



AFTER THE FLOOD

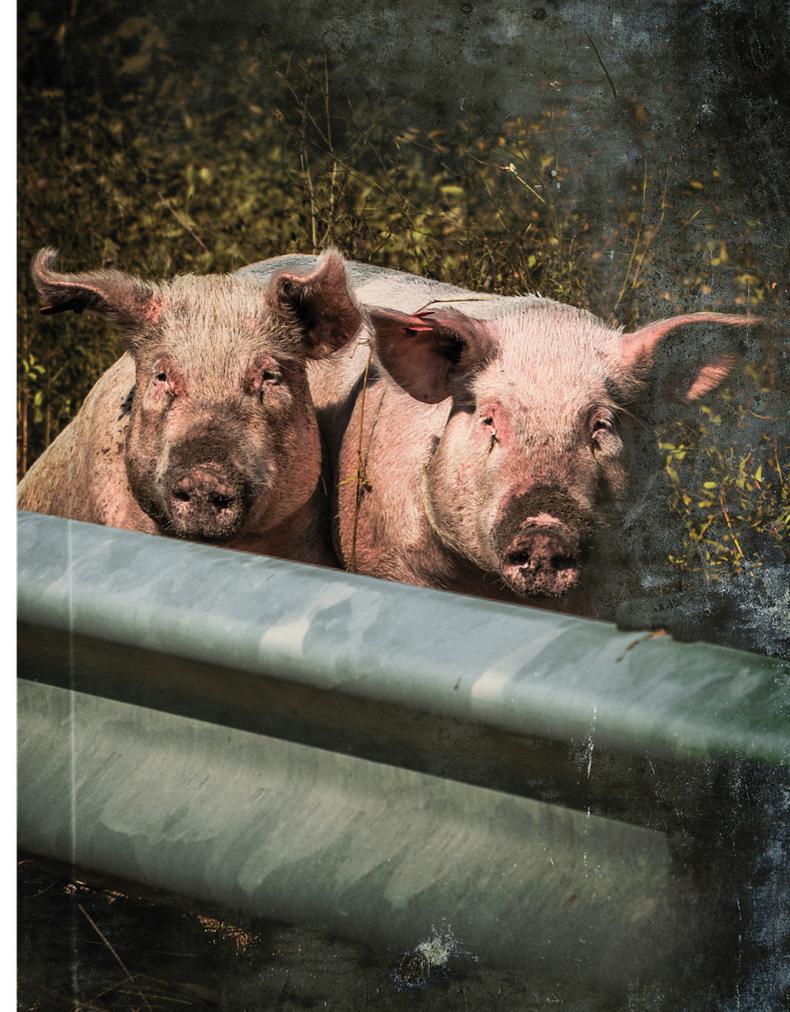
HOW DISASTERS LIKE HURRICANE FLORENCE UNCOVER
ANIMAL AGRICULTURE'S HIDDEN CASUALTIES.

by Kathryn Gillespie

“I TOLD HER TO JUST HOLD ON”

In the aftermath of Hurricane Florence, amidst mass farmed animal deaths, ten pigs stood stranded on an elevated stretch of highway near Chinquapin, North Carolina. Traveling by boat through the floodwaters, documentarians Kelly Guerin of *We Animals*, and Daniel Turbert of *The Sentient Project* were passing countless drowned pigs and chickens from industrial farming facilities. “The word that kept coming to mind for us was *apocalyptic*,” Guerin recalls. When, to their relief and surprise, Guerin and Turbert discovered the group of pigs on the highway who had likely swum through the floodwaters to higher ground, they immediately contacted local rescue groups for help. It was getting dark. The boat operator would have to turn around because the boat didn’t have a light. So Guerin and Turbert decided to spend the night on the highway to keep the pigs safe. Through the night, they would hear the sound of pig bodies hitting the posts under the bridge as they floated by.

When daylight broke, Guerin and Turbert watched as the pigs slept in the morning sun and then rooted around in the dirt. One of the pigs couldn’t get up and was shivering uncontrollably, so Guerin started softly speaking to her. “I told her how lucky she was about to be, that she was going somewhere more beautiful than she could possibly imagine. I described the grass and the pools and the friends she would undoubtedly have so soon. I told her to just hold on, that help was coming, and that we wouldn’t leave her.” As Guerin spoke, the pig opened her eyes, and soon, the shivering stopped. “It occurred to me that I had a few salted lima beans,” Guerin continues. “She snuffled for them and quickly munched them up. I heard her make a sound for the first time that morning and recognized it to be the soft, deep



WHAT REMAINS Two of the ten pigs who swam for their lives through the flood waters of 2018’s Hurricane Florence. Photo by Daniel Turbert | Opposite: A flooded chicken CAFO in Duplin County, North Carolina. Photo by Jo-Anne McArthur

chirpy snort of a happy pig.”

