

SUSTAINABILITY REPORT 2022

Helping Farmers Today Create the Farms of Tomorrow



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WELCOME SUSTAINABILITY MANAGER

Helping farmers today create the farms of tomorrow - this has been the mission of PIPESTONE since its inception in 1988. At the heart of that mission lies the purpose of this report. Though previously undefined or under-defined, sustainability is a concept that has been known long and well in the community of agricultural producers. Maximizing resources, reducing waste, using efficient practices and responsible stewardship of the land are not new concepts to those of you reading this. However, understanding that each of those factors results in an industry that is way ahead of the sustainability game is something that is only now being brought into the eye of the public. This report is intended to show the PIPESTONE commitment to sustainability and the ways in which we wish to be an industry leader to those ends.

- **Pigs:** Animal Care is at the core of what we do. Our pigs rely entirely on us to meet their needs. Because they rely on us to meet their needs and care for their welfare, we have an obligation to do so. The welfare program goals are designed to equip, verify, and respond to the needs of both the animals and the staff that is responsible for their care. To equip, we strive to create a culture focused on promoting and protecting pig welfare by providing all staff with clear guidelines, tools, and training. To verify, internal and external audits are performed to ensure guidelines are followed. Finally, to respond to animal welfare concerns in a way that results in continual improvement of pig welfare on PIPESTONE managed farms.
- **People:** PIPESTONE works hard to create an environment that is both an enjoyable experience and one that helps our employees learn and grow. With an overall employee satisfaction rate of 97%, 2022 showed that dedication to employee growth and engagement creates an environment of productivity and fun. This can also be shown in the voluntary commitment that team members have made throughout the year to give back to the community through both volunteer time and donations to the GiVE program.
- **Planet:** Farmers have long been the most responsible stewards for the planet that provides for them. To ensure the continued ability to develop a sustainable business for both PIPESTONE and our partners, the decisions we are making today are made with long term sustainability in mind. Research into renewable energy resources such as wind and solar are ongoing and becoming more feasible as the technology advances, livestock water recycling of liquid manure is being analyzed as a way to maximize resource potential, and carbon market opportunities are being explored for farmers implementing regenerative agriculture practices. The horizon has never looked brighter in our commitment to the environment and the continued growth of our vital industry.

I want to say thank you to the 1,495 PIPESTONE team members that made all these accomplishments and many more possible.

With all that being said, I'd like to welcome you all to the 2022 PIPESTONE Sustainability Report!



Tim Spade

WHO IS PIPESTONE?

Since founded as a veterinary clinic in 1942, PIPESTONE has grown to meet the evolving needs of a pig business. Today, this includes a focus on three key areas: services, partnerships, and purpose.

OUR SERVICES

Health

Pipestone Veterinary Services is helping pig farmers make critical decisions about animal health, productivity, and profitability.

Management

Pipestone Management is providing management services while farmers maintain ownership of their pig business.

Nutrition

Pipestone Nutrition is providing economic-driven, feed ingredient procurement and performance-based diet formulations.

Business

Pipestone Business is providing resources and expertise in the pig business, particularly through production record-keeping, financial record-keeping, farm consulting, and on-farm labor.

Marketing

Big Stone Marketing is providing hog marketing services to improve their bottom line and remain competitive in today's marketing environments.

Research

Pipestone Research is providing practical science-based solutions to relevant issues facing customers now and in the future.



SCALE and SCOPE

Employees

1,495

Previous: 1,308 | Trend: ▲

Weaned Pigs Produced

7,949,100

Previous: 7,402,710 | Trend: ▲

Sows Managed

315,409

Previous: 277,230 | Trend: ▲

States with Managed Sow Farms

9

- Illinois
- Indiana
- Iowa
- Kansas
- Minnesota
- Missouri
- North Dakota
- South Dakota
- Wisconsin



Countries with Managed Sow Farms

3

- United States
- Mexico
- China



PIPESTONE is proud to partner with independent farmers through a variety of avenues.



GreenStone Farmers is a farmer investment opportunity facilitated by PIPESTONE to create and capture value for farmers in the U.S. carbon market. As a farmer-owned company, GreenStone Farmers takes a common-sense approach to carbon farming, with a focus on positioning farmers for success in this new economic opportunity for their farms.

Directly Owned by Farmers

This is not another “program”, this is an investment opportunity for farmers to own the company that sells their carbon credits.

Common Sense Approach

Existing programs get caught up in “precision” modeling and additionality. GreenStone advocates for a pay for practice methodology that pays farmers to maintain existing carbon farming practices and enhance new carbon farming practices.

Difference Maker

With a goal to be the largest carbon farming company in the market, GreenStone will be a difference maker for climate change and a market maker for farmers.



Wholestone Farms is a farmer-owned, pork processing facility, working together to bring the consumer closer to the farmer.



YellowStone Cattle is a farmer-owned company designed to create and capture value in the beef supply chain for cattle owners.



Riverstone is a partnership offering in China. Today, Riverstone is managing 70,000+ sows and owns 25,000 sows in China.

Listen in: SwineTime Podcast

The SwineTime podcast is a monthly podcast hosted by Dr. Spencer Wayne. New podcasts are released monthly. Subscribe using the platforms below:



Read: Swine News

Did you know that here at PIPESTONE we publish a swine-focused e-newsletter twice a month? Sign up on our website: www.PIPESTONE.com to get timely, top-notch research and information directly to your inbox.

Follow us: Social Media

- PIPESTONE.com
- PIPESTONE Discovery
- PIPESTONE - Helping Farmers
- PIPESTONE_pigs
- PIPESTONE - Helping Farmers

United Nations Sustainability Development Goals

Nearly every category of sustainability laid out by the UN's International Panel on Climate Change (IPCC) has bearing on the operations of PIPESTONE. Throughout this report you will see graphics like those listed below. These graphics will indicate that the practices being reported on in that section in some way address those goals.



End poverty in all its forms everywhere.



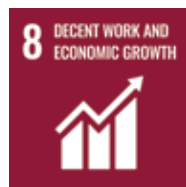
Ensure access to affordable, reliable, sustainable, and modern energy for all.



Take urgent action to combat climate change and its impacts.



End hunger, achieve food security and improve nutrition and sustainable agriculture.



Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.



Conserve and sustainably use the oceans, seas and marine resources for sustainable development.



Ensure healthy lives and promote well-being for all at all ages.



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.



Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.



Reduce inequality within and among countries.



Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.



Achieve gender equality and empower all women and girls.



Make cities and human settlements inclusive, safe, resilient and sustainable.



Ensure availability and sustainable management of water and sanitation for all.



Ensure sustainable consumption and production patterns.



Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.

2023 Sustainability Goals

Animal Welfare

Implement monthly training courses on animal welfare.

Continue validation of performance through: Monthly veterinary visits to sow farms for animal welfare assessments and training, internal audits completed annually with scores over 90%, one third-party audit every 24 months with scores over 90%.

Antibiotics

Track antibiotic use on 10% of US market hogs by '24.

Employee Engagement

Achieve employee satisfaction scores of satisfied or higher on >98% of the team.

Manage farm turnover at 33% or less.

Training

Online training completion above 95%.

15% of our population in advanced training for leadership positions.

Employee Benefits

Maintain wages and benefits combined in the top 1/3 of our industry as benchmarked by third parties.

Safety

Managed OSHA recordable injury rate at 5% or less.

Training and Audit compliance goals remain at 100%.

Community Involvement

Encourage 75% of sow farms to donate locally through the PIPESTONE Cares Program.

Carbon Footprint

Develop the GreenStone Farmers business plan to create a profitable carbon solution for it's farmer-owners implementing regenerative Ag programs.

Feed

Optimize on-farm feeding protocols and diet formulation to manage feed use to pig requirements +/- 5% of total feed use as validated by an expert nutrition panel.

Manure

Fully compliant nutrient management program with state and third-party verification at all sites.

Complete direct injection manure application for greater than 95% of gallons.

Have manure usage under four gallons/sow/day and feeding protocols to reduce waste to less than 2% of total use.

Energy

Continue to document total energy use.

Validate new technology and equipment to lower total energy use.

Have our sow farms on 50% renewable energy, reducing energy use by 5%.

Water

Continue to document total water use.

Validate new technology, equipment, and protocols to reduce total water usage.

Waste

Implement recycling program on 50% of our sow farms.

Implement waste and recycling program at the office locations.

