CREATING A CULTURE OF ANIMAL CARE

Perdue Foods

COMMITMENTS TO ANIMAL CARE

2021 REPORT

CREATING A CULTURE OF ANIMAL CARE
As we look back over the five years since we announced Perdue Commitments to Animal Care, it has been a journey of listening, learning and evolving. The Perdue Commitments to Animal Care was shaped with input from diverse stakeholders – including some of our harshest critics – and we continue to seek their input. We learn from a wide range of perspectives, whether they be farmers, our associates, advocates, customers or consumers, in formal and informal ways.

Cumulatively this has resulted in 69 initiatives designed to address one of the Five Freedoms or one of the other three pillars of our program. And perhaps more importantly, these initiatives have moved from studies or intentions to programs and best practices that are now embedded in how we do business every day.

We’re proud of our progress and eager to continue to our journey. The following pages report on the most recent and core ongoing initiatives as well as our future goals. Highlights of our recent progress include:

- Establishing a “Free Range Utilization” technique that allows us to measure pasture utilization in our free range housing.
- Continue to test the feasibility and benefits of on-farm hatching to improve early chick care
- Expanding our farmer animal care incentive program
- Launching our third farmer contest to tap into their experience and expertise in raising chickens
- Creating our first Young Farmers Development Group to help foster the next generation of farmers and uphold our commitment to building stronger relationships with our farmers
- We held our fifth Animal Care Summit, bringing together virtually animal care experts and advocates, customers, farmers, and our leadership, in October 2020. We are holding our sixth summit in October 2021.
Our Perdue Commitments to Animal Care, launched in 2016, is a four-part program to accelerate our progress in animal care by giving our chickens what they want, strengthening our relationships with our farmers, building trust with multiple stakeholder groups and creating an animal care culture for continuous improvement.

Each year, we report on our progress, and the initiatives we’re undertaking to continue our advancements. In the Continuous Improvement section, we also share updates on programs and practices that have become standard practice and are now an ongoing part of our animal care culture.

This report covers key achievements from June 2020 through July 2021, and describes the steps we are taking to move our program forward.
OUR CHICKENS’ NEEDS AND WANTS
Perdue will evaluate and implement production systems specifically designed to go beyond just the “needs” of our chickens to also include what our chickens “want.” We will chart our progress against the “Five Freedoms.”

FARMER RELATIONSHIPS
We are recommitted to our efforts to transform our relationship with the farmers who raise our chickens. We will listen and communicate effectively, evaluate our pay structures to incent best practices, and also consider their well-being when implementing production systems.

OPENNESS, TRANSPARENCY AND TRUST
We will be transparent in our programs, goals and progress in order to build lasting trust and relationships with our stakeholders.

A JOURNEY OF CONTINUOUS IMPROVEMENT
We believe raising animals should be a journey of continuous improvement. We will continue to build an Animal Care Culture within Perdue.

THE FIVE FREEDOMS, AS DEFINED BY THE FARM ANIMAL WELFARE COUNCIL:

1. Freedom from Hunger and Thirst by ready access to fresh water and diet to maintain health and vigor.
2. Freedom from Discomfort by providing an appropriate environment including shelter and a comfortable resting area.
3. Freedom from Pain, Injury or Disease by prevention or rapid diagnosis and treatment.
4. Freedom to Express Normal Behaviors by providing sufficient space, proper facilities and company of the animal’s own kind.
5. Freedom from Fear and Distress by ensuring conditions and treatment which avoid mental suffering.
PART 1

OUR CHICKENS’ NEEDS AND WANTS
Initiative: High Welfare Hatching Practices

We have been studying the feasibility and potential benefit of On Farm Hatching (OFH) to improve early chick care. OFH is a concept where eggs are incubated through day 18 and then taken directly to the farm to hatch instead of placed in the hatcher. The eggs are placed in their setter racks in a suspended table or placed directly on the litter depending on the system. The room temperature is adjusted to keep the eggs at the desired temperature and then birds will hatch over the next 24-72 hours. We installed an OFH system at our research farm in Westover, Md., last year.

As a continuation of this journey, we explored whether reducing the time between chick hatch and access to feed and water using the OFH system versus conventional hatching methods. Total hatchability of eggs using the OFH system were comparable to conventional methods when eggs are incubated in a commercial incubator, but we had lower hatchability in a small single-stage research farm incubator. Low wet bulb temperatures in the incubator (due to low relative humidity) left some chicks too weak to break through the shell. We are reviewing incubation profiles and pursuing an updated temperature profile under low humidity conditions.

