

## THE HIDDEN COSTS OF CHEAP CHICKEN

is that we evolved to become omnivores, which was one of our steps in survival and in becoming what we are today. Being opportunists, we could survive the longest winters or the desert or whatever, because we ate meat. We would eat anything. It just seems like a natural order to me.”

“Well, I have more qualms about it.” Jake says. “There’s a feeling in me that says, OK, yeah, we’re adapted to eat meat, but if we don’t have to, then why do it? If it was a matter of necessity, that would be one thing. Like if we’re stuck in a cave and starving to death, I’m going to cut off your leg and chow down, you know?”

“Don’t go hiking with her,” Lee laughs.

We talk about the demands of marriage and children and how other considerations affect their food choices. Would they choose differently if they had more information about how their food was produced? Probably not—the alternatives are inconvenient and cost more. “Laziness is part of it, too,” Jake says. “There’s one store here where you can be assured that everything you buy is organically grown and all the meats are free-range. Everything is politically correct for the ethical meat eater, the careful carnivore. But it’s about a twenty-five-minute drive from here . . . in nasty traffic. And all of the meat there is two or three times more expensive than what I get at Wal-Mart, which is only about five minutes away.” Then she pauses a moment before saying: “Isn’t it a sad thing when our morals become so disposable?”

Later, driving on from Mabelvale, we ponder that line. It’s easy to understand why Jake and Lee make the food choices they do. They are, as Lee said, absorbed in their family and, in his case, his work, too. Making different choices would take time and add to their food bills. It’s reasonable for a couple in their situation to recoil from the prospect of paying substantially more for their food, especially when buying organically grown vegetables and free-range meats would take more time as well. Is organic food really better for you, or for the environment? It’s not easy to be sure. Nothing in the television they watch or the newspapers they read suggests that there is anything unethical about the choices they are making. Doesn’t all of America shop at Wal-Mart? How can it be wrong to do as everyone else does?

Among the items that Jake bought on her grocery shopping trip is an icon of modern American food production: chicken. Americans eat a phenomenal amount of chicken, more than any other meat. Those of us over 50 can still remember when chicken was a treat for special occasions because it was more expensive than beef. Today chicken is the cheapest meat, and its consumption has doubled since 1970.<sup>1</sup> Advocates of factory farming boast that their techniques have brought chicken within the reach of working families.

The chicken breasts Jake bought were produced by Tyson Foods, a corporation that proudly calls itself “the largest provider of protein products on the planet,” as well as “the world leader in producing and marketing beef, pork, and chicken.”<sup>2</sup> Tyson now produces more than 2 billion chickens a year, and if you are shopping in a typical American supermarket, close to a quarter of the chicken you see on the shelves will have been produced by Tyson.<sup>3</sup> Although the corporation contracts out the actual growing of its chickens to “independent” growers who own their own land and sheds, Tyson controls every aspect of production. It hatches the chicks, delivers them to the growers, tells the growers exactly how to raise them, buys back the grown chickens, and then slaughters and processes them.

Virtually all the chicken sold in America—more than 99 percent, according to Bill Roenigk, vice-president of the National Chicken Council—comes from factory-farm production similar to that used by

Tyson Foods.<sup>4</sup> The ethical issues raised by its production of chicken therefore exemplify issues raised by modern intensive chicken production in general. We can divide these issues into three categories, according to whether they most immediately impact the chickens, the environment, or humans.

## AN ETHICAL WAY OF TREATING CHICKENS?

To call someone a “birdbrain” is to suggest exceptionally stupidity. But chickens can recognize up to 90 other individual chickens and know whether each one of those birds is higher or lower in the pecking order than they are themselves. Researchers have shown that if chickens get a small amount of food when they immediately peck at a colored button, but a larger amount if they wait 22 seconds, they can learn to wait before pecking.<sup>5</sup> Moreover, after thousands of generations of domestic breeding, chickens still retain the ability to give and to understand distinct alarm calls, depending on whether there is a threat from above, like a hawk, or from the ground, like a raccoon. When scientists play back a recording of an “aerial” alarm call, chickens respond differently than when they hear a recording of a “ground” alarm call.<sup>6</sup>

