



***Rolling Stone's* 'Bosshog' Article: Fiction vs. Fact**

Smithfield Foods fully endorses the freedom of the press that is a linchpin of our free society. As most of us know, that right comes with substantial responsibility. Unfortunately, it is a responsibility that Jeff Tietz chose to ignore as he crafted his fictional "Bosshog" article in the December 14, 2006 issue of *Rolling Stone* magazine. This is especially disappointing since we provided him with correct facts which he chose to ignore.

As we read through the article, the half-truths and distortions eventually grew to outright misinformation. Below is a listing of just some of the areas in which Tietz betrayed the public's trust as he ignored the responsibility by which most journalists live. We present the facts to counter his more egregious falsehoods.

'BOSSHOG' FICTION #1

America's top pork producer churns out a sea of waste that has destroyed rivers, killed millions of fish and generated one of the largest fines in EPA history.

FACT #1

We dispute the claim that Smithfield has destroyed any river or killed millions of fish.

It's true that nearly 10 years ago a federal judge fined Smithfield Foods \$12.6 million under the U.S. Clean Water Act for allowing wastewater from a meat processing facility, as opposed to hog farming activities, to enter the Pagan River in Smithfield, Va.

Since then our efforts to improve our environmental programs have won accolades from the EPA, USDA and recognition from Virginia state government.

'BOSSHOG' FICTION #2

The best estimates put Smithfield's total waste discharge at 26 million tons a year. That would fill four Yankee stadiums. So prodigious is its fecal waste, however, that if the company treated its effluvia as big-city governments do—even if it came marginally close to that standard—it would lose money. So many of its contractors allow great volumes of waste to run out of their slope-floored barns and sit blithely in the open, untreated, where the elements break it down and gravity pulls it into groundwater and river systems.

FACT #2

How the author determined total waste discharge is impossible to guess. However, it is clear that he has little understanding of how a treatment system works. Waste does not "run" out of barns but is collected and then flushed to the treatment system.

This is the same principle that is used in homes across the country that have their own septic system. Waste is collected in the toilet, then flushed to the septic treatment system.

But here is a major distinction between hog farm and municipal treatment systems: Unlike "big city" systems which treat wastewater and discharge treated effluent into public waterways, the systems employed by pork producers in North Carolina, under terms of the Federal Clean Water Act, are designed as non-discharging systems.

All pork producers in North Carolina, including the company's contract growers, operate waste treatment systems in accordance with state regulatory requirements.

The anaerobic treatment system with land application of treated effluent is the system most widely used in North Carolina by livestock producers. This system was developed by the U.S. Department of Agriculture, Natural Resources Conservation Service and is designed as a non-discharging system.

These systems are required by state regulatory permits.

'BOSSHOG' FICTION #3

Although the company proclaims a culture of environmental responsibility, ostentatious pollution is a linchpin of Smithfield's business model.

FACT #3

There is absolutely no evidence to support such a ludicrous claim and there's no logic to support how any type of pollution could be a linchpin of **any** business model. Our company's environmental policy states:

It is the corporate policy of Smithfield Foods, Inc. and its subsidiaries to conduct business in a manner consistent with continual improvement in regard to protecting the environment.

- Smithfield Foods, Inc. is committed to protecting the environment through pollution prevention and continual improvement of our environmental practices.
- Smithfield Foods, Inc. seeks to demonstrate its responsible corporate citizenship by complying with relevant environmental legislation and regulations, and with other requirements to which we subscribe. We will create, implement and periodically review appropriate environmental objectives and targets.

- Protection of the environment is the responsibility of all Smithfield Foods, Inc. employees within the scope of the Environmental Management System.
- Smithfield Foods, Inc. communicates this policy to persons within the scope of the EMS and makes it available to the public upon request.

In the past several years Smithfield Foods has been a recognized leader in the environmental arena.

Smithfield received ISO 14001 environmental certification for all its U.S. hog production and beef and pork processing facilities, an international seal of approval for our environmental management practices.

EPA officials praised Smithfield's environmental stewardship efforts after we became the first company in our industry to achieve such widespread ISO certification.

Regular independent EMS audits, coupled with continual improvement commitments and our compliance programs, underscore our commitment to environmental stewardship.

Here is what some officials have to say about Smithfield's environmental performance:

"It's gratifying to see that companies such as Smithfield Foods are using comprehensive environmental management systems to ensure that high environmental standards are routinely maintained."

