

# Commit and Improve: Pig Farmers' Approach to Sustainability



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## For People, Pigs and the Planet

**A**merica's pig farmers care deeply about the environment. That's because we rely on the soil, water and air for our livelihoods. But we also raise our families on our land and feed them the food we produce.

For more than five decades, we've been committed to sustainability and continuous improvement, and that commitment is stronger than ever. As an industry, we are guided by six principles embodied in our We Care commitment: **Food Safety, Animal Well-Being, Environment, Public Health, Our People and Community.**

Through our commitment to these principles, we are evolving and improving practices across our supply chain to deliver proven progress toward the safest, highest-quality pork supply in the world. We take pride in the progress we have made so far. This report demonstrates pig farmers' successes in responsible pig farming.

# Sharing the Farm Story

**F**armers like Thomas Titus of Elkhart, Illinois, know the importance of sustainable farming. Titus comes from a six-generation farming family and his wife, Breann, is a third-generation farmer. He now manages a 750-sow farrow-to-finish farm on 1,700 acres that is part of the Tri Pork Inc. company owned by his wife's parents, Dave and Lisa Conrady. He hopes his focus on the environment, the community and the health of their pigs will allow his two young daughters, Reagan and Lakin, to become the farm's next generation.

"We want to continue that legacy, so we must find ways to sustain the farm into the next generation," Titus said. "We're always looking for ways we can do our jobs better, save water and reduce our carbon footprint."

In recent years, the farm installed reserve power, revamped the lighting systems with more energy efficient bulbs, introduced new manure handling equipment to reduce energy use and began milling corn in a new way to reduce feed requirements.

Achievements such as reducing the farm's carbon footprint are part of the story that Titus believes must be shared with the American public. Few Americans today (1.4%)<sup>1</sup> have ties to the farm, yet they are increasingly curious



about it, Titus said. They want to know where their food comes from and how the animals are cared for and treated.

Over the last six decades, advancements in farming methods, technology and economics have significantly transformed farming. As providers in the food supply chain, farmers understand the need to assure the public that we uphold high standards and continuously strive to be better. This is increasingly important as we seek to promote a better understanding between pig farmers and those less familiar with agriculture.

That's why Titus looks for opportunities with local, state and national groups to talk about and show what farmers do. For example, the farm hosted a "farm-to-fork" harvest dinner for 125 doctors, dietitians, food policy makers and



elected officials, to show them the farm's equipment, crops, animals and how they care for them.

"We need to rebuild our trust with decision-makers, showing them how we care for our land and animals," he said.

Titus and his family also work through non-profit programs to show their farm to underprivileged youth.

"The farm is a teaching tool to show young people how they can be

productive citizens with a sense of their own value and self-worth," Titus said. "We want them to understand the importance of animal care and that what we do on the farm holds a greater purpose than ourselves."

Caring for the animals is job one for Titus. He ensures they're comfortable, well-nourished and as healthy as possible, even if that sometimes requires medicines like antibiotics. It takes healthy pigs to provide safe, quality pork, he said.



## The Future Depends on Sustainability

Ultimately, Titus said, it's all about his kids. When his daughters get off the school bus, they run out to help on the farm, and their excitement is what helps him stay focused on finding new ways to protect and preserve the land and care for the animals.

"My wife and I say that the most important thing we raise on the farm is our children," Titus said. "We want to provide our kids with the same opportunities we had. Focusing on sustainability helps us do that."

Pig farmers like Titus are focused on building trust and increasing the value of U.S. pork by doing what's right *for people, pigs and the planet*. We know sustainability and continuous improvement go beyond our barn doors, and we will continue to create advancements that help us care for our farms and our communities.

## Our Values

### Consumer-focused, producer-led

We are driven to meet consumer expectations, guided by producers.

### Trustworthy

We do what we say we'll do.

### Integrity

We strive to always do what's right to meet our ethical principles.

### Passionate

We care deeply about what we do, and we keep working to do it better.

### Agile

We are focused, flexible and we lead through change.

# Responsible Actions Through Decades of Continuous Improvement

Farmers understand that trust must be earned. As we seek new and better ways to produce pork, we are focused on continuously improving how we serve our customers, communities and the animals in our care.



- **1982** The ideal market hog “Symbol” developed by National Pork Producers Council
- **1989** Pork Quality Assurance® (PQA®) Program launched
- **1994** Animal Well-Being Research and Education initiated
- **1995** Pork Quality Audit launched  
Environmental Assurance Program launched  
Environmental Stewards Program launched
- **1996** PQA incorporates Hazard Analysis Critical Control Point (HAACP) regulations
- **2001** Transport Quality Assurance® Program launched
- **2002** Farm biosecurity and security guides developed through industry research  
Responsible Antibiotic Use launched
- **2003** Swine Welfare Assurance<sup>SM</sup> Program launched
- **2004** Youth Pork Quality Assurance® Program launched
- **2005** Take Care™: Use Antibiotics Responsibly Program launched  
Air Emissions Agreement created  
Swine ID Plan developed
- **2006** Air Management Practices Assessment Tool launched  
Pork Production Safety System training materials developed
- **2007** National Pork Board merges education programs into expanded Pork Quality Assurance® Plus program
- **2008** We Care® Commitment formalized and made public
- **2011** Carbon Footprint Calculator offered to pig farmers
- **2012** First U.S. Pork Industry Responsibility Progress Report published
- **2014** Common Swine Industry Audit launched
- **2018** Sustainability Research Alliance formed by National Pork Board, United Soybean Board, National Corn Growers Association and Environmental Defense Fund
- **2019** 55-Year Retrospective Life Cycle Assessment of U.S. Pork Production published  
PQA Plus Version 4 launched



