Unnatural Breeding Techniques and Results in Modern Turkey Production

A Farm Sanctuary Research Report
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Introduction

Like other segments of agriculture, the turkey industry has changed significantly in recent decades, as fewer large companies have come to dominate the production and marketing chain. As the industry has changed, so has the basic genetic makeup of the birds. Turkey breeders have selected birds genetically programmed to grow fast and large in order to maximize production, but in doing so they have also created significant animal welfare problems. This report describes the consequences associated with intensive genetic selection and artificial insemination in the turkey industry.

Modern Turkeys

Unlike their sleek and agile wild ancestors, commercially raised turkeys have difficulty flying or running, and they cannot reproduce naturally. Victims of an industry focused on increasing productivity and profit, factory-farmed turkeys are the result of intensive genetic manipulation and now grow more than twice as fast and twice as large as their wild ancestors. As one industry publication explains, “If a seven pound (human) baby grew at the same rate that today’s turkey grows, when the baby reached 18 weeks of age, it would weigh 1,500 pounds.”

The unnaturally rapid weight gain coupled with their abnormally configured anatomy (thanks to consumer demand for white meat) puts tremendous pressure on the skeletal systems and vital organs of commercially raised turkeys. These birds commonly suffer from painful leg and joint disorders, lameness, heart problems, and weakened immune systems. According to an industry article “Turkeys 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.”

In describing the heart and circulatory system abnormalities bred into modern, commercially farmed turkeys, a Utah State University publication explains

Circulatory disturbances in turkeys are likely to become increasingly prevalent because of the economic need to continue to produce fast-growing strains of turkey. The consequences of breeding for rapid growth have undoubtedly affected the occurrence of circulatory-related mortality in commercial turkey flocks. Spontaneous turkey cardiomyopathy (STC), also known as roundheart disease, is a prevalent circulatory disturbance afflicting turkeys raised at moderate to high altitudes.

Kent Reed, who studies turkey genetics at the University of Minnesota, explains, “Some of these birds have skeletal problems, the joints at the legs aren’t appropriate for that amount of mass. There also are cases where you can push the circulatory system so far as well.” A condition known as pale soft “exuditive meat” develops when the heart literally can’t pump blood out to the far reaches of the bird’s muscle mass.

Although some industry geneticists have attempted to breed birds with stronger legs and hearts in order to reduce the economic losses from debilitated, dead and deformed birds, to date the economic gains associated with bigger birds still outweigh the losses and the trend toward bigger birds will likely continue.

In order to meet consumer demand for white meat, commercial turkeys have been genetically selected for extremely large breasts. This anatomical abnormality, which could never arise naturally, has made it impossible for the birds to mount and reproduce.

Prior to the introduction of factory farming, flocks of turkeys, like herds of cattle, were driven many miles across the range to market. But with the physical maladies and frailties that plague modern, commercially bred turkeys, such a thing would be impossible today.

The November 29, 2003, issue of Science News describes

[the narrowing of breeding lines, for the sake of producing a consistent product, has come at the price of the birds’ ability to survive off the farm... The birds have also become increasingly vulnerable to pathogens...Indeed, infections pose bigger risks today because of turkeys’ normally confined living and massive flock sizes. Today’s industrial farms may pen thousands of turkeys at one time. Just 5 decades ago...most turkeys came from farms growing fewer than 100 each, usually of a variety different from that on neighboring farms. Identifiable color patterns came with other genetic advantages over most modern birds: relative longevity, longer
stamina, less susceptibility to disease, and better ability to stand up to bad weather...with the modern broad-breasted turkey, if you tried to drive them anywhere, they'd either go down from weak legs or die from a heart attack within the first half mile. Modern broad-breasted turkeys have been bred for tenderness and rapid weight gain, which allows them to go to market fast. Most are killed at about 16 weeks, but some poultry producers slaughter the birds as early as 8 weeks after hatching.  