Interesting as these studies are, the point of real ethical significance is not how clever chickens are, but whether they can suffer—and of that there can be no serious doubt. Chickens have nervous systems similar to ours, and when we do things to them that are likely to hurt a sensitive creature, they show behavioral and physiological responses that are like ours. When stressed or bored, chickens show what scientists call “stereotypical behavior,” or repeated futile movements, like caged animals who pace back and forth. When they have become acquainted with two different habitats and find one preferable to the other, they will work hard to get to the living quarters they prefer. Lame chickens will choose food to which painkillers have been added; the drug evidently relieves the pain they feel and allows them to be more active.<sup>7</sup>

Most people readily agree that we should avoid inflicting unnecessary suffering on animals. Summarizing the recent research on the mental lives of chickens and other farmed animals, Christine Nicol, professor of animal welfare at Bristol University, in England, has said: “Our challenge is to teach others that every animal we intend to eat or use is a complex

individual, and to adjust our farming culture accordingly.”<sup>8</sup> We are about to see how far that farming culture would have to change to achieve this.

Almost all the chickens sold in supermarkets—known in the industry as “broilers”—are raised in very large sheds. A typical shed measures 490 feet long by 45 feet wide and will hold 30,000 or more chickens. The National Chicken Council, the trade association for the U.S. chicken industry, issues Animal Welfare Guidelines that indicate a stocking density of 96 square inches for a bird of average market weight<sup>9</sup>—that’s about the size of a standard sheet of American 8.5 inch × 11 inch typing paper. When the chicks are small, they are not crowded, but as they near market weight, they cover the floor completely—at first glance, it seems as if the shed is carpeted in white. They are unable to move without pushing through other birds, unable to stretch their wings at will, or to get away from more dominant, aggressive birds. The crowding causes stress, because in a more natural situation, chickens will establish a “pecking order” and make their own space accordingly.

If the producers gave the chickens more space they would gain more weight and be less likely to die, but it isn’t the productivity of each bird—let alone the bird’s welfare—that determines how they are kept. As one industry manual explains: “Limiting the floor space gives poorer results on a per 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.”<sup>10</sup>

In Britain, a judge ruled in 1997 that crowding chickens like this is cruel. The case arose when McDonald’s claimed that two British environmental activists, Helen Steel and David Morris, had libeled the company in a leaflet that, among other things, said that McDonald’s was responsible for cruelty. Steel and Morris had no money to pay lawyers to defend themselves against the corporate giant so they ran the case themselves, calling experts to give evidence in support of their claims. The “McLibel” case turned into the longest trial in English legal history. After hearing many experts testify, the judge, Rodger Bell, ruled that, although some other claims Steel and Morris had made were false, the charge of cruelty was true: “Broiler chickens which are used to produce meat for McDonald’s . . . spend the last few days of their lives with very little room to move,” he said. “The severe restriction of movement of those last few days is cruel and McDonald’s are culpably responsible for that cruel practice.”<sup>11</sup>

# ENTER THE CHICKEN SHED

(Warning: May Be Disturbing to Some Readers)

Enter a typical chicken shed and you will experience a burning feeling in your eyes and your lungs. That's the ammonia—it comes from the birds' droppings, which are simply allowed to pile up on the floor without being cleaned out, not merely during the growing period of each flock, but typically for an entire year, and sometimes for several years.<sup>12</sup> High ammonia levels give the birds chronic respiratory disease, sores on their feet and hocks, and breast blisters. It makes their eyes water, and when it is really bad, many birds go blind.<sup>13</sup> As the birds, bred for extremely rapid growth, get heavier, it hurts them to keep standing up, so they spend much of their time sitting on the excrement-filled litter—hence the breast blisters.

Chickens have been bred over many generations to produce the maximum amount of meat in the least amount of time. They now grow three times as fast as chickens raised in the 1950s while consuming one-third as much feed.<sup>14</sup> But this relentless pursuit of efficiency has come at a cost: their bone growth is outpaced by the growth of their muscles and fat. One study found that 90 percent of broilers had detectable leg problems, while 26 percent suffered chronic pain as a result of bone disease.<sup>15</sup> Professor John Webster of the University of Bristol's School of Veterinary Science has said: "Broilers are the only livestock that are in chronic pain for the last 20 percent of their lives. They don't move around, not because they are overstocked, but because it hurts their joints so much."<sup>16</sup> Sometimes vertebrae snap, causing paralysis. Paralyzed birds or birds whose legs have collapsed cannot get to food or water, and—because the growers don't bother to, or don't have time to, check on individual birds—die of thirst or starvation. Given these and other welfare problems and the vast number of animals involved—nearly 9 billion in the United States—Webster regards industrial chicken production as, "in both magnitude and severity, the single most severe, systematic example of man's inhumanity to another sentient animal."<sup>17</sup>

