more enjoyable for the team and the pigs we care for. In this context, think of tech services as the filter for which new technologies or ideas are adopted across the 68 Pipestone System sow farms.

When we think of innovation at Pipestone, we focus on bringing value in these five areas:

- 1) Work efficiency
- 2) Safety
- 3) Barn design and equipment
- 4) Welfare
- 5) New products

The testing process begins with a simple evaluation on paper:

- What works well?
- What needs changed to work on farm?
- Ease of implementation?

After ranking the criteria above on a 1 to 10 scale, the products/concepts are sorted out and anything above a score of 5 moves into phase two testing.

Phase two consists of obtaining the product or technology and trialing in a sow farm. This combines the three criteria above with real world experience and staff feed-back. Often this phase also allows us to give feedback back to the manufacturer or developer to improve or modify to better meet our need. If this step proves successful, we conduct an economic analysis to evaluate the return on investment to the farm, driven by reduced labor, sustainability, improved production or other avenues.

A new product or technology can fail at any stage of testing, and it is our job in tech service to arrive at the point of "Yes, implement in the system" or "No, send it to the product graveyard" as quickly as possible. In our view, the "did not work" products are just as important as the products we implement, because we are able to pivot and move to a new direction of focus instead of always wondering "what if?".

We are committed to future technologies, but also need to maintain a realistic perspective to help us prioritize our projects. Stay tuned for further updates! For specific questions related to tech service projects, contact Kiah Gourley at kiah. gourley@pipestone.com.

To give you a flavor of the projects we have worked on over the past two years, and what's next on the trial list see below:

Product	Key Takeaways	Outcome
Infrared heat lamps (See page 42)	More durable option found to reduce replacement cost and create energy savings.	Testing proves success. Implement in farms as old bulbs burn out.
Farrowing Heat Mat (See page 41)	Reduced energy at farm compared to heat lamps. Can reduce wash time.	Implement in new construction farms, or as old farms are renovated.
Robotic Power washer #1	Product slow and maintenance intensive.	Ended
Robotic Power Washer #2	Successful at level of wash and ability to reduce labor. Durable with little maintenance.	Implement to more farms in farrowing for labor reduction.
Wean pig conveyor # 1 to eliminate pig pick up for vaccination	Difficult to move pigs through. Added significant time to process.	Ended
Porcitec Mobile. Mobile, point of task entry of records on farm.	Improved data recording accuracy and timeliness. Major labor savings eliminating secondary entry.	Implemented in all farms.

In Process or Upcoming	Goal
Pig counting camera	Improve accuracy of pig counts at weaning.
Wean Pig Conveyor #2	New design to eliminate picking up pigs, improve welfare, and reduce worker injury.
Processing cart efficiency	Building design to improve efficiency and reduce repetitive injuries.
Body condition camera	Measure sow body condition more consistently and objectively.
Feed sweeper	Farm friendly Roomba to clean feed alleys in farm to reduce feed waste.



By: Dr. Gustavo Pizarro. Technical Service Director gustavo.pizarro@pipestone.com

Management

Proven Labor Savings...

Challenges of COVID-19 brought human health and safety concerns to the national pork food chain, our country, and our world! In our world of food production, this interruption sent signals across the country, requiring us at Pipestone to work with the shareholders of our Pipestone System sow farms and production teams to change our production methods for an undetermined amount of time. Though this was a difficult task, we spent hours implementing advancements to continually improve on farm.

As we continue to work together to improve, we believe in the need for flexibility, efficiency, and sustainability as we prepare to adapt to the customers demand and to you as our shareholders and customers. Improvements and advancements come with innovation. Dr. Gustavo Pizarro discussed countless ways we think of innovation at Pipestone in his article, "Innovation in Production" found on page 12.

Here are a few labor savings from proven products identified by Dr. Pizarro and the Tech Services team for Pipestone System.

Robotic Power Washer

Goal: Successfully wash pig barns, while reducing on-farm labor.

Outcome: By implementing the Robotic Power Washer into sow farms, we reduced labor.



Porcitec Mobile

Goal: Improve data recording accuracy and timeliness.

Outcome: By implementing the mobile system into all farms, we...



With the new advancements to our farms, we had a positive outcome, helping us to:

- Improve working conditions for the team and efficiency of daily tasks
- Deliver our Pipestone System sow farm shareholders the highest quality pig
- Leverage our technical services team and the data produced to improve accuracy of our records and information

Here at Pipestone, we believe in the future of pork production and our future has never been so bright! Wishing you all the best in 2021!



By: Dr. Barry Kerkaert, Pipestone System President barry.kerkaert@pipestone.com

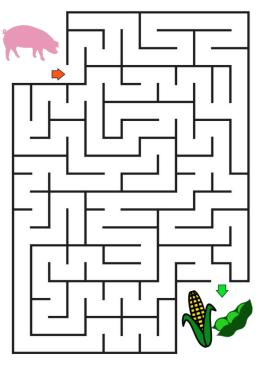
Bacon Bit

KIDS ACTIVITIES

Find all 10 words that are involved with pigs.

Help the pig get to it's food.

	G	W	А	Т	Е	R	А	Е	Q	Ρ		
The second second	S	С	В	Ν	Т	Ζ	W	Ρ	А	Ι		
and a	F	М	Н	Ι	М	J	К	U	L	G		
	S	Е	В	0	А	R	К	S	V	L		
-	А	В	D	R	Ν	Y	F	W	W	Е		
Boar Feed	U	Ρ	D	0	U	Х	G	Ι	L	Т		
Genetics Gilt	S	Ν	Н	С	R	Y	Х	Ν	G	Е		
Manure Water	А	G	F	Е	Е	D	L	Е	F	W		
Piglet	G	Ι	Н	D	Q	U	W	Ν	Ρ	0		
Sausage Sow	Е	А	G	Е	Ν	Е	Т	Ι	С	S		
Swine												





Bacon Bit

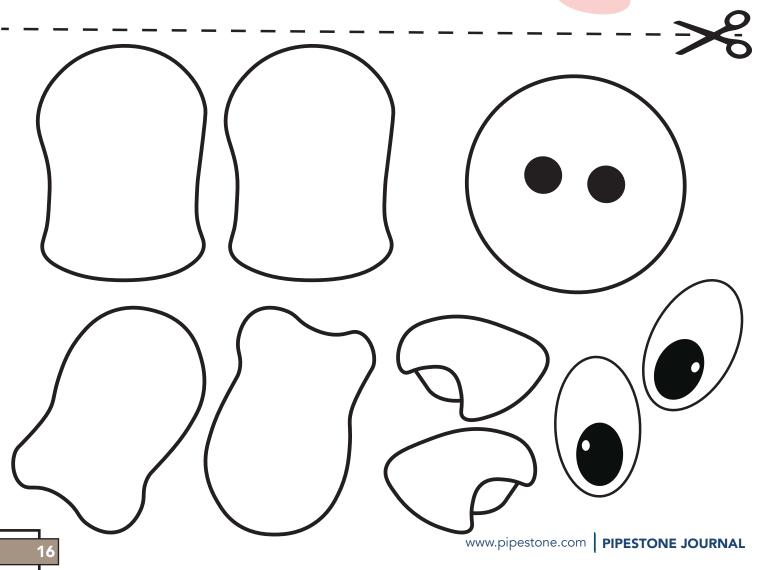
Make your own **PIG PUPPET**

Materials needed:

Brown paper bag Scissors Glue or tape Crayons Marker

Steps:

- 1. Color your paper bag
- 2. Cut out or trace the pieces of the pig below
- 3. Attach the pieces of the pig onto the bag and decorate
- 4. Let dry if needed
- 5. Add any additional details to customize your pig
- 6. Enjoy!



