## CAFO: The Tragedy of Industrial Animal Factories The CAFO Reader

Edited by Daniel Imhoff Order the Book

"An important new book on animal agriculture, CAFO: The Tragedy of Industrial Animal Factories by Dan Imhoff is a powerful, oversized volume of images and writing on an issue that has been heating up this summer and promises to be in the news this fall as food safety legislation is debated in the Senate."

- Michael Pollan

## Introduction

## By Daniel Imhoff

Our domesticated livestock have never been as cruelly confined or slaughtered in such massive quantities in all of history. Every year, at least four domesticated animals are raised for every person on the planet. In the United States alone, nearly 10 billion domesticated livestock—mostly chickens, pigs, and cows—are raised and slaughtered annually, a number that is dwarfed if one includes rapidly expanding land- and ocean-based fish farming. This is twice the number that America raised in 1980, and ten times more than in 1940.1 Even more alarming is that animal food production is expanding across the globe at a staggering pace. The United Nations Food and Agriculture Organization predicts that global consumption of both meat and dairy products will double by 2050.2 Yet already the world's lands and waters are being overwhelmed by animals that consume vast amounts of energy, foul the environment, and when eaten excessively, degrade our health.3 In the United States and in other parts of the world, the raising of livestock has become increasingly dominated by concentrated animal feeding operations (CAFOs), intensive livestock operations (ILOs in Canada), and smaller animal feeding operations (AFOs). These are essentially factory-like buildings into which animals—industrially bred for rapid growth and high output of meat, milk, or eggs—are tightly crammed, caged, and sometimes even chained or tethered. By current U.S. Environmental Protection Agency definitions, a large CAFO imports its feed and concentrates more than any of the following: 1,000 cattle; 2,500 swine over 55 pounds; 10,000 swine under 55 pounds; 55,000 turkeys; 125,000 chickens; or 82,000 laying hens.

As the name implies, a CAFO is a feeding operation. Animal density and weight gain are the primary objectives. These animal factories are quite different from small- or medium-size diversified farms that combine row or tree crops with livestock raised on pastures, using the animals' manure to fertilize the fields or orchards. Most CAFOs shouldn't really even be described as farms—either technically or legally—because they basically operate under an industrial factory framework. In a CAFO, animals are concentrated in unnaturally high stocking rates by the thousands or tens of thousands and under unnatural conditions, often unable to breathe fresh air, see the light of day, walk outside, peck at plants or insects, scratch the earth, or eat a blade of grass. They are fed a high-calorie grain-based diet (sometimes including reclaimed animal manure, ground-up fish, or recycled animal parts) designed to maximize growth and weight gain in the shortest amount of time. Only a select few modern breeds are chosen for these cold industrial parameters.

According to the Oxford English Dictionary, the first recorded use of the term factory farming appeared in an American journal of economics in 1890, although confinement feeding operations such as the deplorable nineteenth-century "swill" dairies—which fed milk cows the spent distillery wastes from whiskey production&8212;had been in existence

discovery that adding vitamins A and D to feed rations allowed producers to keep animals indoors all year long, channeling their energy into rapid growth.4 By the post—World War II era, the increasing confinement of livestock ultimately triggered high rates of mortality and outbreaks of disease. These problems were countered with a second technological development essential to the CAFO system—regular doses of antibiotics (or antimicrobial medicines) in feed and water to fight off infectious pathogens and promote weight gain.5 As grain replaced pasture as a primary feedstock, farmers also turned to twentieth-century industrial technologies such as synthetic fertilizers, toxic pesticides and herbicides, and hybrid and genetically modified crop varieties to boost feed harvests. Factory farms grew larger, and became ever more mechanized and capitalized. Smaller independent slaughtering facilities closed down, and regional distribution networks dried up. With falling prices and limited access to markets, millions of independent family operators vanished from the agricultural landscape altogether. Or they became low-margin contractors or low-wage employees for the animal factories that replaced them.

