

## CAFOs - Farm Animal Cruelty by Design

A concentrated animal feeding operation (CAFO) is designed and operated in a way inherently cruel to farm animals. The underlying design principle is ***intensive confinement*** -- the cramming of large numbers of hapless animals into enclosed spaces. The primary purpose is the *minimization of production costs* and *maximization of profits*. The consequences of these design and operating features are listed below with links to our *CAFO Horror Stories* describing particularly egregious examples of CAFO animal cruelty.

**High stress on farm animals is created** by their inability to express natural behaviors on concrete or dirt floors in tightly confined spaces. Mother pigs (sows) are often confined in "crates" preventing them from even turning around. Hens are kept in tiny cages in egg factories. CAFOs are filled with an overpowering stench of ammonia, hydrogen sulfide and other odorous emissions from feces and urine buildup from thousands of animals. Most of these animals are denied access to fresh air and sunshine for their entire lives.

### Sows in Gestation Crates



Photo by iStock.com/acceptfoto

Egg-laying hens are usually so tightly confined in "battery cages" that they cannot open their wings or even turn around fully. Because no federal welfare law covers farmed animals any such regulation depends on state governments. While ten states currently have implemented battery-cage related laws, [more than 75% of egg-laying hens live in states with little-to-no welfare protections.](#)

## Caged Hens in an Egg Factory



Photo by iStock.com/chayakorn

**High levels of disease transmission.** High stress, close proximity, and near identical animal genetics in CAFOs lead to high death rates due to the rampant spread of infectious diseases. Iowa State University estimated in 2018 that 30 to 35% of pigs die before they reach market, and this mortality rate has been increasing.<sup>1</sup> The industry uses antibiotics to keep some animals alive in the filthy conditions of CAFOs, but that creates a problem for human medicine, and they don't work on viruses. When infected by certain viruses, the entire population of animals in a CAFO may be killed in a cruel manner to prevent further spread. In March of 2022, [5.3 million hens were "culled" at an egg factory in Iowa](#). CAFOs are also a [potential reservoir for human disease pandemics](#).

**Mutilations, forced impregnation, and separation of mother and offspring.** To reduce fighting in tight, confined conditions, bodily mutilations are commonly performed on livestock animals, almost always without any pain relief.<sup>2</sup> Calves and piglets are castrated, chickens are debeaked, cows are branded and dehorned, piglets have their teeth clipped, and pigs' and cows' tails are docked. Animals used for breeding, along with dairy cows, are subject to repeated forced impregnation throughout their lives. Offspring are often separated from mothers within hours, days or a few weeks of birth, causing stress for both the mother and babies. Repeated cycles of impregnation, birth, and milk production take a heavy toll on the animals' bodies, often considered "spent" at a fraction of their normal life span.<sup>3</sup> The egg industry claims to want to eliminate the cruel killing of male chicks but so far hasn't followed through at scale.<sup>4</sup> Due to consumer concerns, the CAFO industry is slowly moving to reduce some of these practices but there is little or no government oversight to assess progress.<sup>5,6</sup> In general, it seems these animals are viewed as nothing more than units of production rather than living creatures worthy of respect and compassion.

**Barn Fires and Explosions.** Over the past decade the Animal Welfare institute has documented a large number of fires and explosions in CAFO buildings that occur each year.<sup>7</sup> When these accidents occur in large poultry, hog and dairy CAFOs that intensively confine tens or even hundreds of thousands of animals,

the death and destruction can be enormous due to the inability of operators to remove the animals before they burn to death or die from smoke inhalation. CAFOs are so highly automated that there is usually no one around when the fire breaks out, and terrified animals become hard to handle. When known, the cause is almost always related to sparks from defective wiring, instruments or machinery in the building. Fire suppression sprinklers are not required in CAFOs. Frequently firefighters must use tankers to haul in water from distant ponds or streams to fight the fires. CAFOs in rural areas frequently are located well beyond the reach of municipal fire hydrants. In one recent case some 18,000 dairy cows died in a [massive explosion in Texas](#).