An Ohio State University Animal Science paper further explains:

Selection for an increased amount of breast muscle and increased body weight has increased total body weight and amount of breast muscle at a faster rate than the increases observed in muscles of the legs...The relative amount of leg muscles declines with age as the birds get heavier...there appears to be a biologically incompatible combination in commercial turkeys of increased body weight with relatively less support (leg muscles and bones), and this inherent stress probably magnifies the effect of various causes of leg problems.

Further pain and difficulty in walking arises from sores and ulcers on the birds' feet, which result from the stress caused by their excessive weight. According to World's Poultry Science Journal, “Dermatitis or scaly brown scabs and ulcers of the foot pads is a common condition in commercial broilers and turkey flocks. Lesions are characterized as acute inflammation, swelling and hyperplasia of the epidermis, progressively developing into necrosis and ulceration of the metatarsal and digital pads.”

Most commercial turkeys are now raised inside crowded warehouses, where they are unable to exercise their most basic instinctual behaviors: flying, perching, foraging, dustbathing, and simply feeling the sun on their backs and breathing fresh air. They have no choice but to literally wallow in their own waste, often suffering from ammonia burns on their keels.

Not surprisingly, these conditions have led to a high mortality rate among commercially raised turkeys. The reported turkey death loss in the U.S. in 2005 was 10.4 thousand head or almost 10.5 million turkeys. Still, the death losses are counterbalanced by the economic gains from the factory farming methods, and as long as profits exceed losses, there is no incentive to make reforms.

The Turkey's Ancestry and Today's Alterations

Wild turkeys have a much sleeker build than modern, domestic turkeys, with longer legs, a longer neck, a slimmer body, and a smaller head. While wild turkeys have naturally dark plumage, commercial turkeys have been genetically altered for white plumage in order to appeal to consumers who apparently found the dark pigmentation left behind on the skin of dark-feathered turkeys after plucking to be unsightly.

A wild tom turkey generally weighs between 16 and 21 pounds, while a wild hen turkey averages about 9 pounds. In sharp contrast, commercially raised toms typically weigh between 26 and 32 pounds at the time of their slaughter (usually at 18 weeks), but they can weigh in excess of 75 pounds if allowed to grow older. Hens typically weigh between 15 and 18 pounds when they are slaughtered, usually at around 14 weeks old.

Wild turkeys have their own social order, in which they separate into flocks on the basis of sex and age. In the summer, the basic unit is the family flock (brood), consisting of the hen and her poult (young offspring) and these can often merge with others to form multiple hen-brood flocks. Toms sometimes run together in groups, but they may also spend much time on their own.
Turkey hens are protective mothers and are known to feign injury to lure predators away from their young. Hens will typically hatch a clutch of between 8 and 12 eggs each year.13 In commercial production, turkey hens used for breeding are expected to produce up to 100 fertilized eggs during a 25-week production cycle.14 The eggs are removed from the hens and set into incubators to hatch. The mothers never know their offspring.

Wild turkeys live in varied home ranges, by seasons and by individual preference, which may extend from 3 to 11 square miles. They tend to prefer mature forests mixed with open areas that provide for feeding, breeding and raising their young.15 In nature, adult turkeys forage on plants, grasses, acorns, buds, seeds, insects, and berries, while poults subsist mostly on insects and grubs during their first few weeks of life.16

Commerically raised turkeys, whether kept solely for slaughter or used for breeding, are fed diets rich in corn and soybean meal.17 They are crowded tightly together. With a typical “grow-out” house holding 10,000 hens in a 25,000-square-foot area, each bird is allowed, on average, 2.5 square feet of living space.18 Males may be allotted 3.5 square feet.19 Breeding hens are allocated about the same amount of space as those raised specifically for slaughter, as are breeding toms.

The life span of turkeys in nature has been documented at 9 to 15 years with an average of 3 to 4 years.20 In commercial production, most turkeys are killed at about six months of age,21 while breeding hens and toms are killed before their second birthday. Wild turkeys can fly up to 55 miles per hour and can run at speeds of at least 12 miles per hour,22 but today’s commercially raised birds have been so profoundly altered that they are often barely able to walk.