-JON SCHOLL, COUNSELOR TO THE EPA'S ADMINISTRATOR FOR AGRICULTURAL POLICY

"An important part of what we do is catch people doing something wrong. But another thing I really like to do, and I think gets as much benefit for the environment, is to catch people doing something right. And I'd really like to thank Smithfield for doing something right by stepping forward to implement EMSs and to get ISO certification. It helps all of us, all of society, all the folks who care about the environment get what they want—a healthy environment and a healthy economy."

-DON WELSH, ADMINISTRATOR FOR THE EPA'S REGION THREE

'BOSSHOG' FICTION #4

Forty fully grown 250-pound male hogs often occupy a pen the size of a tiny apartment. They trample each other to death.

FACT #4

We have never seen hogs trampled to death. Our licensed veterinarians dispute this claim.

Murphy-Brown, our hog production subsidiary, has an Animal Welfare Management System (AWMS) that says "shelter is designed, maintained and operated to provide a physical environment that meets the animals' needs."

Our AWMS meets the U.S. Department of Agriculture's "Process Verified" standards for quality management systems that assure customers we are providing consistent quality products. For further details, please refer to our AWMS at www.smithfieldfoods.com.

'BOSSHOG' FICTION #5

The temperature inside hog houses is often hotter than ninety degrees. The air, saturated almost to the point of precipitation with gases from shit and chemicals, can be lethal to the pigs. Enormous exhaust fans run twenty-four hours a day. The ventilation systems function like the ventilators of terminal patients: If they break down for any length of time, pigs start dying.

FACT #5

Ensuring good air quality for our animals is a high priority and is one of the aspects of production which is monitored and managed on a daily basis through our Animal Welfare Management System.

Our company's swine production facilities are designed to maintain adequate fresh air for our animals and maintain temperatures within the animals' comfort range.

Air quality management devices are regularly inspected to ensure proper operating capability.

It is extremely rare when mechanical failure of ventilation systems causes death of animals due to indoor air quality.

All of the company's farms and the farms of our contract growers have either emergency backup power generators or other types of devices that are designed to ensure access to fresh air in the event of a power failure.

'BOSSHOG' FICTION #6

Accordingly, factory pigs are infused with a huge range of antibiotics and vaccines, and are doused with insecticides. Without these compounds—oxytetracycline, draxxin, ceftiofur, tiamulin—diseases would likely kill them. Thus factory-farm pigs remain in a state of dying until they're slaughtered.

FACT #6

Murphy-Brown has long had a policy of using antibiotics for therapeutic and prevention purposes only as part of our overall management focus to ensure animal well-being. Murphy-Brown strictly limits antibiotic use for its animals. The guidelines used to decide whether to administer antibiotics are determined by a veterinarian who considers what is

best for the animal. In those cases, the required dosages and treatment regimens are strictly followed.

For further details, please see our antibiotic usage policy at www.smithfieldfoods.com.

Some producers use minimal amounts of label-approved insecticides during the rainy season to control bug bites in hogs, which if left untreated can cause great discomfort to the animals.

'BOSSHOG' FICTION #7

When a pig nearly ready to be slaughtered grows ill, workers sometime shoot it up with as many drugs as necessary to get it to the slaughterhouse under its own power. As long as the pig remains ambulatory, it can be legally killed and sold as meat.

FACT #7

Absolutely not true. We have strict withdrawal timeframes for which records are kept to ensure Food and Drug Administration (FDA) compliance. We meet or exceed all withdrawal periods set by the FDA. Processing facilities conduct the testing of animals to check for compliance.

For further details, please see our antibiotic usage policy at www.smithfieldfoods.com.

'BOSSHOG' FICTION #8

In addition, the waste nurses more than 100 microbial pathogens that can cause illness in humans, including salmonella, cryptosporidium, strepococci and giardia. Each gram of hog shit can contain as much as 100 million fecal coliform bacteria.

FACT #8

North Carolina State University has done a great deal of research on the subject of microbial pathogens, the details of which can be found on the [NCSU website](#).

'BOSSHOG' FICTION #9

The liquid in them is not brown. The interactions between the bacteria and blood and afterbirths and stillborn piglets and urine and excrements and chemicals and drugs turn the lagoons pink.

FACT #9

Again, a false assumption by an author unfamiliar with the science of raising hogs.

A pink lagoon is a healthy lagoon. That's a sign of bacteria doing what it should be doing. It's indicative of lower odor and lower nutrient content.

Black would be an indication of unhealthy lagoons.

'BOSSHOG' FICTION #10

Hog farms that contract with Smithfield differ slightly in dimension but otherwise look identical: parallel rows of six, eight or twelve, one-story hog houses, some nearly the size of a football field, containing as many as 10,000 hogs, and backing onto a single large lagoon.