Criticize industrial farming, and industry spokespeople are sure to respond that it is in the interests of those who raise animals to keep them healthy and happy so that they will grow well. Commercial chicken-rearing conclusively refutes this claim. Birds who die prematurely may cost the grower money, but it is the total productivity of the shed that matters. G. Tom Tabler, who manages the Applied Broiler Research Unit at the University of Arkansas, and A. M. Mendenhall of the Department of Poultry Science at the same university, have posed the question: "Is it more profitable to grow the biggest bird and have increased mortality due to heart attacks, ascites (another

illness caused by fast growth), and leg problems, or should birds be grown slower so that birds are smaller, but have fewer heart, lung, and skeletal problems?" Once such a question is asked, as the researchers themselves point out, it takes only "simple calculations" to draw the conclusion that, depending on the various costs, often "it is better to get the weight and ignore the mortality."<sup>18</sup>

Breeding chickens for rapid growth creates a different problem for the breeder birds, the parents of the chickens people eat. The parents have the same genetic characteristics as their offspring—including huge appetites. But the breeder birds must live to maturity and keep on breeding as long as possible. If they were given as much food as their appetites demand, they would grow grotesquely fat and might die before they became sexually mature. If they survived at all, they would be unable to breed. So breeder operators ration the breeder birds to 60 to 80 percent less than their appetites would lead them to eat if they could.<sup>19</sup> The National Chicken Council's Animal Welfare Guidelines refer to "off-feed days," that is, days on which the hungry birds get no food at all. This is liable to make them drink "excessive" amounts of water, so the water, too, can be restricted on those days. They compulsively peck the ground, even when there is nothing there, either to relieve the stress, or in the vain hope of finding something to eat. As Mr. Justice Bell, who examined this practice in the *McLibel* case, said: "My conclusion is that the practice of rearing breeders for appetite, that is to feel especially hungry, and then restricting their feed with the effect of keeping them hungry, is cruel. It is a well-planned device for profit at the expense of suffering of the birds."

The fast-growing offspring of these breeding birds live for only six weeks. At that age they are caught, put into crates, and trucked to slaughter. A *Washington Post* journalist observed the catchers at work: "They grab birds by their legs, thrusting them like sacks of laundry into the cages, sometimes applying a shove." To do their job more quickly, the catchers pick up only one leg of each bird, so that they can hold four or five chickens in each hand. (The National Chicken Council's Animal Welfare Guidelines, eager to avoid curtailing any practice that may be economically advantageous, says "The maximum number of birds per hand is five.") Dangling from one leg, the frightened birds flap and writhe and often suffer dislocated and broken hips, broken wings, and internal bleeding.<sup>20</sup>

Crammed into cages, the birds then travel to the slaughterhouse, a journey that can take several hours. When their turn to be removed from the crates finally comes, their feet are snapped into metal shackles hanging from a conveyor belt that moves towards the killing room. Speed is the essence, because the slaughterhouse is paid by the number of pounds of chicken that comes out the end. Today a killing line typically moves at

(continued on page 26)



## A DAY IN THE LIFE OF A TURKEY INSEMINATOR

The turkey meat in the sandwiches Jake buys at Arby's would come from factory-farmed turkeys, reared in much the same way as chickens. The main difference is that because turkeys have been bred to have such an oversized breast, they cannot mate naturally. A few years ago we learned that the Butterball Turkey company, a division of the agribusiness giant ConAgra, needed workers for its artificial insemination crews in Carthage, Missouri. Our curiosity piqued, we decided to see for ourselves what this work really involved. The only qualification for the job seemed to be the ability to pass a drug test, so we were hired.