We will conduct additional trials to determine if incubation conditions affect hatchability and chick quality in the OFH system.
Initiative: Better Leg Health for Big Birds

We continued our efforts to better understand the challenges in heavy bird programs, those weighing more than 8 pounds at harvest. Our objective is to find ways to improve roaster leg health by studying farms with consistently good legs.

We continued to perform gait scores across all farms and identified those raising birds to heavy weights with good leg health. While overall leg health differences can be attributed to culling best management practices, there are many farms that routinely have better leg health. We’ll continue to study those farms for additional learnings and best practices that can be applied elsewhere.

Initiative: Stress support through the water

We explored whether pre-shipment or early chick water supplementation for nutritional and/or stress support is more beneficial than vitamins and electrolytes. Trials of a prototype solution did not indicate benefits in terms of weight gain, rate of gain, feed conversation or mortality when fed to young birds. The prototype solution also created clogging issues in the drinker lines. This project is on hold.
Initiative: Better Chicks/Less Culling

Appropriate culling remains an important part of our animal care program. In fact, our goal is to reduce culls by 15 percent in the first two to four weeks. In 2021, through improvements in egg supply and handling, and hatchery operational and sanitation standard operating procedure, we enhanced overall chick quality, reducing the cull rate by 8 percent. We will continue to work toward our 15 percent goal.

Results:

Initiative: Free Range Pasture Contest No. 2

Following up on our 2019 farmer contest to identify free-range and organic farmers who get the most birds outside, 53 farmers signed up to participate in a new two-year contest in 2020 that challenges them to develop new ideas and tips for increasing range utilization. The contest engages farmers in improving free range usage by identifying management changes and “hacks” that encourage more chickens to go outdoors. Farmers will also be encouraged to describe benefits seen for the birds inside when some of the flock has gone outside. Key learnings will be shared among existing and new free-range farmers to assure chickens have meaningful outside access. Winners will be announced at our 2022 Animal Care Summit.
Initiative: Free Range Utilization Metric

Our goal was to develop a method to describe and measure success in getting birds to utilize pasture. Every free range farm should have a “Free Range Utilization” score. In 2020, we developed a scorecard that focuses on attributes we know allow birds to use the pasture, including on-farm management practices, house direction, bird access doors and ramps, and access to water, shade and enrichments in the pasture.

We explored more expensive drone technology to measure birds in pasture, but opted for pictures and manual counting. Additionally, we installed Radio Frequency Identification reader technology on a farm in Washington state to gather data on birds exiting and entering the “pophole” doors and time each bird spends in the pasture.

Initiative: Enrichment through diversity within flocks

We conducted research looking at the welfare implications of raising chickens that differ in age, growth rate, feather color, and activity together in the same flock. We studied two different breeds combined with Ross 708 birds to understand if there were any beneficial effects of combining birds with distinctly different activity. Our research revealed no meaningful benefit. We put this project on hold.

Initiative: Controlled Atmosphere Stunning

We are committed to moving all of our harvest operations away from using electrical shocks to “stun” birds before harvest, to using a multi-stage, dual-gas technology Controlled Atmosphere Stunning (CAS) system to induce insensibility with minimal trauma. We successfully implemented CAS at our Milford, DE. harvest plant in November 2017. Our first chicken CAS system was instructive, and in general, we consider it a significant step forward for chickens and our associates. We intend to keep moving on our promise towards 100 percent CAS and are on track to select a second CAS system by mid-2021 and begin installation.
Initiative: Young Farmer Development Group

As part of our commitment to build stronger relationships with farmers who care for our chickens and our desire to be the Farmer’s Choice as an integrator, we launched a Young Farmer Development Group in 2020 in recognition of their unique needs.

The group consists of 12 next generation farmers under the age of 30 from across our broiler growing regions. We conducted two virtual meetings with this group to explore their priorities for mentoring, including with experienced poultry farmers, information and engagement and are developing a program to support their development and long-term success. Two meetings are planned this year.

Initiative: Farmer Animal Care Incentives

In 2020, we expanded a new contract that connects pay to animal welfare outcomes to a second growing area. The contract incorporates paw quality and minimum litter depth as part of the farmer pay structure. The farmer receives about $300 a house per flock if they have paws that are healthy and unblemished. We have seen improved paw health since implementing this incentive.