Some news stories of CAFO barn fires cite the intensity of these fires and how rapidly they spread. Hogs and dairy cows are fed rich diets to speed growth or to increase milk production. Thus, a huge amount of manure is produced. All this manure bubbling in liquid impoundments generates what is known as manure gas, a noxious mixture of hydrogen sulfide, ammonia, carbon dioxide, methane and odorous organic compounds some of which are flammable.

In "deep pit" hog CAFO designs where the manure percolates under the animals for extended periods before being pumped out, the buildup of highly flammable methane is a known explosion hazard. The powerful fans needed to expel the hazardous gases in CAFOs provide perfect conditions for fire. It is perhaps no surprise why hog CAFO fires become so intense. Canada's *Farm Animal Councils* published a fact sheet for first responders that noted, "Pigs are highly flammable."<sup>8</sup>

**Heat Stroke and Mass Suffocation** are lesser-known consequences of intensive confinement technology. On July 7, 2007, 850 sows died from heat stroke and suffocation at a swine CAFO near Concordia, Missouri due to a mechanical failure.<sup>9</sup> During heatwaves in the summer of 2011, a power failure stilled ventilation fans in a CAFO, and 2500 hogs died of heat stroke. At a CAFO in Southeast Kansas more than 4000 turkeys died after temperatures hit 105 degrees F even with fans working, and thousands of cattle died in outdoor feedlots in several states.<sup>10</sup> Outdoor cattle feedlots, holding thousands of animals, can also present inhumane conditions. In hot weather with no shade, the cows stand on dirt or dried manure that absorbs much more heat than would grass-covered ground if the cows were on pasture. Pastured cows could also move under the shade of trees or find pond or stream water.<sup>11</sup>

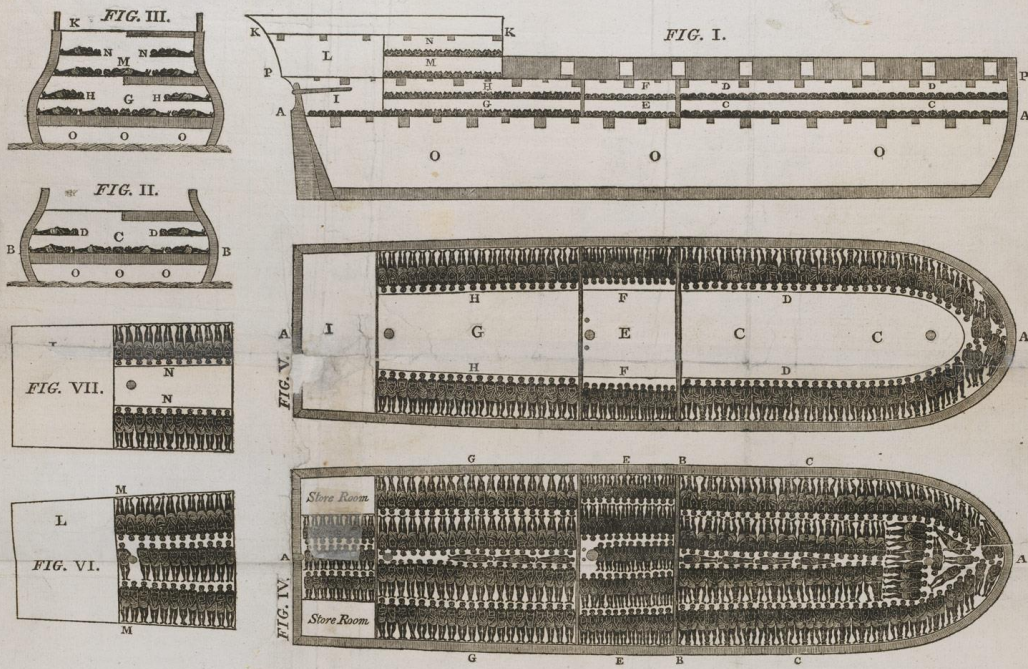
Animals in CAFOs can suffer carbon dioxide poisoning and asphyxiation when the ventilation system fails. So many animals are crammed together in an enclosed space that they deplete the available oxygen. This occurs frequently enough that operators can buy specific insurance coverage.<sup>12</sup>