FACT #10

Absolutely false. Actually, the dimensions of hog barns can vary tremendously, both for company-owned farms and those of contract growers.

No buildings are the size of a football field, and none house 10,000 hogs. For example, on average a finishing barn houses 800 to 2,400 pigs per barn, depending on the style of building.

'BOSSHOG' FICTION #11

Pollution control at Smithfield consists of spraying the pig shit from the lagoons onto the fields to fertilize them. The idea is borrowed from the past: The small hog farmers that Smithfield drove out of business used animal waste to fertilize their crops, which they then fed to the pigs.

FACT #11

Throughout history, animal manure has been the most important source of fertilizer to safely and successfully grow crops.

In the modern era, livestock producers use strict controls governing application rates to ensure that nutrients are not over applied.

The rules and regulations governing the application of fertilizer from hog farms in North Carolina are among the most stringent in the United States.

We follow the nutrient management practices recommended by the U.S. Department of Agriculture and its Natural Resources Conservation Service.

Each permitted hog farm in North Carolina is subject to two annual inspections by government agencies to ensure that these guidelines are being followed.

'BOSSHOG' FICTION #12

At one point, three hog-raising counties in North Carolina were producing more nitrogen, and eighteen were producing more phosphorus, than all the crops could absorb.

FACT #12

This claim is based on a state report that was shown to be incorrect and was subsequently revised.

The fact of the matter is that the state's operating permit for hog farms requires a balance of available land, crops, and nutrients from each permitted hog farm. Each permitted hog farm in North Carolina is subject to two annual inspections by government agencies to ensure that these guidelines are being followed.

'BOSSHOG' FICTION #13

Many studies have documented the harm caused by hog waste runoff; one showed the pig shit raising the level of nitrogen and phosphorus in a receiving river as much as sixfold.

FACT #13

A recent review of N.C. Department of Environment and Natural Resources, Division of Water Quality's sampling program reveals that the presence of hog farms in the Black River and Northeast Cape Fear River watersheds is not negatively affecting water quality.

In a report issued on June 2, 2003 by Mr. Alex Avery, director of research and education at the Hudson Institute's Center for Global Food Issues, Churchville, Virginia, stated "Data indicate that the effects from intensive confinement hog farms and the rapid expansion of the hog industry during the 1980s and 1990s have not significantly affected nutrient levels in the Black and Northeast Cape Fear watersheds in North Carolina as previously believed."

'BOSSHOG' FICTION #14

In eastern North Carolina, nine rivers and creeks in the Cape Fear and Neuse River basins have been classified by the state as either "negatively impacted" or environmentally "impaired."

FACT #14

The N.C. Department of Environment and Natural Resources, Division of Water Quality produces a basin-wide assessment report on each of North Carolina's seventeen river basins on a five-year cycle.

In regard to the two major river basins in eastern North Carolina, the most recent report on the Cape Fear Basin was completed in 2004 and the Neuse River Basin in 2006.

The report breaks down the basins into sub-basins and goes into detail on water quality conditions as well as potential impacts in the sub-basin.

Impacts to water quality include a variety of sources, such as point source discharges, storm water/nonpoint source runoff and land-use activities such as urbanization, sediment and agricultural impacts.

The activities causing water quality degradation in the sub-basins differ greatly depending upon the area of the state.

However, in reviewing the reports it is clear that no single source or activity is causing all the problems in the basins.

The Black and South Rivers, which are included in sub-basin 18-20 in the Cape Fear Basin, are a good example of waters located in an area where there are many animal operations as well as other agricultural operations in the basin.

In 1994, the Black and South Rivers were designated as "Outstanding Resource Waters" based on excellent biological and physical/chemical data.

The 2004 assessment report states that the waters of the Black River have returned to excellent after a decline in 1996 as a result of desnagging of the river following Hurricane Fran and the drought that occurred in 2002.

The degradation noted in this water body was due to naturally occurring conditions, and once normal weather conditions returned water quality improved despite the large number of animal operations in the basin.

'BOSSHOG' FICTION #15

The borders of hog farms are littered with dead pigs in all stages of decomposition, including thousands of bleached pig bones. Locals like to say that the bears and buzzards of eastern North Carolina are unusually lazy and fat.

FACT #15

This is absolutely ridiculous. We take a great deal of pride in the operation and appearance of our hog farms.

What's more, state and federal law, and Smithfield's Environmental Management System and bio-security protocols, specifically prohibit these types of practices.

The company and its contract growers follow the disposal practices required by the North Carolina state veterinarian. Conformance to these requirements is part of the state regulatory inspection process.