We spent some time on both sides of the job: collecting the semen and getting it into the hen. The semen comes from the "tom house," where the males are housed. Our job was to catch a tom by the legs, hold him upside down, lift him by the legs and one wing, and set him up on the bench on his chest/neck, with the vent sticking up facing the worker who actually collected the semen. He squeezed the tom's vent until it opened up and the white semen oozed forth. Using a vacuum pump, he sucked it into a syringe. It looked like half-and-half cream, white and thick. We did this over and over, bird by bird, until the syringe was filled to capacity with semen and a sterile extender. The full syringe was then taken over to the hen house.

In the hen house, our job was to "break" the hens. You grab a hen by the legs, trying to cross both "ankles" in order to hold her feet and legs with one hand. The hens weigh 20 to 30 pounds and are terrified, beating their wings and struggling in panic. They go through this every week for more than a year, and they don't like it. Once you have grabbed her with one hand, you flop her down chest first on the edge of the pit with the tail end sticking up. You put your free hand over the vent and tail and pull the rump and tail feathers upward. At the same time, you pull the hand holding the feet downward, thus "breaking" the hen so that her rear is straight up and her vent open. The inseminator sticks his thumb right under the vent and pushes, which opens it further until the end of the oviduct is exposed. Into this, he inserts a straw of semen connected to the end of a tube from an air compressor and pulls a trigger, releasing a shot of compressed air that blows the semen solution from the straw and into the hen's oviduct. Then you let go of the hen and she flops away.

Routinely, methodically, the breakers and the inseminator did this over and over, bird by bird, 600 hens per hour, or ten a minute. Each breaker "breaks" five hens a minute, or one hen every 12 seconds. At this speed, the handling of birds has to be fast and rough. It was the hardest, fastest, dirtiest, most disgusting, worst-paid work we have ever done. For ten hours we grabbed and wrestled birds, jerking them upside down, facing their pushed-open assholes, dodging their spurting shit, while breathing air filled with dust and feathers stirred up by panicked birds. Through all that, we received a torrent of verbal abuse from the foreman and others on the crew. We lasted one day.

## THE COST TO THE ENVIRONMENT

The Delmarva Peninsula, so called because parts of it belong to Delaware, Maryland, and Virginia, has great natural gifts: green rolling countryside, estuaries, beaches, and two great bodies of water, the Atlantic Ocean on the east and the vast Chesapeake Bay on the west. On the surface, some parts of Chesapeake Bay and its surrounding countryside seem to be among the few remaining nearly natural areas on the East Coast. Underneath, however, the Bay is in serious trouble. When Captain John Smith entered Chesapeake Bay in 1608, it was such a thriving natural environment that he joked you could catch fish with a frying pan. Until well into the twentieth century, the Bay was carpeted with beds of clams and oysters—a huge living filter that kept the water clean. Now the few remaining oysters can't do that.<sup>25</sup> Over-harvesting and the growth of human population in the region, with the pollution it brings, are partial reasons for the bay's problems; but recently attention has been turning to the chicken industry on the peninsula itself.

More than 600 million chickens a year are raised on the Delmarva Peninsula. Those chickens produce more manure than a city of four million people, and instead of getting processed like human waste, chicken manure is spread on fields. But the Delmarva cannot absorb that much nitrogen and phosphorus. Sussex County, Delaware, produces 232 million chickens annually—more than any other county in the nation—but a University of Delaware study found that the county only has enough land to cope with the manure from 64 million chickens. Up to half of the nutrients in the excess manure washes off into the rivers and streams, or

gets into the groundwater. A third of the shallow wells in the Delmarva Peninsula, including those going into the underground aquifer used for drinking water, have nitrate levels above the federal safe drinking water standards, according to the U.S. Geological Survey. In the rivers and the bay, these nutrients stimulate too much algae growth. The algae decomposes, sucking oxygen out of the water, and fish and other forms of water life die. The bay now has "dead zones" that cannot support fish, crabs, oysters, or other species of ecological significance. In July 2003, a dead zone stretched for 100 miles down the central portion of the bay.<sup>26</sup>

In western Kentucky, the masthead of *The Messenger*, the local newspaper of Madisonville, carries the slogan "The Best Town on Earth." But if you had been in the audience of a hearing at the Madisonville Technology Center on the evening of June 29, 2000, you would have had to wonder about that. The Natural Resources and Environmental Protection Cabinet of the Kentucky Department of Environmental Protection was listening to public comment on a proposed regulation for Concentrated Animal Feeding Operations, also known as factory farms. A long procession of citizens came up and made their views known. Here is a selection:<sup>27</sup>