**Animal suffering during long transports.** CAFO animals are also *intensively confined* when they are shipped long distances in trucks to slaughter in huge, regional slaughter plants. Piglets are increasingly being shipped very long distances to "grower CAFOs." Animals can freeze to death or may be frozen to the walls of trailers during transport in winter conditions. During the summer,

animals can die in transport due to heat stroke or dehydration. In the US, pigs can be transported for 28 hours without access to food water or rest.<sup>13</sup> In Michigan in 2019, many hogs died while waiting to be offloaded in the brutal winter weather conditions.<sup>14</sup>

**Intensive Confinement is Not New.** One of the authors of this fact sheet once gave a presentation on CAFOs at a local college. A young woman in the front row commented that these CAFO's reminded her of the slave ships that brought her ancestors over from Africa. It was a stunning revelation confirmed by an old design drawing of a slave ship found on the internet, perhaps the first instance of *intensive confinement* on a large scale.<sup>15</sup>

# DESCRIPTION OF A SLAVE SHIP.



The Plan and Sections annexed exhibit a slave ship with the false beams. In order to give a representation of the trade against which no complaint of exaggeration could be brought by those concerned in it, the *Friday* is here selected. It is well known in the trade, and the fact mentioned in the report delivered to the House of Commons last year by Captain Perry, who was first in Liverpool by Government to take the dimensions of the Ships employed in the African trade from that port. These plans and sections are on a scale of six to an inch.

### DIMENSIONS OF THE SHIP.

Length of the Lower Deck, girding, bulk-heads, included	Feet	inches
at AA	100	0
Breadth of Beams on the Lower Deck, BB	23	4
Depth of Hold, ODD from ceiling to ceiling	25	0
Height between decks from ceiling to ceiling	25	0
Length of the Main Deck, CC on the lower deck	42	0
Breadth of the Main Deck, CC on the lower deck	21	4
Length of the Platform, DD in the main room	42	0
Breadth of the Platform in the main room on each side	5	0
Length of the Boy Room, EE	13	0
Breadth of the Boy Room	5	0
Breadth of Platform, FF in boy room	7	0
Length of Woman Room, GG	18	0
Breadth of Woman Room	5	6
Length of Platform, HH in woman room	6	0
Breadth of the Gun Room, II on the lower deck	10	0
Breadth of the Gun Room on the lower deck	12	0
Length of the Quarter Deck, KK	31	0
Breadth of the Quarter Deck	12	0
Length of the Cabin, LL	14	0
Height of the Cabin	6	2
Length of the Half Deck, MM	10	0
Height of the Half Deck	6	2
Length of the Platform, NN on the half deck	10	0
Breadth of the Platform on the half deck	6	0
Upper deck, PP		
Nominal tonnage	307	
Supposed tonnage by measurement	330	
Number of Beams	45	

The number of slaves which this vessel actually carried appears from the accounts given to the Capt. Perry by the favourable circumstances as follows:

Men	311
Women	122
Boys	96
Girls	41
<b>Total</b>	<b>600</b>

The room allowed to each description of slaves in this plan is:

- To the Men 6 feet by 4 feet 4 inches.
- To the Women 5 feet 6 inches by 4 feet 4 inches.
- To the Boys 5 feet 6 inches by 4 feet 4 inches.
- To the Girls 5 feet 6 inches by 4 feet 4 inches.

