



*Perdue Foods*



**COMMITMENTS TO**  
**ANIMAL**  
*care*  
**2019 REPORT**

**CHANGING THE WAY WE RAISE CHICKENS**  
**TO GIVE THEM NOT ONLY WHAT THEY NEED BUT WHAT THEY WANT**



**“Our Perdue Commitments to Animal Care is a commitment to the chickens and the farmers who raise them, and to transparency with all our stakeholders. We offer this update on our progress and future goals to engender trust in our company, brands and products.”**



# OUR JOURNEY FORWARD

When we announced the Perdue Commitments to Animal Care in 2016, it reflected a change in the way we think about raising chickens, moving us beyond measurements associated primarily with their health and performance. Since then we have been asking questions such as: what allows the chicken to express normal behaviors in the company of its own kind, and what can we do to further minimize fear and distress?

The Perdue Commitments to Animal Care remains a journey of continuous improvement. We are working to further strengthen relationships with the farmers who raise our chickens and involve them in changes we are making. We continue to listen to a diverse range of stakeholders, including our customers, consumers and even our critics. We are moving forward deliberately, building on past learnings to ensure that the changes we make have a measurable impact on improving animal welfare.

The following pages report our progress on the most recent initiatives and introduce new initiatives for 2019. Highlights of our progress include:

- We again made substantial improvement in paw (foot) health over the winter months, indicating we are providing a better environment for the chickens.
- We continue to actively study and learn about alternative breeds, both to meet growing customer demand for higher welfare chickens, and to identify the traits that contribute to healthier chickens.
- We have not yet reached our goal of doubling chicken activity but better understand the contributions of windows, enrichments and space in encouraging more movement.
- We continued to increase the number of chicken houses with windows, exceeding our 2018 goal.
- We asked farmers to participate in a Chicken Welfare Enrichment Design Contest looking for a “farmer-designed, chicken-approved” in-house enrichment. They responded with innovative and compelling designs that will help us move enriched chicken houses forward within Perdue.
- We developed a draft verifiable plan to provide chickens that meet the 2024 criteria outlined in the “Joint Animal Protection Organization Statement on Broiler Chicken Welfare Issues” for customers who desire it.
- We held our third Animal Care Summit, bringing together animal care experts and advocates, customers, farmers, and our leadership, in July 2018. Our fourth summit will be held in July 2019.



# PERDUE COMMITMENTS TO ANIMAL CARE

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.

This report covers key achievements from 2018 and the steps we are taking in 2019.



## PART 1

### 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.”



## PART 2

### 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.



## PART 3

### 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.



## PART 4

### 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.



**PART 1**

# **OUR CHICKENS' NEEDS AND WANTS**

# 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.

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## 1 FREEDOM FROM HUNGER AND THIRST

### **Initiative: Identify top Parent Breeder animal care issues (new)**

We have a robust Parent Breeder Animal Care program. We will identify and report on issues of largest concern in this area. This will include a comparison of weight management approaches in the pullet house.



# 2 FREEDOM FROM DISCOMFORT

## Initiative: Improve paw health

In 2017, we achieved a 12.7 percent improvement in paw (foot) quality scores and set a goal to work with our farmers to improve scores by another 10 percent over winter (December 2018 through March 2019). Through changes in the chicken house environment, we achieved a 9.3 percent improvement. We also saw more consistency in paw quality over the course of the year vs. the traditional decline in the winter.

While this winter was milder than the previous year, the following contributed to the improvement in paw health:

- Increased layout times (time between flocks with the houses empty).
- Better litter conditions through improved drinker management.
- Improved bird health leading to a drier environment.

**Our 2019 goal is to maintain at or better than 70 percent “good paws” through the winter time period.**



## Initiative: Temperature profiling of live haul trailers

The trailers on which our chickens are transported from the farm can be inconsistent in their level of comfort. In 2018, we began temperature profiling trailer interiors during loading, transport and holding to help provide a framework for future initiatives to improve the comfort of our birds during transport.

Working with the University of Delaware, we gathered temperature and relative humidity data on current live haul trailers and transport modules as well as new trailers and modules being purchased. The data was collected during hot and cold weather to develop a baseline.

