# FOR THE BIRDS: HOW TO RECOGNIZE AUTHENTIC ORGANIC CHICKEN AND TURKEY



### THE ORGANIC BROILER REPORT

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This report was researched, written, and edited by the entire policy and communications staff of The Cornucopia Institute. Please note that The Cornucopia Institute has chosen to use the pronoun "who" in reference to animals. Animal welfare is paramount in authentic organic agriculture, in contrast to conventional agriculture. We have thus chosen not to use the accepted pronoun "it" and "which" in our work.

The Cornucopia Institute is chartered as a tax-exempt, public charity focusing on research and education. Cornucopia aims to empower organic producers, consumers, and wholesale buyers to make discerning marketplace decisions, protecting the credibility of the organic food and farming movement and the value it delivers to society.

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# INTRODUCTION: THE UNITED STATES' FAVORITE MEAT

THE ORGANIC CHICKEN AND TURKEY INDUSTRY is a case study in the pernicious influence of industrial agriculture combined with the failure of the USDA to protect the integrity of the organic label.

With respect to organic poultry, the USDA organic seal represents a controversial spectrum of management practices, promoting more questions than assurances.

At one end, authentic organic producers, driven by their commitment to organic principles, provide legitimate outdoor access, prioritize animal welfare, and take measures to protect human and environmental health. But open any grocery meat case and you're more than likely to find the USDA organic label on brands that don't meet the intent of the organic standards.

Motivated by the economic promise of a marketplace hungry for organic poultry, industrial producers take advantage of consumer trust in the USDA organic label, while using conventional management practices. Factory-scale operations externalize costs and undercut competition by offering "organic" meat prices far below what is sustainable for authentic organic producers.

The industrial takeover of the organic poultry market is profound, but the market is not without hope. Authentic, family-scale farms exist; and many of these ethical farmers are well-integrated with their local communities. Superb organic poultry requires a greater investment of time and money—but the payoff in sustainability, nutrition, animal welfare, and economic justice pays dividends.

This report, along with Cornucopia's Organic Poultry Scorecard, serves as a call to action to safeguard ethical, organic poultry farmers and secure their essential role in the marketplace. The small number of authentic organic brands rely on the continued support of invested eaters.

Informed consumers must vote with their forks, putting them down when the only choices in the grocery store are products that push the boundaries of animal welfare and the intent of the organic label.

If you have access to local, pasture-based organic poultry producers, your patronage keeps them in operation and encourages other ethical producers to enter the market.

## Cornucopia's Scorecard: A Powerful Tool for Consumers

Cornucopia's brand research informs consumer food choices. Cornucopia has developed its Organic Poultry Scorecard¹ to make it easier to select the most ethical chicken and turkey. Certified organic chicken and turkey brands with products available at retail are rated based on answers to an individual survey (see Appendix I) and background investigations. The scoring rubric emphasizes quality of outdoor access, exhibition of natural behaviors, and other key indicators. Cornucopia's poultry scorecard can be found here:

cornucopia.org/scorecard/organic-poultry-scorecard



### CASHING IN ON A LUCRATIVE MARKET

ORGANIC POULTRY HAS SEEN A SURGE in popularity. The benefits of organic production, including nutrition, animal welfare, environmental impact, and economic justice for ethical farmers, have made chicken the most popular and accessible meat available in the organic marketplace today.<sup>2</sup>

According to USDA's Economic Research Service (ERS), more than 19 million certified organic broilers were produced in 2016, with sales exceeding \$749 million.<sup>3</sup> The Agricultural Marketing Resource Center (AgMRC) notes that "Chicken is ... the most popular natural and organic meat, purchased by more than seven in ten shoppers."<sup>4</sup>

Organic turkey is also in demand. Representing a much smaller market share than organic chicken, organic turkey sales reached approximately \$83 million in 2016.

The organic chicken and turkey industries continue to experience rapid growth. In 2016, sales from US poultry producers surged 78% from the previous year to a total of \$750 million.<sup>6</sup> In 2018, poultry made up the largest volume of sales in the US organic meat market. All signs point to further expansion of the organic poultry industry.<sup>7</sup>

### **INDUSTRIALIZATION**

Among the various reasons for the boom in the organic poultry industry, one main driver stands out: industrialization. Factory-scale operations entered the organic marketplace when it became clear that the USDA label offered economic advantages: consumers are willing to pay more to know how their food is raised. Big players, many with deep roots in conventional agriculture, scrambled to get a foothold.

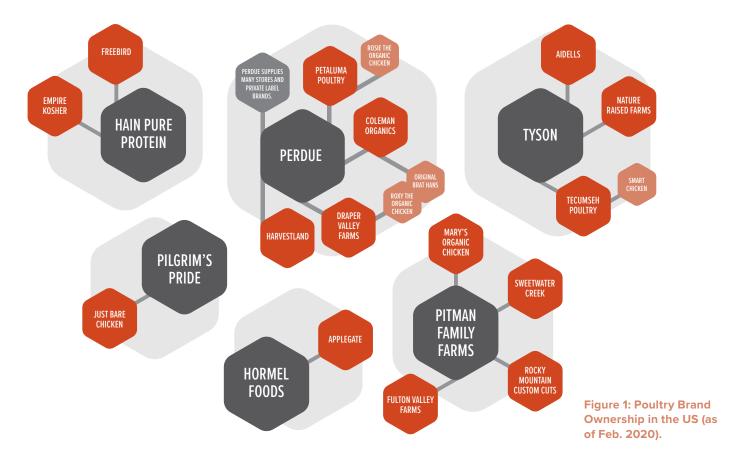
Some of the most common organic brands, such as Petaluma Poultry, Smart Chicken, and Draper Valley Farms, are owned by massive, vertically integrated companies (i.e., when one entity owns and operates multiple stages of production). Chicken dominates the organic meat market because of the relatively short production cycle and comparatively low cost at the checkout.

The majority of modern American poultry producers, even those that carry the USDA organic seal, are more like factories than farms. Sparse regulatory controls for organic poultry have institutionalized conventional style management practices, implemented to produce strikingly cheap organic broilers. The end result: huge barns holding tens of thousands of birds with no legitimate outdoor access are now certified organic. Legitimate farmers who produce ethically raised poultry products struggle to compete with the economies of scale and the externalized costs flouted by industrial producers.

### **CONTRACT GROWING**

Shifts in the poultry production market have seriously impacted the industry. One result is the prevalence of "contract growers" who produce poultry on behalf of a larger company or brand.

Most of the major corporate brands get their organic poultry product almost exclusively from contract growers.<sup>8</sup> Contract farming methods keep corporate costs down and profits up by offloading risks to the farm-operators.<sup>9</sup> Too often, these chicken producers must sink thousands of dollars of their own money into infrastructure, feed, and other costs before they see any funds from the contracting companies. They also bear the risk of disasters such as unexpected losses from disease or predation.



The expenditures assumed by contract growers notoriously outweigh the prices paid by their corporate buyers. Over time, contract growers become increasingly reliant on their corporate buyers. They are often forced to sign agreements that tie up their capital in mandated updates to poultry housing, irrigation, and other infrastructure, while preventing them from producing birds independently. In

Industrial tactics have changed the face of poultry farming; the traditional vision of a chicken pecking around the barnyard is no longer a reality for billions of animals. While there are organic chicken brands that go beyond the basic requirements of the organic standards, the majority of organic chicken in the US comes from factory farms mimicking conventional management strategies (see figure 1).

Part of the problem is lax enforcement. As Cornucopia has detailed, this has led to widespread abuses and industrialization in organic production. In the absence of NOP action, some accredited certifiers have added to the confusion by offering their own interpretations of organic standards. In the absence of NOP action, some accredited certifiers have added to the confusion by offering their own interpretations of organic standards. In the absence of the confusion by offering their own interpretations of organic standards.

But a more fundamental issue is represented by the organic rules and regulations themselves, and their impotence in encouraging the humane treatment of poultry in the organic landscape.

### Perdue's Marketplace Perch

Perdue Farms, Inc. is the largest organic chicken producer in the United States as of the end of 2019.<sup>15</sup> The brand entered the organic market with the purchase of Coleman Natural Foods in 2011. Perdue produces chicken at costs far below those of an ethically raised, pastured chicken by taking advantage of economies of scale. "Organic" chickens under their labels are raised in enormous flocks. Outdoor access at these farms is token at best: a few small pop-holes may offer a handful of birds (out of tens of thousands) a small outdoor area to peck around for a fraction of their lives.