2022 Sustainability Goals Recap

GOAL	UPDATE	STATUS
Animal Welfare		
Implement monthly training courses on animal welfare.	Our completion rate in 2022 was 95.79%.	✓
Continue validation of performance through: Monthly veterinary visits to sow farms for animal welfare assessments and training, internal audits completed annually with scores over 90%, one third party audit every 24 months with scores over 90%.	Third party audits: 24 farms completed with an average score of 98.6% Top Ten Welfare internal audits: 69 farms completed with an average score of 93.9%.	✓
Antibiotics		
Track antibiotic use on 10% of US market hogs by 2024.	We hit target goal at the end of 2022 with 14.5M pigs utilizing the PART program.	✓
Employee Engagement		
Manage farm team turnover at 33% or less.	We are currently at 37% turnover rate.	🕒
Achieve employee satisfaction scores of satisfied or higher on >80% of the team.	Our overall satisfaction is 96% satisfied.	✓
Training		
Reach 10 hours of formal training for each team member.	100% of employees completed 12 or more hours of training.	✓
Advanced training for 15% of our leadership staff.	14.6% of employees are in a leadership program.	🕒
Employee Benefits		
Maintain wages and benefits combined in the top 1/3 of our industry as benchmarked by third parties.	Per Gallagher Benchmark, we are in the top 1/3 of our industry.	✓
Safety		
Manage OSHA recordable rate at top 1/3 of industry average.	According to Gallagher Safety Benchmark, we are in the top 1/3 of industry average.	✓
Achieve Safety Audit compliance goal of 100%	The safety audit compliance rate was 94% safety audit compliance rate.	🕒
Community Involvement		
Re-invest \$0.05 per pig in our local communities every year through the PIPESTONE Cares program.	\$184,000 was donated through the 2022 PIPESTONE Cares Program.	🕒
Carbon Footprint		
Offer an investment opportunity for a farmer-owned carbon farming company.	A farmer-owned, practice-based voluntary carbon market has been developed to give agricultural producers the opportunity to capitalize on the carbon sequestration practices they implement.	✓



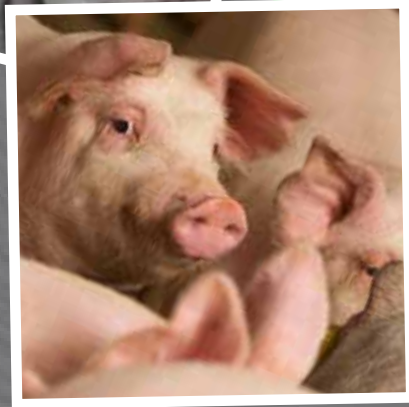
GOAL	UPDATE	STATUS
Feed		
Optimize on-farm feeding protocols and diet formulation to manage feed use to pig requirements +/- 5% of total feed used as validated by an expert nutrition panel	We are trending at -0.76%.	✓
Manure		
Fully compliant nutrient management program with state and third party verification at all sites.	Approved manure management plans have been implemented at all sites and are verified by third party crop consultants.	✓
Complete direct injection manure application for greater than 95% of gallons.	Over 99% of manure was injected or incorporated in 2022.	✓
Have manure usage under four gallons/sow/day and feeding protocols to reduce waste to less than 2% of total use.	Managed farms averaged 3.34 gallons of manure produced per sow per day in 2022.	✓
Energy		
Continue to document total energy use and set usage goals by end of 2022.	Goals have been established and we will continue to document total energy usage.	✓
Validate new technology and equipment to lower total energy use.	We validated heat mats at 57% less energy than heat lamps.	✓
50% renewable energy, reduce energy use by 5%.	We used 36% renewable energy in 2022.	🕒
Water		
Continue to document total water use.	Monitored 100% of managed sow farms water usage and added 9 water meters to sow farms with more to come in the future.	✓
Validate new technology, equipment and protocols to reduce total water usage.	We conducted research on wet vs. dry feeders and implemented water meters in 75% of our sow farms.	✓
Waste		
Implement recycling program on 50% of our sow farms.	We currently have 54% of our managed barns operating a recycling program.	✓

Boundary & Data Summary

This boundary and data summary chart provides you a quick glance on key metrics year over year. Any exceptions to this are described in the chart below.

	Unit	2018	2019	2020	2021	2022
Employees	number	1194	1328	1276	1311	1495
Pounds of Live Weight Produced	lbs.	121,564,528	144,350,007	174,081,576	163,228,312	180,450,403
Energy	total kWh	142,315,430	168,150,042	147,997,349	153,223,676	184,274,494
Water	total gallons	397,787,464	442,095,806	497,414,466	563,437,353	623,694,762
Manure	gallons/lb of pork by live weight	2.52	2.64	2.32	2.49	2.42
Feed	lbs/lb of pork by live weight	4.79	4.77	4.57	4.78	4.77
Number of Animal Welfare Audits - External	number completed	23	33	7	30	27
Score of Animal Welfare Audits - External	average score	91.5	91.4	97.6	98.3	98.3
Number of Animal Welfare Audits - Internal	number completed	582	637	542	524	631
Score of Animal Welfare Audits - Internal	average score	9.6	9.7	9.7	9.5	9.7
Antibiotic Use	mg/lb of live weight	126.1	138.9	62.0	115.3	138.6
Employee Turnover Rate	yearly percentage	N/A	29%	36%	28%	27%
Total Case Incident Rate (TCIR)	number of recordable incidents per 100 full-time employees	8.3	7.7	9.4	6.8	8.8
Days Away from Work Injury and Illness (DAFWII)	number of cases that involve days away from work per every 100 full-time employees	N/A	N/A	41	44	53

pigs



SUSTAINABILITY REPORT 2022

Animal Care

Animal Welfare



Animal Housing

Adult pigs can be kept in a variety of housing systems. There are welfare trade-offs for all systems.

Individual stalls remove the need for hierarchy formation, which minimizes or all together removes aggression, injury, and competition. It allows for individualized feeding and nutrition, facilitates easy observations, and allows for easy and safe medicating, vaccinating, heat checking and pregnancy detecting by caregivers. The tradeoff is that individual stalls restrict movement, exercise, and the display of some natural behaviors. Sows in stalls must be able to:

- Lie down fully on its side without head having to rest on a raised feeder
- Stand up without having to touch the bars on top of the stall
- Stall size must be appropriate for the physical size of the pig

Individual stalls are acceptable when monitored and maintained by responsible, trained animal caretakers.

Pen housing allows for movement, exercise, and the display of more natural behaviors. The tradeoff is that in pen gestation there is hierarchy formation which can result in aggression, injury, and competition for resources (food, water, space to lie down). Pen gestation can also increase the difficulty for caregivers to medicate, vaccinate, heat check, or pregnancy detect. We will fill pens/mix pigs in a manner which reduces the need to remove animals from the pen. Animals which have been injured, lost condition, or for some other reason cannot compete for resources will be removed from the pen. Sows in pens will be able to:

- Lie down, stand up, and turn around.
- Easily access feed.

Pen housing is acceptable when monitored and maintained by responsible, trained animal caretakers.

Farrowing/Lactating sows will be housed in individual maternity pens. During farrowing and lactation, it is important to balance the needs and welfare for both the sow and the piglets. Individual maternity pens restrict movement, exercise, and the display of some natural behaviors for the sow. However, they improve piglet welfare by decreasing injury and death resulting from crushing by the sow. They also improve the caregiver's ability to safely monitor, medicate and assist during the farrowing process. At PIPESTONE, all farrowing and lactating sows will be housed in individual maternity pens.



Sow Farm Pig Care at PIPESTONE: our pigs rely entirely on us to meet their needs. Because they rely on us to meet their needs and care for their welfare, we have an obligation to do so. At PIPESTONE, we have zero tolerance for neglect or willful acts of abuse on farm.

2022 Activity

- Updated the PIPESTONE Welfare Policy based on guidance from our welfare panel
- Adapted our program around the 5 domains of animal welfare, including 4 specific welfare goals for all caretakers
- Updated our internal welfare audit program based on guidance from our PIPESTONE welfare committee as well as feedback from our welfare panel
- Researched open wound treatment options and modified our open wound treatment plan when a superior treatment was determined
- Implemented "Critical Care Sow Cards" in response to internal audits and guidance from our welfare panel
- Added animal welfare topics each month to our swine veterinarian monthly continuing education program
- Modified our anti-inflammatory treatment approach based on guidance from our welfare panel
- Broadened our welfare program to include wean to market swine production as we continued to grow the company in this area
- Trained sow farm animal care takers in the following topics
 - Annual welfare policy
 - Animal observations
 - Early signs of illness
 - Animal handling (specific for piglets, sows, culls, due to farrow sows, and boars)
 - The importance of timely euthanasia
 - Euthanasia methods
 - Confirming appropriateness of euthanasia
- Internal Audits
 - All our sow farms maintained active PQA site assessment status
 - Other internal results BELOW
- External Audits
 - Results BELOW

Third-Party Audits	2018	2019	2020	2021	2022
Average Audit Score	91.5	91.4	97.6	98.3	98.3
Number of Audits	23.0	33.0	7.0	30.0	27.0

Internal Audits	2018	2019	2020	2021	2022
Average Audit Score	9.6	9.7	9.7	9.5	9.7
Number of Audits	582	637	542	524	631

Welfare Expert Panel

- Anna Kerr Butters-Johnson, BSc, MSc, PhD, Professor, Animal Behavior and Welfare, Iowa State University
- Monique Pairis-Garcia, DVM, PhD, DACAW--Associate Professor, Global Production Animal Welfare, North Carolina State University
- Madonna Benjamin, DVM, MS, DACAW Associate Professor, Swine Extension Veterinarian College of Veterinary Medicine, Michigan State University.
- Carissa Odland, DVM, MS, Manager of Sustainability, Wholestone Farms



2023 Goals:

- Implement monthly training courses on animal welfare.
- Continue validation of performance through: Monthly veterinary visits to sow farms for animal welfare assessments and training, internal audits completed annually with scores over 90%, one third party audit every 24 months with scores over 90%.