## Building Trust Through Principles, Practices and Proof

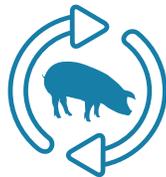
The well-being of people, pigs and the planet is important to farmers and has long been part of our culture – that’s why America’s pig farmers are committed to sustainability and continuous improvement. We are guided by six ethical principles: *Food Safety, Animal Well-Being, Environment, Public Health, Our People and Community.*

Our commitment as pig farmers is essential to We Care, a comprehensive effort to promote responsible practices in pig farming, and continuously evaluate and improve our methods. Created in 2008 by America’s pig farmers, We Care is jointly operated by the National Pork Board (NPB), the National Pork Producers Council (NPPC) and state pork organizations representing farmers.

### Principles x Practices x Proof = Public Trust



Food Safety



Animal Well-Being



Environment



Public Health



Our People



Community



# Food Safety



**E**nsuring the safety of our pork is a complex undertaking that involves everyone from the caretakers at the farm, to swine veterinarians, to those who transport the pigs to market. Today's farming operations use an array of technologies and techniques, such as raising pigs indoors and monitoring biosecurity, to minimize food safety threats.

## As farmers, we are committed to producing safe food.

- We use management practices that are consistent with food safety.
- We manage the health of our pig herds.
- We make use of technologies that minimize food safety threats.

## Food Safety is a Daily Focus at Dykhuis Farms

**F**arming was much different more than 30 years ago when Joe Dykhuis grew up on a pig farm in Hamilton, Michigan. Back then, the farm was relatively small with about 80 sows. Now Dykhuis Farms has 19,000 sows. But it isn't just the size of the farm that changed.

"When I was a kid, I would go out to the pig barn to see what my Uncle Rick was doing," he said. "I wore boots and coveralls, but that was really to keep my shoes and clothes clean."

Dykhuis, who now is a co-owner and president of Dykhuis Farms, still lives in his childhood home. But things are different than we he grew up there, primarily due to strict biosecurity measures the farm has implemented.

To raise animals that are healthy, well and free of disease requires biosecurity, as well as quality veterinary care and employee training, he said. And that means even his own kids cannot enter the barns without taking proper precautions, such as taking a shower or changing clothes.

"Farmers take a tremendous amount of pride in producing food that is so safe and nutritious that you take it for granted," he said.



*Providing safe, nutritious food is our most important responsibility.*



## Our Practices

### Pork Quality Assurance® Plus (PQA Plus®)

PQA Plus, a comprehensive food safety and animal well-being education, training and certification program, is one of our most successful efforts and a model program for others in animal agriculture.

Through PQA Plus, farmers leverage best practices in food safety, animal care, public health, worker safety and the environment. Then, they participate in an on-farm assessment to identify strengths and enhancement areas.

**71,000**

farmers and farm personnel voluntarily participate in PQA Plus<sup>2</sup>



**85%**

of all U.S.-raised pork comes from PQA Plus certified farms<sup>3</sup>



PQA Plus training and assessment includes pork safety topics, such as:

- Herd health management
- Veterinarian relationships
- Foreign animal disease awareness, reporting and prevention
- Proper medication administration and inventory
- Medication and treatment records
- Signage and other methods to restrict access
- Wildlife, rodent and other pest control procedures

### Transport Quality Assurance® (TQA®)

Anyone who handles, transports or sets protocols for handling pigs can influence animal well-being and pork quality.<sup>4</sup> TQA helps these individuals understand how to handle, move and transport pigs, how transportation impacts pig well-being and pork quality.

**31,000**

industry animal handlers and transporters have TQA certification<sup>5</sup>



### Biosecurity

Biosecurity plays a critical part in keeping pigs healthy and growing by preventing the entry of a disease into a farm or spread within a herd.<sup>6</sup> Practices include isolation and testing of incoming animals, disinfection of incoming supplies, barn and transportation sanitation, rodent control, worker and visitor entry policies and other general farm security measures. These efforts also can help control and prevent disease from spreading to other farms.

### Disease Prevention and Mitigation

Farmers work with veterinarians to reduce susceptibility to and prevent disease among animals through herd health management plans, feed plans, and safe and responsible use of vaccinations and antibiotics. PQA Plus requires pig farms to keep records of disease prevention and mitigation practices, including medications and treatments, medication feed mixing, vaccines, visitor logs and needle and drug storage.





# Animal Well-Being



**G**ood animal care is required to raise healthy animals that produce quality food for consumers. Stress, injury and poor health are not only bad for the animal, but they also are bad for the product. Pig farmers have long understood that taking proper care of our animals is not just good business practice, it is an ethical responsibility.

## Pig farmers are committed to protecting and promoting animal well-being.

- We provide feed, water and an environment that promotes well-being.
- We provide proper care, handling and transportation at each stage of life.
- To protect pig health, we provide appropriate treatment and veterinary care.
- We use approved practices to euthanize sick or injured pigs that fail to respond to care and treatment in a timely manner.