INNOVATION in Nutrition

Innovation in nutrition comes in many forms at Pipestone. From new technology, to better feed management, to improving the feed quality across our 40+ feed mills that feed Pipestone System sow farms, we are continually investigating ways to bring value to our sow system.

What does the body condition of an "ideal" sow look like in your mind? If we asked this question to 15 different people, we would likely get 15 different answers. Achieving ideal sow body condition plays an important role during many stages of a sow's reproductive cycle. This includes embryo survival, sow milk production, piglet weaning weight and wean to first service interval. Historically, we evaluated sow body condition with our eyes and handling the sows. This created variation since everyone has a slightly different opinion of "ideal" condition. Although not intentional, a herd can drift fat or thin depending on the "eye" of the person assigning a body condition score. Overfeeding can be very costly to a farm.

What is the downside of variation of body condition in a sow herd? Both thin and fat sows create a problem in sow herds. Many research trials have demonstrated that a fat sow at farrowing will have lower feed intake in lactation, wean lighter litters, lose more back-fat, and take longer to breed back. On the flip side, thin sows also pose a risk with poorer reproductive performance and a greater chance to exit the herd. Both types of sows are costly to Pipestone System in terms of feed cost and decreased production. By maintaining sows in "ideal" body condition, we avoid the "yo-yo" of fat sows becoming thin during lactation, then having to increase feed allowance in early gestation to recover condition.



The above image displays a sow caliper. Sow caliper's are used to gather an objective measurement on sow body condition score.

In our system sow farms, we recently implemented the use of the sow caliper. This tool provides an objective measurement of sow body condition. Anyone can be trained to use the caliper and identify if a sow is thin, idea, I or fat, then adjust the feed box accordingly. This tool has allowed us to reduce the variation in sow body condition and feed usage across the system. On average, sow feed intake decreased by **0.1 lb/day**, a feed savings of

\$750,000/year across 280,000 sows.

As we continue to improve our production system, maintaining sow body condition through feed management we will continue to save money, reduce variation in the herd, and have positive impacts on production. We are continuously exploring other ways to measure sow body condition and weight through cameras that can further improve our accuracy and efficiency.

Feed bin scales are another tool that several of our system sow farms have installed to help with the feed ordering process. These scales measure how much feed remains in the bins and can be viewed by farm managers and our feed order desk. This allows our feed order desk to communicate to the feed mill which bins will need feed delivered the soonest, prioritizing multiple feed deliveries to the farm. As new bin tracker technology becomes available, we will continue to evaluate which avenue provides the greatest accuracy in feed orders, prevents out of feed events, and improves safety by eliminating the need to frequently climb bins to check feed level.

Aside from feed management and technology, improving the quality of feed delivered to sows is another area we have placed a large emphasis on. Over the past couple months, our team has worked to develop a 5-Star feed mill program that encompasses scores for bio-security, ingredient prices, particle size, mycotoxin levels, and uniformity of mixing for feed mills. This information helps us understand the quality of feed that enters the sow farm, assess risks, and help keep the feed mill accountable. After-all, it's hard to change something you don't measure. Not only does it help us improve feed quality, but it serves as a tool to educate the feed mill employees on how different variables at the feed mill can affect the sow farm.

Feed is the largest cost of raising pigs, and that has remained constant over the years. However, as nutritionists we have to challenge ourselves to keep searching for efficiencies in formulation, feed quality and management, that will continue to bring value the family farm owners of our Pipestone System sow farms for years to come.



By: Dr. Kiah Gourley, Nutritionist kiah.gourley@pipestone.com

Nutrition When Cheap Diets Fail

Everyone likes a deal! Who doesn't? If there is an opportunity to buy something at a "good" price most people jump at the opportunity. But sometimes the deal isn't as good as what we thought and is not figured out until after the fact. The same thing can happen with nutrition or formulation.

One of the responsibilities of a swine nutritionist is to formulate diets that can reduce cost and provide adequate performance for the producer. There are many times opportunities come up that allow nutritionists and producers to re-formulate and save money. But saving money sometimes just shows up on paper and is never realized at the barn level or the close out. Why is that?

When we think we are going to save money, sometimes it never happens because we have gone too cheap and the diet fails. We sometimes just think about Average Daily Gain (ADG) and Feed:Gain (FG) and seldom think about the number of fall behinds, culls and medication costs that can occur.

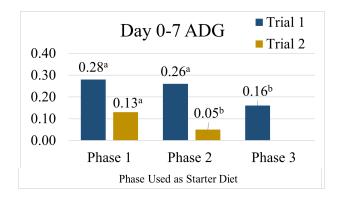
Our Pipestone Nutrition Advisory Panel continues to teach us that the most important diet in a pig's life is phase 1, the second diet is phase 2 and the third is lactation. Providing a good start for the baby pig and weaned pig will help them finish ahead of the curve. But trying to cut cost to save money may not always be the best option, and we need to understand the negative effects.

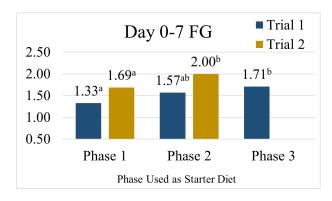
Here are a few examples of when going cheap fails.

Weaning Older Pigs

Cheap Option: Weaning older pigs gives an opportunity to reduce the phase 1 nursery feed budget. What a great idea! The phase 1 diet costs the most on a per ton basis, so let's skip it or reduce it.

Results: Pipestone conducted two research trials that showed feeding older, heavier weaned pigs a lower amount of phase 1 or skipping phase 1 completely **did not** save money due to lower performance and increased mortality.

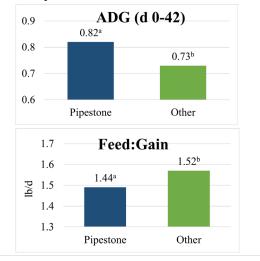


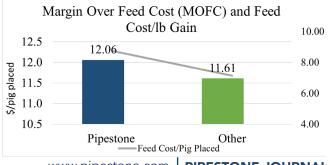


Weaning Older Pigs

Cheap Option: Just looking at nursery feed cost on a per ton basis when evaluating nursery programs. Mainly from habit, it is easy to look at cost per ton and go with the cheaper option, but assuming performance will be equal is not correct.

Results: Below is another Pipestone research trial that demonstrates the Pipestone Nutrition program to another nursery program that appears to be cheaper on paper. However, the pigs told us a different story.





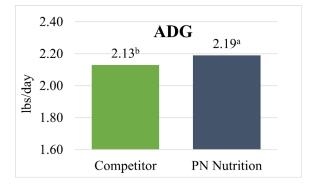
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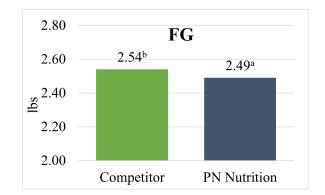
Expert Advice

Margin over Feed Cost

Cheap Option: Most producers are on a wean pig wheel schedule, meaning they have a fixed time to get their market hogs to the appropriate market weight before their next group of weaned pigs show up. The urge to feed cheap diets to save a buck is very tempting in the grow finish stage.