Animal Care

Biosecurity



Biosecurity practices help ensure we keep diseases out of our barns and keep animals from getting sick. At PIPESTONE, several biosecurity practices have been put in place at each of our managed barns to ensure the highest security protections for our animals and clients. Some of these practices include but are not limited to:

- All employees and visitors must shower in and out of the farm.
- Only visitors from a farm of high health status can shower into our barns to protect the pigs inside from disease transfer.
- Waiting periods have been established to minimize transfer of illness from barn to barn.
- All transport trucks and trailers must abide by biosecurity protocols.
- D&D rooms are used to disinfect any equipment or medical/health supplies coming into the farm.

Strict adherence to these guidelines and the vigilance of our drivers, staff, and veterinarians help to keep our swine population as healthy as possible.

Wean-to-Market Biosecurity Standards - What Are They

What do we mean when we refer to a standard? “Standards are the distilled wisdom of people with expertise in their subject matter and who know the needs of the organization they represent. They are the formula that describes the best way of doing something.” (International Organization for Standardization, 2022)

PIPESTONE has been a leader in research, innovation, and adaptation of biosecurity practices for more than 30 years, which has helped define a standard for sow farm biosecurity. This standard continues to evolve and provides a distinct advantage to farmers by reducing the incidence of disease. Over this same course of time, the swine industry has failed to adapt standards in wean-to-market biosecurity. Farmers leave themselves, and the US industry, at risk of disease introduction and dissemination. We believe it is time that the swine industry recognizes standards for wean-to-market biosecurity and commits to change.

Pork producers today have nothing to lose and everything to gain by being proactive and improving the standards by which we hold ourselves to. The United States is at more risk than ever for a foreign animal disease introduction with increasing globalization and African Swine Fever virus now present in Haiti and the Dominican Republic. In addition, the disease pressure from PRRSv, Influenza, and bacterial challenges prove more challenging than ever.

At the PIPESTONE Summit this past year, when surveyed, 92% of the producers responded that they believe there would be a positive return on investment for improving wean-to-market biosecurity. If the resounding opinion is there is value in doing so, why aren't we making this investment?

To help address this, PIPESTONE developed a Wean-to-Market Biosecurity Standard and Wean-to-Market Biosecurity Assessment to evaluate a farmer's practices relative to the standard. The results are summarized to provide a benchmark, and serve as a roadmap for farmers to make progress in improving their biosecurity. With a common set of standards and a commitment to measure and improve, we believe the industry can change. Contact your PIPESTONE veterinarian to review and benchmark your biosecurity practices.

“What is the health status of my farm?” This seemingly should not be a difficult question to answer, but unfortunately it is not that simple. We believe it is time to change that and simplify the way we communicate farm health status in the future.

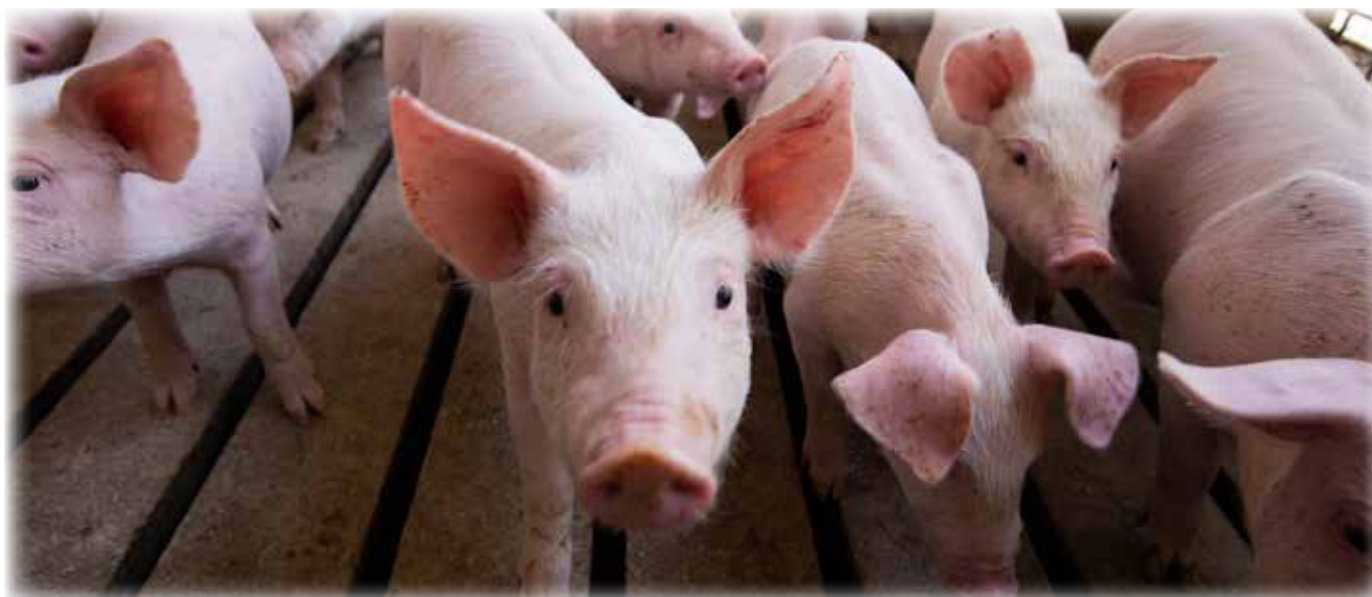
Swine health classification schemes exist to provide a framework for producers and veterinarians to accurately describe the status of animals to a specific disease and guide health management strategies. Today, we have many more classification systems and complex levels for each disease than we ever had in the past as our knowledge about swine disease continues to advance.

Ultimately, how does this help our ability to improve pig health for the farmer? While we have made strides in using disease knowledge and classification for pathogen elimination or control strategies, the complexity has created a gap in communication. There is value in simplifying how we think of and represent pig health status to better achieve the goal: is the health of my farm and my pigs what I should be striving for to be successful? Starting in 2023, we seek to do that through a Simple Health classification system.

In PIPESTONE sow farms today, we define status for five diseases: PRRS, Mycoplasma hyopneumoniae, Enteric Coronavirus (PEDV), Influenza, and highly-pathogenic bacteria. The Simple Health system involves only three health levels, defined by the colors Green, Yellow, and Red. The farm status is defined by the health of the pigs for each of these five diseases above, collectively.



This refinement in how we think and talk about pig health status will be refreshing. It will enhance understanding of the true issues in suboptimal farms, along with guide appropriate health management strategies. We fortunately have tools such as disease control and elimination strategies, vaccines, and antibiotics that are effective at reducing disease in Yellow and Red farms and providing a good outcome. We believe this is a step forward in health management and helping farmers today create the farms of the future.



Foreign Animal Disease Preparedness

Secure Pork Supply Plan (SPS)

There are many foreign animal diseases (FAD) that threaten the pork industry. If foot and mouth disease (FMD), classical swine fever (CSF) or African swine fever (ASF) is confirmed in the United States, movement restrictions for susceptible livestock will be put into place by Regulatory Officials (local, state, tribal and federal officials, as appropriate). The restrictions are designed to control the spread of these highly contagious animal diseases by animals, animal products, vehicles, and other equipment. Officials will set up regulatory Control Areas (areas where premises are quarantined, and movement is restricted) around infected premises and movement of livestock will only be allowed by permits. For a permit to be issued, Regulatory Officials will require premises to demonstrate certain criteria that reduces the risk of disease spread from the movement. Permitting guidance can be found in the Secure Pork Supply (SPS) plan for continuity of business.

The SPS plan provides opportunities to voluntarily prepare before a foreign animal disease (FAD) outbreak. This will better position pork premises with animals that have no evidence of infection during the outbreak to move animals to processing or another pork production premises under a movement permit.

PIPESTONE Customers with a filed VCPR

35%

completed SPS plan

Previous

25.8%

Trend



PIPESTONE Managed Sow Farms

100%

completed SPS plan

Previous

100%

Trend



Target: Provide resources for 75% of all PIPESTONE customers to complete an SPS plan by 2023.