Corporate agri-businesses that have revved the economic engines of the global animal factories have reduced living creatures to mere production units of milk, eggs, and meat. Every step of the way, domesticated animals have been increasingly altered and bred to meet the conditions of their confinement. Chicks" beaks can be partially seared off so they cannot fatally strike one another. The tails of piglets are "docked" to instill "avoidance behavior" inside a stall crammed with hogs: the animals do all they can to prevent an aggressive or stimulation-deprived pen mate from gnawing their sensitive backsides. The horns of young cattle are sawed off or chemically shortened before they are sent off to the overcrowded feedlots. Mother sows and dairy cows nurse their offspring for a bare minimum before they are both whisked off into animal factory food assembly lines. The CAFO industry argues that while such practices may seem cruel to some, they are done to benefit the health and welfare of the animals and to provide an abundant and safe food supply for a hungry planet.

Meanwhile, the intensive concentration of animals produces obscene amounts of waste. It is not uncommon for a CAFO on 100 acres to generate the same amount of sewage as a city of 100,000 inhabitants. The key difference is that CAFOs aren't required to set up carefully monitored sewage treatment plants. Instead, the waste—spewed onto surrounding "spray fields" or buried directly into the soil—is often too much for the area to safely absorb and at some point becomes a toxic social and ecological liability. Stored in football field—size ponds (aka "lagoons"), massive quantities of manure often become fugitive—seeping into groundwater, released into the atmosphere, and mixing with rainwater during rain and flood events.

Inside the CAFO, animals are routinely administered antibiotics whether they need them or not. (The states of Iowa and North Carolina, for instance, each administer more antibiotics for animal production than the entire human population of the United States uses for medical purposes.) The appearance of new, more virulent forms of disease-causing organisms such as Salmonella, E. coli, and methicillin-resistant Staphylococcus aureus (MRSA) have been increasingly associated with CAFO production. Many scientists now caution that we are dangerously close to losing the effectiveness of valuable human medicines because of their overuse in industrial animal food production.

At the far end of the animal food production chain are the slaughterhouses and "disassembly lines." The pace of killing is relentless—7,000 calves, 130,000 cattle, 360,000 pigs, 24 million chickens per day in the United States at the turn of the twenty-first century—making slaughterhouse work one of the more dangerous occupations.6 In February 2008, the Humane Society of the United States released an undercover video showing employees at the Westland/Hallmark Meat Company in Chino, California, dragging, electrically prodding, and using forklifts to move "downer cows" unable to walk to the kill floor. Slaughtering an animal unable to walk under its own power is illegal under the Humane Slaughter Act of 1958 (updated in 1978 and 2002). But without adequate regulation and enforcement (recently strengthened in 2009), an estimated 100,000 downer animals have still been slaughtered every year in the United States.7 The Hallmark case led to the largest meat recall on record—143 million pounds—and the closure of that plant.8 In

addition to the brutality inflicted on helpless creatures, what shook many observers was that this particular firm supplied a significant amount of meat to the National School Lunch Program.

The CAFO industry has also become concentrated geographically. California and Idaho lead the country in dryland industrial dairies, and Texas and Kansas lead in cattle feedlots. Meat chicken (broiler) CAFOs are heavily concentrated along the eastern shore of the Chesapeake Bay, Arkansas, Alabama, Georgia, western Kentucky, and North Carolina, while Iowa and Ohio specialize heavily in eggs. Swine CAFOs are centralized in Iowa and North Carolina. The state of Iowa, for instance, raises an average of 11.3 hogs for every citizen in its population of just 3 million. The New York Times reported in 2008 that Iowa's 5,000 confinement hog facilities generate over 50 million tons of raw waste, or 16.7 tons of animal manure for every resident.9 Many CAFO production areas are prone to cyclical flooding.