Perdue is not the only industrial organic chicken producer in the marketplace. Tyson Foods Inc., the nation's largest meat company, bought specialty chicken producer Tecumseh Poultry, LLC in early 2018, acquiring the Smart Chicken brand. Another poultry giant, Pilgrim's Pride Corp. (owner of the Just Bare Chicken brand), has a new organic facility in North Carolina.



### THE SPIRIT VS. LETTER OF THE LAW

THE ORGANIC LABEL is the only federally regulated label that speaks to how a product was produced, not just what a consumer can expect in the end product.

The Organic Foods Production Act (OFPA), enacted under Title 21 of the 1990 Farm Bill, served to establish uniform national standards for the production and handling of foods labeled as "organic." As a result, organic food has strict labeling requirements that include what can and cannot be displayed on the front panel of a product. 19

The NOP Final Rule defines organic production as "a production system that is managed ... to respond to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity."<sup>20</sup>

The standards provide a framework under which every organic producer must operate, or else risk their certification. But the rest of the federal law is light on specifics regarding livestock animals.

The laws themselves can serve as an important consumer education tool. But less regulatory language is dedicated to poultry than ruminant livestock. While the basic organic livestock standards apply to birds (along with all other organic livestock), special accommodations for the unique needs of poultry are a glaring omission.

### THE REGULATORY ROOT

As the overarching federal law for the organic label, OFPA dictates a structure for organic production and handling. The organic regulations are other federal laws built on OFPA's initial framework. Both sources are important when trying to understand what organic poultry production was intended to be, what it is now (including the regulatory loopholes found by some unethical producers), and what it could be in the future.

OFPA sets some standards for the origin of poultry, stating: "With the exception of day old poultry, all poultry from which meat or eggs will be sold or labeled as organically produced shall be raised and handled in accordance with this chapter prior to and during the period in which such meat or eggs are sold."<sup>21</sup>

OFPA does not get into many specifics when it comes to livestock animals; instead, it focuses on the basic requirements a product must meet to qualify for the organic label. OFPA's section on animal production practices and materials lays out some basic prohibitions that apply to poultry (as well as other livestock):<sup>22</sup>

- No re-feeding of manure or feeding urea,
- No growth promoters or hormones (though growth hormones are prohibited in conventional chicken and poultry as well),
- No sub-therapeutic use of antibiotics,
- No use of synthetic internal parasiticides on a routine basis, and
- No medication, other than vaccinations, in the absence of illness.

### **Bare Bones for Birds**

The basic requirements applying to organic poultry operations that sell over \$5,000 in organic products annually include:<sup>23</sup>

- Operations must be certified by a USDA-accredited certifying agent.
- Birds must be fed and managed organically from the second day after hatching.
- All agricultural components of the feed ration (including kelp and carriers in feed supplements) must be 100% organic.
- All poultry must have access to the outdoors.

The intent of the organic law was to support pasture-based production, but these baseline standards did little to inform the industry about how exactly they should be raising their poultry. Nor did it discourage industrial players from moving in and taking over.

### LOOPHOLES FOR LIVING CONDITIONS

The language within the organic standards plainly intends that every animal should be outdoors, but many broilers never see the sun. Popular strains of broiler chickens are bred to reach market weight sometime between four and six weeks of age, a fragile age that some producers and certifiers argue is too young to be let outdoors.

Using allowances under the "stage of life" rules, these industrial producers confine organic poultry.<sup>24,25</sup> But because broilers are processed at a young age, their time in the open air is severely limited. The birds may get outdoor access for the last week or 10 days of their lives, but since "outdoor access" is not defined, it does not necessarily mean the birds are actually going outside.

Stocking density is another problematic area of the regulations. A rule protecting ruminant livestock (e.g., cattle, sheep, and goats) stipulates that the feeding areas (other than pasture) must allow for them to feed simultaneously without crowding and without competition for food.<sup>26</sup> Chickens and turkeys do not benefit from such specific requirements.

It's left to individual certifiers to determine whether a poultry producer's stocking density is appropriate. The average adult chicken needs approximately two feet of space to comfortably spread their wings without hitting another chicken. One industry analysis found that certifiers were requiring a minimum of 0.14 square meters (or

0.46 square feet) per bird—a square less than eight and a half inches wide for each bird.<sup>27</sup> It is difficult for broilers, bred to grow rapidly, to express natural behaviors such as preening, resting, and dissipating excess heat in such a small area.<sup>28</sup>

Because the regulations are open to interpretation with respect to poultry, enforcement of outdoor access and stocking density is essentially non-existent in the organic broiler industry. But these are not the only loopholes that have led to highly variable organic poultry production management techniques.

The organic rules require producers to maintain living conditions that accommodate the health and natural behavior of all their animals, an important differentiator that could help consumers choose between industrial and family-scale production.<sup>29</sup> But the standards contain sparsely defined exceptions that are easily twisted to maximize profits in the organic poultry market. The organic label is an enticing incentive.

#### **Under the Law**

- Animals must have year-round access to the outdoors, shade, shelter, exercise areas, fresh air, clean water for drinking, and direct sunlight. (With some exceptions, birds can be "temporarily denied" access to the outdoors).<sup>30</sup>
- Continuous total confinement of any animal indoors is prohibited.
- Appropriate, clean, dry bedding is required. When roughages (like straw) are used, they must be certified organic.<sup>31</sup>
- Shelter must be designed to:

Allow for natural maintenance, comfort behaviors, and opportunity to exercise;

Maintain temperature level, ventilation, and air circulation suitable to the species;

And reduce the potential for injury.32

■ The operation must manage manure in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, heavy metals, or pathogenic organisms. Manure management must also optimize recycling of nutrients and must manage pastures and other outdoor access areas in a manner that does not put soil or water quality at risk.<sup>33</sup>



### A DIVIDED MARKETPLACE

EVEN THE MOST EDUCATED CONSUMER would find the organic poultry marketplace tough to navigate. Due to sparse regulations, a range of dramatically different poultry production methods can be used in certified organic agriculture. Some organic poultry production methods mimic conventional agriculture, while others go above and beyond the minimum standards required by organic regulations. Broadly speaking, producers can be differentiated by their approaches to the following key management practices:

- Housing and outdoor access
- Breed and strain selections
- Physical alterations and other management tools
- Organic feed and supplements
- Slaughter
- Chicks and poults

Each of these key issues, including differences within the organic sector, is explained in detail throughout this section.

### HOUSING AND OUTDOOR ACCESS

Several standard types of housing are used in the organic meat bird industry. Bird welfare hinges on whether producers manage outdoor access by following both the intent and the letter of organic law. High-welfare housing approaches protect birds from extreme weather and still provide the birds with legitimate access to the outdoors to perform their natural and instinctive behaviors. Allowing for sufficient space, both outdoors and indoors, is one of the most compelling animal welfare considerations a producer can make. Legitimate pasture-based poultry benefits birds and consumers and can be a contributing part of a diversified farm ecosystem.

### **Debunking Foraging Myths**

Some argue that selective breeding has altered chickens' instinctive behavioral needs, making standard practices for the treatment of hybrid chickens "humane." The claim is that these birds are not missing anything because their desire to forage for insects, walk any distance, or socialize has been bred out of them. This argument is fundamentally flawed because these fast-growing breeds often experience severe physical problems that cause them pain during their short lives.

There is fierce debate within the research community as to just how much food will be collected by chickens and turkeys while on pasture. In addition to access to pasture, other factors impact the foraging habits and consumption rates of chicken, including bird breed and freshness and quality of the forage. This means that truly effective pastured production requires the use of techniques that increase foraging consumption. Studies back this up, showing that even when traditional broilers are given good pasture access, their foraging consumption rates do not necessarily increase without further management considerations. There are some flaws in the majority of studies however; more active strains of meat birds are underrepresented in research since they have less commercial presence. The same is true with respect to turkeys.

### The Al Fresco Life

Outdoor-centric housing premises every aspect of the birds' lives on outdoor access. There are many different methods used to maximize time outdoors. Most high-welfare farmers use some combination of the following techniques: 1) mobile housing, such as "chicken tractors," 2) moveable fencing, and/or 3) farm ranging.

 Mobile housing structures. One of the most common and effective approaches to providing outdoorcentric poultry housing is the use of mobile housing structures. While popular among farmers who raise laying hens, mobile housing strategies can be used for broilers and other meat poultry as well.

Instead of coops, young broilers are housed in mobile enclosures that resemble fenced, open-floored hoop houses. Often called "chicken tractors," these houses give birds free access to the ground to forage, while keeping them contained and safe from predators.