The aroma of salted lima beans in the morning air attracted the other pigs, and they lined up waiting for Guerin to scatter some for them, too. Soon, Brother Wolf Animal Rescue and Ziggy’s Refuge Farm Sanctuary arrived and provided more food and water to the pigs. Everyone worked together to corral the pigs into a transport trailer. But by this time, as the floodwaters began to recede, local residents who had been out on the roads reported the rescue effort to police and animal control. When authorities arrived, although the pigs were

not tagged or identifiable as the “property” of any particular farmer, law enforcement insisted that they be surrendered to the farmer who claimed they were his. Negotiation efforts fell on deaf ears. “The pigs—they watched us leave them,” says Guerin, her voice strained with grief. “My first thought as we were ordered off the bridge by animal control was that my girl, all by herself, would be the first to be caught.”

The pigs’ status as property thoroughly shaped their entire lives — from being bred and raised in an industrial farm, to being abandoned by the farmer on the brink of



LEFT BEHIND
The drowned body of one of the millions of broiler chickens abandoned by CAFO operators before the storm, carried out by the flood waters into a nearby residential area. Photo by Jo-Anne McArthur

The US's third largest chicken producer Sanderson Farms referred to the chickens who drowned in their cages during flooding as "inventory losses."

Five thousand five hundred pigs and 4.1 million chickens and turkeys perished during Hurricane Florence, according to the North Carolina Department of Agriculture. Rick Dove, a founding member and senior advisor for the Waterkeeper Alliance, explained to me that this number was probably a conservative estimate, given that it's based on self-reporting by the industry. Dove, who is well respected for his work in water protection and in North Carolina CAFO documentation, hypothesizes the hurricane's death toll to be much higher. After all, North Carolina houses and slaughters a staggering 9.3 million pigs, 32.5 million turkeys, and 900 million chickens every year. Numbers like these can start to feel abstract, so for activists like Guerin, it comes back to putting the "focus on the individual animals because our brains aren't capable of accounting for that amount of suffering and death." Like the ten pigs on the highway, who tried hard to survive, each one of those millions of animals (or billions, globally) wants to live.

The commodification of living animals, in other words, the logic that reduces animals only to what they can produce for human consumption (meat, eggs, milk, and so on) — drives global CAFO production and corporate contracts with local farmers. In the case of North Carolina, the Chinese meat processor WH Group owns most of the pigs in the state. Legally, farmed animals fall into the category of property, a designation that enables their largely unquestioned use for farming. In a press release immediately following Hurricane Florence, the U.S.'s third-largest chicken producer Sanderson Farms referred to the chickens who died in their cages during flooding as "inventory losses." This austere terminology highlights that farmed animals' only value to the industry is as sources of profit, and it's this kind of thinking that, in turn, shapes how the industry prepares for and deals with disasters like hurricanes.

Over his twenty-five years of documenting the aftermath of hurricanes in North Carolina through aerial video and photography, Dove has seen a shift in industry preparations for storms. Now, he says,

the industry is much more careful to try to prevent the spread of negative imagery, such as the large numbers of farmed animals who drown. Before evacuating themselves as Florence approached, CAFO operators were reported to have tightly secured the doors of their facilities in an attempt to prevent the bodies of drowned animals from floating out into the floodwaters where they would be visible to the public (this, of course, also prevented the animals from escaping their fate.) But animal remains could not be concealed despite these efforts. Both Guerin and Byrd described, for instance, following a trail of floating chicken bodies by boat to a CAFO where a small side door had broken open in the storm. For most farmers, evacuation has little incentive. "It's not feasible to evacuate that number of animals," Caroline Byrd explains, "And they're insured. If the animals die, [producers] are going to get their money for them."

And factory farms don't only harm animals; they also harm human communities. In a 2018 Duke University study, *Mortality and Health Outcomes in North Carolina Communities Located in Close Proximity to Hog Concentrated Animal Feeding Operations*, researcher Julia Kravchenko described

how people who live near factory farms in southeastern North Carolina are experiencing poorer outcomes for a variety of health conditions, compared with residents of North Carolina communities located in zip codes without hog CAFOs. There is a deep inequality to who is most adversely affected. In a form of discrimination known as environmental racism, factory farms are deliberately built in low-income communities of color, making Black, Latinx, and Indigenous residents disproportionately more susceptible to ill health, according to a 2014 report by the think tank NC Policy Watch. Environmental contamination from CAFO lagoons and spray fields introduces a range of contaminants from animal waste into the water—including pathogens, pharmaceuticals, heavy metals, antibiotics and hormones. People who live near hog and other CAFOs are exposed to these contaminants through the water and air and regularly experience a range of health issues as a result: respiratory problems, antibiotic-resistant bacterial infections (like MRSA), chronic headaches, eye irritation, kidney problems, nausea, and psychological effects (such as memory loss and loss of balance).