An increasing number of observers argue that such concentration has arisen as a direct result of intentional U.S. government policies that have allowed CAFOs to avoid paying the true costs of their operations. 10 For over a decade—until the recent ethanol and biofuels boom—CAFO operators were able to purchase feed at below the cost of production. These staggering discounts came about thanks to billions of dollars in annual taxpayer-funded farm bill grain subsidies, allowing animal factories to outcompete smaller independent producers and unfairly expand their operations.11 Farm bill "conservation" programs have also doled out hundreds of millions of taxpayer dollars to build the actual infrastructure for large CAFOs to process their waste, a routine cost of business that most small- and medium-size operations normally cover out of their own operating expenses. Powerful agribusiness corporations have successfully lobbied for laws that regard CAFOs as farms rather than industries, essentially giving them a free pass on certain air, water, and solid waste emissions, and in many cases, exempting them from animal cruelty legislation. Agencies have often failed to enforce existing environmental regulations and antitrust laws despite the outright domination of nearly every sector of the industry by a small number of corporations 12 Local control over the ability to reject a CAFO installation has been taken away from community governments in some states as the powerful industrial animal food production sector has successfully shifted authority from the local to the state level. In three states—Montana, Kansas, and North Dakota—it is actually illegal to photograph a CAFO without permission of the owner. Thirteen states have passed disparagement laws that attempt to restrict what can be said about perishable food products, meaning that our food system is now infringing on basic constitutional freedoms.

The world's increasing appetite for animal food products of all kinds—pork, dairy, beef, poultry, and eggs—is also placing unsustainable pressures on the planet's ecosystems. The Earth's atmosphere is literally heating up, and waterways and fisheries are being deluged as a result of the prolific waste output of the world's food producing animals. According to an oft-cited 2006 United Nations Food and Agriculture Organization report, the livestock sector alone accounts for 18 percent of global greenhouse gas emissions, a larger share than all of the world's transportation emissions combined.13 A more recent study published by the World Watch Institute, however, pegs global livestock production as responsible for 32 billion tons of carbon dioxide per year, or 51 percent of all greenhouse gas emissions.14 There are now five hundred reported "dead zones" throughout the world, aquatic regions whose biotic capacities are collapsing, largely because of agricultural runoff and waste contamination, much of it linked to the livestock sector.

At one time, the concept of industrial-scale farming seemingly held out a promise to society at large. Fewer people would be required to grow more food in less labor-intensive factory-like operations. "Economies of scale" would make food cheaper for an expanding population in a world where periodic famine and crop failures inflicted mass suffering. Today we know too well that these short-term advances in affordability and availability of animal food products have been offset by tremendous costs to the natural world, rural communities, public health, and society at large—along with a legacy of basic welfare denied to untold billions of confined livestock. A 2008 Pew Commission report on CAFOs described—and cautioned against—the rise of the "agro-industrial complex: an alliance of commodity groups, scientists at academic institutions who are paid by the industry, and

their friends on Capitol Hill." The commission, overseen by the Center for a Livable Future at the Johns Hopkins University Bloomberg School of Public Health, concluded that the current method of producing food animals in the United States "presents an unacceptable level of risk to public health and damage to the environment, as well as unnecessary harm to the animals we raise for food."15

Clearly, the ways in which we produce our food define us as a culture and as human beings. The subject forces us to ask big questions: How did we arrive at this place where the very foundation of human society—secure and sustainable food production—has become so far removed from caring farmers and the cycles of nature? What are our ethical responsibilities as eaters, citizens, and producers in reforming a food production system that is so clearly in need of change? What does our treatment of domestic animals say about our society, our government, our food system, and our very way of life? But this is getting ahead of our story, a complex topic that bridges a vast number of subjects: economics, food science, veterinary medicine, ecology, ethics, nutrition, food and agricultural policy, and genetics, to name just a few. The rapid growth of the animal factory and industrial food production in general stems from a pervasive philosophical framework, one that reduces the world to a mechanistic system in which the ultimate goal is the maximization of output and market share, even as animal and human health, worker and community well-being, profit margins and democratic freedoms decline. Welcome to the world of the CAFO. Welcome to an issue for our time.

## For Store Page:

CAFO Reader: June, 2010 480 pages, 6" x 9" Edited by Daniel Imhoff ISBN-978-0-9709500-5-5 US \$21.95

CAFO: The Tragedy of Industrial Animal Factories: August, 2010 400 pages, 12" x 13" Hardcover Edited by Daniel Imhoff ISBN-978-1-60109-058-4 US \$50.00