Animal Care

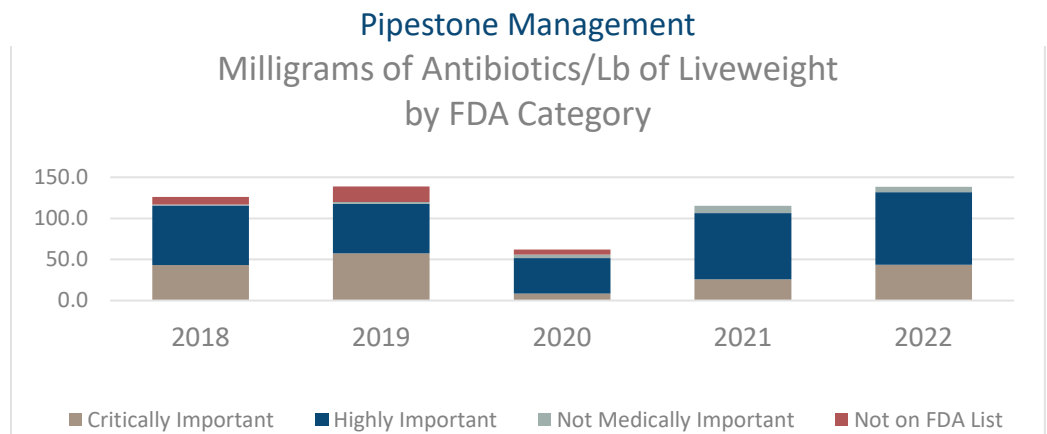
Antibiotic Resistance



Antibiotic Resistance is a growing topic of concern among us all. We recognize that human and animal health must work together to understand and combat Antibiotic Resistance. Launched in 2017, PIPESTONE Antibiotic Resistance Tracker (PART) was launched to track antibiotic use in real time. PART provides livestock farmers a web-based tool to do their PART in the fight against Antibiotic Resistance by exhibiting and monitoring antibiotic use in accordance with their veterinarian. PART now offers a producer data-entry portal.

PART allows producers to Record, Review, and Respond for the Responsible Use of Antibiotics.

Today, PART supports 190 producers, 10.7 million market hogs & 14.5 million weaned pigs.



PIPESTONE Antibiotic Use Standards (PORK)

PIPESTONE's commitment to Responsible Antibiotics Use and reduced AMR serves as the framework for our PIPESTONE Antibiotic Use Standards (PORK).

A producer certifies the production of hogs for PORK at one of the three levels as set forth. These levels apply to all stages of swine production.

Pipestone Management sow farm breakdown for 2022 antibiotic use	Level 0	Level 1	Level 2	Level 3
	4	63	0	0

	Level 0	Level 1	Level 2	Level 3
ABX administration is under VCPR		YES	YES	YES
Antibiotics used only when necessary		YES	YES	YES
No antibiotics used for growth promotion	No tracking of antibiotics	YES	YES	YES
Antibiotic use		Use for disease treatment and control only after diagnosis has been determined	No use of critically important antibiotics	No use of ANY antibiotics



2023 Goals:

- Track antibiotic use on 10% of US market hogs by '24.

IMAGINE

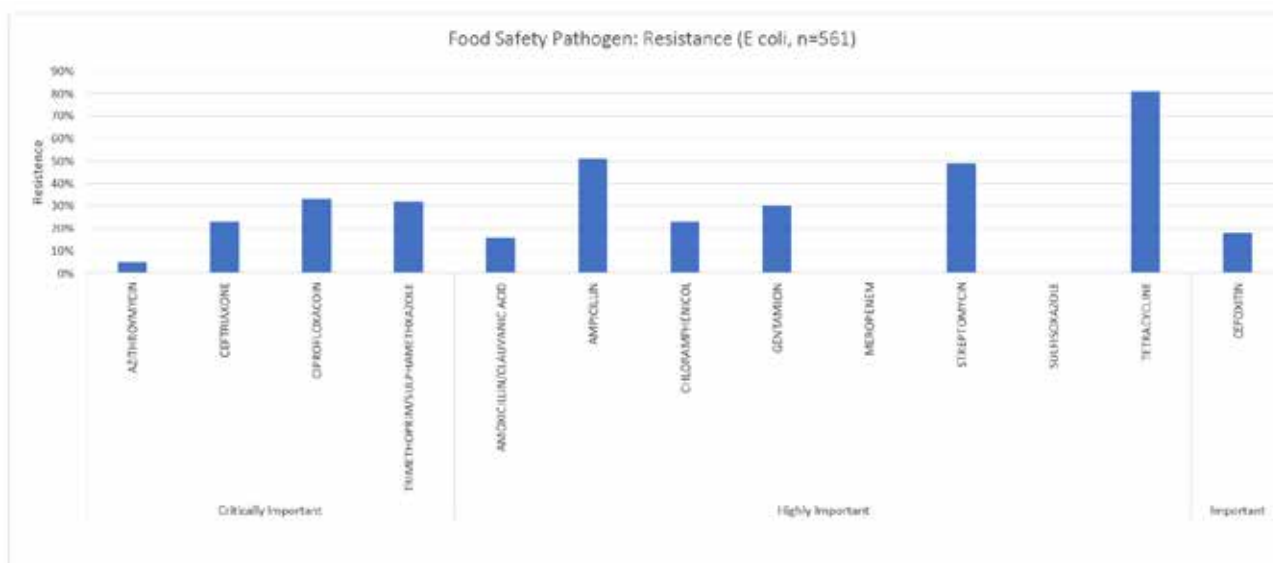


IMAGINE is a collaborative effort to study antimicrobial use and resistance on commercial swine farms in the Midwest. Partners in the project include the United States Department of Agriculture (USDA), National Animal Health Monitoring System (NAHMS), the National Pork Board (NPD), and the Foundation for Food and Agricultural Research's (FFAR) International Consortium of Antibiotic Stewardship in Agriculture (ICASA). The work focuses on use and resistance in relation to animal health and production-related indicators.

Sample collection started in May 2020. From the start through July 2022, the IMAGINE team sampled 146 total producers for 575 cases. Sampling is on-going with our plan for this to be a 5+ year project.

Takeaways to date include:

- Resistance to classes never used in pigs - naturally occurring.
- Resistance to classes used in pigs - need to be aware & use judiciously on pig farms.



People

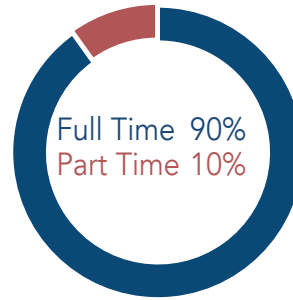
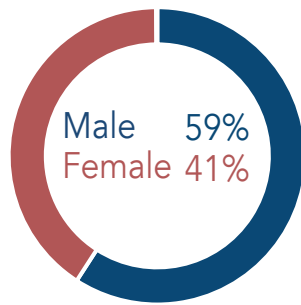


People

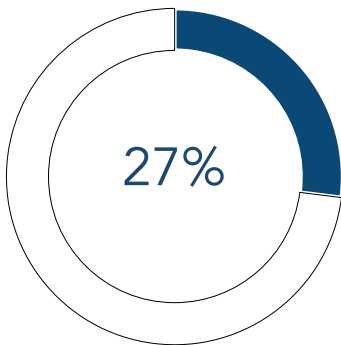


At PIPESTONE, one of our core values is commitment. We are committed to our employees, farmers and community. Within PIPESTONE, we are committed to diversifying our team and providing advancement opportunities.

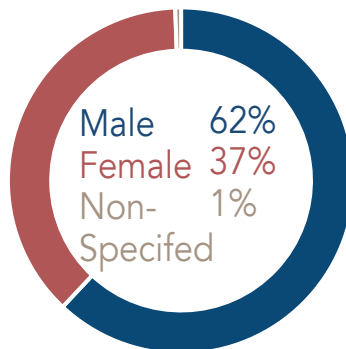
1,495
Employees



Employee Turnover



Turnover by Gender



Age Turnover

Age	% of Turnover
15-19	1%
20-29	39%
30-39	35%
40-49	13%
50-59	8%
60-69	4%
70-79	0%
80-89	0%



Diversity, Equity, & Inclusion



In 2021, we formed a Diversity, Equality, & Inclusion (DEI) committee and formed our formal position on DEI at PIPESTONE. We strongly believe that all of our team members should be kind, respectful, and that the workplace is not an area for discrimination. We hire and promote people based on their abilities, values and past and current performance. We will closely monitor diversity, equity, and inclusion going forward.

Ethnicity Demographics

Age Demographics

Ethnicity	% of employees
American Indian/Alaska Native	0%
Asian	0%
Black or African American	1%
Hispanic or Latino	50%
Not Specified	7%
Two or More Races	1%
White	41%

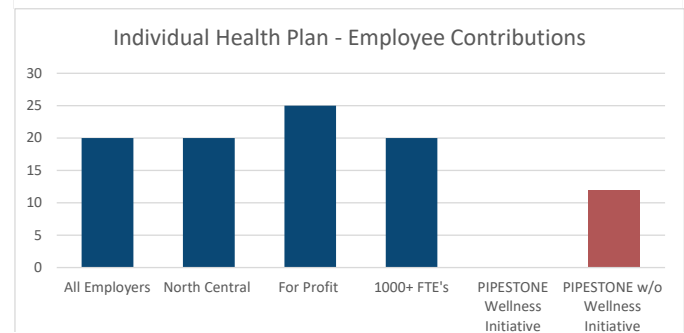
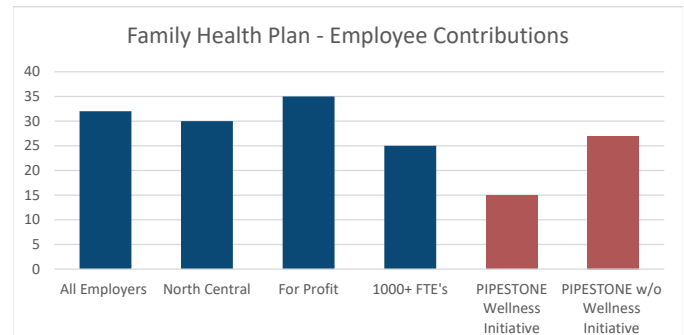
Age	% of employees
15-19	4%
20-29	29%
30-39	37%
40-49	17%
50-59	9%
60-69	4%
70-79	0%
80-89	0%

Benefits

We have taken great pride in continuing to offer a competitive wage and benefit plan for full-time employees. To date, our wages and benefits rank in the top 1/3 of the pig industry. We had a total satisfaction rate of 96.9% across all our business units with Pay & Benefits being #1 in the categories.