We will continue to explore other incentives.
PART 3

TRANSPARENCY

We want to build lasting trust with stakeholders
Initiative: Meeting demand for “Class of 2024” chicken products

We are committed to providing current and future customers a sustainable supply of chicken that meets all the 2024 animal welfare criteria outlined in the “Joint Animal Protection Agency Statement on Broiler Chicken Welfare Issues.” We offer products from poultry raised under programs that meet any or all of the four criteria: enrichments, extra space, approved breed, and stunned at harvest using a Controlled Atmosphere Stunning system.

After further consultation with interested stakeholders, we chose not to proceed with a separate certification for these attributes but continue to offer products that meet the criteria.
CONTINUOUS IMPROVEMENT

We want to create a culture of animal care
We want to influence and change the culture around animal care within our associates, farmers and anyone else who comes into contact with our live poultry.

**Initiative: Ongoing Programs**

While some animal care initiatives are short-term activities, others will continue as part of our enhanced culture of animal care. We report goals and performance for ongoing programs within the Continuous Improvement section of this report.

**Initiative: Improve paw health**

We started our Paw Improvement Initiatives in 2016 in the first year of our formal public Animal Care Commitment. We have steady improvements, especially in the late winter/early spring time period of the year. This graph shows the difference seen in the 2016/2017 versus the most recent 2019/2020 time frames.

Our stated 2020 goal was to maintain at or better than 70 percent “good paws” through the winter time period. January, February, and March we fell slightly below the 70 percent level. Although 20 percent better than three years ago, we still have room to improve. There are several areas with particularly harsh winter conditions that we need to focus particularly hard on this next winter.

**Initiative: Animal handling video monitoring**

It is important that our associates who handle birds understand what we expect in how the birds are treated and handled. We invested in video cameras that are monitored by a third party in all of our harvest facilities. This gives us the opportunity to coach individuals and change how they do their jobs as well as identify individuals who shouldn’t be working with live animals. We have seen a steady decline in deviations to our program (we refer to these as “occurrences”), along with the number of escalations (incidents with potential of injury to the animals). We recently added video monitoring for catching crews.
**Initiative: Behavioral changes in animal care**

Key to shaping culture is recognizing associates’ behaviors to change or reward. Through third-party and other monitoring, we are keeping a log of both positive and negative behaviors observed and reported and are publishing it. A report on Poultry Care Incidents is posted to the Animal Care section of the Perdue Farms corporate website and updated quarterly. The incident report includes positive and negative behaviors, and responses and action plans. We will continue to log behaviors and update the report on a quarterly basis.

**Initiative: Continue to install windows in houses**

We believe that windows and natural sunlight create a better environment for the chickens, and for the people who care for them. We now have windows in 52 percent of our farms.

**Initiative: Increase bird activity**

We believe that active chickens — those that can express normal behaviors such as perching and play — are healthier chickens. That’s why, in 2016, we announced a goal to double bird activity. Installing windows to provide natural light, adding enrichments, increased space and outdoor access have been shown to increase activity. We continue to study other contributors that will allow us to move closer to our goal. We have increased the number of our birds that have outdoor access to 25 percent. Activity has proven to be difficult to measure consistently. However, work is going on in this area in several countries throughout the world so a reliable metric seems to be likely in the next few years.

**Initiative: Improve farmer relationships**

To successfully advance our animal care programs we need to strengthen relationships with and engage the farmers who raise our chickens on their farms. No one spends more time with our chickens then the people who raise them, and we value their insights. The following programs are designed to improve communication and help move us to our goal of the being the “Farmer’s Choice” for growing chickens.

**Initiative: Farmer Relationship Index**

As part of our efforts to transform our relationship with the farmers who raise our animals, we maintain a Farmer Relationship Index to measure farmer satisfaction with raising chickens for Perdue. It is published on the Perdue farmer website. We continue to add measurable items that our farmers consider important to them.
Initiative: Farmer Councils

In 2015, we created Farmer Councils in each of our growing areas to share information and receive feedback. In 2020 during the height of the COVID-19 pandemic, we suspended our in-person council meetings, and supplemented our communication with frequent letters to our farmers, updating them on how we were responding to the crisis. We also surveyed farmers to understand the effectiveness of our communication. We established a Young Farmers Development Group and hosted two virtual meetings to better understand their needs to help them navigate the business. We resumed in-person Farmer Council meetings in July 2021.

