

The Urgent Case for a Factory Farm Moratorium in Maryland

The chicken industry continues to expand on Maryland's Eastern Shore. More chickens may mean more profits for companies like Perdue and Mountaire Farms, but for residents it spells more manure waste, polluted air, planet-warming emissions and degradation of the Chesapeake Bay. Weak state and federal regulations allow these corporations to pawn off the enormous burden of waste disposal to their contract growers — and ultimately to Maryland taxpayers, who help foot the bill to transport hundreds of thousands of tons of poultry and other livestock waste each year. It is time Maryland's leaders place a moratorium on new factory farms and on the expansion of existing ones.

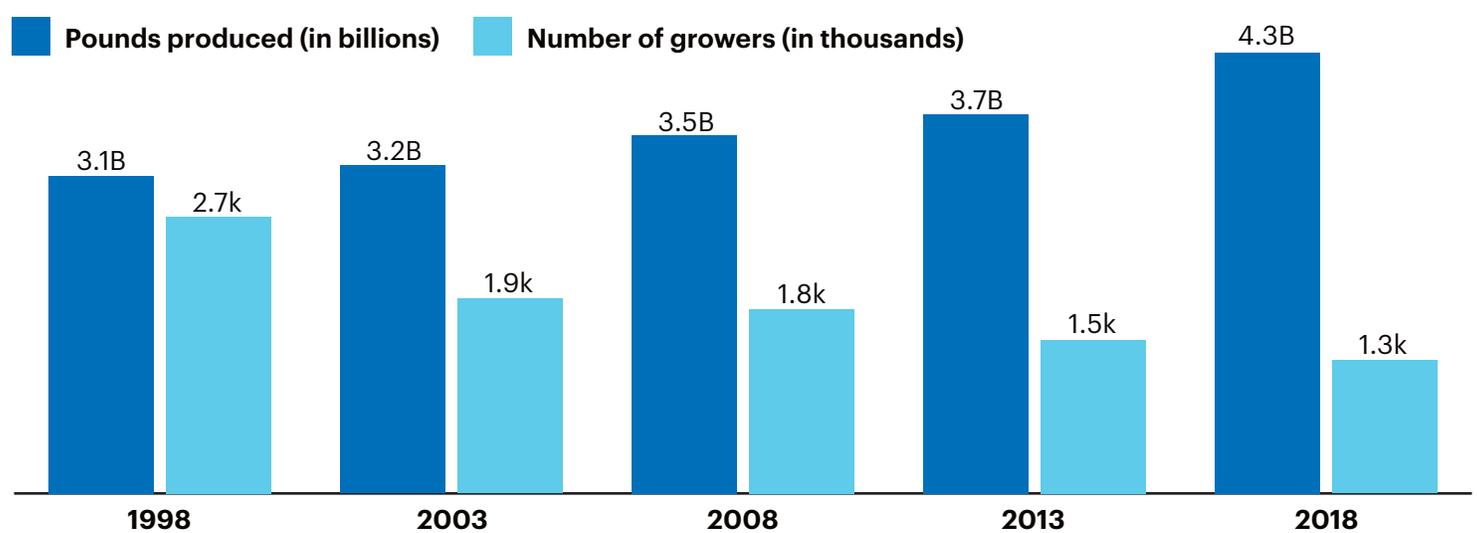
From independent farms to corporate contractors

Maryland's poultry industry looked remarkably different in the mid-20th century. Chicken growing was largely a side business; farmers put up a couple of chicken houses

but still maintained mixed crop systems, helping them better manage poultry litter (a mixture of manure, bedding and feathers)¹ by utilizing it as crop fertilizer. But beginning in the 1940s, companies began to seek control over each step of broiler production, from chick breeding to poultry processing.² Today, a handful of corporations including Perdue and Mountaire Farms control a system for producing broiler chickens that is radically different — and that concentrates significantly more birds on each site. The company, or "integrator," owns the birds and contracts with farmers, called "contract growers," to raise them. The average Maryland contract grower now has at least six chicken houses and raises half a million birds per year.³