**For 2019, we will continue to collect and analyze data using temperature sensors and contour plots representing the thermal environment of the trailers to provide a more uniform environment and consistent comfort for the chickens.**

## Initiative: Chick Nursery research (new)

Chickens need very special care in the first several days of life. We will investigate if this care is better done in a Nursery environment with the birds going to the farm at several days of age versus shortly after hatching.

# 3 FREEDOM FROM PAIN, INJURY OR DISEASE

## Initiative: Unannounced video reports

In addition to third-party video monitoring of chicken catching and live bird handling at harvest plants, we identified three areas to conduct unannounced video audits of our Animal Care Program: live haul, farmers and chick delivery. The videos were reviewed internally with the Animal Care Council for compliance to our program.

- Catching Technique via video. It is clear that chicken catching technique improves when it is videoed and critiqued. We will expand the program so all catching is videotaped for random auditing.
- With the farmers' consent, we videoed farmer work patterns. Culling and euthanasia technique must be constantly taught and checked. Flock advisors now do this every flock.
- Chick delivery technique was investigated. Proper technique to gently empty chicks from boxes to the litter needs to be taught and checked more often. We now have a more effective training video on chick delivery. By also showing this training video to farmers they can act as effective monitors of the process.



## Initiative: Improve our culling programs

Appropriate culling is an important part of our Animal Care Program. While we have focused on the appropriate culling process for birds unable to get to feed and water, in 2018 we developed clearer expectations for when culling is required, how to audit culling and identifying when farms need assistance. Proper attention to culling during the early stages of grow out results in a healthier flock and less culling later.

- A new culling Standard Operating Procedure (SOP) has been developed and training provided to all flock advisors and farmers.
- We now are reporting culling separately from other mortality on all our farms.
- This information is maintained in our flock database so we can measure and trend culling versus natural mortality in the different programs and seasons.

**Our goal is to decrease the need for culling between two and four weeks of age by 15 percent through improved chick quality and better chick starts.**

## Initiative: Assess leg health

Gait scoring as an assessment of leg health is part of our Poultry Care Program, but we have not systematically charted results. We are now conducting weekly leg health assessments and generating and assessing graphs showing average gait scores on a weekly basis.



## Initiative: Mechanical catching

Mechanical catching equipment continues to be refined. We experimented with earlier versions and did not find them beneficial for poultry welfare. We are currently evaluating two new styles in seven growing areas. As part of our evaluation, we reviewed poultry care metrics in areas where mechanical catching has replaced hand catching to determine if mechanical catching is on par with or better than hand catching, and what, if anything, needs to be done to assure appropriate bird welfare.

Two distinct areas to consider in mechanical catching are how the machine picks up the birds and how the machine delivers the bird to the transport module. Although it is early, one of the two styles being evaluated appears to be gentler than the other at picking up the birds. The transport module type is as or more important as the machine catcher to improve the module loading technique.

## Initiative: Heavy bird challenges research (new)

Research is lacking in how chicken welfare changes as they are grown to heavier weights. We will put a special effort into understanding the challenges in heavy bird programs (more than 8 pounds at harvest) and issue a special report on “Animal care challenges special to heavier broilers”. Areas we plan to explore include mortality cause and timing, leg health, and farm variation and seasonality of issues.



## Initiative: Poultry Handling and Transportation certification (new)

All live haul personnel (company associates and contractors) will be trained and certified by June 2020 in the Poultry Handling and Transportation program offered by U.S. Poultry and Egg Association. The certification program was developed by a team of poultry scientists and veterinarians from Pennsylvania State University, the U.S. Department of Agriculture and transportation industry professionals. It trains poultry transportation and catch crews in biosecurity, disease recognition, emergency planning, and the safe and humane handling of birds before, during and after transport.



# 4 FREEDOM TO EXPRESS NORMAL BEHAVIOR

## Initiative: Alternative breeds

We recognize the health and welfare challenges associated with today's fast-growing chickens, including leg and muscle issues. We are also committed to supporting customer demand for higher-welfare breeds.

To gain a better understanding, we have been working with 11 different breeds, gathering information on activity, welfare and production aspects. Our goal this year was to develop a behavior rating system to better identify behaviors of the breeds we are studying so we can understand each breed's tendencies and their implications.



