

Factory Farm Nation: 2020 Edition

Research and analysis from Food & Water Watch continue to reveal the dangerous trends of factory farm expansion and increasing consolidation in the meat, poultry, dairy and egg industries.^a These mega-operations foul our soil and water, fuel climate change, exploit workers and cause needless animal suffering.

In just five years, the number of animals living on U.S. factory farms increased by more than 190 million (a 14 percent increase; see Figure 1). The manure generated by these additional animals is equivalent in weight to the human sewage of three New York Cities. At the same time, family-scale operations continue to close in the face of factory farm expansion.

What Is a Factory Farm?



Beef cattle:

500 head on feed (feedlot)



Dairy:

500 cows



Hogs:

1,000 head



Broiler chickens:

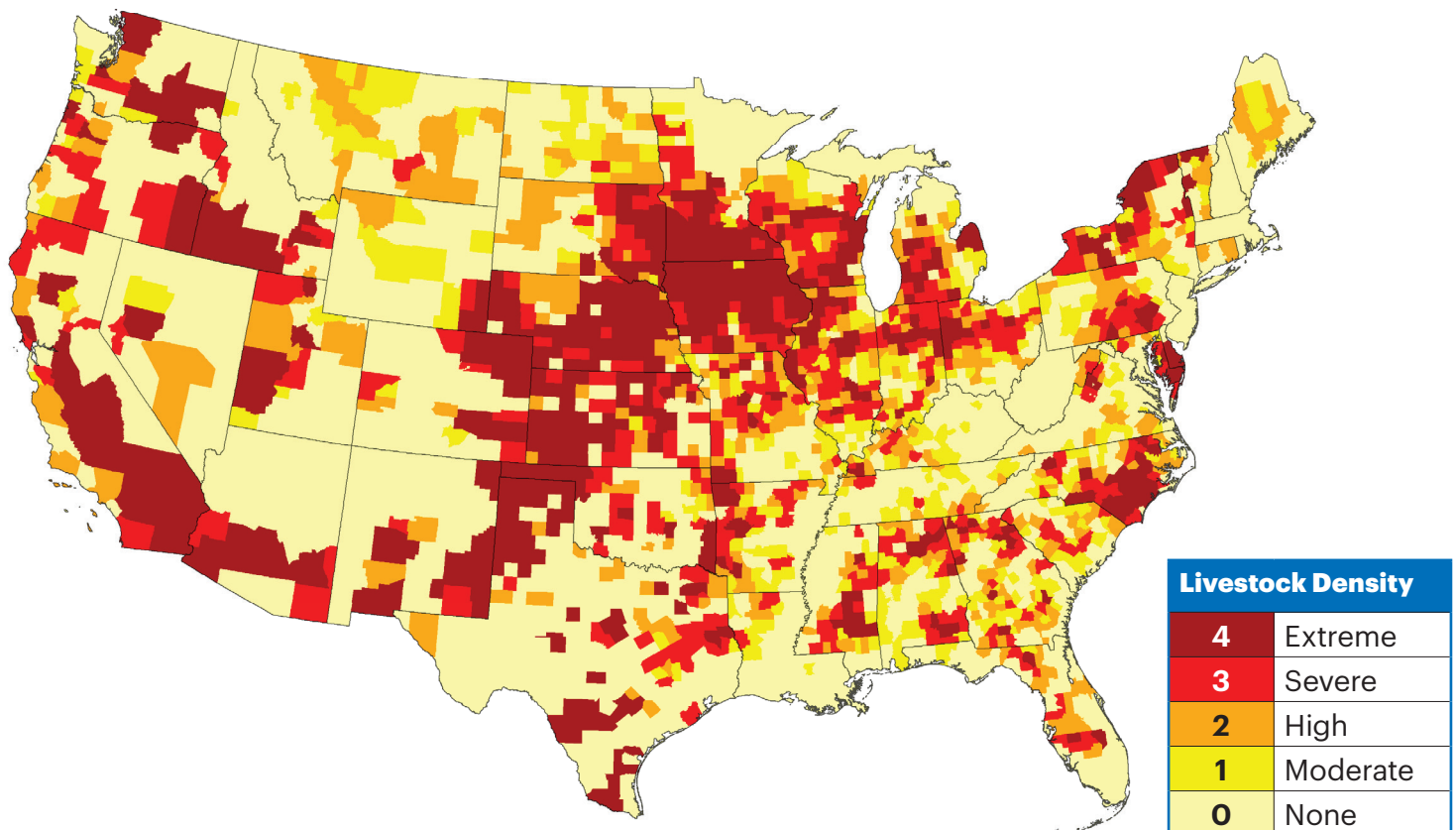
500,000 sold annually



Egg-laying chickens:

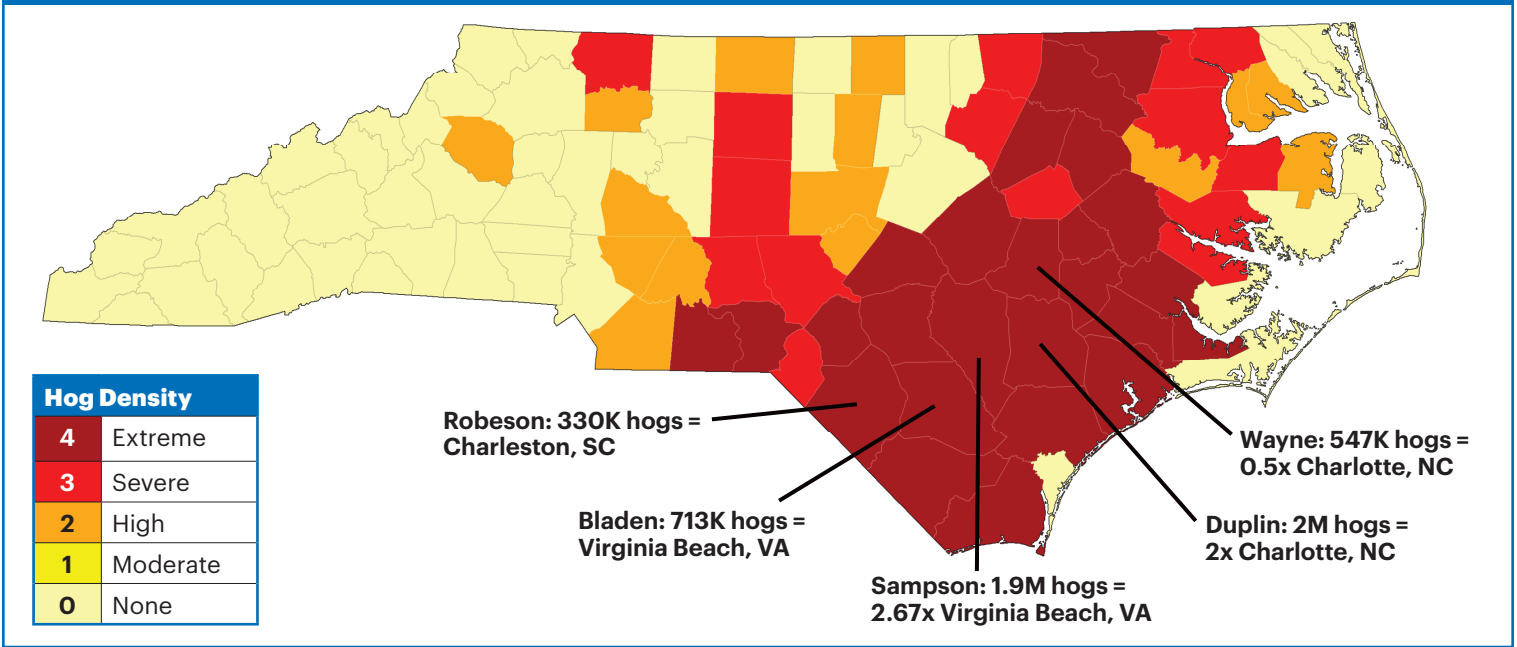
100,000

FIGURE 1. All Livestock on U.S. Factory Farms



^a For the methodology behind our maps and data, see FWW. "Factory Farm Nation: 2020 Edition." 2020 at 9.

FIGURE 2. North Carolina's Top Factory Hog Farm Counties Produce as Much Waste as Metropolitan Areas



We need a fundamental change in how we produce meat, dairy and eggs in our country, starting with an immediate ban on new and expanding factory farms. We must also revamp our state and federal policies so they work to support independent farmers and consumers, not giant agribusinesses.

Hog waste is destroying our water resources

Over the past few decades, the hog industry became highly concentrated across the American South and Midwest, replacing smaller family-scale farms and creating an enormous waste problem. For example, in 2017, hogs on factory farms in Duplin County, North Carolina produced double the weight in manure as residents of Charlotte (see Figure 2).