History of Domestication
In From Pen to Table - Turkeykind has experienced major changes over the past 50 years, author Sara Bir explains that turkeys originated from the pheasant in Central America 11 million years ago, and were one of the first animals in the Americas to be domesticated. Spanish explorers brought turkeys back to Europe. In the 1500s, turkeys were being raised domestically in Italy, France and England and then the bird was brought to North America via the Pilgrims, who began cross-breeding them with the native, wild species they saw.

Bir states “[c]hanges in 20th-century farming streamlined poultry production and narrowed down the number of breeds raised. Before the ’50s, broad-breasted bronze turkeys were the most common commercial breed. In 1937, a team of researchers discovered methods for artificially inseminating breeding turkeys, which allowed specific traits to be bred into the turkeys raised commercially ... The public’s hunger for lean, mild breast meat led to the broad-breasted white.”23

After World War II, the development of industrialized farming methods and genetic selection accelerated to new levels, leading up to today’s situation.

The Santa Rosa Press Democrat attributes George Nicholas (1916-1984), founder of the Sonoma-based Nicholas Turkey Breeding Farm, as one of the top influential shapers of the economy and demographics of Sonoma County, Calif. in the 20th century. Called a “Petaluma farm boy who turned a genetic accident into a multi-million dollar turkey breeding business based in Sonoma,” Nicholas “took turkey breeding out of the barnyard and put it into the laboratory, using science to develop turkeys yielding low-fat, inexpensive meat for the masses.”24 Other scientists who are considered “pioneers” in artificial avian breeding are Frank X. Ogasawara, professor of Avian Sciences at the University of California, Davis, who, along with Fred Lorenz of UCD, developed many of the techniques for artificial insemination of turkeys. In 1966, Ogasawara was awarded the National Turkey Federation’s Outstanding Research Award for pioneering studies in avian artificial insemination. Canadian turkey breeder Alfred McInroy “Mac” Cuddy used lighting to imitate the turkeys’ natural
spring mating season and therefore manipulate them into producing eggs year-round. A. M. “Mac” Cuddy also cross-bred fowl with other breeds to alter the appearance and taste of turkeys, eventually producing a white turkey in conjunction with his friend George Nicholas.

Nicholas contributed to the development of the modern broad-breasted and thick-thighed white turkey, which dominates today’s market, by genetically modifying the birds into fast-growing turkeys that “more efficiently converted feed into meat.” This modern, man-made creation is now raised year round, rather than just for the holiday season. While 30 years ago, two-thirds of turkeys raised in the U.S. went for holiday consumption, today that proportion is down to one-third. Still, in the U.S., about 45 million turkeys are killed for Thanksgiving and about 22 million are eaten for Christmas.

Proud of its production efficiency, the National Turkey Federation (NTF) touts, “from 1949 to 1993, the price of turkeys dropped approximately 4.5 percent per year, more than twice the index for all livestock and commodity groups.”

Absent from the turkey industry’s narrow financial calculations are severe costs to animal welfare, as well as numerous other deleterious consequences of industrial animal agriculture, including environmental pollution, economic harm to rural communities, and the evolution of new pathogens and diseases that threaten both human and animal health.

There is growing concern from scientists and farmers that commercial breeding for specific production traits threatens animal welfare and destroys genetic diversity. As Science News explains, “Standard supermarket birds are ‘a separate breed’ with a dwindling gene pool…Just 50 years ago, there were more than 200 breeds and varieties of poultry in common agricultural use in the United States. Today there are less than a dozen ‘improved types.’”

The vast majority of the turkeys consumed in this country are the Broad-Breasted White Holland breed. It is thought that fewer than 1 percent of the market is comprised of “heritage breeds,” dark-feathered, sleeker turkeys more closely resembling their wild ancestors. Some farmers who raise free-range, heritage breed turkeys complain that “[c]ommercial turkeys never experience the out-of-doors. They’re despurred and debeaked, but because of crowding and other stresses, they still find ways to harm each other. It shows in the quality of their meat.”