Since Tyson took over the operation of the growing houses, there is a very offensive odor that at times has taken my breath. There has been a massive invasion of flies. It is hard to perform necessary maintenance on our property.<sup>28</sup>

Uncovered hills of chicken waste attract hundreds of thousands of flies and mice... People, including school children, can not enjoy a fresh morning's air and can't inhale without gagging or coughing due to the smell.<sup>29</sup>

My family lives next to chicken houses. We caught 80 mice in two days in our home. The smell is nauseating . . . My son and I got stomach cramps, diarrhea, nausea, and we had a sore on our mouths that would not go away. We went to the doctor and my son had parasites in his intestines. Where are the children's rights? Should families have to sacrifice a safe and healthy environment for the economic benefit of others?<sup>30</sup>

After the hearings, local western Kentucky residents, supported by the Sierra Club, sued Tyson Foods for failing to report releases of ammonia from four of its chicken factories as it was required by law to do. Tyson claimed that because the factories were owned by growers who only contracted to sell their chickens to Tyson, it was not responsible for reporting the pollution. In 2003, a federal court rejected that argument, holding that since Tyson controlled how the chickens were raised, what they were fed, and what medications they were given, and gained most of the profit from raising them, Tyson was also responsible for the pollution.<sup>31</sup> Tyson finally settled with the residents in 2005, agreeing to spend \$500,000 to study and report on emissions and mitigate ammonia emissions. Tyson also agreed to pay the legal costs of the residents and to plant trees to screen the chicken factories and reduce odors. Sierra Club attorney Barclay Rogers hailed the outcome as a "landmark decision" that has established the responsibility of factory farms to "clean up their act and stop putting communities at risk."<sup>32</sup>

The Delmarva Peninsula and western Kentucky are examples of a nationwide problem. In Warren County, in northern New Jersey, Michael Patrisko, who lives near an egg factory farm, told a local newspaper that the flies around his neighborhood are so bad, "You literally can look at a house and think it's a different color."<sup>33</sup> Buckeye Egg Farm in Ohio was fined \$366,000 for failing to handle its manure properly. Nearby residents had complained for years about rats, flies, foul odors, and polluted streams from the 14-million-hen complex.<sup>34</sup> At the same time, Oklahoma Attorney General Drew Edmondson was threatening to sue Arkansas poultry producers, including Tyson Foods, saying that waste from the companies' operations is destroying Oklahoma lakes and streams, especially in the northeast corner of the state.<sup>35</sup>

Tyson Foods, which the Sierra Club listed as one of the Ten Least Wanted Animal Factory Operators in 2002, has a long history of convictions for pollution.<sup>36</sup> After the incidents the Sierra Club listed in its 2002 report, Tyson was again in the news in 2003, when it admitted that it had repeatedly discharged untreated wastewater from its poultry plant in Sedalia, Missouri into a tributary of the Lamine River. The plant, which covers a thousand acres and processes about a million chickens a week, discharges hundreds of thousands of gallons of wastewater every day. State and federal prosecutors alleged that over the previous decade Tyson had repeatedly ignored civil fines, state orders, and other violation

notices about its wastewater discharges. Tyson acknowledged that employees at the plant knew about the discharges and agreed to pay a total of \$7.5 million in fines.<sup>37</sup>

Tyson produces chicken cheaply because it passes many costs on to others. Some of the cost is paid by people who can't enjoy being outside in their yard because of the flies and have to keep their windows shut because of the stench. Some is paid by kids who can't swim in the local streams. Some is paid by those who have to buy bottled water because their drinking water is polluted. Some is paid by people who want to be able to enjoy a natural environment with all its beauty and rich biological diversity. These costs are, in the terms used by economists, "externalities" because the people who pay them are external to the transaction between the producer and the purchaser.

Consumers may choose to buy Tyson chicken, but those who bear the other, external costs of intensive chicken production do not choose to incur them. Short of moving house—which has its own substantial costs—there is often little they can do about it. Economists—even those who are loudest in extolling the virtues of the free market—agree that the existence of such externalities is a sign of market failure. In theory, to eliminate this market failure, Tyson should fully compensate everyone adversely affected by its pollution. Then its chicken would no longer be so cheap.