And the industry's output continues to expand. Over the past five years, the Delmarva Peninsula built 400 new chicken houses and increased its broiler production by over half a billion pounds per year. The region's farms are raising more chickens, but on fewer farms, because farm size has been increasing.⁴ In Maryland, this means that while the number of contract broiler operations fell by almost a quarter from 2002 to 2017, the number of chickens produced annually increased by 20 million (see Figure 1).⁵

FIG. 1: Delmarva Broiler Production⁶



SOURCE: Delmarva Poultry Industry, Inc. (DPI). Includes data for Maryland, Delaware and Accomack County, Virginia

In 2017, Maryland’s 307 million broiler chickens raised under contract generated a whopping 400,000 tons of litter. For comparison, that’s equal to the weight in manure produced by nearly 600 thousand people — roughly the population of Baltimore city.⁷ Many broiler operations today no longer raise crops alongside their chickens, limiting their options for sustainably disposing of this waste. Overapplication of litter can lead to nitrogen and phosphorus runoff and ultimately the degradation of the Chesapeake Bay.⁸

Poultry operations make neighbors sick

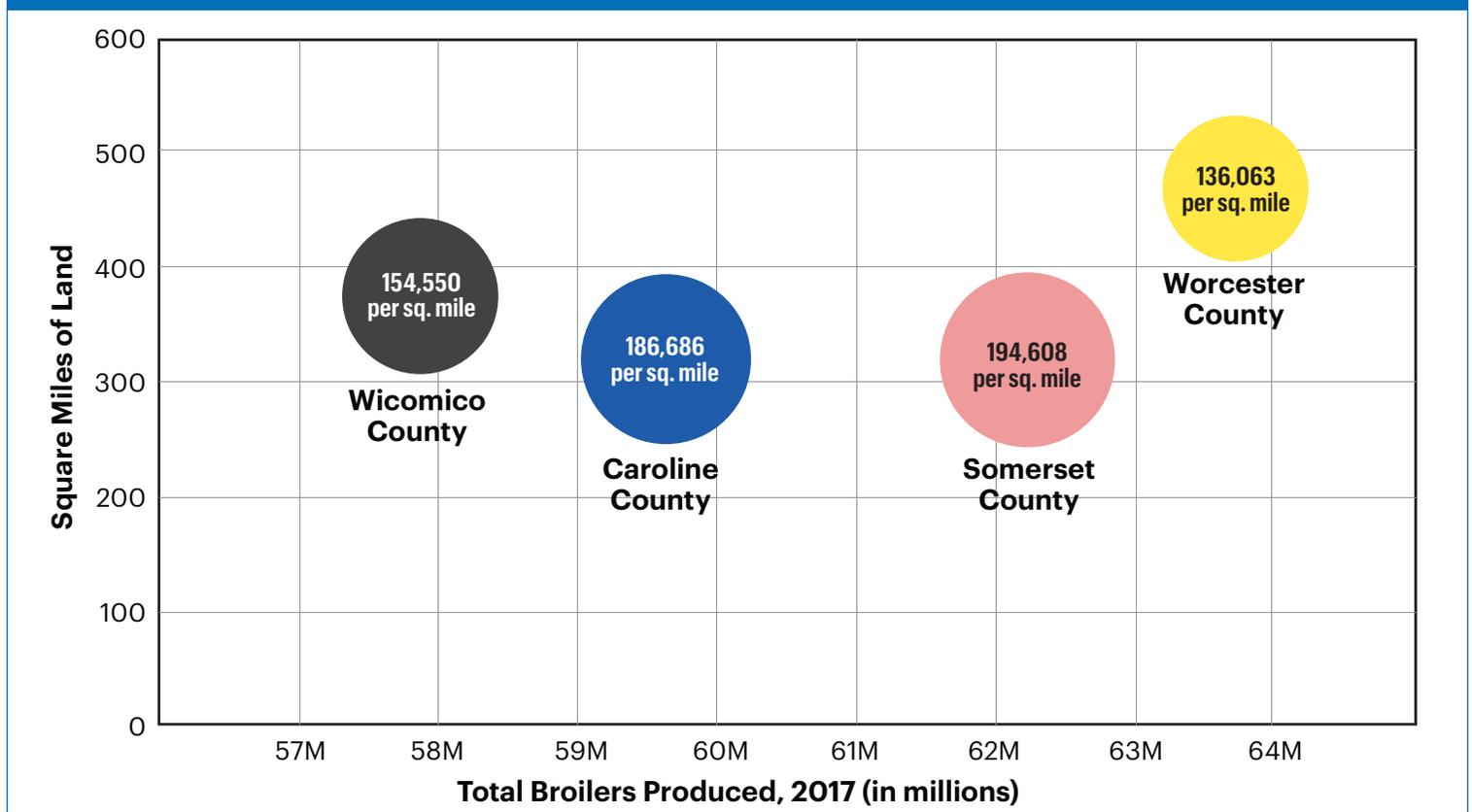
Excess poultry litter and other pollution from broiler factory farms threaten the health of surrounding communities. The Environmental Integrity Project estimates that the typical broiler operation on the Eastern Shore emits 19 to 24 tons of ammonia each year.⁹ Ammonia, along with particulate matter and endotoxins, are respiratory irritants linked to lung disease. Broiler houses also emit foul odors and human pathogens, as well as volatile organic compounds, which irritate the eyes and throat, damage the nervous system and contribute to ground-level ozone.¹⁰

