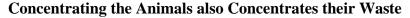
Intensive Confinement: CAFO's Deeply Flawed Technology

Concentrated Animal Feeding Operations, or CAFOs, are based on the principle of *intensive confinement* intended to produce food products of animal origin at the lowest possible cost, in other words, animal factories. This system was developed, starting in the 1950's, in response to the promotion of meat and dairy consumption by the US Government and the national livestock associations as a symbol of prosperity, and to serve the prevailing World War II economic paradigm where America would "Feed the World."

A CAFO is the misconceived application of industrial engineering principles and techniques to living beings. After being tightly confined in barns and feedlots these animals are then crammed into large trucks and shipped, in many cases, long distances to massive and highly automated slaughterhouses. As detailed at this website, CAFO technology poses a nationwide menace to the health and social fabric of rural communities, causes massive air and water pollution and frequently subjects livestock animals to cruel conditions.





Source: Ks. Dept. of Health & Environment, Inspection Photo dated Dec. 29, 2011.

The inherent flaws in CAFO technology

- 1. Intensive confinement of large numbers of animals in one place also concentrates their waste, i.e. urine, feces and industrial chemicals, with these consequences:
- a. Large wastewater impoundments (for dairy & swine) are needed to store the waste until it can be spread on fields to grow crops. These usually are lined with only compacted soil instead of

impervious materials capable of inhibiting seepage into groundwater. Research has shown that, when applied to fields, some of this wastewater runs off into surface water;³

- b. These un-aerated waste impoundments and crowded barns generate intense odors, dangerous airborne particles, and hydrogen sulfide and ammonia gases that impact the health of both workers and the neighbors⁴;
- c. Many of these same risks are associated with the dry storage of piles of manure at poultry CAFOs and cattle feedlots including ammonia and airborne particulate matter harboring pathogenic bacteria.

2. Concentration of large numbers of genetically identical animals creates near perfect conditions for disease transmission.⁵

- a. Producers have resorted to the use of antibiotics in water and feed to suppress disease, but fail to prevent viral infections. Periodically, CAFO operators kill entire populations of animals to prevent further spread; ⁶
- b. The pervasive use of antibiotics compromises their use for human medicine; ⁷
- c. Wastewater contains antibiotic resistant bacteria that have been detected in nearby ground water and surface water. Such bacteria have also been found on particles blown out of CAFO barns and in aerosols from spraying wastewater onto fields.⁸
- 3. Cruelty by Design: confining animals in close proximity amidst their own waste.⁹
- a. Animals are denied the ability to express their natural behaviors;
- b. Power failures and loss of ventilation can lead to death of an entire barn population due to intense heat and asphyxiation from insufficient oxygen;
- c. Fires are common in CAFOs and the design of the closely packed animal barns do not provide for fire suppression sprinklers and rapid evacuation of animals.

References

- 1. Center for Food Safety, "Opting Out of Industrial Meat," July, 2018. https://www.centerforfoodsafety.org/reports/5406/opt-out-of-industrial-meat-how-to-stand-against-cruelty-secrecy-and-chemical-dependency-in-food-animal-production
- 2. Christopher Deutsch, "Forging a National Diet: Beef and the Political Economy of Plenty in Postwar America", U. of Missouri Dissertation, 2018. https://mospace.umsystem.edu/xmlui/bitstream/handle/10355/69855/research.pdf?sequence=1

- 3. K. Rosov, M. Mallin, L. Cahoon, "Waste nutrients from U.S. animal feeding operations: Regulations are inconsistent across states and inadequately assess nutrient export risk," *J. Environmental Management*, 269, (2020) https://www.sciencedirect.com/science/article/abs/pii/S0301479720306708
- 4. National Association of Local Boards of Health. Understanding CAFOs https://www.cdc.gov/nceh/ehs/docs/understanding_cafos_nalboh.pdf
- 5. Pew Commission on Industrial Farm Animal Production, "Antimicrobial Resistance and Human Health", 2010, https://www.pcifapia.org/_images/212-2
 2 AntbioRprt_FIN_web%206.7.10%202.pdf
- 6. The Guardian, "US egg factory roasts alive 5.3m chickens in avian flu cull then fires almost every worker," April 28, 2022. https://www.theguardian.com/science/2022/apr/28/egg-factory-avian-flu-chickens-culled-workers-fired-iowa?CMP=oth_b-aplnews_d-1
- 7. American Public Health Association (APHA), "Precautionary Moratorium on New and Expanding Concentrated Animal Feeding Operations," 2019, https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2020/01/13/precautionary-moratorium-on-new-and-expanding-concentrated-animal-feeding-operations
- 8. APHA, Ibid.
- 9. Animal Welfare Institute. https://awionline.org/content/farm-animals