

A COK Report: Animal Suffering in the Turkey Industry

Summary

The average American consumes 17 pounds of turkey meat per year. To satisfy this appetite, 252 million turkeys are killed annually. The vast majority of turkey meat found in grocery stores and restaurants comes from turkeys intensively confined on “factory farms.” Today’s standard practices on the farm, during transport, and at slaughter cause these turkeys to suffer significant pain.

In the 1960s, it took 220 days to raise a 35-pound turkey. Due to selective breeding and growth-promoting drugs, it now takes only 132 days. Such fast growth causes turkeys to suffer from a number of chronic health problems, including skeletal disorders and heart disease. As one industry journal concluded, “[T]urkeys have been bred to grow faster and heavier but their skeletons haven't kept pace.”

Most farmed turkeys spend their entire lives inside overcrowded and poorly ventilated warehouses that typically house up to 25,000 birds in a single shed affording as little as one square foot of space per bird. Such stocking densities make it impossible for most birds to carry out normal behaviors and cause the turkeys to suffer from stress and disease.

After 14 to 20 weeks, turkeys are transported to slaughter without food, water, or protection from extreme temperatures. At the slaughter plant, the birds are dumped onto conveyors and hung upside down in shackles by their legs. In the United States, there is no legal requirement that poultry be rendered unconscious before they are slaughtered.

Profits have taken priority over animal welfare. Standard industry practices cause turkeys to experience both acute and chronic pain. The treatment of these animals would be illegal if anti-cruelty laws applied to farm animals. But in the United States, unlike many other countries, there is no federal legislation protecting turkeys (or other poultry) on the farm, in transit, or during slaughter; and most state anti-cruelty statutes do not apply to farm animals.

Breeding

An American consumes, on average, seventeen pounds of turkey meat per year.¹ To satisfy this appetite, 252 million turkeys are killed in the United States each year.² More than 45 million of these turkeys are killed for Thanksgiving, alone, and over 20 million are killed for Christmas.³

Virtually all of these turkeys come from fast-growing strains produced by three primary breeding companies.⁴ These turkeys have been intensively bred to produce the most meat in the shortest amount of time, using the least amount of feed. In the 1960s, it took 220 days to raise a 35-pound turkey. In 2004, it took only 132 days.⁵ While this rapid growth has increased producers’ profits, it has contributed to a number of serious welfare problems, including skeletal, respiratory, and cardiovascular disease, as well as chronic

hunger in breeding stock. Animal scientist Dr. Ian Duncan has concluded, "Without a doubt, the biggest welfare problems for meat birds are those associated with fast growth."⁶

The most severe of these problems are skeletal diseases, such as hip lesions and tibial dyschondroplasia. One study found that between 7 and 28 percent of turkeys suffered hip lesions, while 17 to 83 percent exhibited abnormal gait.⁷ In tibial dyschondroplasia, an abnormal mass of cartilage extends across the tibia, causing bone deformity and lameness. Incidences as high as 73 percent have been reported in turkey flocks.⁸ Mortality due to skeletal diseases has ranged from 2.7 to 4 percent.⁹

According to a report in industry journal *Feedstuffs*, "[T]urkeys have been bred to grow faster and heavier but their skeletons haven't kept pace, which causes 'cowboy legs.' Commonly, the turkeys have problems standing . . . and fall and are trampled on or seek refuge under feeders, leading to bruises and downgradings as well as culled or killed birds."¹⁰ A scientific review concluded, "There is no doubt that the rapid growth rate of birds used for meat production is the fundamental cause of skeletal disorders, nor that this situation has been brought about by the commercial selection programmes used over a period of 40-50 generations."¹¹

One animal scientist has argued that, due to skeletal disorders, "we must conclude that approximately one quarter of the heavy strains of broiler chicken and turkey are in chronic pain for approximately one third of their lives. . . . [T]his must constitute, in both magnitude and severity, the single most severe, systematic example of man's inhumanity to another sentient animal."¹²