## Taking Care of Pigs is Top Priority

**F**or Brandi Guerrero and Orlando Lopez, managers at pig farms owned by Smithfield Foods, the well-being of the pigs is their foremost concern. As farm leaders, they ensure the animals' needs are met and their employees follow practices that support animal care and safety.

"We are here to take the best care of our animals and do it professionally and ethically," said Lopez, who went to veterinary school in Mexico before joining Smithfield 12 years ago.

Lopez says every morning starts with 7 a.m. "rounds," during which he and his 17 employees walk through the barn to check on the health and welfare of his 5,000 sows at Smithfield Foods' farm in Milford, Utah. Over two to three hours, they check that all pigs have water and food, that they're eating, and that conditions are comfortable. Extra care is given to pigs that seem unwell.

When it comes to animal well-being, it's important to take care of the little things, Guerrero said. Guerrero joined Smithfield 17 years ago and leads a team of 15 employees at a 4,700-sow farm, also in Milford, Utah. For Guerrero, there is no greater job

satisfaction than walking through the barns and seeing healthy animals.

"When the animals look great and are healthy, and when the piglets are healthy, it gives me a good feeling," she said. "It's very gratifying to see that these animals are thriving because of what we have done."



*We are here to take the best care of our animals and do it professionally and ethically.*



# Our Practices



Animal Well-Being

## Veterinary Care

Veterinarians are critical to keeping the animals healthy, and farmers should have a valid veterinary-client-patient relationship. Besides diagnosing and treating sick animals and maintaining records, veterinarians help farmers:

- Prevent the introduction of viruses and bacteria that threaten the herd.
- Enhance herd disease immunity with appropriately timed vaccinations.
- Develop strategies to minimize disease risk through barn design, pig movement, vaccination, herd health monitoring, disease surveillance and appropriate diagnostics.

## Animal Nutrition

Healthy pigs require healthy diets. Pig farmers work with nutritionists to develop animal diets that:



Are nutritionally balanced and age-appropriate.



Are sustainable, by using strategies that target efficient production and maximize animal health.



Follow proper feed processing and biosecurity protocols.

## Proper Caregiving

Pig farmers are trained to take care of the animals and provide for their well-being, including:

- Documenting their observations of each animal at least once per day.
- Properly handling the pigs to reduce stress. TQA-certified handlers pledge their commitment to promote and protect pig well-being when they are moved for transport.<sup>9</sup>
- Identifying, preventing and reporting abuse and neglect in accordance with the principles taught in PQA Plus and TQA.

## Quality Assurance Programs

Pork Quality Assurance<sup>®</sup> Plus and Transport Quality Assurance<sup>®</sup> have sections dedicated to animal welfare, addressing topics such as abuse or neglect of animals, timely and humane euthanasia, appropriate handling, adequate space and use of electric prods. In addition, the Common Swine Industry Audit assures our customers that farmers and pork processors take care to improve animal well-being and food safety. It is certified by the Professional Animal Auditor Certification Organization (PAACO) and available to the public.



Finally, the National Pork Board provides a variety of resources on pig care practices that are recommended for safe, humane and efficient pork production, including Safe Pig Handling training, the Employee Safety Toolkit, Humane Animal Handling training, and On-Farm Euthanasia of Swine handbook.<sup>7</sup>

## Today's Housing

Animal housing allows farmers to control access and prevent introduction and spread of disease to animals.<sup>8</sup> Housing should:

- Keep the animals safe from harm from their surroundings, such as building structures, equipment or other pigs.
- Keep out predators, parasites and vermin, which is vital to prevention of pig injury and disease.
- Provide a comfortable environment. For indoor housing, this means properly maintained air circulation and temperature-control systems. For outdoor housing, this could include insulated shelter and protection from temperature extremes.
- Protect feed and water from contamination.
- Prevent visitors from entering without following farm-specific biosecurity protocols.
- Provide for the needs of the animals and allow farmers to monitor them closely.



# Environment



**F**armers' livelihoods are directly tied to air, water and land, so we understand our responsibility to protect our planet's natural resources. The world's population is projected to grow to 9-10 billion people by 2050, which would require global food production to increase by 70-80%.<sup>10</sup> As food needs rise, pig farmers are working to reduce farming's impact on the environment, while also producing more food.

## Pig farmers safeguard natural resources in all of our practices.

- We manage manure as a valuable resource and use it in a manner that protects air and water quality, while enhancing soil health.
- We use buffer strips and tree windbreaks to improve air, soil and water quality and preserve wildlife habitats. Today's barns also decrease environmental impacts while improving pig performance.
- We protect the quality of our natural resources.

## Protecting and Improving the Environment

**F**armers were among the first, and still some of the best, conservationists, according to James Lamb, a pig farmer who grew up on a 75-acre farm in Sampson County, North Carolina, farmed by his father and grandfather before him.

"Farmers are in it for the long haul," said Lamb, who now raises 3,000 pigs on his family farm. "We depend on the air, the water and the land to keep our animals healthy and our food safe."

That's why Lamb is especially committed to protecting the environment as both a farmer and as an environmental and manure-management specialist at Prestage Farms. In his role, he helps partner growers in the Carolinas comply with environmental regulations and recycle pig manure, using it as fertilizer on pastures and cropland.

