

Factory Hog Farming: The Big Picture

In North Carolina, hogs are big business. The state is now home to over 10 million hogs, making it the nation's #2 hog producer. And hogs have passed tobacco as North Carolina's number one agricultural commodity, generating over \$2 billion in cash receipts in 1997. But as North Carolina's hog industry has grown, it has also become big in other ways:

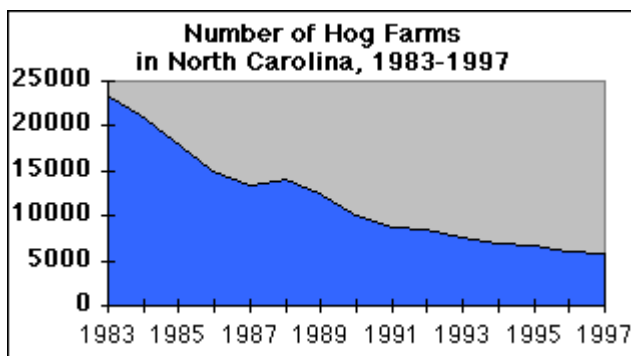
- ✓ **Big industrial hog factories have become the norm.** Today, over 92% of North Carolina's 10 million hogs are raised on factory operations of at least 2,000 hogs. These hog factories bear little resemblance to the small family-run hog farms they have replaced.

Hog factories have made it increasingly difficult for small, independent farmers such as this one to make a living. (*News & Observer* photo by Robert Willett)

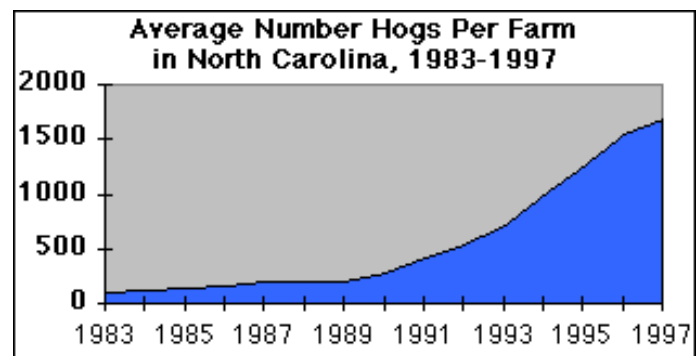


- ✓ **Hog factories in North Carolina are geographically concentrated.** The large majority of North Carolina's new hog factories are bunched together in the eastern third of the state. In some areas the concentration of factories is extraordinary. For example, the combined hog population of Duplin and Sampson counties is over 4 million, making these two counties home to more hogs than 46 of the 50 states.
- ✓ **Most hogs raised in hog factories are owned by large companies that are involved in several phases of the production process.** These companies, known as "integrators," control multiple hog factories and hog-related businesses. North Carolina is home to four of the nation's twelve largest "integrators."
- ✓ Hog factories have brought big pollution problems. North Carolina's hog factories produce 19 million tons of waste a year. **That's 2.5 tons of hog feces and urine per North Carolina citizen per year.** Disposing of all this waste presents a significant environmental challenge - a challenge that is not being met by current environmental regulations and industry practices.

In the last 15 years, North Carolina has lost thousands of hog farms...



...and those that remain have gotten bigger and bigger.



Source: North Carolina Department of Agriculture

Sadly, many small independent farms have been forced out of business. North Carolina has lost more than 50% of its smaller family hog farms in the last 15 years. Small hog farmers are simply unable to compete with the market clout of mega-industry. The message? Get big or get out.

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Big Hog Factories Have Become the Norm

Don't be misled by the term "hog farm." The modern day hog factory has little in common with the traditional family farm of yesteryear. The modern hog factory is a highly-mechanized, mass-production operation. Hogs are managed much like raw materials in a typical industrial factory where every aspect of the hogs' existence is technically managed to ensure maximum productivity. Mechanical devices are used to facilitate feeding, reproduction, and even the nursing of young hogs. Everything from additive levels in feed, to dosages of antibiotics, to exposure to daylight is manipulated to ensure orderly production.

In hog factories, hogs live their entire lives packed together in big warehouses called hog houses. A single football-field-sized hog house can contain 800 to 1,000 hogs. Larger operations have 10,000 or more hogs on a single "farm." One "farm" in the state actually has capacity for 68,000 hogs.



Hog houses like this one can contain from 800 to 1,000 hogs.

In North Carolina, hog factories have taken over the hog production business. The uncontrolled growth in North Carolina's hog population during the past decade has been fueled almost entirely by construction of new factory farms. Today, over 92% of North Carolina's 10 million hogs are raised on factory operations of at least 2,000 hogs.

In fact, North Carolina is number ONE in hog factories that house more than 5,000 hogs. North Carolina has 480 of these mega-sized factories – that's more than double the number of its closest competitor, Iowa, which has 220.

Hog Factories Are Geographically Concentrated

The big new hog factories that have sprung up in North Carolina are located almost entirely in the eastern third of the state, bringing over 5 million new hogs to the area in the last 5 years. The present concentration of hog factories in eastern North Carolina is truly unprecedented. For example, in 1997, the hog population of Duplin County was 2.2 million. That's more hogs than are produced in most states, crammed into a single county with a human population of only 40,000!

The Whole Hog

There's no doubt that North Carolina's hog factories are much bigger than traditional family farms. But many of these hog factories are not just big by themselves – they are also parts within much bigger machines.