The unnaturally rapid growth common among farmed turkeys causes other welfare problems, as well: lowered immune performance, making turkeys more susceptible to a variety of diseases; increased rates of the muscle disease, focal myopathy; and increased rates of ascites, perirenal hemorrhage syndrome, cardiomyopathy ("round heart" disease), and aortic rupture, with mortality rates from these causes as high as 10 percent.¹³

Housing

Before World War II, most turkeys were free range, roaming in open pens. In 1931, turkey production was written about, thus: "Turkeys cannot be kept in small cramped surroundings The turkey is a great forager and will wander about all day, picking up grubs and insects, and incidentally doing good to the land overcrowding is fatal, and each bird should be allowed 8 square feet of floor-space."¹⁴

By the 1940s, farms began rearing turkeys in intensive confinement, without outdoor access, to increase economic efficiency. "More economical production is achieved by full confinement rearing," wrote industry authors.¹⁵ Like most farmed poultry, turkeys are now crowded indoors in large warehouses, where they may never see daylight. A typical industrial turkey shed houses 10,000 to 25,000 birds with only one to four square feet of floor space per bird, depending on age.¹⁶ Such confinement causes a number of welfare problems, including stress, disease, and aggression.¹⁷

Grower houses are commonly windowless and force-ventilated to control temperature. They are barren except for litter material on the floor and rows of feeders and drinkers. Despite generations of breeding, turkeys have maintained their most basic natural instincts to forage. The barren environment of grower sheds frustrates these instincts and the lack of substrate for foraging causes many birds to redirect their pecking at other birds, causing injuries.¹⁸ To reduce pecking, light levels in grower houses are kept as low as 1 lux. Such low light levels cause stress in turkeys, who prefer brighter light to explore their environment, as well as abnormalities in physiology and eye morphology.¹⁹

Overcrowding in sheds causes air quality to deteriorate. As the weeks pass, turkey excrement accumulates on the floors. As bacteria break down the litter and droppings, the air becomes polluted with ammonia, dust, bacteria, and fungal spores. High ammonia levels cause respiratory irritation and keratoconjunctivitis (ammonia-burned eyes). Ammonia also destroys the cilia that would otherwise prevent harmful bacteria from being inhaled. As a result, turkeys “are inhaling harmful bacteria constantly” and develop respiratory infections, such as airsacculitis.²⁰

Turkeys have an acute sense of smell, which they use to perceive their environment. Ammonia fumes inhibit this sense. As one animal scientist put it, “For a bird with an acute sense of olfaction the polluted atmosphere of a poultry house may be the olfactory equivalent of looking through dark glasses.”²¹

Overcrowding in sheds also results in the rapid deterioration of litter, causing contact dermatitis—foot-pad lesions, enlarged sternal bursa (“breast blisters”), focal ulcerative dermatitis (“breast buttons”), and hock burns, all believed to be painful.²² One study found that 98 percent of turkeys suffered foot-pad lesions under commercial conditions,²³ while another found 67 percent of turkeys suffered breast buttons.²⁴ These lesions become pathways to bacterial infections.²⁵

One scientific study concluded that “density had potentially deleterious effects on the welfare of turkeys: a tendency to more disturbance of resting birds by other birds, a decreased gait score, a greater incidence of foot-pad dermatitis and of hip lesions, and a decrease in body weight.”²⁶ In such overcrowded conditions, factory farmers accept that many birds will die from disease, stress, and injury—the average mortality rate on U.S. turkey farms is 10 percent.²⁷ But there remains an economic rationale for farms to overcrowd the birds. As one industry manual explains, “[L]imiting the floor space gives poorer results on a bird basis, yet the question has always been and continues to be: What is the least amount of floor space necessary per bird to produce the greatest return on investment.”²⁸

Alternative housing systems do exist but are often not what is advertised. For producers to apply the term “free range” to their turkey meat requires only that the turkeys have access to the outdoors. There is no specification for the frequency, duration, or quality of outdoor access available to the birds. All other aspects of a free-range turkey's life (including genotype) can be identical to those of a conventionally-raised turkey. University of California-Davis poultry specialist, Ralph Ernst reports: “Most free-range

birds are still fenced in corrals, though people like to imagine the birds are out roaming the range. They're not out exercising. These birds are raised much like the regular turkeys."²⁹