When this type of housing is moved frequently, typically every day or on alternating days, poultry have continuous access to fresh pasture and the added benefit of not living in their own excrement!

- 2. Moveable fencing. An alternative to enclosed "tractors," mobile fencing serves to offer birds some protection, while limiting their range to an area that can be rotated. This technique is used more often with turkeys, who are larger and more gregarious than chickens.
- 3. Farm ranging. Other producers let their birds range in a larger area without any confinement, providing them with shelter, feed, and water in strategic areas to promote foraging and their safety. Livestock guardian dogs have also been utilized to protect free-ranging chickens and turkeys with great success.

Industrial operators suggest that raising birds on pasture gives rise to a higher risk of predation and disease. In fact,

This brand takes "chicken tractors" to a commercial scale, allowing birds to remain safe within the tractor while still being able to access the ground and fresh vegetation. Photo courtesy of Greener Pastures Chicken.

disease risks arise when birds remain on denuded pasture, in contact with pathogens from their own excrement. Rotating birds onto fresh ground largely eliminates this threat.

Moving birds frequently to fresh ground is labor intensive but provides many clear benefits, including:

- **Opportunities to forage.** Birds that have access to fresh ground are encouraged to express the natural behaviors (e.g., moving, scratching, and foraging) which, in turn, stimulate other natural behaviors and promote animal welfare.
- More natural diet. Chickens and turkeys are omnivorous and benefit from a diet that includes animal protein and fresh vegetation on top of the seed, grain, and legume mixes that make up most poultry feed. As they express their natural foraging behaviors, birds on fresh ground supplement their diets with natural and varied foods. A more natural and varied diet translates to greater health for the birds and for the humans that eventually eat them. Research shows pastured chicken is often more nutritious than conventional chicken.<sup>36</sup>
- Manure control. Without frequent rotation, poultry manure accumulates and becomes a pollutant. Mobile management evenly distributes the nitrogen-rich poultry manure on the land, preventing manure overload, which can harm the soil and contaminate nearby water systems.
- Promoting soil health and fertility. When managed properly, manure actually helps fertilize the soil, replenishing the pasture recently eaten down by the chickens or other poultry. Some producers with diversified operations also use their birds to "clean up" spent fields or rotate them behind other livestock, which helps to break up and spread the manure of other livestock as well. In turn, healthy soil is more beneficial to the birds' pasture, feeding into a virtuous cycle.



Young turkeys in mobile "tractor" pens. Photo courtesy of Many Hands Farm.

### Into the Woods: Silvopasture

Historically, chicken, turkey, and many other game-birds were creatures of the underbrush, not natural "grazers." They scratched and foraged in woodlands and forested areas. Silvopasture is an approach to outdoor access that attempts to duplicate this natural setting, giving birds outdoor access among trees or other woody plants and undergrowth.<sup>37</sup> Often, this production model pairs poultry with other farm systems, such as orchards or berry farms, but it can also include other woody plants (e.g., alders for biomass).

Silvopasture offers many benefits for both the birds and producers.<sup>38</sup> Running poultry outdoors where there is ample cover protects them from predators that can decimate flocks in open pasture. This "canopy cover" can increase the birds' sense of security and reduce stress.39 The birds potentially have more opportunity to find a diversity of invertebrates, seeds, and vegetation. In some operations, the birds break down dropped fruit after harvest season and help to compost leaf litter by scratching and turning it. Ranging poultry also fertilize the ground with their droppings. Foraging poultry snatch up everything they can get their beaks on, providing excellent controls for pest invertebrates. This appetite includes insects such as ticks, fleas, mosquitos, and other pests that may damage crops.<sup>40</sup> Tree cover may also provide broader environmental benefits, such as soil stabilization, reduced nutrient leaching from manure loads, and carbon sequestration.41

Because silvopasture closely mimics natural ecosystems, this approach can restore ecological features and functions. <sup>42</sup> Successful silvopasture systems match the type of animal with the land and keep animals on rotation to prevent damage to the land. <sup>43</sup> Hardy broiler strains that like to forage and range are well suited to silvopasture systems, while most hybrid strains are not.

### **Fixed Housing**

Fixed housing is standard practice for the majority of the chicken produced in the United States. While it can accommodate more birds, it ultimately leads to poor outdoor access.

The organic standards require outdoor access to include shelter, shade, clean water, fresh air, area to exercise, and direct sunlight (with some allowed exceptions), but they do not define "outdoor access" or "year-round access."

A small number of high-welfare producers use fixed housing approaches with outdoor access. Limited to pasture adjacent to the house, these producers rotate the birds' outdoor space using moveable fencing.

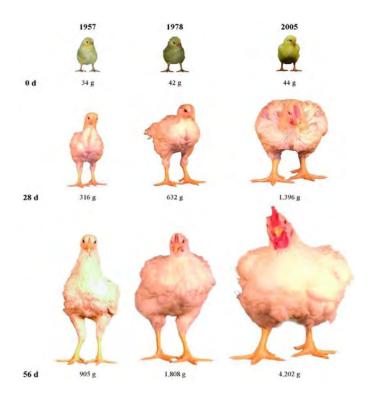


Figure 2: Age-related changes in size of common broiler strains over the years. Figure courtesy of: *Poultry Science*, Volume 93, Issue 12, December 2014, Pages 2970–2982.

The most egregious industrial-scale operators provide no outdoor access at all. Others meet the bare minimum requirements for outdoor access, where small, limited doors; barren ground; and a lack of shade, protection, food, or water discourage birds from using the outdoor space.

Factory-scale producers represent the biggest industry players, creating a dire scenario for most chickens. <sup>45</sup> Taking advantage of the allowed exceptions under the organic regulations, producers often pack many short-lived broilers into a single house. These birds spend most, if not all, of their short lives without outdoor access. When the doors do finally open in the last week or two of a broiler's life, the outdoors seems alien and unsafe. Essentially, outdoor access is "offered," but not utilized. <sup>46</sup>

In these systems, fast-growing broilers (such as those depicted in Figure 2) are slaughtered after five or six weeks. Then, the fixed houses are cleaned out and stocked with new chicks, repeating the cycle. In this way, industrial production depends on the practice of breeding birds for their short life spans, another key issue that differs across management styles.

### **BREED AND STRAIN SELECTIONS**

The chicken of a hundred years ago barely resembles today's broiler. Selective breeding for the fastest growing chickens has resulted in just that: birds that grow twice the size in half the time (such as those depicted in Figure 2).<sup>47</sup> The transformation of a day-old chick into a finished five-pound broiler in six weeks or less is a hallmark of agricultural industrialization.

The most common breed used in both conventional and organic broiler production is the Cornish Cross hybrid.<sup>48</sup> This Cornish breed and other similar hybrid strains are what you would recognize as today's "typical" grocery-store chicken. Consumers have adapted to this chicken's abundant white meat.

Despite welfare issues, consumer demand has popularized strains like the Cornish Cross, leading even many small organic poultry producers to grow them in favor of heritage or slower-growing breeds. 49 According to many of these family-scale producers, attempts at selling heritage strains were not well received by consumers who seemed unwilling to purchase meat beyond a certain price point or with unexpected qualities.

### **Animal Welfare Implications of Hybrid Strains**

Research indicates that consumers perceive outdoor access and stocking density to be more important welfare concerns than the animal breed or strain used.<sup>50</sup> However, breed and strain selection are inextricably linked to animal welfare considerations.

What consumers expect form their chickens: a hybrid broiler strain that focuses on fast growth and ample breast meat.

The Cornish Cross and similar strains are more susceptible to illness and stress than slower-growing breeds. Fast growth, uneven weight distribution, and low activity cause physical issues. A high incidence of metabolic and locomotive problems among Cornish Cross birds has been observed. Locomotive or gait problems may occur when a bird's skeletal structure is unable to support the uneven distribution of body weight caused by large front breast muscles.

Fast growth rate is also generally accompanied by decreased physical activity and extended time spent sitting or lying down, causing sores.<sup>52</sup> This hybrid often succumbs to heart failure; it has been selected to divert resources that would otherwise be utilized for heart growth into growing an enormous breast.<sup>53</sup> Lung function can also be compromised.

Chronic hunger is another negative welfare implication. Breeders have selected for appetite. The Cornish Cross' unnaturally fast growth rate and large size create constant hunger, driving the chickens to spend every waking moment in front of their feed.<sup>54</sup>

Industrial breeding has also selected for more docile chickens, who are less able to fend for themselves. Even when broilers are given access to the outdoors, they may be poor foragers, with little natural instinct to scratch and explore.