## THE COST TO WORKERS

Jobs at Tyson Foods are so poorly paid and unpleasant that job turnover in some plants has been reported to be higher than 100 percent annually, meaning that the average employee lasts less than a year—although Tyson refuses to make the figure public.<sup>38</sup> Some of the jobs are also dangerous. In 1999 Tyson Foods was named one of the Ten Worst Corporations of the Year by *Corporate Crime Reporter*. That year, seven Tyson workers died in industrial accidents. One of them was a 15-year-old boy working as a chicken catcher in Arkansas. In the same year, another 15-year-old was seriously injured in an accident at a Tyson plant in Missouri. As a result of the accidents, two 14-year-olds and another 15-year-old were discovered working at the Missouri plant. Tyson was fined by the Department of Labor for violating the child labor provisions

of the Fair Labor Standards Act.<sup>39</sup> The corporation was also fined by the Occupational Health and Safety Administration for violating health and safety laws in several states.<sup>40</sup>

Tyson has a record of seeking to lower wages and cut health benefits for its workers, even while the corporation has been experiencing unprecedented growth and making billions of dollars in profits. When Tyson took over IBP, a major beef producer, it found that it had acquired a workforce receiving better wages and benefits than its own workers—and it set out to change that. In February 2003, Tyson offered workers at a former IBP plant in Jefferson, Wisconsin, a new contract that included pay cuts, no pensions for new workers and frozen pensions for existing workers, cuts in vacation time, and higher health insurance co-payments for an inferior health care package. The plant had been profitable when run by IBP and was continuing to make a profit for Tyson—but not as big a profit as Tyson thought it could make. A company manager said that the workers' pay of \$25,000 to \$30,000 a year, plus benefits, made the plant an "outlier" and put its workers "in a luxurious position from our perspective."<sup>41</sup> A long, bitter strike ensued, but after Tyson brought in new workers willing to cross the picket lines, strikers eventually had to accept virtually the same deal that they had been offered before the strike began.

The contractors who are responsible for rearing the chickens, known in the industry as "growers," may seem to be more independent than employees, but once they have signed on, they have little choice but to take the terms Tyson offers them. Growers have to invest their own money in the sheds and equipment and often go heavily into debt to do so. They then become dependent on constantly renewing their contract with a corporation like Tyson to get their money back—for without a new contract, no more chicks will arrive in their sheds. Since the sheds are useless for anything but growing chickens, the growers can lose not only their investment, but their land as well. Usually only one corporation operates within a 25-mile radius, and even if two corporations are operating in the same area, there is often an unwritten rule that one company will not pick up a grower who has worked for another company. So if a grower does not like the contract that Tyson offers, there is nowhere else to go. Their independence gone, the growers are, as one of them put it, "serfs at the mercy of the companies that make a fortune on their backs."<sup>42</sup>



Corporations often defend their low wages by saying that if people don't like the pay they are offering, they don't have to take it. Employees in poultry slaughterhouses can, they say, seek work elsewhere, and growers are free to grow chickens and sell them themselves, if they can—or not get into chicken growing in the first place. In a free market, that's how things work, and the consumers benefit in terms of lower prices. However, the job options available to many low-skilled chicken growers may be limited. In any case, this argument doesn't excuse the mistreatment of chickens who, unlike workers, have no choice at all. In the end, consumers, too, are free to choose. If they don't like the way a corporation treats its workers and contractors, or the environment, or the animals it uses, they can take their money elsewhere.

## THE GREATEST COST OF ALL?

In 2005, the world began to face the serious possibility that the cheap chicken produced by factory farming could be far more costly to all of us than even the most radical animal rights advocates had ever dreamt it might be. Scientists began to warn leaders to prepare against the possibility of an epidemic of avian influenza—popularly known as bird flu—that could spread to human beings and take tens, or even hundreds, of millions of lives. Supporters of factory farming have used the threat of bird flu to make a case against having chickens outdoors, claiming that the virus can be spread by migrating birds to free-range flocks.<sup>43</sup> But the real danger, as scientists now recognize, is intensive chicken production.