Lamb is also involved in research to find ways for pig farms to further reduce their carbon footprint and recycle nutrients by finding other uses of manure, such as for energy. The goal is to protect the environment both now and for the long run.

"The environment around our farms is where our children breathe the air, drink the water and play on the land," Lamb said. "It's where we hunt and fish. It's critically important to us because we're as close to the environment as anyone."



*We depend on the air, the water and the land to keep our animals healthy and our food safe.*

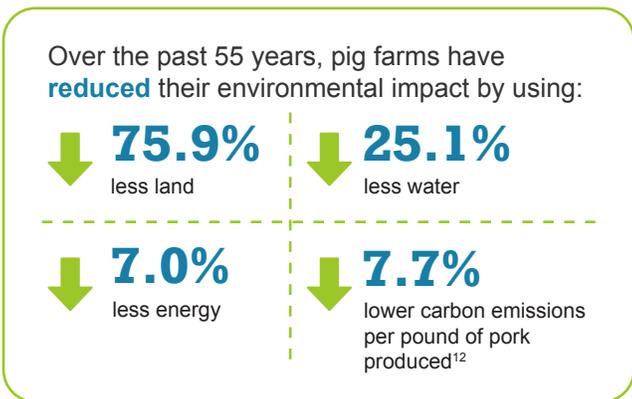


# Our Practices

## Our Environmental Footprint

Today's pig farmers are leaders in understanding their carbon, water and land footprints, using a comprehensive life-cycle assessment to analyze the entire supply chain. The National Pork Board developed the Pig Production Environmental Footprint Calculator to give farmers a tool to estimate the amount of land and water used and greenhouse gases released from their production site.<sup>11</sup>

In addition, pig farmers increasingly use wind turbines, methane digesters and solar panels to power their farms. Some farmers are now carbon neutral, and even carbon negative, which means they are able to provide energy back to the power grid.



## Sustainability Research Alliance

Research is integral to understanding the impact of pig farming and improving and implementing sustainability practices. The National Pork Board recently joined the United Soybean Board, National Corn Growers Association and Environmental Defense Fund to form the Sustainability Research Alliance, a program that shares research, coordinates new research and communicates results with each organization's members.

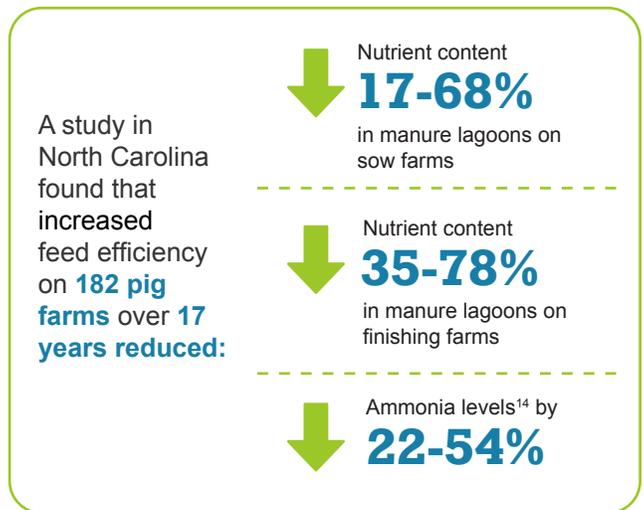
## Water Quality

Today's barns and lagoons are designed to keep manure from ending up anywhere it's not intended. New technologies help farmers analyze nitrogen, potassium and phosphorus levels in manure and in their soil, with an ability to apply the right amounts of manure to their field in the right places. This helps avoid runoff or buildup, as well as the need to apply additional fertilizer.

## Soil Health and Manure Management

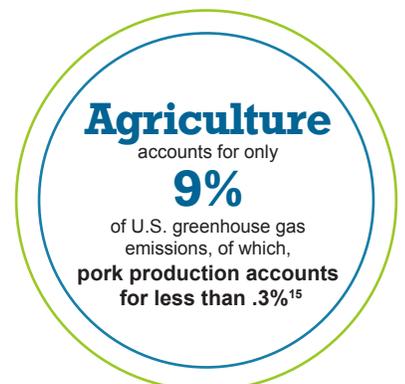
Manure is an effective, organic nutrient source for sustainable crop production, which can be used to grow crops that feed the pigs. Pig farmers monitor manure output on farms to preserve air and water quality, keeping farms safe and pigs healthy. This valuable organic fertilizer:

- Increases the soil's productivity with less runoff.
- Offsets the use of commercial fertilizers made from petroleum products.
- Reduces energy use without increasing nitrous oxide emissions.<sup>13</sup>
- Helps safeguard air and water quality.



## Odor Control and Emissions

Farmers manage air quality and control odors from production facilities to minimize the impact on neighbors and the community. Overall, greenhouse gas emissions from U.S. animal agriculture have remained relatively constant, while protein production has dramatically increased due to improved feed efficiencies, better manure management strategies and efficient use of cropland.





# Public Health



**T**he U.S. food supply chain has earned a global reputation for the safety of its products, and pig farmers have contributed to that reputation. Pig farmers use rigorously tested technologies, and apply checks and balances every step of the way to ensure that pork is high quality and safe. In addition, farmers work on ways to ensure their meat is not only safe, but also better for public health.