Trials at our Westover, Md., research farm are generating behavioral activity data and will help us describe each breed's behavioral tendencies. Virtually all alternative breeds we have trialed are more active, use enrichments more, and have a tendency to use outdoor areas at a higher level. As we grow breeds with higher activity tendencies, the chicken house layout and furnishings need to accommodate their behavioral requirements.

## Initiative: More space

Too many chickens per area can limit access to feed and water, negatively impact the poultry house conditions and limit natural behavior. However, the number of chickens raised in each house directly impacts farmer income, and too few chickens per area is economically unviable.

Previously we gathered data on how bird health responds to space in small, medium, and large birds. This year we explored the effect of additional space on behavior, including amount and types of bird activity, use of enrichments, bird performance independent of feeder space, and whether feeder space affects bird feeding behavior.

- We studied two placement densities (0.8 square feet per bird and 1.2 square feet per bird), which equate to 7.9 pounds per square foot or 5.3 pounds per square foot at harvest.
- Walking/running increased by 30 percent, from 4.7 percent to 6.2 percent of activity, when space was increased. Sitting (resting) decreased by just 2.5 percent with increased space.
- Video clips were taken multiple times daily for behavior analysis. Birds tended to rest along the wall and near perches despite additional free floor space, which is consistent with previous research suggesting this is natural behavior to avoid predators and disturbance from other birds.
- The rate of perching increased 30 percent at the lower bird density.
- Two feeder space densities were also studied in both placement densities. Limiting feeder space results in more aggressive feeding behavior in the early part of the day. Additional feeder space partially offset the negative effect of reduced floor space on bird performance.



## 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 over three years. Previous work provided a method to measure motion and activity. We also proved that installing windows to provide natural light in the chicken houses increases activity during the daylight hours, but also encourages birds to rest during the “lights-out” periods.

- This year we added enrichments to see if they further increase activity.
- We estimate enrichments increase activity by about 10 percent. However, the enrichments caused the birds to cluster around the enrichment and thus actually showed a reduction in motion using our current measurement method.
- We believe multiple areas combined will lead to doubling activity:
  1. Natural light increases activity 30 percent
  2. Enrichments provide an additional 10 percent
  3. Extra space will increase activity by 30 percent
  4. The remaining 30 percent requires more study. Improved health (leg or other) and farmer approach to management are possible other contributors.

We still have more to learn about what increases activity and the best way to measure it. Our experience with video monitoring in plants suggests it can be used to better quantitate bird activity. Access to the outdoors will also be added as an attribute that can help stimulate healthy activity.

## Initiative: Continue to install windows in our existing houses

We believe that windows and natural sunlight create a better environment for the chickens, and for the people who care for them.

- We set a 2018 goal to have windows in 35 percent of the houses raising our chickens. We now have windows in 48 percent.
- Due to our progress, windows conversion will not be a targeted focus for 2019 but will continue to increase as we expand our free range programs, moving us toward the goal of 75 percent of houses with windows by summer of 2020.



## Initiative: Expand outdoor access/free-range

We are in the process of increasing free-range farms with a goal of 25 percent of houses across the company with outdoor access by January 2020. This expansion will allow us to keep pace with growing demand for PERDUE® HARVESTLAND® organic and free-range chicken.

## Initiative: Hold a farmer participation contest to design a better enrichment for the birds

Who better to design a better chicken enrichment than the farmers, who spend more time with our chickens than anyone else? The Chicken Welfare Enrichment Design Contest, open to Perdue farmers, offered a \$5,000 first-place prize for a new chicken enrichment and \$2,000 for the runner-up. The contest garnered 33 entries.

- The enrichment criteria included:
  1. Encourage chickens to act like chickens, increasing normal and beneficial behaviors,
  2. Enhance comfort and better use of space,
  3. Increase the chickens' ability to cope with physical and behavioral challenges, such as exposure to humans.
- The Top 5 finalists along with their families and their flock advisors were invited to Salisbury, Md., for the final judging.
- Temple Grandin, Colorado State University, Maja Makagon, University of California-Davis, and Richard Swarzenruber, organic poultry farmer with Coleman, served as judges.
- Farmers were asked to describe what inspired them to design the enrichment and why their enrichments would be beneficial for the chickens, and the farmer.
- The Carpenter Bench, designed and built by the Carpenter family from Wadesboro, N.C., won the competition. They will attend the 2019 Animal Care Summit to present the enrichment.