In the modern pork industry, big companies not only own and manage factory operations directly; they also control a large number of other factories through contracts with farmers who raise the companies' hogs. North Carolina's own Murphy Family Farms is such a company. Murphy's is the single biggest hog producer in the country. Murphy's owns a whopping 6 million hogs. That's almost as many as its nearest two competitors combined; and more than the entire hog population of Minnesota, Illinois, or Indiana--three leading hog producing states.

In economic terminology, North Carolina's pork industry is "vertically integrated", which means that a small number of companies are involved in more than one phase of pork production. These large companies, often called "integrators," combine company-owned farms, contract farms, and farming-related businesses (feed mills, transportation, etc.) under a single corporate banner. These major companies dominate the entire pork industry - from the feed mill to the hog house to the dinner plate.

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The trend towards consolidation and integration in the pork industry has taken place on a national scale, but some argue that North Carolina has been leading the charge. North Carolina is home to four of the nation's twelve largest hog farming operations: Murphy Family Farms (#1), Carroll's Foods (#2), Prestage Farms (#6), and Goldsboro Milling (#12). Overall, more than 86% of North Carolina's hog production occurs on factory-size operations, a majority of which are contract operations. A few major hog companies own more than 61% of all the hogs produced in North Carolina. And these companies also own shares of feed mills, slaughterhouses, and processing facilities. For example, in 1995, Carroll's Foods owned 13% of Smithfield Foods, Inc., which in turn owned the world's largest hog processing plant (Freese, 1998).

The industrialization of hog farming has taken over hog production in the same way chain stores take over small mom and pop retail stores. Changes in the industry - not environmental regulations - have been the principal factor in driving small farmers out of business. The number of hog farms in North Carolina has plummeted over the last decade, even before environmental regulations were in effect. Those wanting to stay in the hog business must get big or get out. It is also increasingly hard for those independent growers not affiliated with a major producer to compete.

Many hog farmers in North Carolina don't even own the hogs they raise. Instead, they serve as "contract growers," meaning that they raise hogs under contract with a major company. The result is that farms are much larger, less diverse, and more densely centered around the pork producer's support facilities such as feed mills, slaughterhouses, and processing plants. The contract growers provide the land, facilities, utilities, and labor for raising the hogs, and are typically paid for each hog raised to market weight. Under a typical contract, the pork companies retain ownership of the hogs, provide the feed, and control many aspects of the contract growers' operations.

Hog Factories Have Brought Big Pollution Problems

Hog factories produce waste on a scale never before seen in agriculture:

- ✓ A single average factory in North Carolina has about 3,700 hogs and produces 38,480 pounds of feces and urine every day.
- ✓ In all, North Carolina hog factories produce 19 million tons of waste a year.
- ✓ That's 2.5 tons of hog waste per North Carolina citizen per year.

Disposing of all this waste presents a significant environmental challenge -- a challenge that is not being met by current environmental regulations and industry practices.

Despite the increased waste output of North Carolina's hog population, the vast majority of hog factories have not improved their waste management practices, relying instead on systems and technologies that simply are not effective in protecting neighbors and eliminating pollution. While human waste is extensively treated and disinfected, hog waste is sent to open-air waste lagoons with almost no treatment, and then sprayed on land (Sobsey, 1998). In addition, the waste management systems used by most of North Carolina's hog factories are particularly ill-suited to the state's wet climate and sandy soils, and these primitive systems do little to prevent the escape of potentially hazardous gases and offensive odors.



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The concentration of hogs in eastern North Carolina increases the threats to human health and the environment from groundwater contamination, leaking waste lagoons, odors, and runoff from lagoons and sprayfields. Many parts of eastern North Carolina are ecologically sensitive and economically important areas, including a dense network of wetlands, streams, and rivers. These waters eventually empty into important recreation areas and fish breeding grounds, so the disposal of huge amounts of hog waste is dramatically increasing the nutrient pollution in these waters, in addition to pollution from other sources.

Pollution problems from hog factories are made worse by the lack of a thought-out regulatory framework. For the most part, hog factories are still regulated much like the small farms they have replaced. State regulators and lawmakers, initially caught off guard by the massive explosion in North Carolina's hog population, have not yet adopted all the laws necessary to control the environmental and health problems caused by the numbers and concentrations of North Carolina's hog factories.

Progress on adopting more effective environmental and health regulations has been opposed by the hog industry, which has vigorously fought attempts to adopt new rules on how hog waste is managed. The hog industry argues that present laws are sufficient, and more regulation is unnecessary. Yet every other industry in America that generates significant waste is subject to comprehensive regulation and stringent environmental standards designed to protect public health and the environment.

Who's Responsible for This Mess?

Contract growers must often borrow heavily to finance the construction of the facilities (typically \$200,000 to \$1 million) and generally assume the financial risks associated with raising hogs for a pork company. While a contract grower may carry several years' worth of debt, typical contracts allow the hog company to terminate the contract with only 30-days notice (News & Observer, 1995). Contract growers, not the pork companies that own the hogs, also bear the environmental risks associated with the vast amounts of waste generated at factory farms. The producer makes the big money, yet the grower is responsible for managing the hog waste and for any violations, waste lagoon ruptures, or other environmental problems.

For more information go to <http://www.environmentaldefense.org/go/hogwatch>