**Consumer and Production Statistics**

With the rise of factory farming, the turkey industry has become increasingly integrated. Turkeys are raised by large companies and their subsidiaries that control all or part of the following enterprises: breeding facilities, hatcheries, feed mills, processing plants, further processing plants (if separate), company-owned growing facilities, contract growing facilities, and transport.

Today, the average U.S. citizen consumes about 18 pounds of turkey per year, up dramatically from 8.3 pounds per year in 1970. Nearly 300 million turkeys are slaughtered annually in the U.S., at an average weight of about 28 pounds. In 1970, 116 million turkeys were slaughtered in the U.S., with each bird weighing an average of 19 pounds.

This trend toward eating more birds reflects the rising concerns of many Americans regarding the cholesterol and saturated fat in red meat. While this shift is unlikely to bring about the desired health benefits, it has helped fuel the growth of industrialized poultry production in the U.S. As in other segments of animal agriculture, the turkey industry has come to be a billion dollar business dominated by a handful of industry giants, who are integrating and consolidating their means of production. “During 2004, the value of turkey production in the United States totaled $3.07 billion,” says National Agricultural Statistics Service administrator R. Ronald Bosecker. “This total was up 14 percent from the $2.7 billion reported in 2003.” Through artificial insemination and other genetic programs, they are increasing the amount of sellable meat per bird.
According to the NASS, the top turkey-raising states in 2005 were Minnesota, North Carolina, Arkansas, Virginia, Missouri, and California with 256,270,000 total turkeys raised in the U.S. in 2005.

Table 1: Number of turkeys raised in the U.S. and average weight per bird by year

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Turkeys Raised</th>
<th>Average Weight of Live Birds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1930</td>
<td>17,052 thousand head = 17,052,000</td>
<td>13 lbs.</td>
</tr>
<tr>
<td>1940</td>
<td>33,316 thousand head = 33,316,000</td>
<td>15 lbs.</td>
</tr>
<tr>
<td>1950</td>
<td>44,134 thousand head = 44,134,000</td>
<td>18 lbs.</td>
</tr>
<tr>
<td>1960</td>
<td>84,271 thousand head = 84,271,000</td>
<td>18 lbs.</td>
</tr>
<tr>
<td>1970</td>
<td>116,139 thousand head = 116,139,000</td>
<td>19 lbs.</td>
</tr>
<tr>
<td>1980</td>
<td>165,243 thousand head = 165,243,000</td>
<td>19 lbs.</td>
</tr>
<tr>
<td>1990</td>
<td>282,445 thousand head = 282,445,000</td>
<td>21 lbs.</td>
</tr>
<tr>
<td>2000</td>
<td>270,466 thousand head = 270,466,000</td>
<td>26 lbs.</td>
</tr>
<tr>
<td>2005</td>
<td>256,270 thousand head = 256,270,000</td>
<td>28 lbs.</td>
</tr>
</tbody>
</table>

Table 2: Top 10 turkey-producing states in 2006
Source: National Turkey Federation

<table>
<thead>
<tr>
<th>State</th>
<th>Turkeys in Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnesota</td>
<td>46.5</td>
</tr>
<tr>
<td>North Carolina</td>
<td>39</td>
</tr>
<tr>
<td>Arkansas</td>
<td>28.5</td>
</tr>
<tr>
<td>Missouri</td>
<td>21.5</td>
</tr>
<tr>
<td>Virginia</td>
<td>19.7</td>
</tr>
<tr>
<td>California</td>
<td>15.7</td>
</tr>
<tr>
<td>Indiana</td>
<td>13.3</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>12.0</td>
</tr>
<tr>
<td>South Carolina</td>
<td>12.0</td>
</tr>
<tr>
<td>Iowa</td>
<td>9.0</td>
</tr>
<tr>
<td>Total</td>
<td>256.27</td>
</tr>
</tbody>
</table>