## Pig farmers strive to protect public health.

- We make use of practices consistent with producing safe and nutritious food.
- We carefully manage the use of animal health products.
- We manage manure and air quality.

## Veterinarian Carissa Odland Studies Antibiotic Stewardship

**A**nimals, like humans, may need to take antibiotics when they're sick. Antibiotic use in livestock, and how that use may impact humans, is a complex and important issue. That's why Carissa Odland, DVM, a veterinarian with Pipestone Veterinary Services in Pipestone, Minnesota, has made it her mission to explore this relationship and help farmers care for their herd while using antibiotics responsibly.

"Protecting the health of the public starts with protecting the health of the pig," Dr. Odland said. That means preventing disease in pigs through vaccinations, the right environment, proper nutrition and quickly addressing any signs of disease, and then using antibiotics responsibly to treat illnesses.

"One of the fundamental questions veterinarians have is whether using antibiotics in the pig changes the resistance we find in the pig, population and environment," she said.

Not all antibiotics are the same and not all antibiotics used in livestock are medically important for people. While there is no proven link between antibiotic resistant illness in people and antibiotic use in livestock, farmers are committed to understanding antibiotic resistance, increasing transparency and proactively monitoring the emergence of antibiotic resistance in both humans and animals.

For example, Dr. Odland is part of a research project through the University of Minnesota and the National Pork Board to study whether antibiotic resistance patterns change when pigs are treated with an antibiotic. The project tracks antibiotic resistance over the lifetime of those pigs. So far, her research has shown that piglets carried antibiotic resistant bacteria shortly after weaning despite not receiving antibiotics during lactation and, during the wean-to-finish period, there was minimal significant impact on antimicrobial resistance of the bacteria tested, regardless of antibiotic treatments received.



"While the best practice is to reduce usage of antibiotics, we're not aiming for zero antibiotic use," Dr. Odland said. "We want to encourage responsible and sustainable antibiotic use."

*We want to encourage responsible and sustainable antibiotic use.*





## Maintaining Veterinarian-Client-Patient Relationships

When it comes to public health, veterinarians are the first line of defense. They help ensure the health of pigs entering the food chain, and guard against disease spread among pigs and between pigs and people. Veterinarians help prevent the introduction of diseases that can affect the herd, and help farmers maximize herd health via vaccination and responsible antibiotic use.

## Responsible Antibiotic Use

Animals, just like humans, should be cared for and treated when they are sick. In the case of pigs, that may mean medications like antibiotics are necessary, just as they often are in humans. The pork industry has delivered on its three-point antibiotic stewardship pledge to promote research, pig farmer education, and consumer and influencer outreach.

Pork Quality Assurance® Plus training and assessment addresses safe and appropriate use of antibiotics.<sup>16</sup> The occurrence of antibiotic residue exceeding regulatory maximums in pork is extremely rare today because the vast majority of pig farmers are certified through PQA Plus and receive close guidance from swine veterinarians. The industry has also spent more than \$3.6 million over the past two decades to better understand how antibiotic use drives resistance, with the goal of identifying new ways to protect the efficacy of these drugs.

These research and stewardship-related efforts are already making an impact. According to the U.S. Food and Drug Administration, domestic sales of all medically important antimicrobials intended for use in food-producing animals decreased by **33%** between the years 2016 and 2017.<sup>17</sup> Pig farmers are dedicated to identifying new ways to decrease the overall need for antibiotics.

## Biosecurity

A biosecurity plan helps keep pigs healthy and reduces the risk of disease spread, which is critical to protecting public health. These plans carefully manage access of anything capable of carrying disease to farms, including people, pigs, birds, wild animals, rodents, equipment, feed and water.<sup>18</sup>

## Lean Pork

Consumers want nutritious proteins. The pork industry has responded by adopting new feeding and management practices, which have made several cuts of pork leaner than they were 20 years ago.<sup>19</sup> The Pork Checkoff also worked with the American Heart Association® to certify boneless pork sirloin roast and pork tenderloin with the Heart-Check Food certification program.<sup>20</sup> The Heart-Check program certifies that these cuts meet specific criteria for total fat, saturated fat, trans fat, cholesterol and sodium, and that they contribute a beneficial nutrient.<sup>21</sup>

## Ensuring a Healthy Planet

Pig farmers employ tools to better manage the use of nutrients and manure on our farms, allowing us to use fewer natural resources and make our farms more sustainable. A comprehensive life-cycle assessment analyzing the entire supply chain shows overall trend lines continue in a positive direction, with 75.9% less land used, 25.1% less water used, 7.0% less energy used and a 7.7% reduction in carbon footprint per pound of pork produced over the past 55 years.<sup>22</sup>

Over the past 55 years, pig farms have **reduced** their environmental impact by using:

**75.9%**  
↓  
less land

**25.1%**  
↓  
less water

**7.0%**  
↓  
less energy

**7.7%**  
↓  
lower carbon emissions  
per pound of pork  
produced<sup>12</sup>



# Our People



**S**afety on the farm is no accident. U.S. pig farmers bring the latest knowledge and practices to the farm through reputable, national training and certification programs, such as Safe Pig Handling, Pork Quality Assurance® Plus and Transport Quality Assurance® education and certification. Effective employee education and training is essential to creating a safe, ethical workplace and earning the trust of employees, customers and the public.<sup>23</sup>

**As pig farmers, we are committed to providing a work environment for our people that is safe and consistent with our ethical principles.**

- We promote the health and safety of our people.
- We educate and train our people on our ethical principles.
- We provide a work environment where employees are treated fairly and with respect.