With this allowance of room the smallest number that can be stowed in a vessel of the dimensions of the *Friday*, is as follows (being the number exhibited in the plan) and is less than (as is now viz.:

Men on the lower deck, at CC	124	100
Men on the platform deck, DD	66	177
Men on the lower deck, EE	47	51
Men on the platform, FF	24	1
Women on the lower deck, GG	47	183
Women on the platform, HH	47	183
Women on the lower deck, II	25	27
Women on the platform, JJ	24	41
Boys on the lower deck, KK	13	69
Boys on the platform, LL	5	27
Girls on the lower deck, MM	5	27
Girls on the platform, NN	5	27
<b>General total</b>	<b>470</b>	<b>600</b>

The principal difference is in the men. It must be remarked that the men when only stowed in the hold, are stowed in a more compact manner than when they are stowed on the platform deck. In this ship the number of men actually carried was 600. The number of men stowed in the hold at 1 foot 4 inches each Difference - 161. As the floor on this plan would flow 43 women boys and girls in the places above them more than the *Friday*, supposing the number of men taken from the main room, and placed in their stead, this will reduce the number of men to 570 in the main room; if, of course, the room above them, instead of being 16 inches as in the plan, was really only 10 inches each; but of the whole number 155 were stowed in the main room, they had only 9 inches each to lay in. The men therefore, instead of lying on their backs, were placed, as is usual, in full packs, on their feet, or on each other. In which last situation they are not uncommonly found dead in the morning. The longitudinal section, fig. I, shows the manner in which the slaves were placed on all the decks and platforms, which is also further illustrated by the transverse sections, fig. II, & III. By which it appears, that the height between the decks is 5 feet 8 inches, which, allowing 1 inch for the platform and its beams, leaves the height between the decks and above the platform cannot be obtained at more than 4 feet 7 inches; by Captain Perry, being usually large ships, was only 3 feet 4 inches. The height of the beam between decks was 4 feet 4 inches, of the *Kitty*, 4 feet 4 inches, both of which had platforms. In their smaller vessels therefore, the beams were 3 feet under the platform. The beams are also introduced on one side of the transverse sections II and III, in order to show the space which a slave placed under a beam has to lie and breathe in. It must be noted, that every possible advantage of stowing is allowed in the plan. There is no room for the beams, or the beams are placed in such a manner as to require the greatest and densest packing which is consistent with the safety of the vessel, and the greatest of the crew.

It may be expected, from this mode of packing a number of our fellow-creatures, dead in their own country to a life of woe, and from the magnitude of their situation must necessarily create, that many of them will fall sick and die. Influences however occur of horrible mortality. The average is not less than 1-10, or 20 per cent. The half deck is sometimes appropriated for sick beds, but the few who are taken into the privilege of being placed there, will there a little hope of recovery. The slaves are never allowed to lie on their backs, either deck or well; but are stowed on the beam boards, from the foremast to the mainmast, by the motion of the ship, and their chains, they are frequently much twisted, and in some cases the flesh is rubbed off their shoulders, chests, and hips.

It may not be improper to add a short account of the mode of scourging, flogging, and exercising the slaves. The women and children are not chained, but the men are commonly chained two and two; the right leg of one to the left leg of the other, and their hands are forced to give place to the men in rotation. They are brought up on the main deck every day, about 6 o'clock, and set to work, if it is a fair day, by day labour, or by the clock, as they are put through their docket, a precaution absolutely necessary to prevent idleness, — in this ship, if the weather is favourable, they are permitted to remain about one-third part of the twenty-four hours, and during this interval they are fed, and their appearance below is cleaned; but when the weather is bad, even these indulgences cannot be granted them, and they are only permitted to come up in final company, of about ten at a time, to be fed, where after remaining a quarter of an hour, each man is obliged to give place to the next in rotation. In very bad weather, some are unaccountably brought on deck; there being no other method of getting water, provision, &c. out of the hold, but by removing those slaves who lie on the beam-ways. The consequence of this violent change from their rooms, which are commonly below, to the wind and rain, is their being attacked with coughs, swellings of the glands of the neck, throat, and dysentery, which are communicated by infection to the other slaves, and also to the sailors. The only exercise of the men given is made by the men to jump in their chains; and this, by the flogging of the trade, is called *driving*. To prevent unaccountable with the mode of carrying on this system of trading in human flesh, their chains and shackles will appear rather a fiction, there is no room for flogging cables, and each slave stands and slaves are singly placed between decks. In a large ship (i.e. a first class) the articles are either deposited in the hold, or piled upon the upper deck, and from thence, in case of bad weather, or accidents, are to be taken out, and occasionally — it may be also said, the slaves are placed in very close, and there is not room for the fingers to visit and visit them: The fact is, that when the flogging goes on, the slaves are packed so close together as to be seen, by stepping between their legs. He frequently finds it to be impossible to find there that relief which a human man could have there even in this trade) would willingly give them. When attacked with fevers, their situation is to be described. To give an instance, (as related by an eye-witness) as 6 slaves to convey some idea, though a very faint one, of the misery of their unhappy brethren who are usually brought from their native country, and down to perpetual labour and captivity: — some were met blowing weather having ascended the port-side of the ship, and the grating to be covered, slaves and boys among the support of the deck. While they were in this situation, my position requiring it, I frequently went down among them, till at length their