Table 3: Top turkey processors in 2005
Source: 2006, Watt Poultry USA

<table>
<thead>
<tr>
<th></th>
<th>Live weight processed (million pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jennie-O Turkey Store</td>
<td>1265</td>
</tr>
<tr>
<td>Cargill Turkey Products</td>
<td>947</td>
</tr>
<tr>
<td>ConAgra Foods, Inc.</td>
<td>840</td>
</tr>
<tr>
<td>Carolina Turkeys</td>
<td>600</td>
</tr>
<tr>
<td>Bill Mar Foods (Sara Lee)</td>
<td>280</td>
</tr>
<tr>
<td>Perdue Farms, Inc.</td>
<td>245</td>
</tr>
<tr>
<td>House of Raeford</td>
<td>241.5</td>
</tr>
<tr>
<td>Foster Farms</td>
<td>229.5</td>
</tr>
<tr>
<td>Kraft Foods</td>
<td>205</td>
</tr>
<tr>
<td>Virginia Poultry Growers Coop.</td>
<td>200</td>
</tr>
<tr>
<td>Farbest Foods</td>
<td>198.3</td>
</tr>
<tr>
<td>West Liberty Foods (Iowa Coop.)</td>
<td>180.5</td>
</tr>
<tr>
<td>Cooper Foods</td>
<td>175</td>
</tr>
<tr>
<td>Michigan Turkey Producers</td>
<td>170</td>
</tr>
<tr>
<td>Pilgrims' Pride</td>
<td>165</td>
</tr>
<tr>
<td>Norbest, Inc.</td>
<td>160</td>
</tr>
<tr>
<td>Willowbrook Foods, Inc.</td>
<td>159.5</td>
</tr>
<tr>
<td>Zacky Farms, LLC.</td>
<td>125</td>
</tr>
<tr>
<td>Prestige Foods</td>
<td>90</td>
</tr>
<tr>
<td>Turkey Valley Farms</td>
<td>65</td>
</tr>
<tr>
<td>Oak Valley Farms</td>
<td>39</td>
</tr>
<tr>
<td>Northern Pride Turkey</td>
<td>37.5</td>
</tr>
</tbody>
</table>
Natural Mating Replaced by Artificial Insemination

Like other segments of the livestock and poultry industries, turkey producers have sought to increase productivity and efficiency by manipulating every aspect of the turkeys’ lives, starting with their genetic makeup. By altering the birds’ genes, producers have been able to produce more meat, more quickly and cheaply. The assumption that modern production technology is cheap and efficient fails to account for the various external costs, including pollution cleanup; taxpayer subsidies for feed crops, particularly corn and soy; human and animal health risks associated with emerging pathogens and antibiotic resistance; economically failing rural communities; and animal cruelty.

Today’s domesticated turkeys have been anatomically manipulated to be large breasted and heavy to meet consumer demand – especially for white breast meat. They have been so profoundly altered that the birds are incapable of breeding naturally. Put simply by Science News, “…the quick-growing birds develop such large breasts that males can no longer mount females. So they are totally dependent on human-managed artificial insemination for their reproduction.”

According to USDA Agricultural Research Service poultry physiologist Ann M. Donoghue, “Essentially 100 percent of the nearly 300 million turkeys produced annually in the United States for consumption are the result of artificial insemination.”

Breeding Hens

Hens used for breeding are expected to lay from 80 to 100 eggs during their 25-week breeding cycle. After this, they will either be slaughtered for meat, or molted in order to induce a second production cycle. Molting consists of withdrawing food, water and light to shock the birds’ systems into another egg-laying cycle. During the second cycle, the hens produce around 75 to 80 eggs.

Breeding hens live crowded in warehouse-like sheds, similar to those used to raise turkeys for slaughter, with a few differences, most notably the presence of nest boxes wherein the hens instinctively lay their eggs. The desire to lay eggs in a private, covered area is one of the few instinctive tendencies that is partially met. The eggs are fertile because the hens have been artificially inseminated.

At the beginning of the process, when the hens are 32 weeks old, they are inseminated three times a week, after which they are “hit”—or artificially inseminated—one to two times a week. The procedure is harsh and painful, as semen is forced into hens in an assembly-line fashion.