Results: Pipestone conducted a competitor trial looking at a cheaper feed cost program to the Pipestone Nutrition program. In this trial, feeding cheaper diets did not allow the pigs to grow, and caused higher amount of culls reducing revenue. This is one reason we like to look at Margin over Feed Cost. Not only does it account for the feed cost but also the revenue that is generated.





These are only a few examples of how cheap diets fail. We are always looking at ways to reduce cost, but keep in mind that sometimes going too far will actually cost the producer money. Don't trip over a dollar and pick up a dime.

> Article by: Casey Neill, Head-Nutritionist casey.neill@pipestone.com Research provided by: Emily Scholtz, Research Coordinator emily.scholtz@pipestone.com





Take Advantage when Profit Opportunities Become a Reality

The year 2020 has been anything but normal. I think we can all agree that the hog and pork markets are as volatile as ever! In recent years, this industry has undergone PEDV, African Swine Fever, and now Covid-19. All of the market ups and downs isn't for the faint of heart.

Big Stone Marketing offers a forward pricing program just for this reason. As we believe all producers should have a risk management program for their operation, our program is a tool to help manage risk and lock in prices when opportunities arise. This unique program offers producers the option of either a fixed basis (where BigStone Marketing takes the basis risk) OR leaving the basis open (where the producer has the basis risk).

We aim to make placing a forward contract easy!

All you need to do is call and tell us...

- 1. What delivery period you want to forward price.
- 2. What target price you want us to use.
- 3. If you want to use our fixed basis or not.

BigStone Marketing personnel will place the order and provide you a one-page contract confirming the forward contract. Big Stone Marketing also handles all the margin calls for your positions through delivery! Every producer has a substantial investment in every pig they raise.

Why not protect it?

- Put a game plan in place that will allow you to be profitable.
- Write it down so you can reference it.
- Calculate your break-even so you have a basic understanding of your costs with a reference point.
- Set profit targets that are achievable/realistic and then place orders with BigStone at your strike price.

The most common mistake we see is when producers try to hit the high price. This usually occurs when the news is bullish and the market feels like it is going to keep running up, so producers wait. The result is usually a market correction. Then producers wait for it to return to those higher levels and it never does. This leaves producers getting little coverage in these situations. Those that are successful with their risk management programs have a plan. They know their cost of production, set reasonable profit goals, and place orders to achieve those targets. When you stay consistent with this program, you'll find that sometimes you lock in high prices and sometimes you don't; however your profitability stabilizes and is more consistent over time and that should be the goal.

Stay on track with the game plan and continue making sales out front to take advantage of forward contracting opportunities when available.



For example, for those that were consistent and forward priced hogs at \$100 in June 2014 when the market ran to \$130, they also got to sell February 2015 market hogs for \$90 when the market fell to \$50. It all worked out and they protected their profit opportunity. During that same time, we saw many producers disappointed that they only locked in \$100 and missed the high of \$130. Frustration caused them to stop putting positions on, and when the downturn came, they had no coverage on and so they got \$50.

Fixed Basis Program

Our fixed basis program is another great tool for producers but can be confusing. Fixed basis levels are based on the last 3-5 years of historical basis levels and are set accordingly. In other words, if a fixed basis level seems high, it is because it has been high over the last 3-5 years which end up being your higher risk delivery periods for basis swings. If the fixed basis level being offered is a lower or positive number, that is because it's been relatively low risk in the past. I encourage you to use our fixed basis program as a part of your risk management program and build the basis levels into your strike price order. For example, if you are looking to lock in a good June futures price at \$85 and Big Stone Marketing is offering a -\$4.00 basis then set your strike price at \$89 on some of your orders. If they fill then you achieved your strike price and will have zero basis risk!

BigStone's Forward Contracting program is designed to help producers take advantage when profit opportunities become reality. Prioritize the items discussed above and take advantage of this unique program. If you would like to discuss further or need some help putting together your risk management program just give us a call; we are happy to help. I believe we are all ready for 2021! If you currently don't have a risk management program I encourage you to do so for this new year!



By: Brian Stevens BigStone Marketing President bstevens@bigstonemarketing.com

Meet BigStone Marketing Team Member...



Tracie Skyberg

Data Analysis - BigStone Marketing

Growing up in Pipestone, Tracie returned home in 2012 when she started with BigStone Marketing. She is currently our data analysist and works with accounting, Meta farms and reporting. Tracie and her husband, Taylor, have two kids: Levi, 3, and Ella, 1. Together they enjoy spending time with family.

Marketing

INNOVATION in Marketing

Here are a few ways BigStone Marketing has been working to get information to your fingertips faster!

1. We have improved processes so we can send Kill Data packets to you the same day payment is issued if you receive your information from us electronically.

2. You can now monitor your carcass deliveries against your Packer Agreement obligations online. **3.** You can review your upcoming marketing schedule online.

Check out some of these new features at: www.bigstonemarketing.com.



BigStone Marketing Team

Brian Stevens President

Christine Colemer Western Regional Manager

Chris McCulloh Eastern Regional Manager

Angie DeGroot Logistics Coordinator

Tara Wheeler Logistics Coordinaor

Bo Summerfield Logistics Coordinator

Ashley Jasper Accountant

Tracie Skyberg Data Management

Full-time dad, diesel mechanic and pig farmer Customer Highlight: Evan Buysse

Evan Buysee grew up pig farming with his dad as a child, as well as part-time while in college. But three years ago, Evan started to manage his own site just down the road near Minneota, Minnesota.

"As my own boss, I can do what I need to do and make my own decisions," Evan said. "Also, there is something about solving your own problems that makes it more rewarding."

Evan manages three barns, selling 6,000 market hogs per year. Continuing to improve a little each year, Evan has implemented new learnings to the farm, including management techniques and simple things here and there.

"Simple things make a world of difference," Evan said. "Pig farming is tough, and the market is crazy sometimes. To stay stable and get a better price, we started working with BigStone Marketing. This relationship makes it better to keep going and allows us to work with others to get a better contract."

Although pig farming sounds like a full-time job, Evan also works as a diesel mechanic, lays tile for drainage, and spends time with his wife and two children.

"I have a 5 and 3-year-old at home, with one on the way," Evan said. "I keep pig farming because of the lifestyle. Raising a family outside and spending time on the farm with them is incredible."

Although it is a challenge find time to spend at home with family, Evan is proud to raise his children in the farm life.





Washington Pavilion opens "GROW IT!"



PIPESTONE is excited to announce their sponsorship of the new agriculturethemed exhibits on the new "Grow It!" floor at the Washington Pavilion Kirby Science Center in Sioux Falls, SD. "Grow It!" features 3,000 square feet of new agriculture-themed exhibits as part of the center's third floor dedicated to the state of South Dakota.

"Grow It!" offers new hands-on experiences that will inspire children to connect, engage and learn while having fun. PIPESTONE is proud to sponsor the Pipestone Marketplace and the Pipestone Pig Pen displays. In the Pipestone pig pen, children dress up like a pig farmer and learn how farmers care for their animals by completing a chore list. Afterwards they can head over to the Pipestone Marketplace where they can stock the shelves straight from the crop field next door, shop, and checkout with some delicious bacon.