"When I settled in North Carolina in 1975, it was a true paradise—the air was

a deadly storm, to being returned to the farmer to be killed. "I still feel sad about it," Turbert says. "We just tried to do the right thing. And the horrific legal system prevented us from doing a compassionate action."

"ALL I COULD SMELL WAS DEATH AND WASTE"

On September 14, 2018, the category 4 Hurricane Florence made landfall in eastern North Carolina, one of the highest-density Concentrated Animal Feeding Operation (CAFO) areas in the world. The US Environmental Protection Agency defines CAFOs — or factory farms, as they're more commonly known — as "concentrated agricultural enterprises where animals are kept and raised in confined situations and which congregate animals,

feed, manure and urine, dead animals, and production operations on a small land area." In these spaces, animals like the ten pigs who swam for their lives, are unable to engage in vital species-specific behaviors and relationships with others. Their existence is characterized by intensive control, captivity, and mental and physical suffering for the purpose of consumers eating bacon for breakfast (according to the US Department of Agriculture Foreign Agricultural Service, in 2017, per capita consumption of pork was 64.4 pounds). Waterkeeper Alliance, a global environmental organization, dedicated to protecting clean water, reports that there are approximately 6,500 CAFOs across the state of North Carolina that confine pigs, chickens, turkeys, and cows. These facilities annually produce roughly 10 million pounds of wet animal waste and 2 million tons of dry animal waste, according to the Waterkeeper Alliance, and leave tens of thousands of rural

residents vulnerable to air and water quality contamination.

Caroline Byrd, an animal activist who helped with the attempted rescue of the ten stranded pigs, is a life-long resident of North Carolina's Duplin County where CAFOs dominate, and waste is kept in open-air earthen pits called "manure lagoons." This waste is then sprayed in a fine mist over the fields as fertilizer, dispersing the toxic material into the air. Byrd, who has family and friends working in the hog industry, told me that the smell of waste is always present. In the days and weeks after the hurricane, what was already a chronic pollution problem for the area only intensified when at least 33 manure lagoons flooded during the storm, discharging massive amounts of waste into the floodwaters, as reported by North Carolina's Department of Environmental Quality. Following the hurricane, Byrd says, "All I could smell was death and waste."

BUSINESS AS USUAL A new CAFO in Maxton, N.C. nears completion, set to be fully operational in 2020. It will hold 40,000 chickens in 58 barns, resulting in 11.6 million chickens slaughtered annually. Photo by Rick Dove





RUN TO THE RESCUE Caroline Byrd with one of the stranded puppies saved from Florence's flood waters. Photo by Daniel Turbert

fresh, waters clean and people enjoyed the outdoors," Dove recalls. "Now, the waters are degraded, fish kills are measured by the hundreds of millions, air is often too putrid to breathe, and people do not venture outdoors as they once did." The proliferation of CAFOs in eastern North Carolina, he says, is predominantly to blame.

Hurricanes like Florence, with their resulting flooding and infrastructure destruction, worsen pollution exposure for vulnerable communities in eastern North Carolina. And the consequences last long after the immediate effects of the storm abate — for humans, animals and the environment alike. "Flooding could lead to overflow of the waste pits and contamination of water and soil in nearby residential communities, as well as downstream at a far distance from the CAFOs," Dr. Kravchenko told me in an email. "Hog carcasses could represent additional hazards for bacteria-related contamination in the area. These factors could potentially lead to an increased risk of infectious diseases. It is also possible that people with asthma may have an exacerbation of symptoms when larger amounts of potential contaminants from hog CAFOs will be present in the neighbor-

hood resulting from a hurricane." Farm animals who miraculously survive major storms by swimming their way to higher ground will almost certainly be afflicted with severe health problems as well. NC State University's animal sciences professor Matt Poore described these as "respiratory disease, clostridial diseases (like blackleg), leptospirosis, and infections due to cuts and loss of integrity of skin and hooves" in a September 22, 2018, North Carolina Disaster Information Center advisory.

"WE'RE SPOILING OUR OWN NEST"

Wilmington resident and director of North Carolina Farmed Animal Save, Roxanne Kirtright, shared with me the story of a large carp fish she had named Marvin. Kirtright, along with other activists, were working to rescue fish in Wilmington's Greenfield Lake following Hurricane Florence. In the days after the storm, oxygen levels in eastern North Carolina waterways were so low that many fish were suffocating.

