

# Bacon v. Wildlife: The Environmental Cost of Pork

One of America's favorite foods is polluting waterways, destroying habitat that wildlife need for survival, and contributing to global climate change. Choosing to eat less bacon is a powerful way to make a positive impact on the planet.

<b>Extinction Facts</b>	
Serving Size 4 slices (4 oz.) Bacon	
Greenhouse Gases	3.0 lb. CO <sub>2</sub> e
Habitat Loss	30.2 ft. <sup>2</sup>
Water Use	165.0 gal.
Manure	20.2 lbs.

More than half of all American households always have bacon in the kitchen, and 62 percent of American restaurants have it on their menus.<sup>1</sup> Of the 24 billion pounds of pork produced in 2014, about 60 percent was processed into products like bacon and sausage.<sup>2</sup> With per capita bacon consumption at 51.2 slices per year, the annual environmental cost per person is **1,050 pounds of carbon dioxide equivalents (CO<sub>2</sub>e),<sup>3</sup> 2.13 acres of habitat, 66,300 gallons of water and 1,530 pounds of manure.**

## Pigs and Climate Change

Pork is one of the top four greenhouse gas (GHG) generating animal-products, along with lamb, beef and cheese.<sup>4</sup> Manure management and fuel combustion are the principle ways in which pork production generates GHGs.<sup>5</sup> Fossil fuels are burned to synthesize chemical fertilizers for application to feed crops and to transport and process meat.<sup>6</sup> As swine manure decomposes, nitrous dioxide and methane (extremely potent GHGs) are released into the atmosphere.

The annual American appetite for bacon produces 49.6 billion lb. CO<sub>2</sub>e emissions per year—the same amount as from 4.75 million cars.

## Water Pollution and Manure

To produce a single strip of bacon, a quantity of manure 80 times the weight of that strip was produced.<sup>7</sup> For a nation of bacon lovers, that amounts to about 331 billion pounds of manure from bacon alone, not even accounting for the manure produced by other types of pork. On industrial pig farms, manure is stored in large open-air lagoons and then sprayed on nearby fields.<sup>8</sup> Such vast quantities of manure cannot be absorbed by the available land, and consequently manure pollution—including excess nutrients, antibiotics, heavy metals<sup>9</sup> and disease-causing germs—leaks into groundwater and the surrounding soil. Although major manure spills tend to generate public attention, leaking manure and leaching of pollutants and excess nutrients is a pervasive and continuous problem that is under-regulated by federal and state agencies.

Skipping one serving of bacon (4 strips) per week for a year eliminates **1,050 pounds of manure**, which is the amount it would take to fill an average full-size refrigerator.\*

\*Assuming a density of pig manure of 62 lbs./cubic foot and an average refrigerator size of ~17 cubic feet.

**For more facts, recipes and tips, visit: [TakeExtinctionOffYourPlate.com](http://TakeExtinctionOffYourPlate.com).**

## Little Land Left for Wildlife

Producing pork degrades and pollutes 11.4 million acres of wildlife habitat every year. When factory farms dispose of pig feces and urine by spraying them on nearby fields, this pollutes the soil. Growing soybeans and corn to feed pigs also requires vast areas of land. 149 million acres of U.S. cropland are devoted to growing animal feed.<sup>10</sup>

The top three pork-producing states, Iowa, North Carolina and Minnesota, account for over half of all pig production in the United States.<sup>11</sup> The extreme concentration of industrial farming and pollution in these states has profoundly harmed wildlife. Whooping cranes and copperbelly water snakes mainly live in sensitive marshy areas throughout the midwestern United States. Aquatic habitats are especially vulnerable to the water pollution associated with hog-farming.<sup>12</sup>

In North Carolina, the second largest hog-producing state in the country, a 2015 study found that large pig farms release fecal bacteria into waterways at concentrations that exceed the levels permitted for recreational water use.<sup>13</sup> This is harmful not only to humans but also to marine life and amphibians, such as fish, turtles, salamanders and frogs, that inhabit these areas. When hog waste pollutes lakes and rivers, the excess nitrogen and phosphorous nutrients in the manure cause algae to grow uncontrollably. This process, called eutrophication, deprives aquatic wildlife of oxygen and light and can result in massive fatalities for aquatic wildlife.<sup>14</sup>

American consumption of bacon uses 17,755 square miles of land. This is equivalent to the land area of Vermont and Massachusetts combined.

## Tips for a Wildlife-friendly Diet

Every meal is an opportunity to help protect wildlife by taking extinction off your plate.

- Choose healthy, Earth-friendly breakfast alternatives to bacon like [oatmeal](#), [smoothies](#), [tofu scrambles](#), [breakfast burritos](#), [granola](#), [pancakes](#) and [breakfast sandwiches](#).
- Replace bacon with a crispy, savory and satisfying [plant-based alternative](#), try a [tempeh BLT](#) or [smoked tofu sandwich](#) and use meat-free “Bacon Bits” on salads and with roasted veggies.

1. “[Bacon Trends](#).” National Pork Board
2. White, Martha and Mike Brunker. “[The Big Bucks of Bacon: American Meat Industry By the Numbers](#).” NBC News. 26 Oct. 2015.
3. CO<sub>2</sub>e calculated using following global warming potentials (GWP) (i.e. warming effect relative to CO<sub>2</sub> over 100-year period): N<sub>2</sub>O GWP=298, CH<sub>4</sub> GWP=25, hydrofluorocarbons GWP=1,430) ([Hamerschlag](#), 6)
4. Hamerschlag, Kari. “Meat Eater’s Guide.” Pp. 4
5. Hamerschlag, Kari. “Meat Eater’s Guide: Methodology.” Pp. 30
6. Hamerschlag, Kari. “Meat Eater’s Guide.” Pp. 4
7. 1 strip bacon= 1 oz.; 5.05 lb. manure are produced per ounce of pork (Extinction Facts Labels)
8. Osterberg, David and David Wallinga. “Addressing Externalities From Swine Production to Reduce Public Health and Environmental Impacts.” American Journal of Public Health. Oct. 2004
9. Ibid.
10. EWG Meat Eater’s Guide. “Feed Production.”
11. USDA Census of Agriculture. “2012 Hog and Pig Farming Census.”
12. Center for Biological Diversity. “Whooping Crane.”
13. Heaney, et al. “Source Tracking Swine Waste in Surface Water Proximal to Swine Concentrated Animal Feeding Operations.” Science of the Total Environment. April 2015.
14. Peach, Sara. “[What To Do About Pig Poop? North Carolina Fights a Rising Tide](#)” National Geographic. 30 October, 2014



## Take Extinction Off Your Plate

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