These traits favor the industrial agriculture model perfectly: producers can give token "outdoor access" to be able to market their broilers as free range or organic, knowing their chickens will never utilize that access. Even if a particular strain of birds does not appear to suffer from these problems, the breeder flocks that supply these farms almost always compromise animal welfare.



Freedom Ranger pictured at 4 weeks of age. Photo Courtesy of: Wendy Smoak, Flickr

However, more ethical breed options have been developed. Some slower-growing strains are bred for more vitality and ability to forage in outdoor systems. The increasingly popular Freedom Ranger and Red Ranger hybrid breeds, for example, are typically slaughtered between nine and 13 weeks, depending on the desired size of the finished carcass.<sup>55</sup> True heritage breeds are even slower to reach slaughter weight.<sup>56</sup>

The choice of breed or strain favored by industrial agriculture is driven by the economics and operations of the farm.

### "Standard" or "Heritage" Breeding

The breeds that would have been found pecking around a barnyard or backyard farm 50 years ago are markedly different from those we see today. Farmers bred the healthiest animals in their flocks, creating genetic lines that were selected for heartiness and profitability. These chickens are now known as "standard-bred" or "heritage" breeds.<sup>57</sup> Heritage chickens are defined by the American Livestock Breeds Conservancy as "naturally mating, long lived, and slow growing." Standard breeds are not crossbred, and the offspring breeds are true reflections of their parents, allowing farmers to maintain the genetic lines of their own flocks.<sup>58,59</sup>

Instead of reaching slaughter weight within five or six weeks, these breeds take 10 or more weeks to reach full size; instead of a fat breast, they carry more weight in the thighs. They tend to have more flavorful dark meat.

Commonly used heritage breeds like the Jersey Giant or Columbian Wyandotte can reach market weight in 16 weeks, while some slower-growing birds can take up to 24 weeks. Most of these breeds are also adequate egg producers and will live up to seven years. They have healthier immune systems than Cornish Crosses and are adapted to life on pasture, giving them, among other advantages, the ability to forage for insects. While heritage breeds may not be as efficient at converting feed to muscle and fat, their hearts grow proportionally with their bodies and their skeletal structures are strong enough to support them. Such considerations make heritage breeds a more ethical choice for animal welfare.

## PHYSICAL ALTERATIONS AND OTHER MANAGEMENT TOOLS

In the lexicon of organic poultry production, "animal welfare" and "preventative health" can have conflicting meanings. The organic standards allow for practices that enhance the health of a flock or control problematic behaviors. Yet some of these practices have questionable animal welfare outcomes.

The regulations specify that organic livestock producers must establish and maintain preventive healthcare practices, which can include "performance of physical alterations as needed to promote the animal's welfare and in a manner that minimizes pain and stress..." This means that physical alterations are allowed, as long as a producer can justify that they benefit "animal welfare."

This standard has been easy to meet in the past, and the NOP has given little guidance as to the bounds of what actually benefits "animal welfare." Some of the following practices are common in industrial-organic poultry production.

### **Beak Trimming**

Although more common in laying hens, beak trimming is the most common alteration performed on chickens and turkeys today. In most cases, by the time organic producers receive their orders from conventional hatcheries, this alteration already has been made.

When the chicks and poults are a day or so old, the tip or "hook" of the beaks are burned back—a traumatic procedure that deprives these birds of an important source of sensory feedback. Without the hook at the end of the beak, the birds' ability to forage outdoors can be impacted.

Beak trimming is utilized when crowding and stress would otherwise lead the birds to feather pick or even cannibalize each other, reducing the amount of quality product that can be brought to market. Trimming the beak provides an economic advantage. Of course, this practice does not eliminate aggression or the attendant social stress; it only limits the physical evidence of this aggression. Furthermore, the problematic feather pecking and cannibalization behav-



Said by some to be the best-tasting chicken in the world, the Bresse (pictured here) is a unique breed of meat chicken that is usually slaughtered between three to four months of age.



Note the trimmed beaks in this crowded flock of turkeys (a warning sign that the birds are living in high-stress situations).

iors are not widespread in operations that provide ample outdoor time and low stocking densities.

Other producers trim broiler beaks to prevent food wastage. Frequently, poultry will rake their feed out of the feeder so they can pick through it and eat only choice morsels–approximating a natural scratch-and-peck behavior. Trimmed birds are less able to perform this behavior.

### **Feed Restriction**

Feed restriction is used in broilers to control growth. <sup>61</sup> With hybrid strains developed for rapid growth, leaving this characteristic unchecked often leads to health issues in the birds.

There is active debate as to whether feed restriction of any kind is humane. When paired with other strategies, such as providing good forage, studies have shown that restricting the amount of hard feed increased rates of foraging.<sup>62</sup> This means that feed restriction can be used as a strategy to promote the natural behaviors of these birds.

### **Artificial Lighting**

In broilers, lighting changes can be used to promote feeding during months when there is little natural light available. Chickens and turkeys have poor low-light vision and will not feed when lighting is poor or when they are in darkness, which can limit growth. For producers that raise large flocks indoors, manipulating the lighting can help them push production.

Smaller-scale producers rarely use artificial lighting, and many only raise broilers during the months when the weather promotes active outdoor foraging.

When artificial lighting is used, it is beneficial for broilers to be provided with at least eight hours of continuous darkness, with lights fading on and off to mimic the natural sun cycle. When fewer than eight hours of total darkness are provided, welfare concerns arise.

### ORGANIC FEED AND SUPPLEMENTS

All certified organic poultry must receive certified organic feed. That includes their outdoor foraging space, which must be managed according to organic principles.<sup>63</sup> Domestic organic feed can be expensive, sometimes commanding 50-100% more than conventional feed.<sup>64</sup> It can also be difficult to obtain. Imported organic feed is much less expensive, although it is frequently sourced from overseas markets that are implicated in organic fraud.<sup>65</sup> Most large poultry operations rely on imported organic feed.

Conversely, farmstead and pasture-based producers may use only local feed or grow some of their feed on-farm. This may increase the producers' out-of-pocket expenses, making the final product more expensive at retail.

### Grain Fraud Cripples the Organic Poultry Industry

North American organic grain farmers have lost hundreds of millions of dollars over the past several years as they struggle to compete with imports of fraudulent organic grain used for livestock feed. Documented cases of import fraud have threatened consumer confidence in the organic label.

Cornucopia has been at the forefront in petitioning the USDA to close loopholes, inspect high-risk shipments, and investigate foreign companies and certifiers that engage in questionable import and certification practices. We have aggressively tracked suspicious shiploads of "organic" grain, investigated the identity of international supply chains responsible for many of these shipments, and advocated for stronger enforcement measures.

Cornucopia's work, *The Turkish Infiltration of the U.S.*Organic Grain Market, chronicles how a small number of multibillion-dollar agribusinesses came to dominate the US organic grain industry. 66 We've also celebrated the hard work of organic grain farmers across the US in our report:

Against the Grain: Protecting Organic Shoppers Against Import Fraud and Farmers From Unfair Competition. 67

### Synthetic Methionine

Methionine, an essential amino acid for poultry, is an allowed synthetic substance in organic poultry production. This allowance has benefited industrialized production methods more than the truly outdoor-centered production methods favored by small and medium-sized producers. The use of synthetic methionine is controversial in the organic marketplace.

Methionine is classified as an essential amino acid because it cannot be biologically produced by poultry but is necessary to maintain their viability. Among natural sources, grains provide low amounts of methionine. Natural feed sources with relatively high amounts of methionine include blood meal, fish meal, crab meal, corn gluten meal, and sunflower seed meal. Methionine is regulated as an animal feed nutritional supplement by the Food and Drug Administration. Organic livestock producers petitioned for the substance as a part of the NOSB's initial review of synthetic amino acids.

The original organic regulations prohibited synthetic methionine for animal diets, but issued an exemption allowing the industry time to find alternatives. Later, the National Organic Standards Board (NOSB) recommended that the use of synthetic methionine be restricted, rather than prohibited; up to four pounds per ton of feed for laying hens, five pounds per ton for broiler chickens, and six pounds per ton for turkeys and all other poultry were allowed until October 1, 2012.71 After that date, the allowed levels were decreased to two pounds per ton for laying and broiler chickens and three pounds per ton for turkeys and all other poultry.

With sufficient foraging, flocks can overcome some methionine deficiency. In one study, restricting feed was found to be an effective strategy to increase forage intake and decrease rates of synthetic methionine.<sup>72</sup> The use of synthetic methionine as a food supplement may thus be used as a workaround, enabling management practices that ignore the birds' natural behaviors.