Mutilations

Overcrowding in a barren environment is stressful for birds and leads to aggressive behaviors, such as pecking the feathers, combs, toes, or vents off of other birds. Once there is an open wound on an animal, cannibalism can occur.³⁰

Aggression can be prevented by giving turkeys sufficient space, by keeping flock numbers small, and by providing turkeys with an adequately stimulating environment, including objects to explore and peck.³¹ However, these measures are considered uneconomical by turkey farmers, who control aggression, in part, by removing those body parts from turkeys that are used in fighting or are vulnerable to attack. Turkeys may have a large section of their beaks removed, their toes removed, and have the fleshy appendages on top of their heads removed (desnooding).³² All of these procedures are performed without anesthetic. Turkeys who are debeaked and detoed are believed to experience chronic pain.³³

According to a poultry science manual, debeaking can be done when turkey poults are one day old, or later using heavy shears or dog toe clippers. If desnooding is done after a turkey is three weeks old, it needs to be “cut off close to the head with sharp, pointed scissors.” Wings can be clipped with “sharp, heavy shears, with hedge clippers, or with a sharp hatchet and chopping block.” Wing notching occurs when the producer severs the tendon “that crosses the center of the outermost wing joint” with “a vertical red-hot steel bar on the electric debeaking device.” Toe clipping involves “clipping the toes of each foot of day-old” turkeys—“5-inch surgical shears” are used to remove “the tip of the toe...including all of the toenail.”³⁴

Disease

Like other farmed birds, turkeys raised in intensive confinement are vulnerable to a number of infectious diseases. Their vulnerability can be attributed to numerous factors. First, although turkeys are naturally insectivores, on today's factory farms they are fed an unnatural diet of by-products, including meat, sawdust, leather tannery byproducts and even human excrement.³⁵ Second, turkeys are exposed to stress, toxins, and pathogens from indoor confinement.³⁶ Third, selective breeding has weakened turkeys' immune systems.³⁷

Given their vulnerability to disease, turkeys are given more antibiotics than many other farmed animals.³⁸ Drugs are also used to increase growth rates. According to the industry handbook, *Poultry Science*, “drugs are widely used in the turkey industry, for the prevention and treatment of diseases, as well as, in some cases, growth stimulants . . . few flocks are raised without the use of drugs.”³⁹

The routine use of antibiotics to improve growth rates is believed to make these antibiotics less effective against human disease. Dr. Dennis Wages of North Carolina State University's College of Veterinary Medicine says of antibiotics, "In the court of public opinion, I can defend using something to control necrotic enteritis, but I can't defend it just because it makes the chicken have a little more breast meat."⁴⁰

Some poultry diseases are a direct threat to human health. Avian influenza, for instance, infects both chickens and turkeys, and humans.⁴¹ A World Health Organization report in 2004 speculated that "the next [avian] flu pandemic could infect 25 to 30 percent" of the world's population and "kill up to 7 million" people.⁴²

Transport and slaughter

Although a wild turkey lives from two to ten years, today's farmed turkeys are transported to slaughter at 14 to 20 weeks.⁴³ Because there are no U.S. laws regulating poultry transport from farms to the slaughterhouse, turkeys are often badly injured in the process.⁴⁴

Farm employees carry birds out of the growing shed by holding a wing in each hand. This handling can dislocate the turkey's humerus from the shoulder joint. The turkeys are thrown into crates, which are then stacked on the back of trucks. The crates have open sides and do not protect the birds from extreme temperatures or weather. According to one scientist, "Unless crates are properly covered, exposure to wind and cold will rapidly cause freezing of unfeathered parts. The frosted appendage first becomes red and swollen, followed by gangrene, necrosis, and sloughing."⁴⁵ Turkeys may die during the trip from hypothermia or heart failure associated with the stresses of catching and transport.⁴⁶