Here are a few benefits provided by PIPESTONE:

- Competitive wages - based on position and experience
- 401K - company match up to 6% of gross wages
- Health Insurance
- Health Savings Account/Flexible Spending Account
- Dental & Vision Insurance
- Life Insurance/Accidental Death Benefit
- Short & Long Term Disability Insurance
- Supplemental Group Term Life Insurance
- Paid Holidays and Paid Time Off (PTO)
- Referral Bonus Program
- Scholarship Program
- Bereavement Leave
- Bonus Program
- Jury Duty
- Earned Education Days
- **Employee Assistance Program (EAP):** New in 2023 we added in an Employee Assistance Program (EAP). This program provides professional and confidential services to help employees and family members address a variety of personal, family, life, and work-related issues.



- *Employee contributions the same percentage for family coverage, whether they choose the PPO or the HDHP Plan. Contribution share changes depending on participation in the Wellness Initiative.
- Source: 2022 Arthur J. Gallagher National Benchmark Survey



2023 Goals:

- Maintain wages and benefits combined in the top 1/3 of our industry as benchmarked by third parties.

Employee Engagements



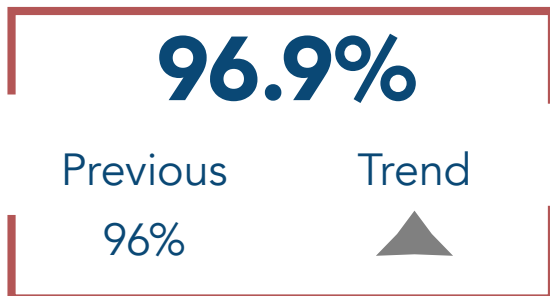
Employee Insights

At PIPESTONE, culture is a driving factor in day-to-day responsibilities. Using employee insights as a tool, PIPESTONE leadership can make smarter culture decisions with employee feedback. Results are analyzed by employee department, role, and managerial level to uncover patterns.

Each PIPESTONE team member is surveyed one time per year, asking a variety of questions directly related to their satisfaction with their job, culture, and communication.

According to the 2022 employee insight results, employees at PIPESTONE are 96.9% very satisfied, satisfied, or neutral about working at PIPESTONE.

Employee Satisfaction



Engagement Through Communication

Effective communication is a continual improvement we strive to meet at PIPESTONE. To achieve effective communication, PIPESTONE provides two regular communication tools: the PIPESTONE Post and Culture Camps.

PIPESTONE sends a weekly internal newsletter called the PIPESTONE Post. The post is distributed via email, and is also displayed on a TV screen at each office location and managed sow farm office. The PIPESTONE post contains leadership communication, tracked metrics across the company, work anniversary and work promotion highlights, employee safety information, and updates on benefits. The PIPESTONE Post also contains a quarterly video update by a leadership team member, highlighting new changes and updates in the company.

In addition to the PIPESTONE Post, PIPESTONE hosts a virtual webinar monthly called, Culture Camp. Each month, different topics are presented by a team member at PIPESTONE. Employees are able to interact and ask questions.



2023 Goals:

- Achieve employee satisfaction scores of satisfied or higher on >98% of the team.
- Manage farm turnover at 33% or less.



Training



PIPESTONE has training requirements for all employees, no matter how many years of experience one may have. We believe proper training plays a big role in making the workplace successful.

New Hire Requirements

PIPESTONE hired 741 new employees this year. All new employees complete an initial new hire curriculum specific to their department through an online learning management system. Beyond online training, new hires receive hands-on training through our on boarding mentor program for roughly 30 days of initial employment.

Skill Development

Continued skill development is provided annually to team members through online training courses, employee meetings, and off-site training opportunities.

Sow farm employees receive a minimum of 36 online training courses annually focused on animal welfare, biosecurity, and safety.

In addition to continual training throughout the year regarding online security and seasonal safety concerns, staff at the office locations also have the opportunity to participate in classes such as beginning and intermediate Excel training and Pig School, an educational program about the swine industry provided by Dr. Scott VanderPoel.

Leadership Development

The dedication and hard work from our team members is recognized through career advancement.

In 2022, 164 employees at PIPESTONE experienced advancement into a leadership role.

PIPESTONE Emerging Leaders

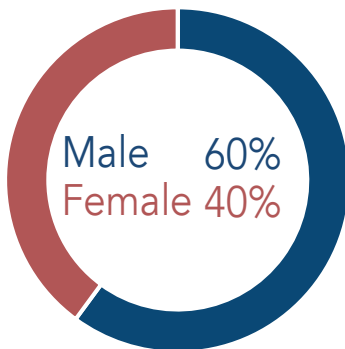
Individuals with leadership and management potential are selected to participate in this program to develop professional skill sets to prepare them for future advancement opportunities.

PIPESTONE Growth & Advancement

Individuals newly placed in management roles are selected to participate to reinforce the responsibilities of their position. This classroom system training consists of topics pertaining to leadership, production, financials, and human resources.

In 2022, 23 employee at PIPESTONE participated in this program.

New Hire Breakdown



Age % of employees

15-19	7%
20-29	44%
30-39	28%
40-49	14%
50-59	6%
60-69	1%
70-79	0%
80-89	0%



2023 Goals:

- Online training completion above 95%.
- 15% of our population in advanced training for leadership positions.

Safety



To align with our core values, PIPESTONE is committed to providing a safe and healthy environment for all employees. PIPESTONE cares about employee safety and demonstrates this by promoting a culture of safety, through a robust safety and health program. Along with the honorable responsibility of caring for our animals comes inherent risk to people safety, PIPESTONE mitigates these risks by adhering to OSHA safety standards for workplace safety and implementing proactive strategies to reduce this risk.

At PIPESTONE, our cross departmental safety committee works collaboratively with the safety team to identify and mitigate safety risk. The safety committee meets bimonthly, with the goal of improving the overall safety culture with the organization. Some key areas of focus for this group include training, procedures, equipment, recognition, evaluation of potential areas of risk, and proactive solutions.



PIPESTONE believes in “The Safe Way, The Only Way”. This is more than just a slogan; it is demonstrated through our safety and health training platform. Employees are provided with monthly safety training, on various topics that impact their ability to work “The Safe Way”. PIPESTONE’S goal is to achieve 100% safety training completion. Team members are encouraged to provide training topic suggestions, which promotes a synergistic safety culture.

PIPESTONE has a robust and proactive safety auditing program, designed to assist managers and employees in identifying potential areas of safety risk within their farm. Through the auditing process, we seek to continuously improve the safety culture as an organization. Our target is 100% audit compliance.

Injury/Illness Rate

	2020	2021	2022
Total OSHA Recordable Injury Rate	9.4	6.8	8.8
Number of Cases that involve days away from work	41	44	53



2023 Goals:

- Manage OSHA recordable rate at top 1/3 of industry average
- Achieve 100% Safety Audit Compliance



Community Involvement

Local Giving Programs

PIPESTONE team members are committed to supporting the communities we live in.

Hunger

Hunger is a primary focus for PIPESTONE charity support. Children and adults face hunger issues in communities across the country. In 2022, PIPESTONE provided \$220,000+ to support organizations focused on supporting hunger. A few examples include:

Local Food Banks and Backpack Programs

In 2022, PIPESTONE donated \$40,000 to local food banks and backpack programs in communities near our clinic locations. The local backpack program provides kids and their families with backpacks of easy-to-prepare food for the weekends.

Feeding South Dakota

Feeding South Dakota is the state’s largest hunger relief organization, serving all 66 counties in South Dakota. PIPESTONE donated 27,000 pork tenderloin, distributed primarily through 120 Mobile Food Distributions held in 98 communities across the state. The pork tenderloins complement other food items to be distributed by Feeding South Dakota such as potatoes and gravy, stuffing, corn, cranberry sauce, and yams, that contribute to preparing a holiday meal.



“As families face the pressures of rising costs, we wanted those facing hunger in our state to have one less worry over the holidays,” said PIPESTONE CEO Dr. Luke Minion. “We’re thankful we can support the work that Feeding South Dakota does by providing nutritional protein to those facing hunger.”



GiVE

PIPESTONE started a charitable giving program called, GiVE, in 2021. The GiVE program allows for team members to get a team together, identify a need they care about in the community, and GiVE.





Gifts for Good

Caring, a core value we live by at PIPESTONE, stretches locally and internationally. Like local charity work, our focus is on children and hunger. In 2022, PIPESTONE, alongside team member giving, supported 5 projects in 4 different countries around the world. In total, \$125,000 was donated internationally, supporting orphanages, nutrition programs, and a dental clinic build. Learn more about each program below.