Initiative: Farmer website

In response to farmer suggestions, we created a website dedicated to the farmers who raise our birds. The website provides location-specific information for farmers, making communications from their respective live production offices more consistent and timely. In 2020, we added weekly settlement data statistics at all of the broiler operations, which has increased farmer visits to the site. Breeder operations now post weekly hatch data and this has also driven usage. Farmer visits surged following the COVID-19 outbreak as farmers used the website for timely and update information. Farmer traffic to the site has steadily increased and continues to be a valuable resource in getting important information to farmers in a more timely manner.

Initiative: Audit results reporting

Sharing results from our third-party audits allows our stakeholders to see both our successes, and where we need to improve. We report our results annually, including:

- The Mérieux/NutriSciences annual audit of all 12 of our harvest operations,
- USDA Process Verified Program audits of our harvest and live production operations,
- Global Animal Partnership audits of farms raising our chickens,
- National Organic Program audits of farms raising our USDA certified organic chickens, and
- Customer audits.
Initiative: Public Engagement

“Follow the Flock” Farmers on Social Media
To increase on-farm transparency, over the past three years we have worked with interested farmers to open their operations via social media. Through videos and photographs, they share what they do daily to raise chickens. We call it “Follow the Flock,” a term coined by one of our farmers. The 13 farmers currently participating have more than 15,000 followers on Facebook, Instagram and Twitter.

Support “open barn” policy
As part of our commitment to transparency, we routinely invite people to tour our farms and plants. We encourage our farmers to be open to visitors within the constraints of biosecurity and business needs. Over the course of a year, a range of stakeholders, including retail and foodservice customers, media, advocacy groups, community members, students and government representatives, visit our facilities. We track the number of tours by audience and have a goal to conduct 100 tours a year. We were only able to conduct 24 tours in 2020 because of pandemic-related restrictions.

On-farm Poultry Learning Centers
Working with farm families we have established three on-farm Poultry Learning Centers. At these educational facilities, the family hosts guests of all ages for a transparent, interactive experience to learn about various aspects of poultry farming and proper animal care. Built seamlessly into the side of a working chicken house, each learning center includes a large viewing room that allows guests to observe the birds undisturbed in their environment. Educational videos explain what visitors see inside the chicken house, as well as the timeline from when farmers receive the birds to how they raise and care for them while they are on the farm. Additionally, guests have the opportunity for hands-on learning using actual poultry equipment that replicates what they see through the window, including mechanized feeders and waterers and automated temperature-control technology.

**Initiative: More space**

As demand for chickens raised under programs with lower density has increased, we have increased the number of chickens raised at less than 6.0 or 6.5 pounds per square foot density.

**Initiative: Global Animal Partnership**

We’re committed to meeting the demand from current and future customers for poultry raised to higher welfare standards, including the Global Animal Partnership (GAP) program. We have farms certified to raise GAP 2, GAP 3 and GAP 5 birds.

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**% Head Harvested under 6 and 6.5 lbs/sqft**

![Graph showing percentage of head harvested under 6 and 6.5 lbs/sqft from FY07 to FY22.](image)
**Initiative: Organic**

We’re committed to meeting the demand from current and future customers for poultry raised to USDA-certified Organic standards. We continue to be the country’s largest supplier of organic chickens.

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**% Organic Head Harvested**

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<th>Year</th>
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Merieux NutriSciences Audit Results

Criteria for this audit are based on the “National Chicken Council Animal Welfare Guidelines” published by the National Chicken Council (Updated 2017 and PAACO certified) and “Poultry Slaughter plant and Farm audit: Critical Control Points for Bird Welfare, August 2005,” published by Temple Grandin, PHD, at www.grandin.com.

NutriSciences conducted annual audits at 11 of our poultry live production and harvesting operations, including hatchery, grow out [farms], catching and transportation, and processing. The audit covers a total of 67 audit points, scored on a scale of 1-5, for a maximum possible score of 335 points. Operations are rated on a percentage basis.

- We received scores between 94 and 100 for all locations audited.
- We had 1 major non-conformance for a live bird entering the scalder, it was assumed since the bird was observed after the backup harvester and the head puller was clogged. Plant passed its re-audit.
- We had 24 minor non-conformances
  - 5 of these were for operations clean catching and loading birds that were unfit for travel
  - 3 for Gait scores outside 7 days of harvest
  - 4 issues with holding sheds
  - 4 broken wings
  - 3 no training on handling chicks
  - 2 birds missing the mechanical knife