## Pig Farms Thrive on Open Communications and Mutual Respect

**R**aul Romero, a manager for Iowa Select Farms, loves working on pig farms and is often seen singing and dancing as he works with the pigs. But life on a pig farm can be stressful, too. That's why he says farms need open communication and mutual respect among the workers.

"We know when it's time to have fun and when it's time to work," said Romero, who is a professional swine farm manager at a farm with about 2,500 pigs near Osceola, a town in south-central Iowa. "Communication is key. We make sure to talk about issues that may come up."

Romero grew up in Guadalajara, Mexico, and he became interested in animal agriculture while attending the University of Guadalajara's College of Agriculture and Biological Science. While there, he attended a class in which the teacher brought in some piglets.

"I loved how curious and happy they were," Romero said of the little pigs. After that he was hooked on pig farming. In 2017 he was hired by Iowa Select Farms, and in 2019, he was promoted to a leadership role. Although Romero is now a manager, he said the

employees all work together as a team. Open communication and teamwork, he said, are critical to ensuring safety for both people and pigs on the farm.

"My team is good, they're experienced, they know what to do," Romero said of his fellow employees. "I don't give orders – we work together. They are not afraid to say something if they have an idea or if they think something is not right."



*They are not afraid to say something if they have an idea or if they think something is not right.*

## Worker Training

Training resources available to pig farms include:

- **PQA Plus:** Teaches workers to take responsibility for workplace, personal and coworker safety; understand safety and health hazards (slips and falls, needle sticks, lifting, hygiene); handle pigs using knowledge of pig behavior; understand barn, building and machine hazards (hazardous gases, fire, electrical, confined spaces); and be prepared for emergencies (emergency action plan).
- **TQA:** Helps pig transporters, farmers and handlers understand how to safely handle, move and transport pigs.<sup>24</sup>
- **Certified Swine Manager Program:** Develops knowledgeable, skilled employees who embody the pork industry's We Care ethical principles, including providing a safe work environment.<sup>25</sup>

## Safety Benchmarking

The industry is renewing efforts to enable pig farmers to benchmark their farm's safety records with others. A confidential third-party database allows farmers to be compared with the top 25%, allowing them to identify ways to enhance safety on the farm and focus on continuous improvement.<sup>26</sup>

## Regulations

U.S. pig farms comply with the federal labor requirements of the Occupational Safety and Health Administration (OSHA), and farm labor conditions are monitored by the Bureau of Labor Statistics. Resources, such as the Employee Safety Toolkit and the Barn Culture Toolkit, help farmers reduce accidents and injuries.<sup>27</sup>





# Community



**P**ig farming has long been an economic driver in America's rural communities, providing employment, supporting local commerce and contributing to the economic tax base. As good neighbors and responsible community citizens, farmers and their families play an active role in helping to build a strong community. They're committed to keeping rural areas, and the quality of life there, strong.

## Pig farmers are committed to contributing to a better quality of life in our communities.

- We recognize that being welcomed and appreciated by our community is a privilege that we must earn and maintain.
- We acknowledge that our practices can affect the trust a community has in pork production and our operations.
- We operate in a manner that protects the environment and public health.
- We play an active role in helping build a strong community.
- We acknowledge community concerns and address them in an honest and sincere manner.

## Pete Dull's Heritage Inspires Giving Back to Community

**F**or Pete Dull, a pig farmer and owner of Dull Homestead Inc. in Brookville, Ohio, giving back is part of his family's heritage. His grandfather Vernon, a founder of Dull Homestead, helped deliver livestock to people in need in Europe after World War II through the Heifer International Project. Today, Dull Homestead – a 500 sow farrow-to-finish operation that also has 1,200 acres of seed corn – has grown into one of the largest farms in Ohio's Miami Valley, and contributing to the community continues to be a top priority.

For the past 30 years Dull has continued his family tradition of supporting his community by personally delivering furniture and other household supplies for people in his community who are in dire need.

"We have higher rates of poverty in Dayton and some lower income families are literally sleeping on the floor," Dull said.

Dull's efforts to provide furniture began with people just out of prison who didn't have anything to rebuild their lives. Now he works with prisons, churches and government agencies to identify those in critical

need of furniture, kitchen tools or other essential household items.

Over the years, people have learned to contact him directly when they have something to donate. He devotes about 10 to 12 hours per week on average picking up and delivering these items, estimating he's helped hundreds of people over the years.



"We're supposed to help those less fortunate," he said. Plus, he just likes helping people.