Many factory farms produce more manure than can be sustainably applied as fertilizer to cropland, and excess manure creates runoff that pollutes soil and water.¹ Nationwide, pollution from animal feeding operations threatens or impairs more than 14,000 miles of rivers and streams, and 90,000 acres of lakes and ponds.² Hog waste also spreads human pathogens into the environment, including strains of antibiotic-resistant bacteria.³

Factory poultry operations emit hazardous air pollution

Broiler (poultry meat) factory farms continue to expand, including on Maryland's Eastern Shore, which has some of the highest densities of factory-farmed broilers in the

TABLE 1. Top Egg-laying Factory Farm States

| State | Egg-laying Hens on Factory Farms | Annual Manure Production (in Olympic Pools/Day) | Average Inventory per Farm |
|----------------------|----------------------------------|---|----------------------------|
| Iowa | 54,120,593 | 1.9 | 1,866,227 |
| Ohio | 24,129,757 | 0.8 | 778,379 |
| Indiana | 23,812,468 | 0.8 | 1,082,385 |
| Texas | 17,575,599 | 0.6 | 925,032 |
| Pennsylvania | 16,206,211 | 0.6 | 558,835 |
| United States | 254,765,800 | 9 | 796,143 |

country. And while the total number of U.S. egg-producing factory farms fell between 2012 and 2017, the total birds on these operations increased, suggesting that these mega-operations are expanding their capacities. In 2017, the average factory egg-laying operation in the U.S. housed about 800,000 birds (see Table 1), each generating 10 Olympic swimming pools' worth of manure annually.

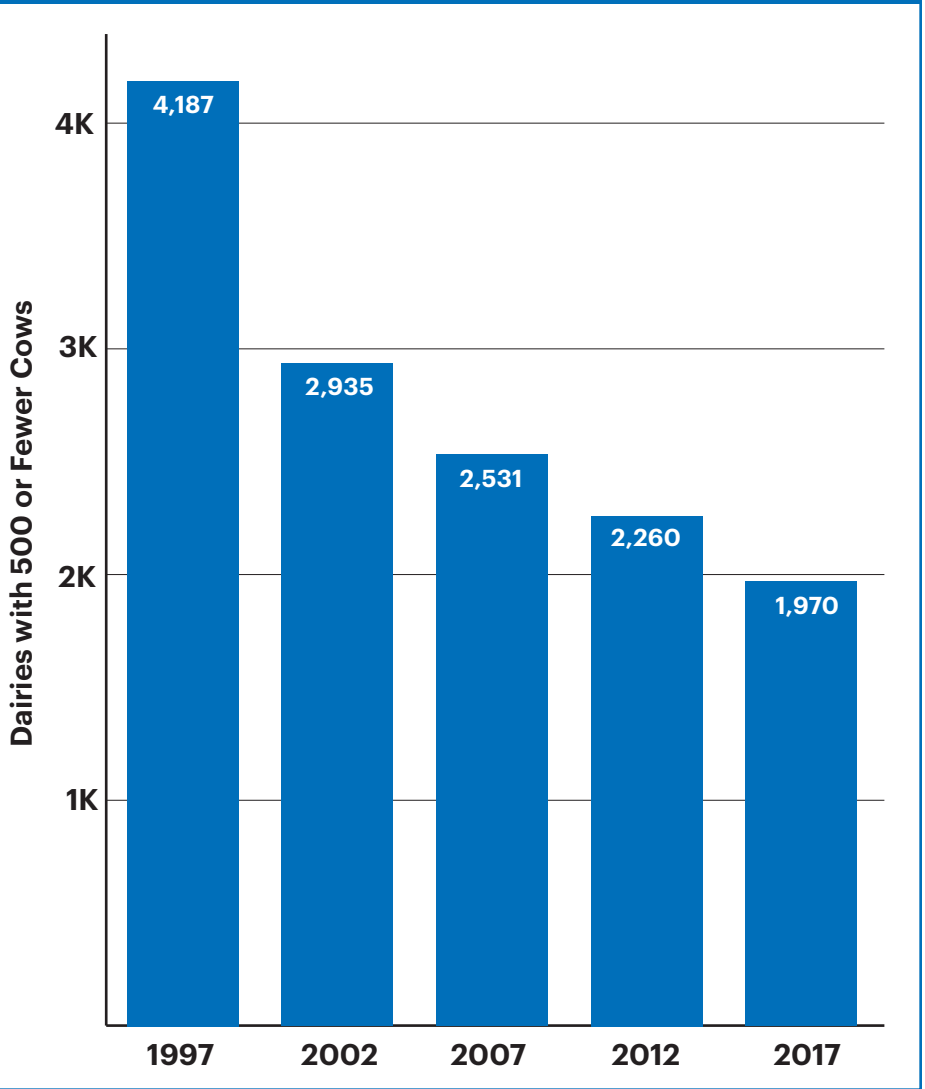
Factory poultry operations make bad neighbors, releasing a slew of toxic pollutants — including ammonia, particulate matter and endotoxins — which irritate the respiratory system and are linked to lung disease. For poultry house workers, these conditions can be a nightmare, and long-term exposure to toxic poultry dust is linked to a slew of lung conditions including chronic phlegm, asthma and chronic bronchitis.⁴