### **SLAUGHTER**

In 2018, more than nine billion chickens were slaughtered in the United States.<sup>73</sup> Of these, approximately 1,060,000 organic chickens were slaughtered each week, with an average weight of 6.5 pounds (in contrast, approximately 30,000 organic turkeys are slaughtered each week).<sup>74</sup>

The Humane Methods of Slaughter Act (HMSA) is a United States federal law designed to decrease suffering of livestock during slaughter. The HMSA refers to "livestock" and does not specifically include or exclude birds under that definition. However, while Cornucopia believes the USDA may have the authority to cover birds under the law, the USDA's view is that including birds would require an act of Congress. To

Poultry slaughter is regulated by the federal Poultry Products Inspection Act of 1957 (PPIA).<sup>78</sup> The PPIA requires the USDA's Food Safety and Inspection Service to inspect all domesticated birds when slaughtered and processed into products for human consumption. This applies to all poultry, including organic.

An in-depth report by The Animal Welfare Institute (AWI) speaks to a paradox of the poultry industry in America: the industry seems to promote the view that the USDA enforces humane slaughter practices, while also arguing that the USDA lacks the authority to regulate humane slaughter of birds. The Humane Slaughter Act, Animal Welfare Act, and the Twenty-Eight Hour Law all exclude chickens and turkey from their protections. So

There are no specific methods of stunning or slaughter prohibited by the organic rules. The only stipulation is that meat cannot be labeled or sold as organic unless the slaughter and processing happens at a USDA certified organic facility. The organic certification requirements for a slaughter facility focus on preventing product contamination instead of promoting bird welfare. See

Small commercial operations can offer more attention and care to the slaughter of each individual animal than a processor dealing with thousands of birds at a time. Some small producers do not the stun the birds before cutting their necks, arguing that a proper cut (individualized for each bird) not only provides the highest welfare option, but also the highest quality carcass. In fact, many experts in the field cite this method of slaughter as the most humane, stating that the correct use of this approach allows the birds to slip into unconsciousness with little pain or distress. §3

More studies are needed to determine what is best for poultry welfare when it comes to stunning and slaughter. However, stark differences remain between how small producers and factory-scale producers stun and slaughter their birds. As it stands, the organic regulators have remained quiet about these differences, despite both slaughter and stunning being another possible way to differentiate management styles within the industry.

### **European Union Promotes Bird Welfare**

Members of the European Parliament voted to approve new regulations for the certification and labeling of organic food in April 2018.<sup>84</sup> These new EU standards do not go into effect until 2021 but will add further requirements for the production of poultry.

The EU standards prevent the slaughter of birds before 81 days (approximately 11.5 weeks old), extending to 140 days for male turkeys (20 weeks) and 100 days for female turkeys (approximately 14 weeks). 85 This prohibition makes the use of hybrid breeds, including the Cornish Cross, difficult, if not impossible, under the EU organic label.

The US organic label does not have such prohibitions. Any breed or strain of poultry can be used, even if the choice to use those strains has negative welfare implications.

### Shortage of Certified Organic Processing Facilities

The dearth of certified organic processing facilities also contributes to higher production costs for small- and medium-scale poultry producers, giving industrialized production yet another economic advantage.  $^{86}$ 

Without a certified slaughter facility within reasonable travel distance, it is nearly impossible to produce organic birds. Certified mobile slaughter units do exist, but they are often significantly more expensive to use.

While there are exemptions to the USDA processing requirements, those exemptions do not apply to every business or farm. Often, poultry that is raised as 100% certified organic will lose its organic status at slaughter due to lack of access to organic certified processing with the required USDA oversight.

Some certified organic producers use alternative strategies to get around a lack of accessible or affordable USDA certified organic processing facilities. If a farmstead falls under the exemptions (based on the amount of meat they produce), they may be able to process the birds themselves. The addition, farms can sell their organic birds "live" to consumers, who then dictate when and how the bird will be slaughtered. In this case, the consumers still get a high-quality product that met all the organic requirements up to the point of processing. These alternatives are only viable for producers raising a small number of chickens or turkeys each year.

Small businesses affected by these concerns often make the choice to market their poultry directly to consumers, rather than pursuing organic certification at all. The end result is that US consumers rarely encounter authentic organic chicken in grocery stores or co-ops.

### **CHICKS AND POULTS**

The welfare of chicks and poults is another contentious issue in organic poultry production. The organic regulations state that "poultry intended for slaughter or egg production must be under continuous organic management beginning no later than the second day of life." (In comparison, ruminant livestock generally have to be managed organically from the last third of the animals' gestation.) Organic chicks may be purchased from a conventional hatchery, where their parents live the low welfare lives of conventional chickens.

Despite this requirement, some chicks may actually be more than 24 hours old when they are shipped. Chicks are often "batch hatched" in groups. In practice, not every bird will hatch at the same time, meaning some chicks in a batch will be slightly older than others. Often these chicks are deprived of food and water until their entire "batch" has hatched.

### The Animal-Welfare Focused Hatchery

Producers have claimed it is too difficult and expensive to purchase and raise chickens that are organic-from-birth at commercial scale. That excuse is no longer valid.

Bell & Evans, which produces organic as well as conventional chicken, now has an all-organic, animal welfare-focused hatchery. At the new hatchery, chicks have immediate access to water and organic feed after they hatch, in contrast to the current industry standard where chicks may wait days to be fed. This hatchery is certified organic. The company also has plans for their breeder broilers to be certified organic in the future.

Hatching chicks out on-farm may become more popular in the future, allowing for chicks to be organic from "birth." Some ethical farmstead poultry producers already do this, even creating their own strains of birds that are suited for their particular farm ecosystem. Recent research indicates that broiler chickens hatched on-farm experience better welfare, and therefore better health outcomes, because the chicks are not exposed to stressful handling, post-hatch feed and water deprivation, and transport. 90,91

The regulatory framework fails to disparage the use of conventional chicks and poults. But the industry is ripe for change, with some innovative operators showing that the use of conventional chicks is no longer essential. With these innovations, the NOP may be inspired to change the rules in this particular area.



### WHY POULTRY MANAGEMENT MATTERS

Industrial brands benefit from economies of scale when it comes to both feed and certification expenses, allowing a more stable bottom line and less risk overall. Other factors that increase risk for smaller farms may include smaller flock sizes, which reduce the ability of a farm to recover from any losses, and a longer growth period for broilers from healthier breeds. Additionally, the high cost and relative unavailability of organic feed and the costs associated with certification itself can be burdensome for small producers. 92.93

All of these factors have associated costs, from environmental issues to impacts on human health and animal welfare, making the final product for authentic organic production more expensive. Since industrial organic producers label their poultry with the same organic seal used by authentic organic farmers, consumers often gravitate toward the cheaper option. Cornucopia's Organic Poultry Scorecard provides shoppers with the information they need to support farmers that go above and beyond the minimum organic rules and regulations for poultry.

### **ENVIRONMENTAL ISSUES**

Industrialized poultry production attracts consumers because of its incredibly low price on grocery shelves. But there are many environmental costs for cheap chicken or turkey that are not accounted for in the pricing. These externalized costs are paid by society as a whole, in the form of pollution, destruction of native ecosystems, and land-use burdens.

Chicken is often touted as a sustainable meat option because it takes less feed to produce a pound of chicken than a pound of beef or pork. However, whereas cattle can subsist and even thrive on an entirely grass-based diet, chickens need to obtain a large percentage of their diet from grain, seeds, or other farmed inputs. These inputs need to be grown on land that could otherwise be used to produce food directly for humans.

There are many environmental costs of industrialized poultry production:  $^{94.95.96}$ 

- The energy use and emissions associated with the production of poultry feed ingredients, such as fuel use for field operations, the manufacture of fertilizers and soil amendments, and the manufacture of additives such as synthetic methionine.
- The degradation of lands used for growing feed (although organic agriculture, and particularly regenerative organic practices, can provide some environmental benefits).97
- The reduction of oceanic fisheries, due to extensive use of fish meal as both a common feed supplement and a feed crop fertilizer.
- Energy and pollution burdens from hatchery chick production and the maintenance of breeder flocks, as well as the disposal of birds that do not meet production needs.
- On-farm energy use, especially when large-scale lighting and ventilation systems are used (as is typical in industrial production).
- Litter and manure management, which can cause pollution runoff into waterways or ground water that impacts local ecosystems and communities. Unmanaged manure can run off during rainstorms and can cause algal blooms in nearby waterways. 98 These

blooms deplete oxygen in the water, killing other wildlife and plant life and destroying native ecosystems. At industrial scales, waste may include not only the manure itself but spent bedding and gaseous emissions.