Poultry house workers exposed to these pollutants suffer elevated rates of respiratory symptoms.¹¹ But broiler house ventilation fans and strong winds can spread the pollutants offsite. Neighbors of broiler operations report experiencing foul odors that enter their homes even with the windows closed.¹²

Broiler operations also threaten drinking water. A U.S. Geological Survey assessment found nitrate (a pollutant from poultry litter runoff)¹³ at levels above the allowable amount in drinking water in one-third of groundwater samples taken in the Delmarva Peninsula.¹⁴ Maryland is second only to Delaware for the prevalence of nitrate in groundwater, which is linked to the life-threatening condition known as “blue baby syndrome.”¹⁵

Exposure to these various pollutants may be contributing to respiratory and heart disease on the Eastern Shore. The counties with the highest densities of broilers produced per square mile of land (see Figure 2) — Caroline, Somerset, Wicomico and Worcester — have rates of heart disease mortality and lung and bronchus cancer that exceed the state average.¹⁶ Additionally, children in Somerset and Wicomico counties have higher rates of emergency room visits for asthma incidents compared to the state average.¹⁷

FIG. 2: Broilers per Square Mile²¹



SOURCE: U.S. Census Bureau; 2017 U.S. Census of Agriculture

These four counties also have higher rates of poverty and lower median incomes compared to Maryland as a whole,¹⁸ suggesting that the siting of poultry houses may be an environmental justice issue. In fact, what would have been the largest poultry operation ever in Wicomico County was proposed for a community that is 77 percent African American, with nearly one in five residents living in poverty.¹⁹ The plan was opposed by the local chapter of the National Association for the Advancement of Colored People (NAACP) and other public interest groups, and was ultimately abandoned.²⁰

Unfortunately, with state and federal regulators failing to regularly monitor emissions from poultry operations,²² it is difficult to know the full extent of toxic emissions that nearby residents are exposed to on a daily basis — and whether this exposure may be contributing to these communities' health issues.

Factory farms are incompatible with a healthy Chesapeake Bay

Agriculture is the leading source of nitrogen and phosphorus loads to the Chesapeake Bay, which feed toxic algal blooms that harm aquatic life and lead to aquatic "dead zones."²³ Poultry litter runoff contributes to this load, yet Maryland's solution is to just shift this litter around rather than halt the expansion of factory farms. Over the past two decades, the Department of Agriculture allocated nearly \$10 million to its Manure Transport Fund, which hauled 1.8 million tons of poultry and other livestock waste off of operations.²⁴

Perdue boasts that it has contributed over \$1 million to this fund; however, the company is possibly the program's largest beneficiary, gobbling up more than \$3.8 million over the past decade to haul litter to its composting and fertilizer facility.²⁵ Taxpayer funding of manure transfer is just another form of corporate welfare. Perdue and other integrators must shoulder the responsibility for managing the poultry litter produced by their chickens. And Maryland's leaders need to address the *production* of poultry waste in the first place by placing a moratorium on factory farms.