In October 2005, a United Nations task force identified as one of the root causes of the bird flu epidemic, “farming methods which crowd huge numbers of animals into small spaces.”<sup>44</sup> Other experts agree, among them University of Ottawa virologist Earl Brown, who said after a Canadian outbreak of avian influenza, “. . . high intensity chicken rearing is a perfect environment for generating virulent avian flu virus.”<sup>45</sup> Although transmission through wild birds to chickens kept outdoors is a possibility, as Dr Brown has pointed out, viruses found in wild birds are generally not very dangerous. It is when they get into a high-density poultry operation that they mutate into something much more virulent. Traditionally reared birds, moreover, are likely to have more resistance than the stressed, genetically similar birds kept in intensive confinement

systems. And in any case, even if there were no chickens kept outside, factory farms are not biologically secure. They are frequently infested with mice, rats, and small birds who can bring in diseases.

As of this writing, the number of human beings who have died from the current strain of avian influenza, known as H5N1, is relatively small, and it appears that they have all been in contact with infected birds. But if the virus mutates into some form that is transmissible from human to human, as experts say it might, the number of deaths could outstrip the estimated 20 million victims of the Spanish flu epidemic of 1918. Governments are, rightly, taking action to prepare for this threat. In 2005, the United States Senate approved the spending of \$8 billion to stockpile vaccines and other drugs to help prevent a possible bird flu epidemic. Other governments have already spent tens of millions for that and other preventive measures.

Such government spending is really a kind of subsidy to the poultry industry and, like most subsidies, it is bad economics. Factory farming spread because it seemed to be cheaper than more traditional forms of farming. We have seen that it was cheaper to the consumer, but only because it was passing some of its costs on to others—for example, to people who lived downstream or downwind from the factory farms and could no longer enjoy clean water and air and to workers who were injured by unsafe conditions. Now we can see that this was only the small stuff. Factory farming is passing far bigger costs—and risks—on to all of us. If chicken were taxed to raise enough revenue to pay for the precautions that governments now have to take against avian influenza, again we might find that factory farm chicken isn't really so cheap after all.

## A CLEAR-CUT CONCLUSION

Gandhi remarked that the greatness of a nation and its moral progress can be judged by the way it treats its animals. If we apply that standard to industrial chicken producers, they don't come off well. Chicken producers could, for a few cents per bird, handle their chickens more gently at all stages of catching, transport, and slaughter, but they do not do so.<sup>46</sup> Instead, everything is geared to speed of production and cutting labor costs. The same indifference to ethical concerns is evident in the



way that the chicken industry treats the environment, those who live near the chicken sheds, their workers, and their contractors. We should boycott those who treat animals, the environment, and workers so callously. As we shall see in Part III, intensive farming doesn't even help to feed the world—it actually reduces the total amount of food available for human consumption. We'll also see that consumers should have no trouble finding healthy, tasty, low-cost alternatives that are, on ethical grounds, much better than factory-farmed food.

3

## BEHIND THE LABEL: “ANIMAL CARE CERTIFIED” EGGS

The carton of Country Creek eggs that Jake Hillard picked up at Walmart carried the name Moark Productions, one of America's largest producers of eggs. It also bore a red seal saying Animal Care Certified. We asked Jake if the seal signified anything to her. “Well, it seemed to imply that they followed some standard of humane animal care,” she said. “I get the general impression that the chickens are cared for better than by some companies, but I don't know by how much.”

Jake's vagueness about the Animal Care Certified seal wasn't surprising. Most Americans know little about how their eggs are produced. They don't know that American egg-producers typically keep their hens in bare wire cages, often crammed eight or nine hens to a cage so small that they never have room to stretch even one wing, let alone both. The space allocated per hen, in fact, is even less than broiler chickens get, ranging from 48 to 72 square inches. Even the higher of these figures is less than the size of a standard American sheet of typing paper. In such crowded conditions, stressed hens tend to peck each other—and the sharp beak of a hen can be a lethal weapon when used relentlessly against weaker birds unable to escape. To prevent this, producers routinely sear off the ends of the hens' sensitive beaks with a hot blade—without an anesthetic.<sup>1</sup>

As for the cages themselves, they are in long rows, sometimes stacked three and four tiers high. That way, in a single building, tens of thou-