'BOSSHOG' FICTION #16

Hog factory workers stink up every store they walk into. I run into a few local guys who had made the mistake of accepting jobs in hog houses, and they tell me that you just have to wait the smell out: You'll eventually grow new hair and skin. If you work in a Smithfield hog house for a year and then quit, you might stink for the next three months.

FACT #16

That's a good one. We think the local guys were having a little fun with the reporter from Texas.

'BOSSHOG' FICTION #17

"We are used to farm odors," says one local farmer. "These are not farm odors. Sometimes the stink literally knocks people down: They walk out of the house to get something in the yard and become so nauseous they collapse. When they regain consciousness, they crawl back into the house."

FACT #17

There is absolutely no evidence that such a preposterous thing ever happened. Maintaining good relations with our neighbors is a high priority for our company.

We have an established mechanism for responding to any type of complaint. Any time we become aware of a legitimate concern from one of our neighbors we respond by working with our neighbors to resolve it.

The N.C. Division of Air Quality maintains an odor complaint response process and has the authority to take enforcement action against any permitted facility which proves to have a verified odor problem.

'BOSSHOG' FICTION #18

A river that receives a lot of waste from an industrial hog farm begins to die quickly.

FACT #18

We are not aware of any dead rivers in eastern North Carolina, or any other area of the state for that matter.

The Black and South Rivers, which bisect the heart of hog country in eastern North Carolina, have been classified "Outstanding Resource Waters," which is the highest water quality classification for any water body in the state.

'BOSSHOG' FICTION #19

Toxins and microbes can kill plants and animals outright; the waste itself consumes available oxygen and suffocates fish and aquatic animals; and the nutrients in the pig shit produce algal blooms that also deoxygenate the water.

FACT #19

Eutrophication—or the depletion of oxygen in water—can occur when a healthy water body receives too many nutrients.

This phenomenon has occurred in different locations close to hog farms as well as areas where there are no hogs.

'BOSSHOG' FICTION #20

Pig-waste runoff has damaged the Albemarle-Pamlico Sound, which is almost as big as the Chesapeake Bay and which provides half the nursery grounds used by fish in the eastern Atlantic.

FACT #20

We are not aware of any scientific evidence that identifies pig waste as a specific contributor to damage in the Albemarle-Pamlico Sound.

'BOSSHOG' FICTION #21

The biggest spill in the history of corporate hog farming happened in 1995. The dike of a 120,000 square foot lagoon owned by a Smithfield competitor ruptured, releasing 25.8 million gallons of effluvia into the headwaters of the New River in North Carolina.....From the headwaters to the sea, every living creature was killed. Fish died by the millions.

FACT #21

Another example of how the author likes to sensationalize. The N.C. Department of Environment and Natural Resources, Division of Water Quality conducted an environmental impact assessment of the Ocean View lagoon spill. That report is publicly available.

The spill at the Ocean View Farms on June 21, 1995, was the result of a ruptured lagoon dike that resulted in approximately 25 million gallons of swine waste entering Donohoe Branch and Long Branch in the New River Basin in Onslow County.

Based on the "Findings and Decision and Assessment of Civil Penalties" dated August 21, 1995 (file number WQ95-05) the N.C. Wildlife Resources Commission documented environmental damage to the New River resulting from the discharge from Ocean View Farm.

The commission determined a loss of 2,641 fish of various sizes, types and classifications.

Significant management problems and other deficiencies by Ocean View Farm were also noted in the report.

As a result of the incident, Ocean View was assessed a penalty plus enforcement costs of \$103,820.49.

'BOSSHOG' FICTION #22

In 1999, Hurricane Floyd washed 120,000,000 gallons of unsheltered hog waste into the Tar, Neuse, Roanoke, Pamlico, New and Cape Fear Rivers. Many of the pig-shit lagoons of eastern North Carolina were several feet underwater.

FACT #22

Let's take a look at the big picture. Yes, some lagoons were inundated, but so was much of eastern North Carolina, including municipal treatment systems, septic tanks, fuel storage tanks, homes, businesses, chemical storage areas, etc.

Hurricane Floyd was classified as a 500-year storm event. We are not aware of any official, definitive estimate of hog waste washed into rivers as a result of Hurricane Floyd.

The N.C. Department of Environment and Natural Resources indicated the widespread impact from Hurricane Floyd on all types of facilities in the eastern part of the state:

- Approximately 50 farms were flooded
- Six animal waste lagoons breached

- Approximately 25% of lagoons in eastern North Carolina had high freeboard levels
- Approximately 209 municipal and industrial wastewater treatment sites were impacted
- Thousands of failed septic systems
- 230 caskets unearthed
- 3,900 underground (fuel) storage tanks at 1,556 facilities impacted
- 171 superfund sites in the flood area
- Flood waters contaminated 2,800 wells
- 24 wastewater treatment plants had to close as a result of flooding
- Approximately 101 dams sustained damage, with 40 of those failing

'BOSSHOG' FICTION #23

Tens of thousands of drowned pigs were strewn across the land. Beaches located miles from Smithfield lagoons were slathered in feces.