"We know the passion pig farmers have for caring for their animals," stated Sylvia Wolters, Public Relations Director for PIPESTONE. "It's fun to see that same passion come to life in children as they interact with the exhibit."

Other exhibits and activities on the "Grow It!" floor include:

- Climb into a tractor cab and imagine a day in the life of a farmer by driving through a field.
- Pick crops of corn, soybeans, sunflowers, and potatoes for inspection at the crop lab.
- Explore tunnels to see what happens underground. Discover the life of bugs and the valuable role they play in soil health.
- Learn about biofuel and animal feed.
- Feel the sun, wind, and other different types of South Dakota weather in the 4D theater experience.

"Our team at the Washington Pavilion has been diligently planning and working on all of the 'Grow It!' details for over two years. It is our love letter to folks who live, work and farm in South Dakota and our surrounding area," said Jason Folkerts, Washington Pavilion Director of Museums. "These exhibits are so fun and interactive – I really think 'Grow It!' has something for everyone. Kids will not want to leave!"

Our Customers

Idlenot Farms a leader in Innovation

"I can remember sitting in a booth at the World Pork Expo when this technology was just being developed. As it was explained to us, I was like, 'wow.' That is quite a dream. I wonder if we will ever have that?" Brad Moser said. "It is real. It really works."

Brad and his brother, Rick, farm with their son's Tyler and Colin and son-in-law Tyler Metzger, near Larchwood, IA. Together, they raise 180,000 market hogs per year and farm 2,000 acres of corn and soybeans.

Shortly after purchasing the pigs in the 1970s, the family added a grinder-mixer to the operation. Although it had great versatility, it lacked capacity. In 1995, they built a separate feed mill designed to handle tonnage for 600 sows farrow-to-finish. As the years went on, they continued to grow and remodel the mill. Today, the mill runs 1,250 tons a week, producing 10 times the tonnage as the original design did.

"The feed mill has been our focus, something we can control," Brad said. "We can control the ingredients and check them if needed. Mixing our own feed has been a key aspect to our farm and our success."

In addition to the fully automated feed mill, the family has a triple roller mill to maintain better control of the corn's particle size, and drive feed conversion. They also have micron testing equipment, allowing them to check the micron's weekly.

Dr. Adam Schelkopf, Pipestone Swine Veterinarian agrees innovation is on-going for the Mosers through:

- Feed mill optimization through bin scales.
- Precise record keeping and data analysis used to make data driven decisions on feeder types, pig flow and barn design to maximize performance.
- New technology advancements in barn controllers to monitor barn and animal parameters in real time.
- Innovative and creative contract grower arrangements to influence the facility design and achieve the best outcome for pig performance and the grower/owner relationship.
- Adoption of a new swine production model to optimize for what is needed in today's environment and position on the future. This included relocating sows to higher health, more biosecure facilities under air filtration.
- Adopting new ideas, products, and challenging paradigms to drive down the reliance on antibiotics. This will help position them for the changing market and consumer.

Our Customers

The Moser's are progressive producers looking to improve their operation by implementing new technology and understanding data to make more effective decisions. There are very few independent produces who have this technology. They took the extra step and implemented scales and bins at most of their barns. This allows the farm to be more efficient at the mill and ensure their pigs never run out of feed.

- Angie Homann, Pipestone Director of Records and Information

Bin scales provide real-time information communicated directly to the feed mill. Barn controllers allow custom reports to include temperature, water usage, and now feed usage at any time.

"With the automated controllers, we are able to keep feed in front of pigs so they can continue to perform and grow," Tyler said. "If pigs do not eat, they do not grow. The controllers on farm allow us to monitor the amount of feed available on each farm, as well as monitor feed and water intake remotely. We can then intervene quicker."

Despite the challenge of 2020, the Idlenot Farm continues to innovate, looking for ways to continuously improve. "The unique thing about the hog industry is there is a lot of opportunity to get better, fine tune things and drive improvement," Tyler said. "I find this rewarding and gravitated toward it when I decided to continue farming with family."

Brad agreed.

"Raising livestock allows us the opportunity to allow family to return to the farm," Brad said. "Today our sons and son-in-law are back working on the farm as the fifth generation."

In 2013, the family started to get involved with Pipestone. Today, they are a part of three System farms and work with Big Stone Marketing, Pipestone Business Services, Pipestone System and Pipestone Veterinary Services.

Article by: Abby Hopp, Marketing Coordinator

Idlenot's farm is located near Larchwood, IA. Brothers, Rick and Brad Moser farm alongside their son, Tyler and Colin, and son-in-law, Tyler Metzger.



eed.

Bacon Bit RECIPES:



Winter White Chili

pound ground pork
 onion (medium, diced)
 teaspoon ground cumin
 teaspoons chili powder
 ounces white beans (drained)
 ounces corn (drained)
 ounces chicken broth
 ounces diced green chiles

In large saucepan, brown pork with onion, stir in cumin and chili powder; stir. Stir in remaining ingredients; bring to a boil, cover and simmer for 15-20 minutes, until heated through and flavors are blended.

Honey-Glazed Pork Chops

4 porterhouse (bone-in loin) pork chops (3/4 to 1-inch thick) salt (to taste) black pepper (to taste) 2 tablespoons brown sugar (packed) 2 tablespoons honey nonstick spray

 Heat oven to 350 degrees F. Sprinkle chops with salt and pepper.
 Coat large skillet with nonstick cooking spray. Heat skillet over medium heat. Add pork chops. Cook until brown, turning once.Remove chops.
 Place chops in 9x13-inch baking dish. Combine brown sugar and honey in small bowl. Microwave on HIGH (100%) for 20 seconds; stir to combine. Spoon half of the honey mixture over tops of chops, spreading evenly.



4. Bake, uncovered, for 15 minutes. Turn chops; spoon remaining honey mixture over chops, spreading evenly.
5. Bake until internal temperature is 160 degrees F, 15-20 minutes. To serve, spoon pan drippings over chops.



Boneless Pork Loin Roast with Herbed Pepper Rub

3 pounds pork loin roast, boneless

- 2 tablespoons black pepper (cracked)
- 2 tablespoons Parmesan cheese (grated)
- 2 teaspoons dried basil
- 2 teaspoons dried rosemary
- 2 teaspoons dried thyme
- 1/4 teaspoon garlic powder
- 1/4 teaspoon salt

Pat pork dry with paper towel. In small bowl, combine all rub ingredients well and apply to all surfaces of the pork roast. Place roast in a shallow pan and roast in a 350 degrees F. oven for 1 hour (20 minutes per pound), until internal temperature on a meat thermometer reads 145 degrees F. Remove roast from oven; let rest about 10 minutes before slicing to serve.

Taking the Final Step

An important key to understanding your pig business is collection of accurate and timely records. This isn't a new concept for most pork producers. Taking the first step to implement a system for data collection is often the hardest. Once daily habits have been formed, things often fall into place. Group closeout data is now available. Unfortunately, the final step of data analysis (arguably the most important step) is often left undone. This isn't surprising considering the workload facing today's livestock producer and the skill set required to perform analysis quickly and effectively.