At the slaughter plant, the turkeys are moved out of the trucks, dumped onto conveyors, and hung upside down on shackles around their ankles. Shackling is painful for turkeys, especially since so many suffer from skeletal problems. In the United States, poultry are not included under the federal Humane Methods of Slaughter Act, thus there are no legal requirements that turkeys be rendered unconscious before they are slaughtered.⁴⁷ Electric stunning in a current-filled water bath is often used to immobilize turkeys before slaughter, making them easier to handle. However, the voltage used may be insufficient to induce unconsciousness⁴⁸ and stunning itself may be painful—because their wings hang lower than their heads, turkeys can suffer pre-stun shocks.⁴⁹

After stunning, turkeys have their throats cut. As slaughter lines run at speeds of many thousand birds per hour, workers may miss both carotid arteries, adding up to two minutes to the time taken for birds to bleed to death.⁵⁰ One researcher concluded, the "problems associated with inefficient neck cutting [are] only too common in poultry processing plants."⁵¹ As a result, turkeys may be conscious as they enter tanks of scalding water intended to loosen the birds' feathers.

Breeders

Each year in the United States, approximately 4 million turkeys are used to breed other turkeys.⁵² These “breeders” have the same genetic predisposition for fast growth, skeletal disorders, and heart disease. If their food intake were unrestricted, few would survive to sexual maturity, and most would suffer from reproductive disorders, decreasing egg production.⁵³ Turkey breeders are, therefore, fed as little as half of the amount of food they would eat on unrestricted diets.⁵⁴

Food restriction in poultry is believed to cause “general undernourishment, specific nutritional deficiency, and frustration.”⁵⁵ The European Commission’s Scientific Committee on Animal Health and Animal Welfare concluded that, “current commercial food restriction of breeding birds causes poor welfare.”⁵⁶

Turkey breeders undergo a series of mutilations meant to reduce the side effects of intensive confinement, such as disease and aggression. A portion of their beaks and toes are cut off, and males also have their snoods cut off. These mutilations are performed without anesthetic and are believed to cause both acute and chronic pain.⁵⁷

Because breeders live longer than other turkeys, their skeletal problems are more severe. At termination of breeding, at least 75 percent of breeders suffer from abnormal gait or lameness.⁵⁸ One study of turkey breeders found that, by the time of slaughter, between 25 and 81 percent of males suffered destructive cartilage loss in the hip joint, and 54 percent suffered serious hip lesions.⁵⁹ Another study found that all male breeders had extensive hip joint degeneration. The study also found results strongly suggestive that turkeys experience chronic pain from hip problems.⁶⁰ Reported mortality rates among breeders range between 25 and 66 percent.⁶¹

Male turkeys have been bred for such large breast muscles that natural mating has become physically impossible. Artificial insemination is now the standard practice.⁶² Male breeding turkeys are “milked” for semen collection and female turkeys are inseminated by tube or syringe.

Conclusions

Standard turkey industry selective breeding, mutilation, confinement, transport, and slaughter practices cause turkeys to experience both acute and chronic pain. Many of these practices would be illegal if anti-cruelty laws applied to farmed animals. But most state anti-cruelty statutes exempt standard agricultural practices, no matter how abusive. And, unlike many other countries, there is no federal legislation in the United States protecting turkeys (or any other birds) from abuse on the farm, in transit, or during slaughter.⁶³

For producers, profits have taken priority over animal welfare, as birds are pushed beyond their physical limits and housed in conditions that are both unhealthy and unnatural. The economic self-interest of producers cannot be relied upon to provide turkeys with humane care. As two poultry researchers asked, “Is it more profitable to grow the biggest bird and have increased mortality due to heart attacks, ascites, and leg problems, or should birds be grown slower so that birds are smaller, but have fewer heart, lung and skeletal

problems?....A large portion of growers' pay is based on the pound of saleable meat produced, so simple calculations suggest that it is better to get the weight and ignore the mortality.⁷⁶⁴

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