Tapestries of Life Guadalupe, Mexico

Tapestries of Life is bringing justice to the fatherless. Their vision is to build an orphanage in Guadalupe, Mexico, which will be the largest orphanage in all of Latin America.

Children Playground Center: Providing a children's playground center for kids who have been welcomed to their new home when it is opened potentially in December.



Children of the Promise Haiti

Children of the Promise believes in a healthy Christian home and family for every Haitian child.

Nutrition Support: For families with a malnourished child or infant, Children of the Promise offers nutritional support in the form of formula (0-12 months) or Medika Mamba (1-5 years). Families attend a session every other week while they journey toward wellness. Each session includes education, a medical consultation, community interaction (with other families in a similar spot) and spiritual encouragement. This program targets in-crisis and at-risk families who have a child with special needs.





New Roots Haiti

Haiti

New Roots Haiti is dedicated to empowering parents to care for the needs of their families through education, employment and nutrition assistance.

Dental Clinic and Classrooms: In 2023, New Roots Haiti will be building a 5,000 sq ft multi-purpose building at the community center that will have 2 large classrooms, offices, and a dental office. While estimates tell us there are only 4 dentists supporting 1 million individuals, people in rural Haiti not only don't have access to professional dental care, nor access to tooth brushes and tooth paste. New Roots Haiti's vision is to have a Haitian dentist to work in the clinic full-time. The 350 kids in our programs, as well as our employees and their immediate families, will receive discounted dental care as encouragement for them to continue to attend our classes.



Indian Evangelical Team

India

Indian Evangelical Team is a community of followers of the Lord Jesus Christ who are compelled by His love to take the love and hope of the gospel to the poor, oppressed, and most unreached peoples of South Asia.

Sponsoring Orphanages: IET maintains several homes for children in various parts of the country. These homes are open to children who come from less than ideal conditions – facing abandonment, physical or mental abuse, absent parents, or poverty. PIPESTONE's donation supports the full care of children in various homes.



Adams Thermal

Ethiopia, Africa

Adams Thermal Foundation strives to alleviate the suffering of the most vulnerable - confronting all forms of human poverty in our community, our nation and our world.

Feeding Students: Food is one of the big motivators that keeps students in the Adams Thermal Foundation program. PIPESTONE's gift will cover 15% of the programs budget for student feeding.



PIPESTONE® Cares

PIPESTONE Cares is an initiative encouraging shareholder groups to contribute farm funds to charitable projects in communities the sow farms are located.

\$184,000 Total 2022 Donations

Hunger Relief Programs

12

FFA/4-H Programs

18

Community Events

21

Youth/School Activities

36

First Responders

62



2023 Goals:

- Encourage 75% of sow farms to donate locally through the PIPESTONE Cares Program.

PIPESTONE Scholarship Programs



PIPESTONE invests in the future of agriculture by supporting families, team members and students.

Our Family Scholarship

The "Our Family Scholarship" provides 5 PIPESTONE team members and immediate family members of PIPESTONE team members with \$2,500 towards their learnings in an agriculture or related field.

2022 Our Family Scholarship Recipients



Brittany Hershey
Hawkeye Community College



Isabell Kruse
University of Wisconsin
Plattville



Jaden Weinkauf
South Dakota State
University



Jayden Wolf
South Dakota State
University



Zoey DeHaas
Culver-Stockton College

Agriculture Education

At PIPESTONE, we believe in sharing the importance of sustainable agriculture in our local communities. Through our initiatives to reach rural communities to urban communities, we are able to educate non-agriculturalists, the next generation, and individuals in our local community.



Discovery Barn

The PIPESTONE Discovery Barns serve as agriculture learning opportunities in 13 different county and state fairs across 3 states. Each Discovery Barn offers a unique learning experience depending on the area and educational opportunity. Highlights may include educational displays, farrowing sows, weaned piglets, and more.



Washington Pavilion

PIPESTONE is proud to sponsor an agricultural-themed exhibit on the "Grow It!" floor at the Washington Pavilion Kirby Science Center in Sioux Falls, SD. "Grow-It" offers hands-on experiences for children and families to connect with and learn about agriculture.



Family Activities

PIPESTONE is excited to offer recipes, coloring sheets, activity pages, and a sow farm virtual tour on www.PIPESTONE.com.

Pork makes a great meal for families, tailgating and special holidays. Healthy and nutritious pork recipes can be found at www.cookpork.com.

planet



SUSTAINABILITY REPORT 2022

Carbon Footprint



Defining a Carbon Footprint Calculator

“Climate change” and “climate crisis” are topics that have gained the attention of policymakers, businesses, and consumers across the globe. Farmers have always been stewards of the land and environment but demonstrating how we are being responsible when it comes to our carbon footprint is becoming exceedingly important.

What we have learned after several years of evaluating platforms is that although there are numerous ways to calculate the carbon footprint, the inputs or resources used remain the same. We will continue to report all the raw data needed to calculate the carbon footprint in this report. In other words, we will simply report the lbs of feed purchased, kwh of electricity used, etc. This is all to continue to be transparent and authentic, while continuing to improve our natural resource use.

For a sow farm, there are 6 categories that contribute to the carbon footprint. Those include Feed, Energy, Manure, Fuel, Mortality Disposal, and Water. The next natural question you may ask is “How can I improve the carbon footprint of my pig farm?” to help answer this, we’ve put together a short list below of items that make the biggest impact.

Best Practices to Improve the Carbon Footprint of your Farm:

1. Lagoons in comparison to deep pit sites emit almost twice the emission on average. Although we realize this is not something easily changed in your system, it is something worth considering if you are evaluating building new sites. 86% of PIPESTONE Managed sow farm sites are deep pits and all new construction sites are built deep pit.
2. Pumping your manure pit twice a year versus once a year.
3. Focus on feed efficiency. For economic reasons this is naturally a focus at farms, but it also has an impact on your carbon footprint.
4. Implement carbon farming practices on your land to lower the carbon footprint of your feed ingredients. To learn more about regenerative ag practices and how farmers are participating in carbon credit programs, read more on page 29.
5. Invest in an on-site renewable energy option such as wind or solar, or purchase Renewable Energy Credits from your local utility provider. In 2022, 36% of sow farms were considered 100% renewable because of supporting Renewable Energy Credits.
6. Consider implementing more energy efficient products or protocols. For example, switching to LED lightbulbs, implementing heat mats instead of heat bulbs, and increasing “night-time” hours at farms were all changes that had a positive production and carbon intensity outcome.

These are just a few things that Pipestone Management has learned and is working on to improve the carbon footprint of our sow farms.



2023 Goals:

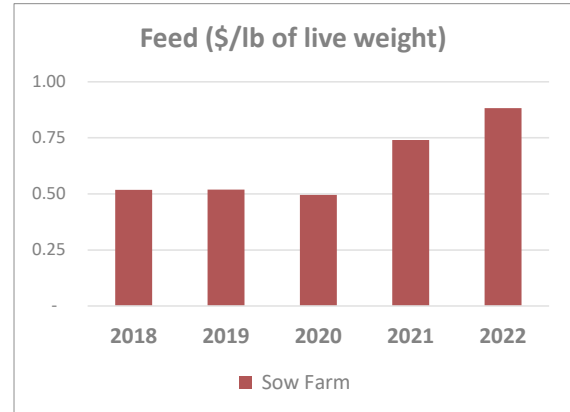
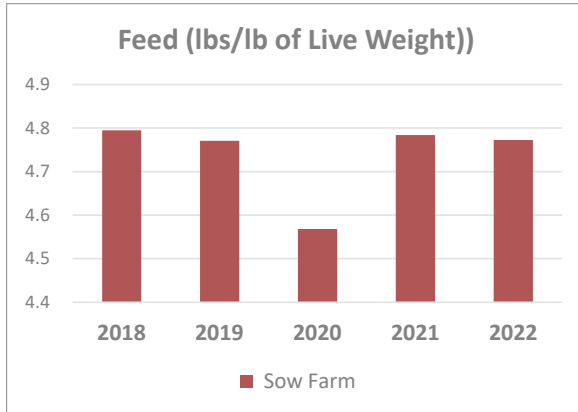
Develop the GreenStone Farmers business plan to create a profitable carbon solution for it's farmer-owners implementing regenerative Ag programs.

Feed



Sow Farm Feed Usage

PIPESTONE is focused on improving feed efficiency; not only because feed is the number one cost of hog production, but because using less feed reduces the resource intensity of the land needed to raise pigs. Feed accounts for 43% of a sow farms carbon footprint. Due to our fiduciary responsibility to shareholders and commitment to animal care, we are constantly seeking ways to do better. This includes: diet formulation, genetic selection, and facility design, all of which have played a role in increased feed efficiencies over the years.