Maryland is failing to regulate its factory farms

Maryland is not holding integrators accountable for their enormous waste problem and the toxic emissions plaguing nearby communities. This goes against the will of the state's residents, the majority of whom support greater regulation of the poultry industry and its waste.³²

Poultry contracts are abusive

Broiler production is the most vertically integrated of all livestock industries, with 96% of all birds raised under production contracts.²⁶ Companies like Perdue and Mountaire Farms (the integrators) provide growers with all inputs including chicks, feed and veterinary services. In exchange, growers borrow money to build the broiler houses (costing an estimated \$1 million per operation) and manage the huge amount of waste produced.²⁷

Contracts shift many of the risks involved in raising poultry onto growers. Growers are paid by the live weight of birds produced, meaning that any losses due to illnesses are reflected on their paychecks.²⁸ Additionally, some companies operate "tournament" systems where growers are compensated based on how their performance compares with other growers. And contract lengths vary, with some integrators offering "flock-to-flock" contracts, meaning there is no guarantee that the integrator will renew the contract once the current flock is sold.²⁹

Integrators are able to offer such one-sided contracts in part because of extreme market consolidation. Many regions have only one integrator willing to work with growers, so contracts become a "take-it-or-leave-it" scenario. Walking away isn't necessarily an option when growers accrue massive debt in order to keep up with contract requirements.³⁰ And integrators have been known to deliver sick birds or to drop contracts with growers who speak out against unfair practices and treatment. This leaves them with empty chicken houses and debt they cannot repay, potentially leading to bankruptcy and the sale of their farmland.³¹

In 2016, Maryland's General Assembly failed to advance the Poultry Litter Management Act, which would have held integrators financially responsible for transporting excess poultry manure.³³ And the Community Healthy Air Act (CHAA) did not make it to a floor vote three years in a row, despite testimony from fenceline communities and broad support from local advocacy groups. The CHAA would have required Maryland's Department of the Environment (MDE) to identify and quantify emissions gener-

ated by poultry and other factory farm operations and to prepare a public health assessment.³⁴

In January 2019, the MDE announced its own study of poultry emissions, but this plan would involve just two monitoring stations near poultry operations measuring for two pollutants.³⁵ Critics note that data from such a small sample can hardly be considered representative of the industry. And since the MDE's plan is funded by the local poultry industry — which vehemently opposes the Community Healthy Air Act — some suspect it is nothing more than smoke and mirrors intended to draw attention away from the CHAA.³⁶

Factory farms exacerbate climate change

Smaller crop-and-livestock operations can better manage poultry litter by using it as fertilizer. But since most Eastern Shore operations lack cropland, they produce significantly more litter than they can manage onsite — an estimated 228,000 tons, according to an analysis by Salisbury University.³⁷ Long-term storage and improper handling of poultry litter can increase greenhouse gas emissions from the litter.³⁸

Additionally, poultry production releases greenhouse gases throughout all other steps in the production chain. This includes the growing and processing of chicken feed (often through intensive agriculture that relies on chemical inputs), as well as fossil fuel consumption to

heat poultry houses and to process and transport poultry products.³⁹

In turn, poultry operations are vulnerable to a changing climate. In 2018, the Eastern Shore's poultry industry warned growers to prepare for Hurricane Florence.⁴⁰ While the region was spared the worst of the storm, Florence ravaged North Carolina's factory farms, drowning millions of birds and sending their carcasses into floodwaters.⁴¹ A similar environmental health catastrophe could occur on the Eastern Shore in the coming years if a major hurricane strikes.

It is time for Maryland to ban factory farms

Corporate consolidation of the poultry industry has squeezed out Maryland's small and independent chicken operations, enabling corporations to profit from abusive contracts while burdening growers and taxpayers with the responsibility of cleaning up litter waste. Meanwhile, their mega-operations pollute the air and water, threaten public health and fuel climate change.

A recent poll found that a majority of Maryland residents would look favorably on state legislators who seek to tighten oversight of the poultry industry.⁴² It is time for Maryland's leaders to listen to the public and move to ban new factory farms and the expansion of existing ones.

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