apartments became so extremely hot, that it is only fully tolerable for a very short time. But the excessive heat was not the only thing that rendered their situation insupportable. The deck, that is, the floor of their rooms, was so covered with the blood and mucus which had proceeded from them in consequence of the heat, that it resembled a slaughter-house. It is not in the power of the humane imagination to picture to itself a situation more dreadful or disgusting. Numbers of the slaves had fainted, they were carried upon deck, where several of them died, and the rest were, with difficulty, refreshed. It had nearly proved fatal to me also.

Another objection which may be raised, is, that here no room is allowed for the sailors' hammocks. In large ships, while the slaves are on board, the sailors have no other lodging than the bare decks, or (in large ships) the rigging. From this exposure, they often are wet for a long time together, the rains in those climates being frequent and extremely heavy. There is no want of water, a quantity being placed over the gratings of the cabins to better themselves creep under this, they are exposed to the sun and wind and infection which usually emanate from the three below. It appeared from the evidence given by the slave merchants last year before the House of Commons, that the employment of the slaves, by loading on the river, that the negroes, guarding them on board, cleaning the vessels, &c. is of a nature extremely and dangerous beyond that of slaves in other services, and that the food, water, medicine, &c. and other necessary articles, are frequent on board these ships. It is therefore fully felt by the well-wishers to this trade, that the degradation of the well-felicitous great misery to human nature, and a very considerable source of commercial profit. The Rev. Mr. Clarkson, in his admirable treatise on the Impolicy of the Trade, has proved from the most incontestable authority, that so far from being a misery, it has been constantly and regularly a grave for our human race. He did it in the most forcible manner, and a greater proof of the nature of the trade, that it is the worst trade of Great Britain in every respect. Besides the time spent on the coast to complete their cargoes, which sometimes lasts several months, the slaves are from ten to eight weeks on their passage from thence to the West-Indies. Now let any person reflect on the situation of a number of dark-skinned people, thus manacled and thus crowded together, and he must think it insupportable, even under every favourable circumstance of human nature, an able seaman, four weeks, and a short passage. But when to long passages are added, indolent treatment, heavy and bad provisions, and rough weather, their condition is insupportable beyond description. In this traffic, in some circumstances, particularly in bad weather, when the slaves are kept below, and the gratings covered with tarpaulins, that a kitchen, which carried only 140 slaves, meeting with a gale of wind which lasted eighteen hours, so that they had barely perished as that small space of time. As to the insubstantiality of this trade, will be universally admitted and lamented, people would do well to consider that it does not often fall to the lot of individuals, to have an opportunity of performing so important a moral and religious duty, as that of emancipating to put an end to a practice, which any, without exaggeration, he shall ever call the *cruelest* ever that this day brings upon the world. *Transacted in the House of the Free Trade, 1808.*

LONDON: PRINTED BY JOHN PHILLIPS, GOLD-SMITH, LUDGATE-STREET, W. McCLELLAN.

Image from British Library<sup>15</sup>

CAFOs are inherently immoral. How we treat the animals we eat is perhaps the greatest measure of our worth and dignity as a sentient species. That is, we have the power to be cruel, but can choose not to be.

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Sierra Club Grassroots Network Food and Agriculture Team/National CAFO Sub-team -  
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