Mega-dairies erode rural communities

Explosive growth in factory farms often masks a parallel occurrence: the shuttering of small- and medium-sized family farms, which are the lifeblood of rural communities. Michigan provides a stark example; the number of factory dairy operations in the state more than quadrupled between 1997 and 2017 — and the total number of cows living on these operations increased eightfold. Yet today, Michigan has fewer than half as many small- and medium-sized dairies (those under 500 head) than it did 20 years ago. All of this expansion led to an overproduction of milk, depressed milk prices (and consequently farm income), and even more closures of smaller dairies (see Figure 3).⁵

Decades of research conclude that the rise in factory farms coincides with stark declines in the economic and social well-being of communities, leading to higher levels of poverty and economic inequality, increased use of supplemental nutrition assistance, and out-migration.⁶ Farm policies that focus merely on increasing production — not on supply management or diversifying operations — perpetuate this damaging scenario.

FIGURE 3. Loss in Michigan’s Family-Scale Dairy Farms, 1997-2017



Market consolidation guts farmer profit and raises beef prices

Mega-feedlots dominate middle America, with five states accounting for 75 percent of all factory feedlot cattle (see Figure 4). The average factory feedlot houses 4,000 head of cattle, but the largest ones can pack in more than 150,000 head at one time.⁷ In 2017, U.S. factory feedlots produced 296 billion pounds of manure — the same weight in sewage generated by two-thirds of U.S. residents.

As feedlot size expanded, so too did the meat-packing industry’s stranglehold on the market, enabling major beef packers to engage in unfair practices that distort the market price of cattle.⁸ Compared to 20 years ago, we pay 70 percent more for ground beef, while farmers’ shares of beef sales declined 8 percent.⁹ Market consolidation allows meatpacking giants to profit while consumers and farmers are fleeced.

We can fix our factory farm problem

We need a complete overhaul of our federal farm policies so that they work for farmers and consumers — not