■ Transportation costs and associated energy consumption for feed, live birds, and processed poultry.

When poultry is well managed on pasture, many of these environmental concerns disappear. Ultimately, the cost on grocery shelves may not reflect the complete story. In fact, a lower cost on the shelf may indicate that more of the true production costs have been offloaded to the environment and community as a whole!

### **IMPACTS ON HUMAN HEALTH**

Human health impacts from industrialized poultry production align closely with the risks to the environment. An increase in human health concerns associated with poultry production often correlates with increased industrialization of management practices and scale of production.

When poultry manure is allowed to contaminate water, the nitrogen compounds convert to nitrate. High levels of nitrate in water cause "blue baby syndrome." When it occurs, this condition frequently leads to death in infants.

Additionally, as microbes decompose the nitrogen compounds in manure, gaseous ammonia is produced and released into the local environment. This ammonia is a respiratory irritant, can cause chemical burns to the respiratory system, skin, and eyes, and can lead to chronic lung disease in workers who are routinely exposed.<sup>100</sup>

Conversely, authentic organic production not only prevents these human health threats, but also increases benefits to human health through nutrition.

### **NUTRITIONAL BENEFITS**

Factory organic producers would like consumers to believe that their products are equivalent to their pasture-based counterparts, but nutrition studies show otherwise.

Studies published in the journal *Poultry Science* show notable differences in the nutrient profiles of pastured and conventional chicken. One study found that meat from pasture-raised chickens contained more omega-3 fatty acids than those who were not given access to fresh forage. This included higher levels of eicosapentaenoic acid in breast meat, one of the omega-3 fatty acids. <sup>101</sup> A second study found higher levels of four different omega-3 fatty acids in birds who had access to fresh pasture and whose cereal feed intake was restricted (presumably to encourage foraging). <sup>102</sup>

The breed or strain of bird also has important nutritional impacts. Another study compared the meat quality and nutritive value of poultry meat from slow- and fast-growing breeds. It found that the quality of the meat was higher in the slow-growing breeds—that is, lower in fat and higher in protein and tocopherols. This study also tested the difference between production systems and found similar nutritive benefits in birds raised with time spent outdoors.

Another study showed that breeding chickens for rapid growth has increased the proportion of omega-6 fatty acids in the meat.<sup>105</sup> Omega-6 fatty acids are inflammatory and already overabundant in the Western diet. The study noted that fat has replaced protein as the leading source of calories in chicken.<sup>106</sup> Traditional poultry, such as heritage breeds, raised on pasture or other forage seem to be one of the few land-based sources of omega-3 fatty acids (long-chain n-3 fatty acids).<sup>107</sup>

Chicken meat that provides several times the fat of its leaner, higher-protein ancestors may be a concern in the face of the US obesity epidemic.<sup>108</sup> However, healthy fats in good balance with other nutritional elements—like those in products derived from animals with a more natural diet—are increasingly in demand.<sup>109</sup>

Pasture-raised poultry is also likely to contain more vitamins. Chicken farmer Barb Gorski compared nutrition data from several pastured chicken farmers to data of conventionally raised poultry in 1999. The findings of the USDA-funded study concluded clear differences in fat and vitamin content:

Meat of the pastured chickens was found to display 21% less fat, 30% less saturated fat and 50% more vitamin A than the USDA standard for chicken meat. Skinless meat displayed no significant differences from the standard; it consequently appears that these healthy attributes of pasture-raised chickens are wholly to be found in the skin. 110

Organic food is also free from antibiotics and toxic pesticides.

In most respects, organic turkey faces the same issues as organic meat chickens. Fresh, organic, pasture-raised turkeys can easily cost twice as much as conventional turkey. As with organic chicken, organic turkey provides benefits to human health that are lacking in conventional turkey. Turkeys labeled organic are also raised without antibiotics, and the overuse of those drugs in raising farm animals is being connected to increasing health issues in humans. 112

### **ANIMAL WELFARE IMPLICATIONS**

Chickens and other poultry get a tough break in agricultural law. As previously described, compared to other livestock, poultry have few regulatory protections. In part, this may be because consumers identify less strongly with birds than with mammalian species. Still, like any animal, poultry suffer from pain, deprivation, stress, and neglect. As gregarious animals, they also can feel social stress.

The organic label is *not* an animal welfare label in the same way that other labels, such as Animal Welfare Approved, purport to be.<sup>113</sup> Still, organic poultry appeals to many consumers who are seeking a more humane production method.

Organic certification does provide these baseline welfare considerations for meat poultry:

- All organic poultry are "free-range," meaning they are not confined to cages and have access to the outside. 114
- Antibiotics are not allowed, encouraging farmers to use management practices to avoid disease in their livestock, such as avoiding overcrowding and stress.
- Poultry production practices are audited on-farm for the organic label (most animal welfare labels are awarded without on-farm inspection).
- Outdoor access requirements give chickens and other poultry the opportunity to express natural behaviors like foraging, scratching, perching, and provide access to fresh air and sunlight.

While all of these points are important, the organic rules and regulations only go so far to promote animal welfare. The organic label does not strictly require any amount of space per bird or clearly define the outdoor access requirement. Similarly, while organic livestock slaughter and processing plants are required to be audited, that audit does not cover animal welfare concerns. Some of these considerations can be covered by other add-on labels.

What might be considered high welfare for one species could be considered low welfare for another. In general, however, systems are considered "high welfare" when the animal can perform natural and instinctive behaviors and is free from deprivation, neglect, and outright abuse.

Some indicators of high-welfare systems include:

- Housing conditions that promote natural and instinctive behaviors (including foraging, socializing, dust bathing, etc.), are clean, and offer fresh air and natural light.<sup>115</sup>
- Freedom from pain, injury, and undue stress for birds.
- Low to moderate stocking density.
- The absence of cannibalism and feather pecking, <sup>116</sup> which are often caused by malnourishment, overcrowding, excessive light, and poor housing conditions in general.

When consumers know their farmer, it is easier to determine how those farmers raise and care for their birds.

# THE ORGANIC LIVESTOCK AND POULTRY PRACTICES RULE: A PROPOSED SOLUTION

The Organic Livestock and Poultry Practices (OLPP) rule was first proposed in April 2016.<sup>117</sup> The OLPP was touted as an "animal welfare update" to the livestock regulations by many stakeholders. This was particularly true for poultry, who, as already discussed, do not get the same attention in the law as ruminant livestock, such as beef or dairy cattle.

The USDA framed the purpose of OLPP as follows:

"To improve upon the current standards, this proposed rule would set separate standards for mammalian and avian livestock living conditions to better reflect the needs and behaviors of the different species, as well as related consumer expectations." <sup>118</sup>

Among other things, the proposal would have set maximum indoor and outdoor stocking densities to ensure birds have sufficient space to engage in natural behaviors.<sup>119</sup>

The first draft of the OLPP in 2016 came after many years of policymaking and NOSB recommendations pushing for changes that would update the organic livestock provisions.

Some NOSB actions clearly contributed to the OLPP proposal. In May 2002, the NOSB recommended changes to how "outdoor access" was defined, stating this should include open air and direct access to sunshine for all poultry. <sup>120</sup> In December 2011, the NOSB passed an additional animal welfare recommendation that included specific indoor and outdoor space requirements (in the form of stocking densities), among other provisions for living conditions specific to poultry. <sup>121</sup> When these recommendations and others were challenged, the USDA determined they needed to do a rulemaking to clarify the issues once and for all. <sup>122</sup>

The final rule was poised for completion in January 2017, but the US presidential transition, along with an executive order by the incoming President Donald

Trump calling for a "Regulatory Freeze Pending Review," resulted in a delay to the OLPP's passage. <sup>123</sup> In May 2017, the effective date of the rule was delayed and another proposed rule was offered. <sup>124</sup> The OLPP went up for comment multiple times in 2017. Each time, the majority of comments were not only generally in favor of the regulation, but requested that it be enacted quickly.

On March 12, 2018, the USDA announced that it would withdraw the OLPP, ending the possibility that the rules would be implemented. <sup>125</sup> In their review of the public comments, the USDA noted that they received approximately 72,000 comments on the proposal to withdraw the OLPP final rule. <sup>126</sup> Over 63,000 of these comments opposed the withdrawal of that final rule. Only 50 comments supported withdrawal of the OLPP.