Enter the Pipestone FarmStats data website. This site was developed to help Pipestone records clients access wean to finish records in a simpler, more useful format. Since the website is linked with the Meta Farms database Pipestone currently uses as its records collection platform, updates happen as data is entered. This allows producers to review the performance of their farm with their veterinarian, nutritionist, and production team from anywhere at any time. Lead time is no longer necessary to grab and organize the data.

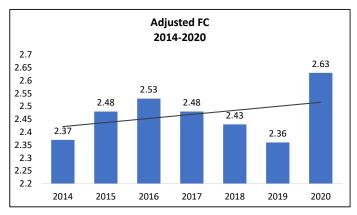
Finding both the strengths and opportunities of the business will help drive decisions for change. This may require a deep dive into site or group benchmarking or a 20,000 ft view of trends year over year. The FarmStats website provides a means for accomplishing this by using:

1. Summarized Closeouts

Provided both with and without financials, this report is essential to understanding individual group performance. The report also ranks each measurement against the entire data set, promoting friendly competition among barn caregivers.

3. Historical Trends

Trends are perhaps the single most important tool in the records toolbox for driving decisions. In the example below, a negative trend is easily identified. A deeper dive can now be taken for understanding of cause.





By: Angie Homann, Director of Records and Information

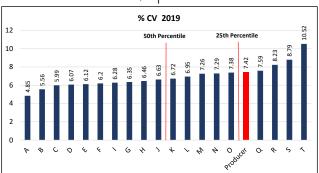
angie.homann@pipestone.com

2. Comprehensive Marketing Reports

The importance of marketing records can be summed up by a quote I've often used of Dr. Kerkaert's. "You can get everything right to 140 days on feed, then lose it all in the marketing period." The easy access and close to real-time nature of these reports allows adjustments to be made quickly during the marketing window.

4. Peer Benchmarking

Today's pork producer cannot live in a bubble. The competition is stiff. A strong grasp of relativity is imperative. A producer ranking in the top half of the pack stands a much greater chance of long-term survival. Economics can also be applied to these observations to help a producer see the ROI of making an effort to improve. An estimated 1% improvement in CV (coefficient of variance) returns an additional \$1.50/head in value. Moving from bottom quartile to top quartile for this producer results in a return of almost \$2 per head.

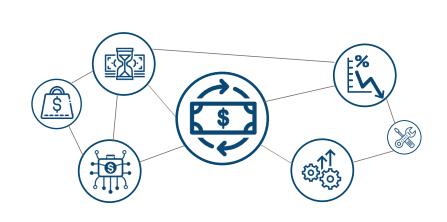


Closing the circle in your records system by taking THE FINAL STEP of data analysis will make a difference for your business. Contact me at angie. homann@pipestone.com for more information.

Business

7 Ways to Build Working Capital





During periods of high commodity prices and profitability, farm business owners should be diligent to financially prepare for the next period of low prices. The following are strategies that could help you build working capital to be ready for the next cycle of low prices.

Improve operational efficiency

Aggressively managing operational efficiency is the most effective way to improve working capital. High prices tend to make us less attentive to the details that maximize profitability. In the farming community, there is an old saying, "It's time to make hay when the sun shines." During periods of high prices, it's time to make working capital!

Additional income from operations gives you the ability to make progress on paying down your accounts payable and Revolving Line of Credit (RLOV) balances. Optimize income from operations by aggressively managing the percent of pigs sold as market tops, sales weights that optimize margin over feed cost, and risk management strategies.

Reduce interest rates

With interest rates at all-time lows, refinancing debt to a lower interest rate while not extending the term of the loan should reduce your overall interest costs. Obviously, your interest expense savings will depend on the spread between your new rate and your current interest rate. If you can recover your costs to refinance within 12-24 months, it's generally a good time to refinance to a lower rate.

Extend loan amortalization periods

Refinancing debt may offer an opportunity to extend the term of a long-term loan to match the useful life of the underlying assets that collateralize the loan. There are limits to how many years lenders will amortize a loan. Lenders will match your amortization period with the useful life of the asset(s) pledged as collateral. For example, if the useful life of your finishing barn is 12 years, you may be able to extend the repayment period from the 7 years remaining on the existing loan to 10 years on the new loan.

In exchange for extending the term of your loan, you will likely increase your monthly free cash flow. Without prepayment penalties or restrictions, extending the loan's term increases your cash flow flexibility. As the stars align and hog sales prices are high, feed purchase prices are low, and operational efficiency is high, the business will generate cash. After your current liabilities are paid down, you can use the excess cash to prepay long-term liabilities.



Create operating debt capacity

If you have long-term assets that are not pledged as collateral for other debt, you may consider moving some or all of your operating loan (line of credit) to long term debt making room for short-term borrowing when hog prices are lower.

Alternately, you could also accomplish a similar result by securing a revolving line of credit secured by unpledged real estate. The real estate revolver loan uses real estate as collateral for short-term borrowing. Because this financing often sits idle until it's needed, the lender will often charge an unused commitment fee.

Catch up on maintenance

In sports, sometimes the best defense is a good offense! Deferring maintenance during periods of low prices is a common strategy to conserve cash for operations. Inevitably, deferred maintenance will catch up with you at the most inopportune time. One way to reduce the use of cash for repairs and maintenance during periods of low prices is to stay current on your maintenance. Diligently schedule your building and equipment maintenance when cash is available to reduce the likelihood you will be paying for required maintenance during periods of low prices. It's time to play some offense!

Diversify customer risk

The old saying, "don't put all of your eggs in one basket," applies to doing business with multiple packers to reduce your contract and customer risk. Customer risk became evident during the COVID 19 pandemic. As some packers were forced to slow down or shut down their operations for weeks during the pandemic, it was beneficial to have multiple packer relationships to minimize the impact of an individual plant shut down. If all of your eggs were in one basket, the pandemic shut downs may have had a significant negative financial impact. Keep in mind that the challenge with diversifying customer risk is that simultaneously you may be giving up selling power by spreading your sales volume across packers. The same holds true for the diversification of packer contracts. It's a delicate balance.

Invest in integration and diversification

Strategic investments in your business can drive out middleman margin or create counter cyclic revenue streams that generate cash flow during periods of low hog prices. Most of us like to invest in things we know and understand. However, making investments to vertically integrate up or down the value chain will likely require you to hire expertise to be successful. For example, if you invest in a feed mill to drive out middleman profit, you will need to understand the complexities of operating a feed mill that is cost competitive. Additionally, investing in revenue streams that are high when hog prices are low will even out your cash flows and reduce the impact of low hog prices on your business. A strategy for reducing the learning curve of a new business is to partner with those who have experience in the new integration or diversification business. As with pork production, there are barriers to entry in the businesses up and down the value chain. Finding a partner is easier said than done!

We understand that low hog prices are cyclic occurring every 3-4 years. It is important to use the tools available during periods of profitability to prepare for periods of low prices. Regular, timely and accurate financial statements are an essential tool for measuring your working capital and overall financial position. Annual financial statements may not provide you with the timely information you need to make proactive decisions. Use these tools to get your business ready in the good times for the bad times.

Learn more about how Pipestone Business Services can help with financial and business planning at www.pipestone.com/business/.



By: Jim Marzolf

Vice President Pipestone Business Services

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Research

RESEARCH PIPESTONE APPLIED RESEARCH

Since 2009, Pipestone Research has been committed to providing industry-leading, relevant information on swine health, genetics, nutrition, production and sustainability. Pipestone Applied Research (PAR) focuses on relevant research under controlled conditions, working collaboratively with each project sponsor, to develop practical solutions to relevant problems.