Graphs represent per lb of weaned pig weight

Total lbs. of feed used	Year				
	2018	2019	2020	2021	2022
Sow Farms	583,389,285	682,466,252	712,745,071	734,100,973	840,964,083

Utilizing by-products from the food industry

We work with a company today that takes by-products from food manufacturers, diverting from food waste and recycling them into feed products. These products are still good to use but had to be discarded from human food due to package mislabeling or being the start up or end of a run. These products can range from granola, cereal, to whey protein powders and soy protein isolate. These are high in nutrient value and work well for the young pig diet. This year across the 5 million nursery pigs we feed, we have utilized 5,677 tons of by-product in the nursery diet, keeping that amount out of the landfill. This is one of the ways we are sustainable in sourcing feed products. We will continue to look for these high-quality ingredient streams that reduce landfill waste, and can be utilized by the pig!



2023 Goals:

- Optimize on-farm feeding protocols and diet formulation to manage feed use to pig requirements +/- 5% of total feed use as validated by an expert nutrition panel.

Alternative Feed Ingredient Hybrid Rye

Hybrid rye has been gaining traction as an alternative feed stuff in the upper Midwest. Compared to conventional rye, the hybrid varieties have shown to be better yielding, less susceptible to ergot (a grain fungus) and more drought tolerant. From the agronomic standpoint, hybrid rye can reduce the carbon footprint of the crop land due to lower water and pesticide use, and having lower drying requirements due to its harvest in mid-summer. As swine producers, it also allows for earlier spreading of manure compared to tillable land harvested in the fall.

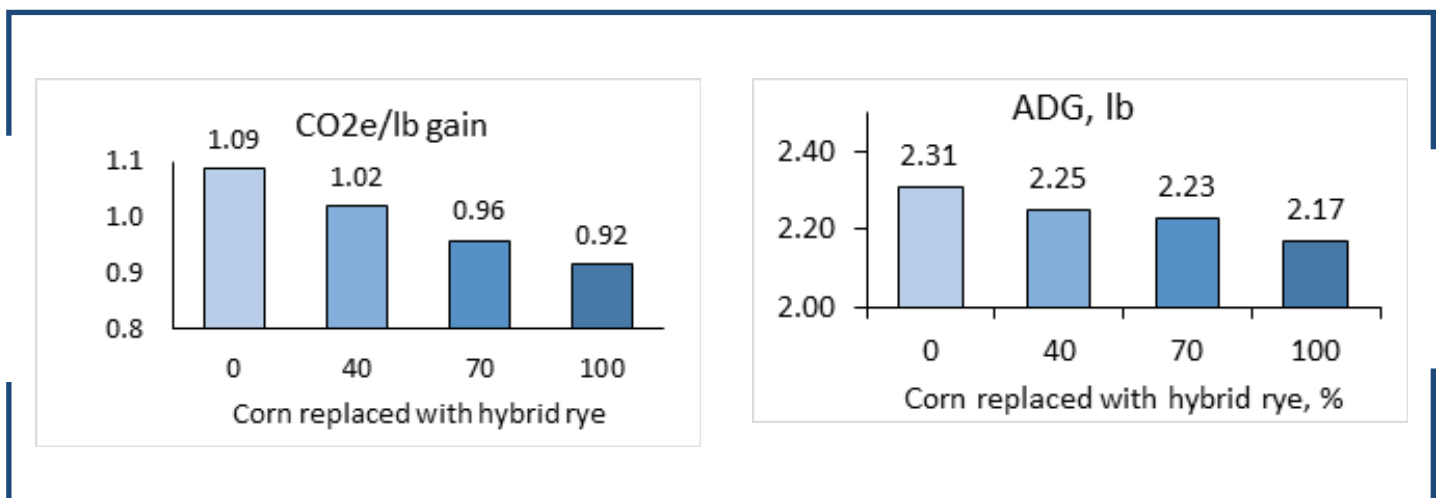


From a feeding value, hybrid rye is categorized as an energy ingredient similar to corn, but has a higher fiber component like wheat or barley. With increasing interest from producers to plant hybrid rye, determining if hybrid rye can partially or fully replace corn in the diet was needed.

We conducted an experiment where we replaced 0, 40, 70 or 100% corn with hybrid rye to determine the energy value relative to corn, and evaluate impacts on growth and carcass fat quality. Increased hybrid rye in the diet decreased the energy content of the diet, which lowered average daily gain and hot carcass weight. This indicates that if feeding hybrid rye, fat will need to be added to the diet to achieve similar caloric intake as a corn-soybean meal-based diet, or the inclusion level will need to be at a lower concentration if the producer wants to maintain similar growth performance. This data demonstrated that hybrid rye can be valued at 93% the energy of corn.

When evaluating a feed ingredient from a sustainability lens, we can calculate a carbon dioxide equivalent (CO₂e) value for each ingredient. As we look at the amount of CO₂e per diet, we can calculate the amount of CO₂e per pound of gain. In this trial, we show that even with the slower growth, each pig took less CO₂e per pound of gain, demonstrating the hybrid rye is a more carbon friendly feed ingredient.

As we look to the future and continue to improve the database of feed ingredient CO₂e factors, our goal is to help producers find the right combination of growth performance, carcass quality and sustainability that fits their operation.



Manure



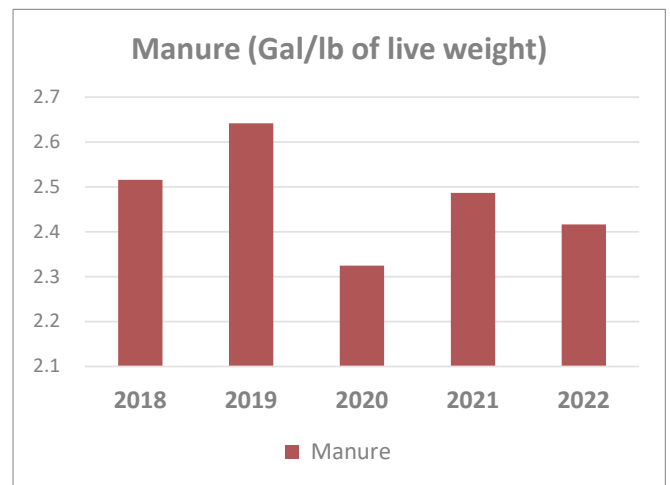
The organic fertilizer produced from pig manure is one of the most vital by-products our industry provides. Pig manure contains all 13 essential nutrients required by plants, including nitrogen (N), phosphorus (P) and potassium (K), as well as a large proportion of organic matter, which provides multiple benefits including improving soil texture and quality, and improving water uptake and water holding capacity.

Nitrous oxide and methane are the primary greenhouse gas emission produced in manure storage systems. Both lagoon and deep pit manure storages produce these GHGs, but the anaerobic decomposition process is hampered by higher nutrient concentrations in deep pit systems, which means there are lower methane and nitrous oxide emissions. This is why 86% of PIPESTONE managed farms operate with under barn manure storage.

A Comprehensive Nutrient Management Plan (CNMP) is a component conservation plan that includes a combination of structural practices, management activities, and/or land management practices for livestock operation. Our managed sow farms are required to maintain up to date CNMPs that are reviewed annually to ensure optimal use of our organic fertilizer by-product.

When applying manure, we use the direct injection/ incorporation method. Injection is when the manure is placed below the surface of the soil. It was developed to reduce odors and issues with ammonia gas losses. This is the most sustainable application method for many reasons. Some of these include but are not limited to:

- Manure is applied more efficiently than other methods.
- Injection places and protects nutrients in the soil minimizing runoff and volatilization losses so crops can readily utilize them.
- It helps to reduce odor.



Economically, organic fertilizer application reduces the need for purchasing manufactured fertilizers that have additional costs associated with them.

Finally, the pumping schedule is an important part of reducing GHG emissions from our farms. Most managed sow barns are pumped at least twice per year, in the spring and fall, to minimize the accumulation and production of GHGs and maximize the nutrient value of the organic fertilizer.

Total gallons of manure pumped					
	Acres Applied	Gallons Pumped	N	P	K
2018	26,861	247,851,740	-	-	-
2019	32,340	329,899,397	-	-	-
2020	36,679	364,133,080	22	10	15
2021	36,583	372,709,856	23	10	15
2022	39,731	390,006,570	23	9	14



2023 Goals:

- Fully compliant nutrient management program with state and third-party verification at all sites.
- Complete direct injection manure application for greater than 95% of gallons.
- Have manure usage under four gallons/sow/day and feeding protocols to reduce waste to less than 2% of total use.

Energy



Energy efficiency is not only a top priority to reduce the economic burden of production, but also to reduce the negative environmental impact that comes with energy production. We are seeking energy solutions to reduce the energy consumption of each barn and source renewable energy.

Electric Heat Mat Use Progress

Research performed by PIPESTONE has shown that heat mat use results in a 57% energy reduction when compared to traditional heat lamp systems. In addition, 100% of heat mats are composed of recyclable materials. The payback for a system of the heat mat and controller is routinely within 14 months on systems using 21-day farrowing cycles. The electrical savings per year with four foot mats vs 125 watt bulbs averages \$56 per year per stall.

Another advantage of pig heating mats is in the pre-wean mortality reduction. Several tests have been conducted and validate a 0.5 pig per litter increase with mats due to diminished crush loss. With weaned pigs annually averaging \$34, saving 0.5 pig on 14 litters per year equals seven pigs. There will be extra feed cost to produce more animals, but a greater reduction in crush losses means more marketable animals and more producer-profits in the end.