The OLPP would have changed the face of the organic broiler industry as we know it. By introducing stocking limitations and spacing requirements for birds, it would have given consumers a clearer idea of the minimum benchmarks for organic meat. Although Cornucopia had some criticisms of the OLPP at the time (mostly that the OLPP did not go far enough in protecting the interest of birds and other livestock), ultimately the withdrawal of the OLPP was a failure of the regulatory process. Cornucopia opposed the withdrawal of the OLPP not only because it undermined the NOSB's advisory role to the NOP, but because the USDA refused to listen to the majority of commenters on this issue, undermining the public process. <sup>127</sup> This set a dangerous precedent.

Without the OLPP or other clarifying legislation, chickens, turkeys, and other poultry are left with current rules and regulations. This means the industry continues to operate without set spacing requirements or clear definitions for "outdoor access."

Until something changes—whether it is the law, NOP enforcement, or consumer demand—industrialization will thrive while family family-scale farmers struggle.



# CONCLUSION: CONSUMER CHOICE RULES THE DAY

Consumers have been trained to expect cheap organic chicken in their grocery stores. But the price of this product does not reflect the actual cost to eaters, animals, and the environment. Understanding the nuances of poultry production is the first step in making more ethical poultry choices.

When good food advocates purchase authentic organic food, they amplify their values. In the current regulatory environment, this marketplace activism may be the most powerful tool in effecting change.

Animal welfare is a compelling reason for consumers to choose organic over their conventional counterparts. While even factory-organic is preferable to conventional production, due to its lower toxic load and land use concerns, the most industrialized organic production provides few animal welfare benefits.

Birds in factory-organic systems live in massive flocks, often in crowded, dirty conditions, and without legitimate access to the outdoors. This contrasts starkly with truly pastured production that prioritizes animal welfare.

Consumer education must also include the implications of breed and strain selection. Poultry consumers are used to the thick breast of the fast-growing breeds, and birds that grow at a more humane pace result in an entirely different end product. Consumers may dislike this meat simply because they haven't been taught the most delicious way to cook it.

The problem is exacerbated by price. A bird that takes twice as long to raise requires a higher price point. Without this knowledge, that extra cost can be hard to swallow.

Some ethical producers meet consumers halfway by raising hybrid strains that are similar to the Cornish Cross in flavor, but are bred to perform better foraging outdoors. Others raise birds like Red Rangers or other hardy breeds that produce a familiar meat product, sometimes with an improved flavor!

## A DIY Approach to Choosing Non-Organic Pastured Poultry

Consumers interested in ethically raised poultry may quickly notice that there is more "pasture-raised" poultry for sale in their area than certified organic poultry. There are many reasons for this, including a dearth of organic processing facilities and the expense of certification. Many diversified farmers also believe they wouldn't see any benefit from organic certification because they market directly to their poultry consumers, with whom they have close relationships.

Some of these businesses represent the very best production practices in the industry, including mobile housing, freedom to forage, and high welfare for the birds. Indeed, many of these operations offer products that are a good choice for consumers seeking clean, ethical food.

However, a product without the USDA organic seal requires more homework for consumers; businesses that advertise as "beyond organic" may not be meeting the minimum principles of the organic standards. The organic seal guarantees that a producer's pastured poultry meets minimum benchmarks and ensures third-party oversight of the producer's claims.

One of the chief concerns with pastured poultry is that, regardless of outdoor standards, they may still be eating feed that is produced with conventional pesticides and synthetic fertilizer and may even be laced with antibiotics. Birds are often fed soy as a protein source, and conventional soy is incredibly "dirty" in terms of the amount of chemicals used and the environmental impact and deforestation caused by soy cultivation. Without the USDA label, there is also no guarantee that the outdoor spaces used for pastured poultry is free from synthetic pesticides and synthetic fertilizers.

If high-quality, certified organic products are not available in their area, consumers can and should quiz pastured poultry producers on their animal husbandry and pasture plans. Dedicated "pasture-raised" producers who use organic feed and refrain from using toxic pesticides on their land exist. Without the organic seal as a guide, it just takes more work to find them.

In these cases, The Cornucopia Institute's *Do-it-Yourself Guide to Choosing The Best Chicken and Turkey* is a valuable tool.<sup>130</sup> The guide points consumers to the kinds of insightful questions that an organic certifying agent would ask when inspecting an organic farm. Based on farmers' answers, consumers can ensure they are rewarding the most ethical farmers who care for their animals and the land.

### WHAT CAN YOU DO?

Your food choices matter. Although factory farms currently dominate the organic poultry industry, there is hope. Consumers have the ultimate power to prompt change: we do it every day with our purchasing decisions.

One strategy is to eat chicken or turkey less often, freeing up dollars to pay for a product that is *truly* organic. When consumers make this choice, it shifts market demand. Our support of small farmers ensures a market for new farmers, one in which farmers considering organic certification can make a living while adhering to organic ideals. Consumer choice can also influence factory farms; informed consumers threaten business models that rely on marketing subterfuge.

Cornucopia encourages informed eaters to invest in the superior management practices of authentic organic poultry farmers. Finding them requires rigorous homework, making Cornucopia's accompanying Organic Poultry Scorecard a valuable consumer tool. Surveying more than 60 marketplace brands of chicken and turkey, the mobile-friendly scorecard points consumers to brands they can trust and warns of brands to avoid. Cornucopia's poultry scorecard can be found here: cornucopia.org/scorecard/organic-poultry-scorecard

Purchasing these top-rated products, as well as those identified using our do-it-yourself guide (see sidebar at left), benefits the farmers who are doing the best work, while enhancing your life in ways that aren't always obvious. Your food dollars serve as an investment in legitimate organic agriculture, as well as our collective health and the future of the planet.

CORNUCOPIA'S ORGANIC POULTRY
SCORECARD POINTS CONSUMERS
TO BRANDS THEY CAN TRUST AND
THOSE TO AVOID. CORNUCOPIA.ORG/
SCORECARD/ORGANIC-POULTRYSCORECARD



### **APPENDICES**

### I. SURVEYS

The Cornucopia Institute sent out surveys to all the certified organic producers of chicken and turkey that sell their products at retail. These surveys were the first valuable step in our data collection and analysis of the brands in question.

### Organic Poultry Production Survey – Broiler Chickens

Please return this survey by mail or electronically. Contact Marie Burcham at burcham@cornucopia.org or 608-637-8278 with any questions or to request an electronic copy to fill out. You are encouraged to manipulate the spacing on this document as needed (or add additional pages, if you are completing this in hard-copy form; please indicate what question you are answering on additional pages).

Some questions request additional documentation to verify the answers given in the survey below. The Cornucopia Institute respects your confidential and proprietary information. Any proprietary information, background documents, producer contact information, and any samples of newsletters or other written farm standards will be held in strict confidence.

All the questions in this survey may not apply to you. For example, if you contract for 100% of your meat bird supply, or finished packaged products (as with a private label), you only need to answer questions relating to your type of business and product sourcing. If you are a single farmstead producer, without multiple farmer-suppliers, then just answer the questions for your farmstead. In addition, not all the questions will impact your ultimate score but instead will provide the consumer with further individual feedback about their favorite meat bird products and brands.

Please feel free to distribute this survey to your individual farmers-suppliers if you are supplied by more than one farm. If all your producers answer the survey, it will improve your overall score (affording you bonus points). We would be happy to distribute a similar survey, edited specifically for your producers, on request.

### 1. OWNERSHIP STRUCTURE:

Please describe the ownership structure of your organization. In addition, please disclose, as per SEC filing requirements, any major shareholders with stakes exceeding 5% if you are a corporation, partnership, or LLC.

### 2. MEAT BIRD SPECIES: Please mark which species you raise for meat that are certified organic: □ Chicken □ Turkey □ Duck □ Quail □ Other (please specify) Note: Cornucopia's scorecard will also feature organic turkey. If your brand also produces organic turkey, feel free to fill out each question for both your chicken and turkey, or Cornucopia representatives can send you a separate, turkey-specific survey with turkey-specific terminology. 3. NUMBER OF FLOCKS/FLOCK SIZE: Please provide the number of farms supplying processed organic birds to your brand and the number of chickens they have the capacity to house at any given time. Please specify an exact number. 4. ORGANIC PRODUCTION AND SEGREGATION: Please specify: ☐ My brand only markets certified organic chicken products ☐ My brand markets both organic and conventional/natural chicken products If you market both organic and conventional products, how do you keep the products segregated? 5. HOUSING: Housing style. Please mark and then describe what kind of housing you utilize for your chickens below (check all that apply and elaborate in the space provided below). □ Fixed barns (static) ☐ Mobile housing with no permanent structures (i.e. mobile coops or chicken tractors) Seasonal housing. Do you have different housing for winter versus summer months? □ Yes □ No If yes, please describe the difference between winter housing and other seasonal housing.