The hens suffer during the handling and insemination process, and they try to resist as workers push and pull birds through a small door into the AI room. One after another, the hens are grabbed, turned upside down, and their legs are affixed in a metal clamp. Workers insert a straw or syringe into the hens’ vents and deliver semen.

Operating at a rapid, untenable pace, laborers expected to inseminate 600 to 700 hens in an hour do not handle the birds kindly or calmly. According to one worker at a turkey breeding facility, young turkey hens are curious and friendly with employees “...until the first couple A.I.s – and then they run from you.”

Describing inseminating techniques, a manager said, “The depth that they inseminate is different. Not everyone is going to inseminate the same way. So really the only difference is how they crack the bird out and how deep they go and how they hold the gun and put it in the hen and inseminate them.”

Putting how workers “crack the bird” into more technical terms, the Merck Veterinary Manual explains that inseminating turkey hens requires pressure being applied to the left side of the abdomen around the vent. This causes the cloaca to evert and the oviduct to protrude so a syringe or plastic straw can be inserted into the oviduct and the appropriate amount of semen delivered. As the semen is expelled by the inseminator, pressure around the vent is released, which assists the
hen in retaining sperm in the oviduct. For maximal fertility, inseminations may be started before the initial oviposition. Fertility tends to decrease later in the season so hens may be inseminated more frequently and more sperm cells may be concentrated per insemination dose.43

Turkey hens used for breeding share the same genetic makeup and health problems as other commercial turkeys. They are highly susceptible to injury and death, especially given their harsh handling. An investigator at one turkey-breeding facility documented dead birds lying on the floor or stuffed into plastic bags near a wheelbarrow.

Referring to the number of hens in a barn, a worker said, “When I brought them in, there was like three thousand. There’s probably about twenty-eight hundred now. As time goes on, you know, they die all up...and they take them out and put them to slaughter.”44

Those who don’t die during the process are typically killed before their second birthday and are used for lower-grade, processed meat products.

Breeding Toms
Tom turkeys whose semen is used to inseminate hens can father about 1,500 poults during a 25-week breeding cycle.45 Each tom can produce enough sperm cells to inseminate approximately 30 hens.46 The toms, which can weigh up to 100 pounds each, live sectioned off in crowded warehouses, typically with 16 or 17 birds packed into 6-by-12 foot pens.47 48

Workers ejaculate toms to harvest the birds’ semen, a process called “milking.” Semen collection starts when the toms are approximately 25 weeks old and is done once or twice a week. According to the manager of one turkey breeding facility, “It’s totally different than what people imagine. I can tell you right now - you’re going to be shocked... Basically I’ll give you the short run down of it. We got a tom bench in the barn. The guys pick the toms up and put them on the bench and they rub them up, squeeze them, and it ejaculates the tom. The semen is sucked up through the filtration system and sent through a valve.”49

The Merck Veterinary Manual explains that collecting semen is done by “stimulating the copulatory organ to protrude by massaging the abdomen and the back over the testes. This is followed quickly by pushing the tail forward with one hand and, at the same time, using the thumb and forefinger of the same hand to ‘milk’ semen from the ducts of this organ... The semen may be collected with an aspirator or in a small tube or any cup-like container.”50

Typically, a worker in a mask and hairnet sits at the “tom bench” collecting semen from turkeys clamped into metal contraptions, under the light of a single bulb. The worker grabs each tom, forces his legs into a clamp attached to the bench, and holds the bird down over his lap. The worker stimulates the bird to ejaculate and using a straw attached to a suction hose, he collects semen then tosses the bird to the floor. He then grabs the next tom turkey, and repeats the process over and over. 51

European agricultural officials describe how teams of two or three workers hold and collect semen from toms. If two workers are involved, one person holds the legs and collects semen while the other massages the male (literally masturbates the male turkey into ejaculation). If three workers are involved, one man holds the legs, another “milks” the semen, and the other collects the semen.52 At a U.S. breeding plant with 100,000 hens and 5,000 toms that produces tens of millions
of baby turkeys each year, a single worker milks the toms. He depends on a clamp on the bench to immobilize the birds, and suction tool attached to his wrist to collect the semen. Collected semen is usually pooled and diluted with a semen extender and then kept in cold storage until it is inserted into the hens. 53