Below is a research team member who works hard every day to advance innovation through science.



Dr. Scott Dee, DMV MS PhD Dipl;ACVM

Currently serving as the Director of Pipestone Applied Research, Dr. Scott Dee has focused on creating new knowledge to solve problems for the swine industry for over 30 years. Dr. Dee joined the Pipestone team in 2011, hoping to make an impact on a large scale in an accelerated manner. Using a combination of scientific training and years of experience as a field veterinarian, Dr. Dee has brought forth several initiatives, such as science-based PRRSV aerosol and mechanical bio-security protocols. This includes air filtration for swine barns, discovery of the risk of viral transmission in feed ingredients, the Transboundary Feed Risk Model, which simulated movement and evaluated viruses entering the farm, Mitigation, and the IMAGINE project, which focuses on conducting surveillance of antibiotic use and resistance at the level of the swine farm. Dr. Dee is proud of the information that the PAR team creates and encourages producers to be students of the data by carefully reading the information, discussing it with their veterinarian and nutritionist, and applying it to their respective operation when deemed applicable.



IMAGINE is the U.S. swine industry's first attempt to conduct surveillance of antimicrobial resistance (AMR) at the level of the farm, in conjunction with the tracking of antibiotic use.

IMAGINE was funded by the National Pork Board, the Foundation for Food and Agricultural Research, and Pipestone. After several years of careful planning, the project was initiated in 2020, despite the COVID-19 delay.

Who is participating? The project is being conducted across farms subscribing to the Pipestone Antibiotic Resistance Tracker (PART), which includes a total of 160 farms, including all Pipestone System sow farms and more than 80 wean to finish producers involved in the PART program.

What are the goals of IMAGINE? To develop and validate a national protocol for evaluating AMR at the level of the pig and the level of the environment in conjunction with the tracking of antibiotic use.

What are the metrics we are using to measure change? At each farm visit, samples for bacterial culture and antibiotic resistance are collected from pigs, both sick and healthy, and from the swine farm environment.

What do we hope to demonstrate? This is new territory for investigation; however, we believe we will demonstrate that the responsible use of antibiotics does not lead to increased AMR on the farm.

What are our accomplishments? Through the first half of 2020, we have sampled 90% of participating sites. We have demonstrated that the sampling programs can successfully isolate important bacteria from both the pigs and the environment, and that the laboratory (South Dakota State University) can accurately measure the level of AMR across all samples. Bacteria we have successfully identified from the environment include the 4 target pathogens from the National Antibiotic Resistance Monitoring System (NARMS): Enterococcus sp., Salmonella sp., Campylobacter sp. and E coli. Bacteria we are targeting from pigs include E.coli, Streptococcus suis, Actinobacillus suis, Glasserella (Haemophilus) parasuis, and Salmonella sp. This is working exactly according to plan.

What are our goals for the rest of 2020? We need to repeat testing across all participating sites, analyze the data so far, and begin to seek sources of funding for 2021. We also plan to convene an external panel of experts in the field of AMR to guide us and improve our process.

In closing, a very sincere thanks to you, from all of us! Please call with questions.

For more information contact:

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By: Dr. Scott Dee, Director of Research for Pipestone Applied Research scott.dee@pipestone.com



History and Advancement of Innovation



Dr. Gordon Spronk



Dr. Jay Bobb

In 1942, Drs. E.A. Scheweim and P.A. Pinkert founded the Pipestone Veterinary Clinic. Since then, the company has continued to innovate while serving our mission of Helping Farmers Today Create the Farms of Tomorrow.

In 1988, the Pipestone System was founded and in 1990 Hiawatha Gilts, LTD was built and became the first Pipestone System managed sow farm. Hiawatha Gilts is still in operation today, along with 68 other Pipestone System farms.

The building of Hiawatha was a pivotal movement in not only Pipestone's success, but for over 500 independent producers across the Midwest.

"It is all about the producer," Dr. Jay Bobb said. "We needed to develop an avenue for producers to be a part of. The development of the Pipestone System managed farm allowed us to step aside from the trends of large farms and keep small farms around."

Dr. Jay Bobb has been with Pipestone for 31 years as a Veterinarian. Dr. Gordon Spronk, also a Veterinarian, started with Pipestone while in High School in late 1975 before he started full-time in 1981.

"Pipestone's culture is agriculturally based, with the traditional ethics of hard work, family and faith as key drivers," Dr. Spronk said. "We have been through disasters, changes, advancements, but our core values have always stayed the same."

Over the years, the world has adapted and changed, allowing Pipestone and pig farmers to continue growing and improving.

Computers have allowed us to advance our speed in data and decision making. Phones have allowed us to better communicate.

"Technological advancement has allowed us to gather the right information at the right time, deliver it to the producer, and make quick, but accurate decisions," Dr. Spronk said. "With information at our fingertips, we can do so much more."

2016 was another pivotal year for PIPESTONE and independent farmers with the formation of WholeStone Farms. Integrating 220 family farmers through ownership in a pork processing facility located in Fremont, NE, WholeStone Farms serves their mission of Bringing the Farmer Closer to the Consumer.

"Anyone can raise a pork chop, but not everyone can be proud to serve their product to their family," Dr. Bobb said. "Pipestone's involvement with Wholestone has made this possible."

The needs of our consumers continue to change. With each other's support, Dr. Bobb believes we can produce safe food and safe pork. A pivotal movement in the swine industry that we have at our fingertips.

"Pipestone is here to facilitate the demands and adapt to those changes, all with the producer in mind," Dr. Bobb said.

"Be prepared for the next generation of consumer demand," Dr. Spronk said. "This starts with healthy pigs including no antibiotics, and the use of new products to new markets. The development of disease elimination and filtered barns is a major impact to the economic well-being of the pig owner."

As we move into the future, Drs. Bobb and Spronk encourage us to accept challenges and risk and to not be afraid to fail. If we raise our pork the best we can, and the market it right, the opportunity is never ending.

"I would have never dreamed where Pipestone would be today," Dr. Jay Bobb said. "There is nothing but good ahead. It won't always look the same, but by growing, changing and innovating, we can push forward."

Dr. Spronk agreed.

"The next generation will go places we have never even dreamed," Dr. Spronk said. "I encourage the next generation to go places and do things to meet the needs of tomorrows farms we cannot even think of today. I encourage and bless you along the way."

Article by: Abby Hopp, Marketing Coordinator







Pictured left to right: Mandi Bridges, Wesley Lyons, Andrew DeBoer, Elliot Flynn and Kristen Whaley.

Pipestone Veterinary Services of Rensselaer

Pipestone Veterinary Services has six locations: Independence, IA, Orange City, IA, Ottumwa, IA, Pipestone, MN, Rensselaer, IN & Sycamore, IL. In this issue, we are featuring our Rensselaer location!

Meet the Rensselaer Team

Andrew DeBoer Swine Veterinarian

Wesley Lyons Swine Veterinarian

Kristen Whaley Practice Manager Mandi Bridges Swine Specialist

Elliot Flynn Warehouse Associate



210 East Wood Road Rensselaer, IN 47978 219.866.6465

Pipestone Veterinary Services of Rensselaer offers Swine Veterinarian Services and serves as a distribution hub to better serve our customers.