If you use different housing for your chickens depending on the season, please indicate the length of your average "winter housing" period, in months.

### 6. BREEDS:

What poultry breeds and/or strains do you raise? If you are growing more than one breed/strain, please include the percentages of your production of each of those breed/strains.

Heritage breeds. Do you market your products as coming from heritage breeds?

### 7. TIMING:

For outdoor access. How old are your chickens when they are initially provided access to the outdoors? If this differs depending on the season or breed, please specify.

Timing for processing. At what age are your meat chickens processed (on average)?

Weight. What is your target body weight for processing?

### 8. ENRICHMENT:

Please describe what enrichments, if any, are available to your birds.

Indoo	rs. Please check all that apply.			
	Perches			
	Dust baths (not including litter or dirt floor)			
	Hay/straw bales			
	Novel foodstuff (alfalfa, fresh greens, insects, etc.)			
	Other (please specify)			
Outdoors. Please check all that apply.				
	Do you have any specifications for minimum vegetative cover? If so, what?			
	Artificial shade structures			
	Natural shade structures (trees, shrubbery, etc.)			
	Perches			
	Structures where birds can hide or shelter from predators			
	Other (please specify)			
9. SPACE AVAILABLE:				
Indoors. How much space is allotted per bird for your indoor housing?				
Outdoors. How much space is allotted per bird for your outdoor space?				
10. OTHER CERTIFICATIONS:				

Please specify if your farm(s)/brand is third-party certified (as identified on your packaging) by any organizations other than USDA Certified Organic (e.g., Animal Welfare Approved, Certified Humane, Food Alliance, Biodynamic, Salmon Safe, Wildlife Friendly, Non-GMO Project, Certified Naturally Grown, or others).

### 11. ORGANIC CERTIFICATION:

How long have you been certified organic?

What accredited certifier(s) performs your certification? Please specify the certifier(s) of your farm(s), processing, and products.

### 12. PASTURE-RAISED:

Do you advertise any of your products as "100% pasture raised," "pasture raised," or with a label indicating a method of production focused on outdoor access (please specify)?

If you do, what are your standards or requirements and how do you ensure that your farmers and/or suppliers comply to those standards or requirements?

Other standards for confinement. What standards do you have in terms of weather or other conditions that would justify confining chickens indoors?

Vegetation. Approximately how much of your outdoor space is vegetated (i.e. soil cover) when you have active flocks accessing that outdoor space? If you follow particular standards with regards to vegetation, please explain.

Other livestock. Do your birds share the same outdoor space with other livestock species or are rotated with other livestock species?  $(\Box N/A)$ 

### 13. PASTURE AND/OR OUTDOOR RUN MANAGEMENT:

Please describe your outdoor run and/or pasture space.

Pasture space. How much square footage of pasture do the birds receive on any given day?

What is the total number of square feet your birds have access to before they are slaughtered?

How often do you move your birds to a new area?

Static housing. If your birds are maintained in fixed housing, how are your outdoor runs managed?

### 14. FEED:

Feed sourcing. For certified organic poultry products, where do you source your feed? Please check all that apply to your meat chickens:

Known 100% U.S. grown source (note how you confirm your supplier's representations)
Obtain feed from organic feed supplier that distributes locally
Feed sourced from commercial mixes manufactured by larger companies
% of feed grown on your farm(s) (including contract producers)
This brand dictates what feed its producers and/or contract growers must use
Source feed locally (please specify protocol for feed sourcing)
Feed is certified organic, but specific source unknown
Feed is also certified GMO-free
Your brand supplies feed to its producers and/or contract growers

Soy free. Some consumers are interested in poultry with a soy-free diet. Are your meat chickens fed soy (this question will not affect scoring)?

Supplements. Do you supplement with synthetic methionine?

If not, what natural additives or management techniques do you use to assure birds receive proper nutrition?

#### 15. CULL RATE:

On your five largest farms, what is the cull rate for birds that had to be removed from the flock for health reasons in 2018? (Extra credit will be added for providing statistics for 100% of your farm-producers.)

Death loss percentage. What is your annual death loss percentage on your five largest farms?

What are the most common causes of death (for example, from predators)?

What do you do with dead poultry?

### **16. PREDATOR CONTROL:**

Please describe what, if any, steps you take for predator control.

### 17. CHICKS:

Please describe where you source your chickens and how the chicks are raised other than conventional management (conventional management is allowed under USDA standards for the first day).

### 18. FARM SUPPORT:

Do representatives of your company visit each farm (if so, with what frequency?), or do you exclusively depend on third-parties to confirm the organic certification process? Please describe in detail, if needed.

### 19. SLAUGHTER AND STUNNING:

How a	are the birds you market rendered insensible and/or slaughtered? Please check all that apply and add any pertinent s.
	Electrified stunning bath
	Head-to-body electrical stunning
	Mechanical stunning (captive bolt, firearms, etc.)
	Controlled Atmosphere Stunning (gas stunner)
	Controlled Atmosphere Killing (gas slaughter)
	Mechanized slaughter
	Hand slaughter
	Kosher slaughter
	Other (please specify)
If you	use either Controlled Atmosphere Stunning or Controlled Atmosphere Killing, what gas do you utilize?
20. M	IARKETING AREA:
Please	e let us know (geographically) where consumers can find your products available at retail.
Thank	you for completing our questionnaire!
	We will offer extra credit in scoring for brands that supply their farm(s) Organic Systems Plan and/or the contact information farmer-suppliers.
Farm	or Business Name:
Brand	Name:
Farm	Owner or Officer's Name:
Title:	
Signa	ture: Date:
_	tory must be a corporate officer, general manager or owner. Emails of electronic documents from one of these individu-

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Please return to: The Cornucopia Institute, P.O. Box 126, Cornucopia, Wisconsin 54827 or fax (866-861-2214); or scan and email to Marie Burcham at burcham@cornucopia.org. Electronic copies of the survey will also be accepted at the same e-mail.

### II. PRODUCER LETTER

Note: the following letter accompanied printed versions of the above poultry survey.

Dear [Owner/manager of poultry brand],

Thank you for producing high-quality and nutritious foods. We appreciate your hard work and commitment to organics.

It is grossly unfair that ethical, organic poultry farmers have to compete with industrial pseudo-organic production brands like Tyson, Pilgrim's Pride, and Perdue.

Consumers expect the organic label to signify ecological stewardship, humane animal welfare, and economic justice for family farmers. Unfortunately, lax enforcement by the USDA allows for the production of "organic" poultry products that carry the same label but are produced with very different methods (including in confinement on "factory farms"). This is a betrayal of consumer trust and places ethical chicken and turkey producers, and their marketing partners, at a competitive disadvantage.

The Cornucopia Institute is an independent, non-profit farm policy research organization based in Wisconsin. We provide widespread public education and promotion of organics and related issues. Our research on organic food and farming issues has been accessed by millions of consumers, and we maintain a higher percentage of certified organic farmer-members than any similar organization.

Cornucopia has investigated many topics important to consumers, farmers, and the organic industry as a whole, culminating in comprehensive reports and online scorecards. Cornucopia has reports and corresponding scorecards on soy, organic eggs, organic dairy, and snack bars, to name a few (these resources can be found on our website at <a href="https://www.cornucopia.org">www.cornucopia.org</a>).

Now we are creating a new report and scorecard rating brands of organic poultry — empowering consumers and wholesale buyers with the ability to make informed decisions. Your completion of the attached questionnaire is a vital part of maintaining transparency and trust in the organic label! In addition, your participation in our research will reflect well on your brand's integrity.

To ensure the accuracy of this survey, we are requesting that the responses be signed by an owner, general manager, or corporate officer. If using email, we ask that the completed questionnaire be sent from the aforementioned authority's address. If requested, we can also email a copy of the questionnaire in an electronic format that can be easily modified.

The Cornucopia Institute will respect your confidential and proprietary business information and will hold any such information in strict confidence.

If you have any questions or need additional background information, please contact us and we will be happy to assist you.

Kindly.

Marie Burcham, J.D.
The Cornucopia Institute

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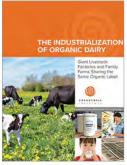
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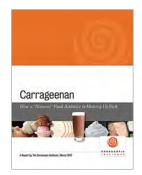
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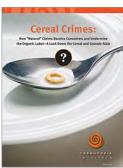
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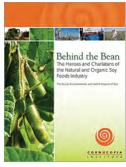
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