Most breeding toms live almost entirely in the dark, because, according to one turkey milker, “...it’s gotta be dark in there. Toms only need so much light in the mornings and evenings to stimulate them to milk. The rest of the time doesn’t matter. They can be totally ‘darked out.’ It’s the length of the light in the morning and the length of light in the evening that stimulates the toms.”54 The birds can languish for about a year like this before finally being sent to slaughter. 55

In addition to being ethically repugnant, artificial insemination has the potential to contribute to the spread of disease. For example, poultry scientists have reported

Salmonella and campylobacter are two important enteric pathogens that cause foodborne disease in humans. Both organisms colonize the intestinal tract of poultry and are often shed into the environment through fecal material. Semen often becomes contaminated with fecal material during collection and can be the source of introduction of these two pathogens into the reproductive tract of hens. It is then conceivable for these bacteria to traverse the reproductive tract and contaminate the fertile egg and subsequent offspring. The practice of pooling semen from large number of toms additionally increases the risk of contamination of large number of progeny. 56

Like all intensively confined turkeys raised on factory farms, breeder turkeys are de-beaked shortly after hatching. According a worker at one large Missouri turkey-breeding facility, the turkeys may even be de-beaked a second time as they get older, a practice which is generally accepted in the poultry industry to be more painful for the birds than debeaking that is done right after hatching. 57

Conclusion

Every aspect of the lives of turkeys and other factory-farmed animals, including their genetic makeup, is controlled from literally the moment of conception to their slaughter. Genetic selection through artificial insemination (AI) is commonly used to enhance the presence of particular production-related traits. Turkey breeders have selected birds who grow fast and large, but these birds are also susceptible to various health problems and suffer as a result. Intensive genetic selection also limits the gene pool, and has made it impossible for commercial turkeys to reproduce naturally.

Turkeys raised for slaughter in the U.S. endure numerous health and welfare problems, which are a result of both their genetic makeup, and the unnatural, overcrowded environments in which they live. Hens and toms used for breeding experience the same inherited genetic problems and unnatural housing conditions as turkeys raised solely for slaughter, but because breeding birds live longer, their problems are magnified. Breeding birds also endure harsh handling as part of the AI process, and they endure overcrowded housing conditions.

Factory farms rely upon AI to keep their breeding stock to a minimum while maximizing the output of each bird. In turn, this has drastically reduced the genetic diversity of the modern, commercial turkey population, making it, as a whole, startlingly susceptible to crippling physical disorders as well as pathogens, death and disease.

Turkeys and other animals raised for food are excluded from the Federal Animal Welfare Act and from most state anti-cruelty laws. Although a majority of states have laws that prohibit sexual contact with animals, such as that which occurs during artificial insemination procedures, farm animals are excluded from these as well.
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26. National Turkey Federation:


28. Raloff, Talking Turkey


31. Voris, California Turkey Production


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38. Midwest turkey farm interview, fall 2005

50. Merck Veterinary Manual; Merck & Co., Inc., Whitehouse Station, NJ USA

51. Midwest turkey farm interview, fall 2005

52. MAFF’s ADAS Reference Book 242, p. 39, Crown Copyright 1983

53. Midwest turkey farm interview, fall 2005

54. Ibid.

55. Midwest turkey farm interview, fall 2005


57. Midwest turkey farm interview, fall 2005
is the nation’s leading farm animal protection organization. Since incorporating in 1986, we have worked to expose and stop cruel practices of the “food animal” industry through research and investigations, legal and legislative actions, public awareness projects, youth education, and direct rescue and refuge efforts. Our shelters in Watkins Glen, NY and Orland, CA provide lifelong care for hundreds of rescued animals, who have become ambassadors for farm animals everywhere by educating visitors about the realities of factory farming. For information on what YOU can do to help, please contact us.

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www.FarmSanctuary.org · www.FactoryFarming.com

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