*As good neighbors and responsible community citizens, pig farmers and their families play an active role in helping to build a strong community.*



# Our Practices



## Our Community Impact<sup>28</sup>

Support  
**550,000 jobs**  
nationally, totalling  
more than  
**\$22 billion**  
in personal income

Directly add  
**\$39 billion**  
to the nation's gross  
domestic product, while  
contributing to more than  
**\$122 billion**  
in economic activity

## Hams Across America

Each year on Giving Tuesday (the Tuesday after Thanksgiving), the pork industry unites and donates pork to local food banks through its Hams Across America giving program. Most recent totals show pork producers donated 548,000 pounds of product, totaling 2.2 million servings to their communities through the program.<sup>29</sup>

## Operation Main Street

Launched in 2004, the Operation Main Street (OMS) program has trained more than 1,300 volunteers across the country to tell the pork industry's story of innovation, quality and stewardship. This national outreach effort spans 48 states and reaches not only local level groups, but also highly influential professionals. OMS speakers have now delivered 10,000 presentations to 288,000 people, and more than 36 million people have been reached through media stories about the program.<sup>32</sup>

Through Operation Main Street in the Schools, the program has reached more than 80,000 culinary, agriculture and environmental science students, including students at all 30 U.S. schools of veterinary medicine.

**10,000** presentations<sup>33</sup> given to  
**288,000** people in  
**45** states and  
**80,000** students



## Scholarships

The National Pork Board sponsors a scholarship program available to college students who plan to pursue a career field related to swine production or attend veterinary or graduate school and major in a discipline with an emphasis on swine. It gives out 21 scholarships each year totaling \$50,000 and 80% of the scholarships go to students pursuing an advanced degree.<sup>30</sup>

## Pig Farmers' Charitable Giving in 2018<sup>31</sup>

DONATED  
**804,644**  
POUNDS OF PORK —  
*More than 3.2 million servings*



VOLUNTEERED OVER  
**54,570**  
HOURS OF THEIR TIME



DONATED MORE THAN  
**\$5.5 million**  
TO CHARITABLE CAUSES



# Proof of Our Progress

America's pig farmers are proud of what we've accomplished, and we're committed to continuous improvement.



## Pork Quality Assurance® Plus (PQA® Plus)



**71,000**

people are PQA Plus certified.



That represents roughly **85%** of U.S. pork production.<sup>34</sup>

## Transport Quality Assurance

**31,000**

industry animal handlers and transporters are Transport Quality Assurance® (TQA®) certified.



This is **98%** of transporters.<sup>35</sup>

## Common Audit

The pork value chain has come together through the use of a **Common Swine Industry Audit**, certified by the Professional Animal Auditor Certification Organization.



## Life-Cycle Assessment

The most recent life-cycle assessment, *A Retrospective Assessment of U.S. Pork Production*, shows

**262%** more food

was produced with

**2%** fewer inputs.

Overall, the study found significant reduction in the use of natural resources over the past 55 years.<sup>36</sup>



Land Use

↓ **75.9%**



Water Use

↓ **25.1%**



Energy Use

↓ **7.0%**



Carbon Footprint

↓ **7.7%**

## Reduced Antibiotics Use

FDA data<sup>37</sup> shows antibiotic use in pig farming operations has been reduced by

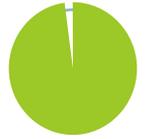
**one-third.**



## Biosecurity

**97%**

of pig farmers have biosecurity standard operating procedures.<sup>38</sup>



## Good Citizenship<sup>39</sup>



As part of our commitment to our communities, pork producers provided more than

**3.2 million servings of food in 2018**

through the donation of more than 800,000 pounds of pork. They also contributed more than



**54,000 volunteer hours**

and more than



**\$5.5 million in donations**

to local causes.