## Initiative: Contest for Free Range pasture design (new)

Just opening the range doors is not enough - the pasture must be inviting to the chickens for them to use it. We will hold a contest by June 2020 to encourage our current free-range farmers to share their knowledge about pasture activity and what encourages chickens to go outside.

# 5 FREEDOM FROM FEAR AND DISTRESS

## 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, Del., 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.

- This year we added the first fully-integrated transportation system of higher-welfare modular containers and specially designed trailers in the U.S. to further improve live bird handling beginning at the farm. There are currently only eight other installations of these container systems in the world.
- The specially designed trailers carry transportation containers that provide easier all-around access and increased headroom for chickens during transport. The advanced containers also lead to drastically less handling of chickens from the farm to the plant as chickens are able to remain in their container as they enter the CAS system.

**We intend to keep moving on our promise towards 100 percent CAS and will install a second CAS system within 24 months.**



## Initiative: Lairage evaluation

Phase Two of the Milford Controlled Atmosphere Stunning process includes an environmentally controlled de-stressing “lairage” area. The lairage area is designed to provide a comfortable space for animals to rest and recover following transport to the plant.

- Midway through our evaluation, it appears our current lairage design is beneficial in the winter but not designed appropriately for summer in the Mid-Atlantic geography. We will complete our basic evaluation in November of 2019, the one-year anniversary of the implementation of the new transportation system.





# FARMER RELATIONSHIPS

We are committed to building stronger relationships  
with the farmers who care for our chickens

## Initiative: Farmer website

Our farmers made it clear we needed to improve communications. One of their suggestions was to have a website dedicated to the farmers who raise our birds. After launching the farmer website in January 2018, Phase 2 went live in May 2019. The website provides location-specific information for farmers, making communications from their respective live production offices more consistent and timely.

## Initiative: Live bird-handling incentives to encourage farmers and others

We want to connect pay to animal welfare outcomes, and not just productivity. Our goal was to pilot a farmer-centric program which includes animal care metrics in one of our growing areas.

- We have developed a draft contract that incorporates condemnation percentage, paw quality and minimum litter depth as part of the farmer pay structure.
- We will continue to explore other ways to incentivize farmers around animal care.

**We will begin testing a draft contract in one region by August 1, 2019.**





**PART 3**

# TRANSPARENCY

We want to build lasting trust with stakeholders

Sharing results from our third-party audits allows our stakeholders to see both our successes, and where we need to improve. We have started reporting 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
- Customer audits

A summary of audit results is included in this report and published on our website at [www.perdueanimalcare.com](http://www.perdueanimalcare.com).

## **Initiative: Establish a certification program for the “Class of 2024”**

In 2017, we promised 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.” Working with stakeholders, we have developed a certification program, which can be audited, to match the “2024” criteria.

- The Perdue Better 4 Chickens Process Verified Program is designed to ensure that poultry raised under this program are appropriately validated for any or all of the four criteria: enrichments, extra space, approved breed, and stunned at harvest using a Controlled Atmosphere Stunning system.
- This program will allow complexes and farms to qualify in one, two, three or all four of the criteria.

**After vetting by interested stakeholders, we will implement the program and offer “2024” certified chickens to customers that are seeking those attributes.**

## **Initiative: Support “open barn” policy for tours (new)**

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 have been tracking the number of tours by audience and have set a goal to conduct 100 tours a year.





**PART 4**

# 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: Publish evidence of behavioral changes in animal care.

Key to shaping culture is recognizing behaviors to change or reward. Through third-party and other monitoring, we are keeping a log of both positive and negative behaviors, and publishing it.

- A report on Poultry Care Incidents is posted to the Animal Care section of the Perdue Farms 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: Chicken behavior training for flock advisors (new)

We have studied chicken behavior for several years now and will begin sharing what we've learned with our flock advisors. We will develop a training module specifically around chicken behavior to build flock advisor expertise and sensitivity around what a chicken wants as well as what a chicken needs by June 2020.