Pipestone Veterinary Services is a...

One-Stop Shop for all you need!

As a customer of Pipestone Veterinary Services, you have access to a wide range of swine health products and supplies, including everything needed to run your operation. Inventory is stored in our 30,000 square-foot warehouse, assuring you of a consistent supply.

Available items include products in the following categories:

- Antibiotics and Medications
- Barn Supplies
- Employee Supplies
- Equipment
- Parasite and Pest Control
- Products for Farrowing and Breeding
- Swine Ear Tags, Marking and Identification Products
- Swine Vaccines
- Vitamins and Electrolytes



Easily order your animal health products online at www.pipestone.com or by calling our Swine Resource Team at 507.562.PIGS (7447).

Follow along with Dr. Cara Haden as she talks about how pig farmers and veterinarians are responsible users of antibiotics!

Connect with

Dr. Cara Haden





Products Atmosphere Ag Forte Pro

Available in Gallon, 5 Gallon and 55 Gallon sizes

Atmosphere AG Forte Pro Cleaner is a water based environmentally safe disinfectant.

Additionally, with the recent Covid-19 outbreak, Atmosphere kills similar viruses and therefore can be used against SARS-CoV-2 when used in accordance with the directions for use against Norovirus (Feline Calicivirus VR-782) non hard, non-porous surfaces.

"Studies were conducted by Pipestone Applied Research and South Dakota State University to evaluate the efficacy of a novel cleaning agent (Ag Forte) versus the current industry standard. Ag Forte Pro was proven effective in breaking down contaminants without harsh chemicals. The product cleans, disinfects, and deodorizes all-in-one, while degreasing without harming most surfaces. The results were not only promising, but surprising. Most importantly, it was extremely easy to work with. Ag Forte Pro provides less irritation to nose, eyes and skin. Eye irritation has reduced, and you cannot put a value on that."

- Dr. Scott Dee, Director of Applied Research

Rope Test Kit

SKU: 504

"Oral fluids are an accurate, easy, inexpensive way to better understand disease outbreaks in your herd. By using oral fluids, you can diagnose that cough you are assuming is "flu" and better guide potential treatment decisions."

- Taylor Spronk, Swine Veterinarian

Oral fluid test kits utilize saliva from pigs to detect disease in barns.

The test kit comes with instructions, a submission form, a test tube, a rope, a zip-tie, a label and a plastic bag.



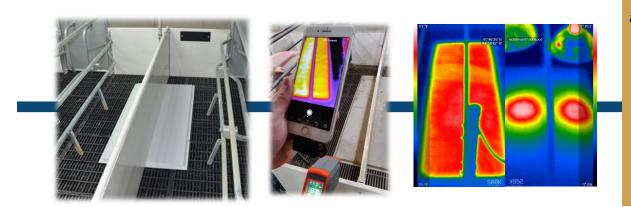
Use the zip tie to secure the rope where pigs have access to it. Make sure it does not touch the floor, but is hanging at the pigs shoulder height. Allow the pigs to chew on the rope for 20 minutes. Collect the fluid by ringing the fluid from the rope into the plastic bag. Pour the contents from the bag into the tube. There should be a half-full tube (3 mL) after chewing. Remember, one kit per pen.

Fill out the label with barn name, collection date and pen number. Place the label on the tube and store in the zip-lock bag inside a refrigerator. Ship to the diagnostic lab.

Heat Mats

"Heat mat or heat mat technology is not new in the market. Many brands and products have been available since the 90's. Quality and performance have been questionable. However, new brands and technology are available today. After a long side by side study we were able to evaluate performance and energy saving for this technology. In addition, we find time for power washing is considerably reduced compared to current heat lamp equipment that requires high operation labor."

Dr. Gustavo Pizarro, Director of Technical Services



To learn more about Heat Mats, read Dr. Gustavo Pizarro's article, "Innovation in Production" on page 12 or call the Swine Resource Team at 507.562. PIGS(7447).

Bluelight Pro2lyte

2 lb bag 25 lb bag SKU: 1186 SKU: 1185



Pro2Lyte provides energy and proteins which gives pigs the functional components they need to recover.

hydration support with protein and amino acides to the young pig.

Pigs love the taste of Pro2Lyte - the iso-osmotic supplement that provides oral

Using Pro2Lyte, you won't be just rehydrating pigs, you'll be minimizing nutrient disruption.

The amino acids found in Pro2Lyte support a healthy digestive tract, which is just what challenged pigs need.

"Pro2lyte has really improved our water intake over the first 48 hours post-weaning in the nursery. This is one product we have received 100% positive feedback from our growers that are grueling fallback pigs. Multiple use product we plan to use moving forward in our nurseries."

- Ryan Bomgaars, Eagle View Pig, LLC

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Respire SKU:70414

Respire is a water-dispersible blend of essential oils specifically designed to alleviate the symptoms of respiratory disease, especially in cases which cannot be treated with antibiotics.

While Respire will not treat the disease directly, it aids in the recovery process through immune system stimulation via mucolytic and expectorant properties. This leads to improved feed and water intake, a shortened recovery period, and a rapid return to optimal performance.

"When faced with a viral respiratory challenge, Respire is a good alternative to antibiotic use. Like antibiotics, Respire does not have any direct anti-viral properties. However it does appear to help alleviate some respiratory symptoms. I have had the best impact when it is used at the first sign of illness (a drop in water intake). Respire is especially convenient because it has no withdrawal and can be used in the face of marketing."

- Dr. Cara Haden, Swine Veterinarian

Infra-Red Heat Lamp and Bulbs

BTB Heat Lamp Heat Lamp - Hard Wired BTB Heat Bulb - 100L

SKU: 10087 & 10086 SKU: 1008 & 10089 SKU: 10177

The BTB-Farming 100 Infra-Red Heat lamp provides ultimate abilities in thermal efficiency and hypodermic saturation on organic bodies. The lamp is highly effective at heat diffusion into whole body resulting in stimulating high blood circulation. This increased circulation results in improving feed efficiency by stimulating the animals appetite.

The infra-red bulb heat lamps come in 9' and 12' options.

RESPIRE ure of essential oils for to supply via drinking

Respire provides:

Mucolytic & expectorant properties

breaks up mucus and makes coughing more productive

Enhances intake

field trials demonstrated an increase in feed and water intake during and posttreatment

Immune system stimulation

activates natural defenses to mitigate respiratory challenges

Speeds recovery

alleviating symptoms of respiratory challenge allows for faster return to optimal performance

"Wow... these are great! They appear to be very durable. I love the choice of 2 different heat settings. Other farms report them to be awesome and very durable. I will be recommending these for strong consideration in all of our farms. Very low replacement rate."

- Keith Bretley, DVM - Director of Veterinary Services with Standard Nutrition Services





Baby Pig Restart

Baby Pig RestartSKU: 3064Animal Protein FreeSKU: 3066SupplementSKU: 3068

"I like using Baby Pig Restart to help get my smaller or challenged pigs started on feed. I use it mixed in with my gruel or mixed with water as a source of an electrolyte for my hospital pen." - Erin McCoy, Production Consultant



Baby Pig Restart supplement is a palatable mixture of milk fat, milk sugar, animal fat, blood plasma and electrolytes designed to help prevent starve outs and stunting in young pigs that has been acidified to help promote optimum digestion.