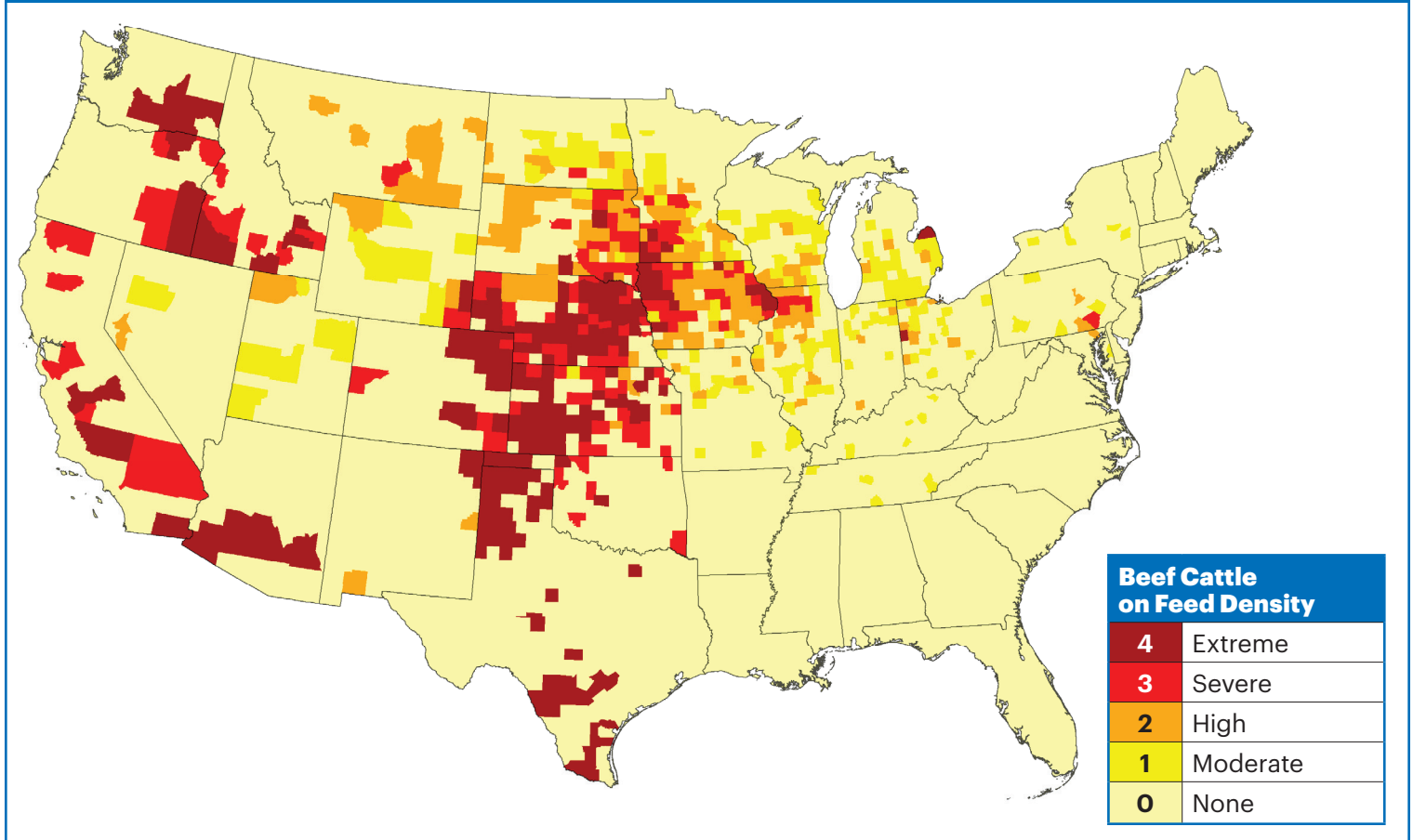
agribusiness giants — all while reducing livestock’s climate footprint. This must include:

- An immediate, national ban on new factory farms and on the expansion of existing ones;
- Research and funding to help current factory farms transition to smaller, more sustainable crop and/or livestock systems;
- Investment to expand local markets and build the infrastructure needed to help farmers bring their products to market.

We cannot shop our way out of this problem. Instead, we need to vote for candidates who share this vision of a more just and sustainable food system — and who are willing take on the agribusiness giants that are only out to promote their corporate interests.

The first step towards fixing our food system is to ban factory farms. Only then can we transition away from polluting, unethical factory operations to sustainable, holistic farming systems.

FIGURE 4. Beef Cattle on U.S. Factory Farms



Endnotes

- 1 Kellogg, Robert L. et al. United States Department of Agriculture (USDA). Natural Resources Conservation Service (NRCS) and Economic Research Service (ERS). "Manure Nutrients Relative to the Capacity of Cropland and Pastureland to Assimilate Nutrients: Spatial and Temporal Trends for the United States." Nps00-0579. December 2000 at Executive Summary, 1 and 89 to 92.
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- 3 Pornsukarom, Suchawan and Siddartha Thakur. "Assessing the impact of manure application in commercial swine farms on the transmission of antimicrobial resistant Salmonella in the environment." *PLoS ONE*. Vol. 11, No. 10. October 2016 at abstract.
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- 5 Heslip, Nicole. "Growing pains in Michigan's dairy industry." *Farm Progress*. January 5, 2018; Heslip, Nicole. "Michigan dairy farmers either exit or eat up equity." *Farm Progress*. October 4, 2018.
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- 9 FWW analysis of USDA ERS. [Data table]. Meat price spreads, Historical monthly price spread data for beef, pork, broilers. February 28, 2019. Available at <https://www.ers.usda.gov/data-products/meat-price-spreads/>. Accessed December 2019; U.S. Bureau of Labor Statistics (BLS). [Data table]. CPI-average price data for ground beef, 100 percent beef, per lb. Available at https://data.bls.gov/timeseries/APU0000703112?data_tool=XGtable. Accessed December 2019; BLS. CPI Inflation Calculator. Available at <https://data.bls.gov/cgi-bin/cpicalc.pl>. Accessed February 2020.