## Continuous Improvement

**99%**

of PQA-certified sites comply with animal welfare practices.<sup>40</sup>

**98%**

comply with barn best practices.<sup>41</sup>

**94%**

comply with PQA food safety standards.<sup>42</sup>

**96%**

have a veterinarian-client-patient relationship.<sup>43</sup>

**94%**

keep detailed medical and treatment records.<sup>44</sup>

**99%**

of caretakers know the training needed for their particular duties.<sup>45</sup>

## Sources

- <sup>1</sup> Employment by major industry sector. Bureau of Labor Statistics. <https://www.bls.gov/emp/tables/employment-by-major-industry-sector.htm>. Sept. 4, 2019.
- <sup>2</sup> National Pork Board.
- <sup>3</sup> National Pork Board.
- <sup>4</sup> <https://www.pork.org/certifications/transport-quality-assurance/>
- <sup>5</sup> National Pork Board.
- <sup>6</sup> Pork Checkoff, Biosecurity Management Best Practices. <https://www.pork.org/food-safety/biosecurity-management-best-practices/>
- <sup>7</sup> Found at: <https://www.pork.org/production/tools/>
- <sup>8</sup> Pork Checkoff, Preventing Foodborne Illness, <https://www.pork.org/public-health/preventing-foodborne-illness/>
- <sup>9</sup> <https://www.pork.org/certifications/transport-quality-assurance/>
- <sup>10</sup> The Food and Agriculture Organization (a specialized agency of the United Nations). Global agriculture towards 2050. [http://www.fao.org/fileadmin/templates/wsfs/docs/expert\\_paper/How\\_to\\_Feed\\_the\\_World\\_in\\_2050.pdf](http://www.fao.org/fileadmin/templates/wsfs/docs/expert_paper/How_to_Feed_the_World_in_2050.pdf)
- <sup>11</sup> Michigan State University press release, Live Swine Carbon Footprint Calculator is now available for pork producers, July 7, 2011. [https://www.canr.msu.edu/news/live\\_swine\\_carbon\\_footprint\\_calculator\\_is\\_now\\_available\\_for\\_pork\\_producers](https://www.canr.msu.edu/news/live_swine_carbon_footprint_calculator_is_now_available_for_pork_producers)
- <sup>12</sup> Retrospective Analysis of US Pork Production from 1960 to 2015 Using LCA. <https://www.pork.org/wp-content/uploads/2016/10/16-214-THOMA-final-rpt.pdf>. July 7, 2018.
- <sup>13</sup> USDA-ARS National Laboratory for Agriculture and the Environment. Meta-Analysis of Swine Manure and Commercial Fertilizer on Environmental Endpoints and Soil Health [pork.org/research/meta-analysis-swine-manure-commercial-fertilizerenvironmental-endpoints-soil-health/](http://www.pork.org/research/meta-analysis-swine-manure-commercial-fertilizerenvironmental-endpoints-soil-health/)
- <sup>14</sup> Harper LA. Changes in Ammonia Emissions from North Carolina Swine Lagoons Associated with Improved Production Management. Pork Checkoff. Aug. 1, 2019. <https://www.pork.org/wp-content/uploads/2019/09/18-205-HARPER-final-rpt.pdf>
- <sup>15</sup> American Farm Bureau Federation. [https://www.fb.org/files/FFASF\\_Flyer.pdf](https://www.fb.org/files/FFASF_Flyer.pdf)
- <sup>16</sup> Pork Checkoff, Responsible Antibiotic Use.
- <sup>17</sup> FDA. The 2017 Summary Report on Antimicrobials Sold or Distributed for Use in Food-Producing Animals. <https://www.fda.gov/media/119332/download>
- <sup>18</sup> Pork Checkoff, Managing Herd Health for a Safe Food Supply. <https://www.pork.org/food-safety/managing-herd-health-safe-food-supply/>
- <sup>19</sup> National Pork Board. "Know the Nutrients in Pork." <https://www.pork.org/facts/pork-bytes/know-the-nutrients-in-pork/>. Accessed September 19, 2019.
- <sup>20</sup> American Heart Association. Making the Healthy Cut: Fish, Poultry and Lean Meats, Accessed July 28, 2019. Updated June 25, 2015. [http://www.heart.org/HEARTORG/HealthyLiving/HealthyEating/SimpleCookingandRecipes/Making-the-Healthy-Cut-Fish-Poultry-and-Lean-Meats\\_UCM\\_459355\\_Article.jsp#.XT4aOI5KjIU](http://www.heart.org/HEARTORG/HealthyLiving/HealthyEating/SimpleCookingandRecipes/Making-the-Healthy-Cut-Fish-Poultry-and-Lean-Meats_UCM_459355_Article.jsp#.XT4aOI5KjIU)

## Sources

- <sup>21</sup> American Heart Association. "One Heart. Hundreds of Heart-Healthy Options." <https://www.heart.org/en/healthy-living/company-collaboration/heart-check-certification>. Accessed September 18, 2019.
- <sup>22</sup> Retrospective Analysis of US Pork Production from 1960 to 2015 Using LCA. <https://www.pork.org/wp-content/uploads/2016/10/16-214-THOMA-final-rpt.pdf>. July 7, 2018.
- <sup>23</sup> Pork Checkoff, Training and Safety in Pig Farming. <https://www.pork.org/our-people/workplace-safety/>
- <sup>24</sup> <https://www.pork.org/certifications/transport-quality-assurance/>
- <sup>25</sup> Certified Swine Manager. <https://lms.pork.org/CSM>
- <sup>26</sup> Pork Checkoff. Benchmarking Employee Safety. <https://lms.pork.org/Tools/View/benchmarking-employee-safety>
- <sup>27</sup> Pork Checkoff, Training and Safety in Pig Farming. <https://www.pork.org/our-people/workplace-safety/>
- <sup>28</sup> "Pork Facts." National Pork Producers Council. <http://nppc.org/pork-facts/>. Accessed Sept. 23, 2019.
- <sup>29</sup> National Pork Board.
- <sup>30</sup> National Pork Board.
- <sup>31</sup> National Pork Board.
- <sup>32</sup> "Operation Main Street Shares Facts about Pig Farming with 10,000 Groups." National Pork Board. <https://www.pork.org/news/operation-main-street-shares-facts-pig-farming-10000-groups/>
- <sup>33</sup> "Operation Main Street Shares Facts about Pig Farming with 10,000 Groups." National Pork Board. <https://www.pork.org/news/operation-main-street-shares-facts-pig-farming-10000-groups/>
- <sup>34</sup> National Pork Board.
- <sup>35</sup> National Pork Board.
- <sup>36</sup> Retrospective Analysis of US Pork Production from 1960 to 2015 Using LCA. <https://www.pork.org/wp-content/uploads/2016/10/16-214-THOMA-final-rpt.pdf>. July 7, 2018.
- <sup>37</sup> FDA. The 2017 Summary Report on Antimicrobials Sold or Distributed for Use in Food-Producing Animals. <https://www.fda.gov/media/119332/download>
- <sup>38</sup> National Pork Board.
- <sup>39</sup> National Pork Board.
- <sup>40</sup> National Pork Board.
- <sup>41</sup> National Pork Board.
- <sup>42</sup> National Pork Board.
- <sup>43</sup> National Pork Board.
- <sup>44</sup> National Pork Board.
- <sup>45</sup> National Pork Board.



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