## Ongoing Initiatives:

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

Supports	Initiative	2016		2017		2018		2019		2020	2021
		Goal	Performance	Goal	Performance	Goal	Performance	Goal	Performance		
Freedom from discomfort	Paws quality score	Establish in-house scoring process	Completed	10% improvement	12.7% improvement	10% improvement	9.3% improvement	Better than 70% "good paws" during winter			
Freedom from pain, injury or disease	Video monitoring	Begin in-plant monitoring	Completed	Monitor in-plant compliance	99.83% compliance in plant	Monitor in-plant compliance. Add catching monitoring	99.9% compliance in plant. Trialed catching monitoring	Monitor in-plant. Monitor 50% of catching crews		Monitor compliance	Monitor compliance
Freedom to express normal behavior	Houses with windows	NA	NA	200 houses	Completed	27%	48%	50%		75%	100%
Freedom to express normal behavior	Chicken activity	Double in 3 years	Developed baseline	Develop better measurement method	Confirmed natural light increases by 10%	Add enrichments to studies	Developed a "formula" for 2X activity	Find final 30% that leads to 2X activity			
Farmer relationships	Farmer relationship index	NA	NA	80	81	80	70	80			
Transparency	Audit results reporting	Publish annually	Published	Publish annually	Published	Publish annually	Published	Publish annually			
Culture of animal care	Behavior logs/incident reports	Identify behaviors to monitor and reward	Trialed video monitoring implemented in all harvest plants	Publish log of positive and negative behaviors	Poultry Incident Report published May 2018	Publish quarterly	Updated quarterly	Publish quarterly		Publish quarterly	Publish quarterly
Transparency	Open doors	Begin tracking tours	88 tours	Track and categorize by stakeholder group	103 tours	Continue tracking	85 tours	100 tours a year			



# SHARING OUR 2018 AUDIT RESULTS

Perdue Foods Broiler Audit Results 2018



# MÉRIEUX NUTRISCIENCES AUDIT RESULTS

Criteria for this audit are based on the “National Chicken Council Animal Welfare Guidelines” published by the National Chicken Council (2014) and “Poultry Slaughter Plant and Farm Audit: Critical Control Points for Bird Welfare, August 2005,” published by Temple Grandin, PhD, at [www.grandin.com](http://www.grandin.com).



NutriSciences conducted annual audits at all 12 of our poultry live production and harvesting operations, including hatchery, growout (farms), catching and transportation, and processing. The audit covers a total of 65 audit points, scored on a scale of 1-5, for a maximum possible score of 325 points. Operations are rated on a percentage basis.

- All 12 locations audited received an “Excellent” Rating (97% or higher).
- We had two major non-conformances and no minor non-conformances.

## USDA PROCESS VERIFIED PROGRAM AUDIT RESULTS

Our USDA Process Verified Program covers all of our live-production and harvesting operations. The audit tool combines the principles from the National Chicken Council 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 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” or “minor” and “continuous improvement.”



The past year, the USDA Livestock, Poultry, and Seed Program’s Quality Assessment Division conducted annual audits of all 11 of our chicken live production and harvesting operations for conformance to our USDA Process Verified Program Poultry Care. Each audit covers a minimum of 188 audit points in more than 50 areas. Over the last 12 months, our PVP audits:

- Identified a total 11 minor non-conformances, defined as “low potential for bird injury” or requiring the establishment of a documented procedure. All were adequately addressed and cleared.
- Identified no major non-conformances.
- Confirmed conformance to our USA Process Verified Programs for Raised Cage Free, All Vegetarian Diet with No Animal By-Products and No Antibiotics Ever.

## GLOBAL ANIMAL PARTNERSHIP

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.

- Over the past 12 months, GAP audited 183 farms, all of which passed GAP certification. GAP identified 55 non-conformances, all of which were resolved.



## 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 159 farms raising organic chickens passed their audit. The audits identified three non-conformances.



## CUSTOMER WELFARE AUDITS

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



## THIRD-PARTY VIDEO MONITORING

We use third-party video monitoring in live-bird handling areas of all 11 of our broiler harvest facilities. This includes random reviews of video, covering 15.5 million birds in 348,000 audit events over the past 12 months. During that time, we achieved a compliance rate of 99.90 percent.







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