Containing glycine, dextrose, sucrose, fructose, and lactose, the sweet taste of Baby Pig Restart draws pigs in transition to dry feed, ensuring that each piglet gets the additional nutrients and energy needed to help avoid starve outs, stunting and promotes weight gain in piglets.

Fortified with vitamins, electrolytes, enzymes and microbial cultures, all pigs at any stage of transition, can benefit from the added electrolytes and acidification as a way to provide energy and help balance the gut pH.

Formulated for pigs from birth to weaning, Baby Pig Restart can be used as a top dress, drench or mixed in drinking water.



Kestral Drop SKU: 50015

Kestrel DROP D2 Wireless Temperature & Humidity Data Logger easily monitors and tracks temperature, humidity, heat index and dew point in almost any environment, wet or dry, indoors or out.

See, save and share data from multiple DROPs with just one phone or tablet iOS 6 installed iPhone 4s, iPad 3rd generation or later Android 4.3 and higher. Works also with most Android devices with Bluetooth[®] low energy, including Samsung Galaxy, Nexus 4, Motorola Droid and other recent generation phones and tablets

The Min/Max/Average readings are clearly displayed and the data log is viewable as a scrolling graph with detailed data for each logged point. The Kestrel[®] LiNK app also allows adjustment of the logging interval and other settings as well as real-time threshold alerts.

> "The Kestrel Drop is a tool to monitor temperature and humidity in the barn and to graph and see trends. This is especially useful in the winter during minimum ventilation, and at night, when you may not be in the barn. Seeing these trends allows us to make ventilation adjustments for periods when we are not in the barn; this can prevent pig stress and even disease challenges."

- Dr. Evan Koep, Swine Veterinarian

Please note: Not all products are listed. To see all products or to order, visit www.pipestone.com or call 507.562.PIGS (7447).

Stay Warm. Stay Healthy.

Pipestone Winter Products

Retrolite Heat Lamp

SKU: 6436



Retrolite plastic heat lamp hood. Heat Lamp uses a standard heat lamp bulb to 250 watts.

Replacement Parts available:7895Retrolite 12' Cord & Socket7894Retrolite Plastic Hanger Assembly

Adjust-a-Heat Lamp

SKU: 6433



Also Available: 8ft. Replacement Cord with Socket 12 ft. Replacement Cord with Socket

Traffic C.O.P - 18 lbs.

SKU: 9103

Dry foot bath. No need to add water or dilute. A unique blend of chlorine, deodorizers, silicates, and acid impregnated zeolites designed for foot pans.



Ice Melt

SKU: 646

Ice Melt begins working immediately upon contact and generates melting heat. The combination of Calcium Chloride pellets, Magnesium Chloride pellets, and Sodium Chloride pellets makes it a fast acting ice melt. Melts snow and ice in temperatures down to -15°F. Safe on concrete and vegetation.

Please note: Brands may vary and are subject to change.

Aluminum Shovel

SKU: 6136

Aluminum Grain Shovel is the perfect tool for use around barns for clearing snow. 14 gauge.

Flashlight

SKU: 350400

Flashlight for use in the barn.



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LED Head Lamp

SKU: 90723

LED Head Lamp is fully adjustable for maximum visability in low-light situations. The 1" Super Comfortable and Stylish Head Straps are both stretchy and adjustable to fit all adults. Features 2 buttons to easily select 1 of 5 light settings.



Sleeping Bag

SKU: 6601

This sleeping bag with a hood is durable and water resistant, comes with a compression sack for easy storage.

Sleeping Cot

SKU: 6600



This sleeping cot for barn use offers foldup easy storage. Cot holds 250 lbs.

Thermal Lined Gloves

SKU: 77140

Thermal Lined Gloves for barn employee use. Keeps hands and fingers warm.





Stocking Cap

SKU: 70912

This Super Stretch Stocking Cap is made of durable, tight 100% acrylic knit. It can be worn by both men and women. Fits most sizes.

Long Sleeve T-Shirts

Available in size: S-4XL

Washable, durable, wearable and breathable.



Hooded Sweatshirt

Available in size: L-3XL Hooded Pullover Sweatshirt for barn use.



Zip-Up Hooded Sweatshirt

Available in size M-3XL

Zip-Up Hooded Sweatshirt for barn use.



Please note: Not all products are listed. To see all products or to order, visit www.pipestone.com or call 507.562.PIGS (7447).

The importance, effectiveness, and cost of sow farm filtration systems





While the use of air filtration systems on sow farms has been proven to reduce the incidence of airborne illness such as Porcine Reproductive and Respiratory Syndrome (PRRS), there are still many swine farms that operate without it. While the design of physical structures vary, most if not all operations can reduce overall cost per pig if the correct filtration system is used in conjunction with current bio-security standards.

Physical operations can be structured as either positive or negative pressure set-ups. Dr. Spencer Wayne discusses with Hannah Walkes, President of Pipestone Veterinary Services, Pipestone's utilization of filters on their negative pressure managed farms. The discussion included how their adoption has reduced overall cost per pig and dramatically improved overall pig health consistency when compared to data obtained prior to its implementation.



To hear more from Hannah Walkes, tune into the SwineTime Podcast Episode 17. SwineTime podcast was created for the pork industry and individual pork producers around the country. Hosted by Dr. Spencer Wayne with Pipestone Veterinary Services, the podcast contains pork industry news, advancements in animal care and how to enhance your productivity. Monthly podcasts are available on Spotify, Google Music, ITunes, Anchor and on www. pipestone.com.

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Pipestone Extra: Career Opportunities

Intern with Pipestone

Pipestone offers internships in sow production, wean to finish, nutrition and veterinary. Interns will spend time with our production team, field staff, nutritionists, and records department. As an intern, you will have the chance to customize their internship based on their interest areas.

- Practical, hands-on experience in all phases of swine production.
- Opportunities to work with and receive guidance from respected professionals in the industry.
- Learn more about the swine industry.
- Interaction with decision makers.
- A professional environment.
- Complete a research project and present findings.
- Communicate with consumers about their food.

The Production internship pathway has a large variety of career paths!

Pipestone Emerging Leader (PEL)

PESTON

PEL Training program allows new employees to jump start their career with hands on training. We allow you to choose how quickly you want to learn by falling into 1 of 3 paces of development. We strive to build leaders from within our company to help ensure our rapid growth.

- Develop leadership, management, and organizational skills.
- Experience various locations to help you accomplish your career goals.

"Pipestone System offers the opportunity to advance. If you work hard, you will be rewarded for your efforts." - Gavin Van Moer, Site Manager (Previous Pipestone Emerging Leader)

To Apply: Email your resume to hr@pipestone.com.

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Applications Due: March 1, 2021



Jazmin Olguin - Morgan Hil

PHOTO CONTES







Piglets - Jodi Mirissa



Abby Broakaw



Drew De Vries







Katie Arndt & Brenda

Dominguiez



A picture is worth a thousand words. On this page, we highlight farmer stories through special moments and sights on the farm. Please email your best photos to abby.hopp@pipestone.com or on Facebook messenger at Pipestone - Pigs. Top photos voted on Facebook will be placed in the next issue of the Pipestone Journal.



Siobhan





Seth Holmstrom

Daniel, Aaron & Lev



Tracy Winchester Geer

PIPESTONE[°]

PO BOX 188 1300 So Hwy 75 Pipestone, MN 56164