USDA Process Verified Program Audit Results

Our USDA Process Verified Program (Updated continuously and PAACO certified) covers all of our live-production and harvesting operations. The audit tool combines the principles from the National Chicken Council Animal Welfare Guidelines (Updated 2017 and PAACO certified) and our “Best Practices.” Participation in this program is approved by the Agricultural Marketing Service of the USDA. Companies that operate under a Process Verified Program must comply with criteria outlined in the program requirements, and that are audited annually. Since the AMS audits were developed utilizing ISO 19001 Guides for Quality Management Systems audits, they are not “scored.” Instead, they only identify non-conformances, which are classified as “major” and or “minor.”
The past year, the USDA Livestock, Poultry, and Seed Program’s Quality Assessment Division conducted annual audits in one of our 11 chicken live-production and harvesting operations for conformance to our USDA Process Verified Program Poultry Care. The Pandemic caused the Government agency to stop all travel. We continued to conduct our monthly audits with the local Poultry Care Officers and we also conducted our regional audits on all facilities. The USDA has scheduled on site visits for each of our facilities in Calendar 2021 to get us caught up. Each audit covers a minimum of 188 audit points in more than 50 areas. In 2019 our PVP audits:

• No findings with the plant that was audited by USDA.

Global Animal Partnership (GAP)

Some of our customers require Global Animal Partnership (GAP) certification, which applies to the farms raising chickens for those products. GAP certified farms are audited every 15 months.

• During 2020, GAP audited 171 farms, all of which passed GAP certification. GAP identified:
  • 1 major non-conformances - for stocking density issues
  • 9 minor non-conformances - Highest number of issues were for not meeting correct number of enrichments (5), (2) outdoor shade not adequate and (2) for range pens not correct size.

USDA Certified Organic

Every farm raising organic chickens for us is third party audited for meeting the requirements of the National Organic Program for USDA Certified Organic. Farms are inspected annually by third party organic certifiers.

• All 163 farms raising organic chickens passed their audit. The audits identified 29 non-conformances.
  • 10 – records issues of varying types
  • 9 – needing a larger buffer area
  • 3 – issues with FAIR all different issues
  • 7 – other issues for different things
• We did change certifiers this year and they looked at certain things different than past certifiers. It was good to have new eyes on the operations.
Customer Welfare Audits

Our operations are regularly subject to audits by our customers to ensure adherence to their standards. We passed all of our customer audits.

Initiative: Third-Party Video Monitoring

We use third-party video monitoring in live-bird handling areas of all 11 of our harvest facilities. This includes random reviews of video covering 13.6 million birds in 292,700 audit events during 2020. During that time, we achieved a compliance rate of 99.9 percent.

We also had 6 of our operations using video to monitor our live haul operations. This includes random reviews of video covering 1.6 million birds in 9,743 audit events during 2020. During that time, we achieved a compliance rate of 99.6 percent. We did have interruptions in the process due to COVID, our plan is to have all operations video monitored by the end of this fiscal year.
2022 GOALS AND INITIATIVES
Initiative: Chicken Behavior Training Module

We will develop an educational module around chicken behavior and use it to train flock advisors.

**Supports: Part 1, Freedom 1: Freedom from Hunger and Thirst**

Initiative: Pasture Vegetation Preferences

We will establish a method to determine chicken preference for vegetation in the pastures of free range and pasture raised programs.

**Supports: Part 1, Freedom 3: Freedom from Pain, Injury or Disease**

Initiative: Broiler Breeder Enrichment

We will begin to build an enrichment program for boiler breeders, assuming it is different from meat birds.

**Supports: Part 1, Freedom 3: Freedom from Pain, Injury or Disease**

Initiative: Litter Quality Metric

We will develop a litter condition scoring method to be implemented across all operations, all farms, and all flocks.

**Supports: Part 1, Freedom 3: Freedom from Pain, Injury or Disease**

Initiative: Higher Welfare Hatching Practices

We will continue to research feasibility and potential benefits of other methods of On-Farm Hatch systems to determine viability in our operations.

**Supports: Part 1, Freedom 4: Ability to Express Normal Behavior**

Initiative: Social Enrichment for Poultry

We will consider if re-establishing the mother hen/chick relationship will benefit the chicken.

**Supports: Part 1, Freedom 4: Ability to Express Normal Behavior**
Initiative: Free-Range Pasture Contest No. 2

We will complete our second free-range pasture contest in which we are challenging farmers to develop new ideas and tips for increasing range utilization.

Supports: Part 1, Freedom 4: Ability to Express Normal Behavior

Initiative: Free-Range Pasture Utilization Metric

We will develop a low-tech method to measure pasture utilization within free-range housing.

Supports: Part 2: Farmer Relationships