Pipestone Management currently uses heat mats, or has plans to install heat mats, in at least 14 sow farms in 2023. All new sow barns built by Pipestone Management moving forward will have heat mats installed in every farrowing room.

Renewable Energy Research

PIPESTONE continues to explore on-site renewable energy production as a viable and long term solution to creating a sustainable system. Research into single site wind turbines and solar panels has provided several companies with innovative solutions from which to choose. Early feasibility analysis has shown that with the current state of advancing technologies, the return on the investment is sitting in a smaller time frame than ever before.

RECS

Renewable energy certificates (RECs) are non-tangible commodities that represent the property rights to the environmental and social benefits of renewable energy. One REC is produced for every megawatt hour (MWh) of electricity generated from renewable sources such as solar and wind. REC ownership is required to make renewable energy claims.

In 2022, PIPESTONE managed barns purchased 37,625 RECs from our various energy providers. 21 operations purchased enough RECs to boast that 36% of our operations are run on fully renewable resources! The funding from these RECs can now be used to develop innovative technological solutions for renewable energy development.

Energy Usage

FARMS

	2018	2019	2020	2021	2022
kWh of Electricity	86,978,222	100,529,358	95,117,337	98,334,226	100,369,259
Gallons of Propane	2,200,002	2,665,012	2,071,082	2,154,490	3,253,807
Gallons of Natural Gas	47,622	140,591	155,786	145,086	154,151
Total Energy in kWh	142,315,430	168,150,042	147,997,349	153,223,676	182,805,826

OFFICES

kWh of Electricity	N/A	N/A	N/A	N/A	1,041,404
Gallons of Propane	N/A	N/A	N/A	N/A	0
Gallons of Natural Gas	N/A	N/A	N/A	N/A	60,348
Total Energy in kWh	N/A	N/A	N/A	N/A	1,468,668

TOTAL

kWh of Electricity	86,978,222	100,529,358	95,117,337	98,334,226	101,410,663
Gallons of Propane	2,200,002	2,665,012	2,071,082	2,154,490	3,253,807
Gallons of Natural Gas	47,622	140,591	155,786	145,086	214,499
Total Energy in kWh	142,315,430	168,150,042	147,997,349	153,223,676	184,274,494

2023 Goals:

- Continue to document total energy use and set usage goals by end of 2022.
- Validate new technology and equipment to lower total energy use.
- Have our sow farms on 50% renewable energy, reducing energy use by 5%.



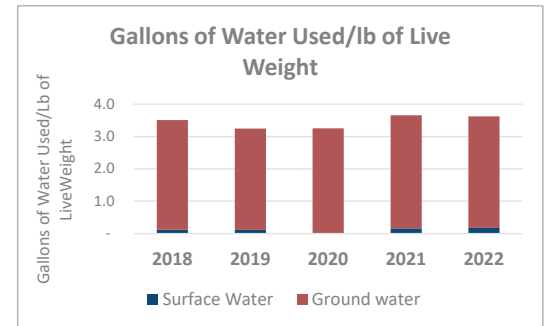
Water



Water is one of the most vital resources to any agricultural industry. At PIPESTONE, we use water for animal consumption and barn sanitation, as well as in the wet/dry feeders that we have employed. Water is sourced from both municipal water systems as well as individual wells.

Water scarcity at sow barns has been a concern especially considering its importance in every stage of production. However, using the World Resource Institute's Water Risk Atlas it was found that no PIPESTONE managed operations are in high or extremely high water risk areas.

Water use monitoring has proven invaluable in determining areas where water is being over or under used. This allows us to perform investigations to find if there is some efficiency action that can be taken to get the operation running at its highest potential. In 2022, 9 water meters were installed in Pipestone Managed Barns, making up a total of 88 water meters or 85% of operations that currently have meters.



Livestock Water Recycling

Livestock Water Recycling (LWR) is an innovative solution that Pipestone Management is researching to assess feasibility in our operations. LWR is a treatment system that continually separates liquid nutrient water (which makes up more than 90% of swine manure) from the solid particulate. This has several advantages which include but are not limited to:

- Improve profit margins
- Eliminate water shortages
- Better control nutrient applications
- Reduce field compaction
- Reduce odor
- Reduce truck traffic

FARMS

	2018	2019	2020	2021	2022
Surface Water	12,517,832	12,894,246	14,895,597	24,035,266	26,905,305
Ground Water	385,269,632	429,201,560	482,518,869	539,402,087	591,884,895
Total Gallons	397,787,464	442,095,806	497,414,466	563,437,353	618,790,200

OFFICES

Ground Water	-	-	-	-	4,904,562
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TOTAL

Surface Water	12,517,832	12,894,246	14,895,597	24,035,266	26,905,305
Ground Water	385,269,632	429,201,560	482,518,869	539,402,087	596,789,457
Total Gallons	397,787,464	442,095,806	497,414,466	563,437,353	623,694,762



2023 Goals:

- Continue to document total water use.
- Validate new technology, equipment, and protocols to reduce total water usage.



Waste

Waste reduction is a pillar of any successful business operation. Beyond increasing efficiencies with regard to waste, what is done with the waste also has a heavy impact on the sustainability of an institution.

Recycling

Recycling services have been implemented at 36 sow farms throughout PIPESTONE Managed sow farms. In addition, the sustainability department has expanded its in-house recycling to 15 barns around PIPESTONE, MN and Huron, SD. This places our total managed sow farm recycling at 54%! All of our office spaces have also begun recycling programs as well.

Compost

Composting is a natural biological process whereby microorganisms breakdown/decompose organic materials by aerobic (requires oxygen) decomposition. This process can be used to break down animal carcasses by controlling the environmental conditions required.

Carcass composting uses organic by-products, such as dead pigs, straw or sawdust, and converts them into odorless, inoffensive, generally pathogen-free product that can be used as a soil amendment or organic fertilizer or alternatively may be incinerated.

Waste

Local waste service companies are used throughout the system for waste removal. Waste totals are assumed based on the volume of the waste containers and the frequency of service. With the implementation 14 more farms participating in recycling programs, waste delivered to the landfill dropped 104,400 lbs over the course of 2022.

Total Waste Farms & Offices	2018	2019	2020	2021	2022
Pounds Composted	15,840,953	18,744,360	24,710,062	25,410,216	26,528,389
Cubic Feet Solid Waste	N/A	5,301	4,699	4,994	3,600
Cubic Feet Recycling	N/A	N/A	257	603	1,672



- 2023 Goals:**
- Implement recycling program on 50% of our sow farms.
 - Implement waste and recycling program at the office locations.

Warehouse



Pipestone Veterinary Services continually strives to do less with more, and lower our overall carbon footprint for the products and services we impact.

Electricity savings

- Goal** Reduce energy usage by 20% by 2025.
- Progress** Continuous lights were replaced with LED censored lighting in the overstock warehouse. New energy efficient A/C units replaced out-dated units.



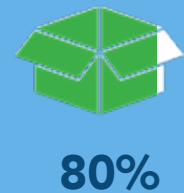
Paperless operations

- Goal** Reduce paper usage by 30% by 2025.
- Progress** Implemented order processing technology, reducing paper usage by 25%.



Bio-degradable packaging

- Goal** Utilize 100% bio-degradable packaging materials by 2023.
- Progress** Upgraded to bio-degradable tape in 2022. In 2023, shrink wrap will be switched to an eco-friendly option.



Waste Reduction

- Goal** Reduce waste by 50% by 2022.
- Progress** Re-purposed packaging materials and implemented vigorous recycling programs, eliminating 70% waste.



GRI Content Index

GRI Standard	Description	Page Location
GRI 102: General Disclosure Organization Profile		
102-1	Name of the organization	Who is PIPESTONE?
102-2	Activities, brands, products, and services	Who is PIPESTONE?
102-3	Location of headquarters	Who is PIPESTONE?
102-4	Location of operations	Who is PIPESTONE?
102-5	Ownership and legal form	Who is PIPESTONE?
102-6	Markets served	Who is PIPESTONE?
102-8	Information on employees and other workers	People
102-9	Supply chain	Animal Care
102-10	Supply chain	Animal Care
102-11	Supply chain	Animal Care
GRI: 302: Energy		
302-1	Energy consumption within the organization	Energy
302-3	Energy intensity	Energy
GRI 303: Water & Effluents		
303-3	Water withdrawal	Water
306-2	Waste by type and disposal method	Water
306-3	Significant spills	Water
GRI: 307: Environmental Compliance		
307-1	Non-compliance with environmental laws and regulations	Manure
GRI 400: Social GRI 401: Employment		
401-1	New employee hires and employee turnover	Training
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Benefits
403-1	Occupational health and safety management	Safety
403-4	Worker participation, consultation, and communication on occupational health and safety	Safety
403-5	Worker training on occupational health and safety	Safety
403-8	Workers covered by an occupational health and safety management system	Safety
Governance		
102-18	Governance structure	Who is PIPESTONE?
102-47	List of material topics	Boundary and Data Summary
103-1	Explanation of the material topic and its Boundary	Contained in each subsection of report
103-2	The management approach and its components	Contained in each subsection of report
103-3	Evaluation of the management approach	Contained in each subsection of report

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