FACT #23

Once again, the author likes to paint vivid mind pictures, while ignoring the truth.

The fact is that according to the official estimate from the N.C. Department of Agriculture, 20,000 pigs were lost due to flooding.

The vast majority of these pigs died inside buildings and remained there until they were removed by the farm managers or owners.

Additionally, we are not aware of any evidence of any feces reaching any beaches or ocean waters.

'BOSSHOG' FICTION #24

A picture taken at the time shows a shark eating a dead pig three miles off the North Carolina coast.

FACT #24

We have seen no such photo. Furthermore, if such a photo did exist it certainly would have been front page news.

We are not aware of a single pig reaching ocean waters.

'BOSSHOG' FICTION #25

From a waste-disposal perspective, Hurricane Floyd was the best thing that had ever happened to corporate hog farming in North Carolina.

FACT #25

Hurricane Floyd, a 500-year flood event, wasn't good for the company or anyone else in eastern North Carolina.

The design of treatment systems on hog farms allowed for containment and storage of animal waste to a greater degree than systems which did not have storage capacity.

While emergency hurricane plans were in place, the fact of the matter is this was a 500-year storm event.

Nevertheless, our waste treatment systems have the ability to capture and store water from unusual rainfall events.

Since Hurricane Floyd none of our lagoons has overflowed thanks to our comprehensive hurricane preparedness emergency action plan.

Our action plan provides for emergency generators and fuel on all company farms. The generators are tested regularly to ensure they are in working order.

In the event of a power outage, company farms have the capability to switch to generator power and continue to supply the power to deliver water and feed necessary for the safety of our employees and the well-being of our animals.

In the event of an impending storm, our emergency response team activates contingency plans, places key personnel on standby and readies transportation and other emergency response equipment to allow us to act quickly.

'BOSSHOG' FICTION #26

Smithfield is no longer able to disfigure watersheds quite so obviously as in the past; it can no longer expand and flatten small pig farms so easily. Several state legislatures have passed laws prohibiting or limiting the ownership of small farms by pork processors. In some places, new slaughterhouses are required to meet expensive waste-disposal requirements; many are forbidden to use the waste lagoon system.

FACT #26

On the contrary, our goal is to preserve family farms.

In addition to the hogs raised on company-owned farms, Murphy-Brown, our hog production subsidiary, has relationships with about 1,900 independent producers who grow animals for us on a contractual basis.

Under terms of the contract, Murphy-Brown provides the hogs, feed, transportation and veterinary support, and the producer provides the growing facilities and day-to-day management to raise the hogs.

Contract growing provides a stable income source unlike any other agricultural commodity they could grow with limited acreage.

This arrangement helps preserve the family farm way of life because producers can count on a steady income since Murphy-Brown provides a specified payment rate and assumes the risk of market price swings.

New or expanded processing plants anywhere in the country must meet whatever regulatory requirements govern new facilities in that location.

'BOSSHOG' FICTION #27

North Carolina, where pigs now outnumber people, has passed a moratorium on new hog operations and ordered Smithfield to fund research into alternative waste-disposal technologies.

FACT #27

Smithfield was not "ordered" to fund this research.

We entered into a landmark voluntary agreement to fund research at North Carolina State University to determine whether environmentally superior and economically feasible technologies could be identified.

'BOSSHOG' FICTION #28

South Carolina, having taken a good look at its neighbor's coastal plain, has pronounced the company unwelcome in the state.

FACT #28

Again, the author is making this up as he goes along. South Carolina has made no such official pronouncement.

South Carolina has an existing permitting system for animal operations, including swine farms.

Murphy-Brown is operating its company-owned swine farm under valid permits issued by the state of South Carolina, and does business with approximately 40 legally permitted contract growers.

'BOSSHOG' FICTION #29

The federal government and several states have challenged some of Smithfield's recent acquisition deals and, in a few instances, have forced the company to agree to modify its waste-lagoon systems.

FACT #29

Wrong again. Federal reviews of significant merger and acquisition transactions are part of a normal process by the U.S. Department of Justice and are not unique to Smithfield Foods or the swine industry.

There are no known examples of the federal government forcing, or even asking, Smithfield to modify waste lagoon systems.