Deoxygenation occurs as a result of nutrient pollution — often a natural process after a storm when debris washes into waterways. But in a region with so many CAFOs, the concentration of waste becomes much too high for the waterways to sustain livable oxygen levels. Marvin was swimming in a small stream of more oxygenated water coming out of a drainage pipe at the edge of the lake. He had an injury — his fin had been eaten off — but his will to live was strong. Kirtright and her colleagues placed aerators (devices to add oxygen to the water) to try to save the fish, but when they returned the next day, many of the fish were dead, and Marvin had disappeared.

In a statement several days later, Waterkeeper Alliance's staff attorney detailed the catastrophic damage to the Wilmington area: "More than 5 million gallons of partially treated wastewater discharged from a local treatment plant and a catastrophic breach of coal ash sent toxic heavy metals flowing towards the city. Upstream in the basin, untold amounts of waste from inundated hog and poultry operations entered the floodwaters." While hurricanes worsen the problem of pollution and deoxygenation of waterways, CAFOs cause widespread fish kills even when there aren't flooding conditions.

Rick Dove has been witnessing the effects of major storms since the 1990s, with Hurricanes Bertha, Fran and Floyd. During all of these hurricanes, as with Florence, the mass amounts of animal waste that end up in the estuary, he explains, "causes algae and dangerous organisms to grow." Over time, the area's water quality deteriorated so much that people were warned to stay out of it. "Many of the fish that perished had open bleeding lesions covering their bodies," Dove says. "People who ventured into polluted water developed those same sores." Dove explains that in North Carolina's Neuse River alone, an estimated

2 billion fish had died since 1991 as a result of water contamination. In addition to being a clear animal welfare issue, these fish kills are detrimental to the broader aquatic ecosystem and are often the first sign of severe environmental stress.

In places like eastern North Carolina, a hurricane is a flashpoint of crisis that exposes the systemic injustice of animal agriculture. As far back as 2006, global leaders had been made aware of the impacts of animal agriculture on the environment, as detailed in United Nations Food and Agriculture Organization's landmark report *Livestock's Long Shadow*, which urged for animal agriculture to be a "major policy focus when dealing with problems of land degradation, climate change and air pollution, water shortage and water pollution and loss of biodiversity." Yet since then, rather than policymakers responding to this call with meaningful measures, the UN FAO reports that global consumption of animal products has continued to rise.

In North Carolina, Dove recently documented two vast new poultry facilities being constructed that, once fully operational later this year, will process over 20 million chickens annually. "The state of North Carolina has failed to regulate the growth or produc-

tion practices of this industry," he says. "While citizens and environmental groups have been sounding the alarm, the state has turned a deaf ear to their concerns."

Intensifying hurricanes like Florence, disastrous wildfires in California, tornadoes wreaking havoc through the central United States, flooding in the Midwest, and heatwaves in the South are just a few very recent examples of what the UN's Intergovernmental Panel on Climate Change refers to as extreme weather events precipitated by the climate crisis. These events injure, kill, and displace both humans and animals, and will only escalate and become more frequent if unmitigated climate change continues warming the planet. The destruction wrought by Hurricane Florence in a North Carolina landscape already permeated with climate-crisis-inducing CAFOs offers a window into a grim climate future.

"We're losing the race with mother nature," Dove gravely warns. "You can't play around with these agricultural practices and think there's no consequence. It's going to affect everyone whether we are part of the problem or the solution. It doesn't matter if you live in Seattle or in eastern North Carolina. Nature can strike back. We're spoiling our own nest."

On any given day, animal agriculture is a profoundly harmful system that demands a complete reimagining of humans' relationship with animals and the environment.

Dove was adamant that a disaster like Florence does not become a fleeting moment of concern. "Photos come out, and media covers the story, and people get riled up about how we've got to fix this," he says. "But then thirty days later it goes quiet, and then we just wait for the next storm." When I asked Dove how we could address the problems related to CAFOs in North Carolina, he said, "We know we don't need to eat animals to survive. And we know that a lot of global warming comes from animal agriculture. We need to transition away from eating meat, from eating animals." Plant-based agricultural futures are possible and are already emerging as more farmers who were previously raising animals for food have begun to transition to growing plant crops instead. Florence and subsequent environmental disasters make clear that we don't have a moment to lose in manifesting these radically different futures—for animals like the sweet pig snuffling for lima beans on the bridge, for the wellbeing of vulnerable human communities, and for the very survival of the earth as we know it. ■

SOMEONE A cow that survived the hurricane stands stranded. Her rescue was not possible, and her fate is unknown. Photo by Jo-Anne McArthur. [Editor's note: A photo illustration effect of water damage was added to the original images in this story to symbolize the devastation of animal agriculture and the erasure of sentient beings trapped within.]



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