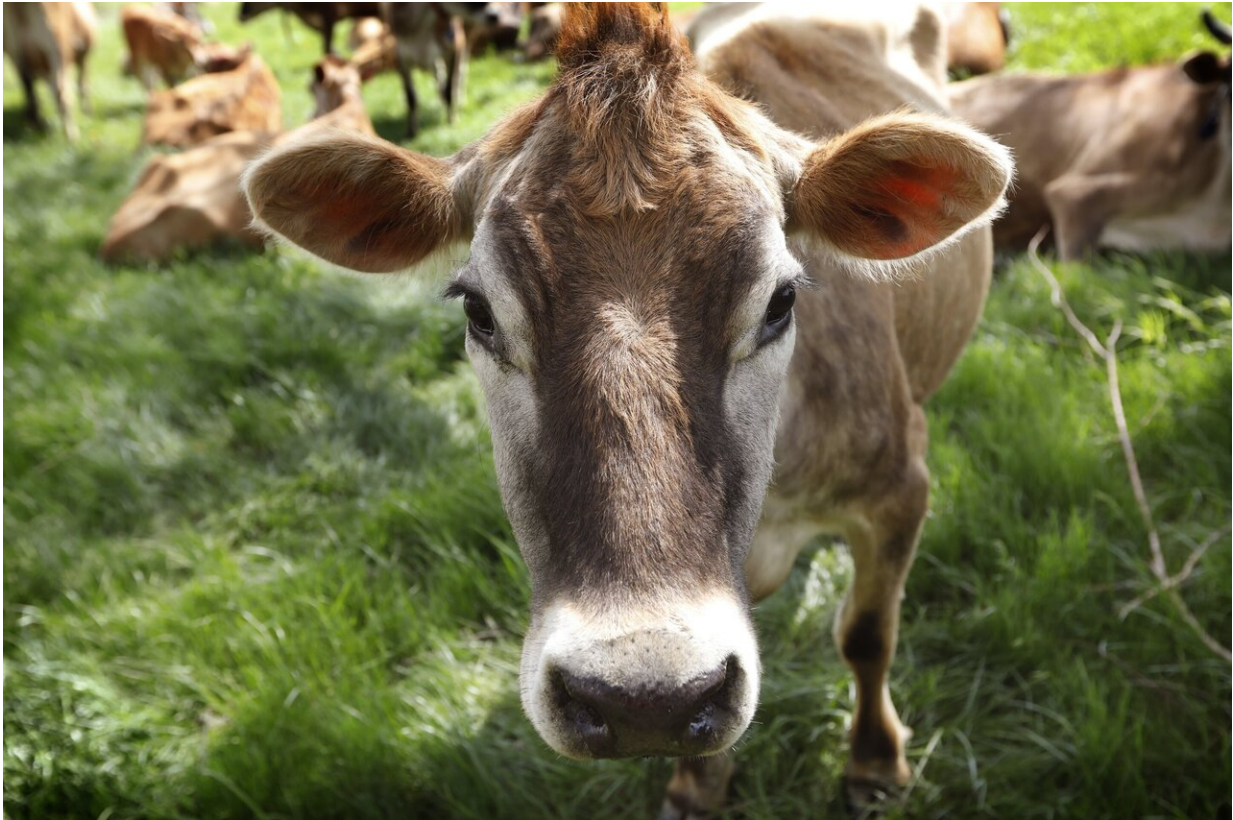


Unraveling the mystery of whether cows fart

April 28 2019, by Calvin Woodward And Seth Borenstein



In this May 8, 2018, filephoto, a Jersey cow feeds in a field on the Francis Thicke organic dairy farm in Fairfield, Iowa. Let's clear the air about cow farts. In the climate-change debate, some policy makers seem to be bovine flatulence deniers. This became apparent in the fuss over the Green New Deal put forward by some liberal Democrats. More precisely, the fuss over an information sheet issued by the plan's advocates. (AP Photo/Charlie Neibergall, File)

Let's clear the air about cow farts.

In the [climate change debate](#), some policymakers seem to be bovine flatulence deniers.

This became apparent in the fuss over the Green New Deal put forward by some liberal Democrats. More precisely, the fuss over an information sheet by the plan's advocates.

With tongue in cheek or foot in mouth, depending on whom you ask, the statement's authors said that despite the plan's proposals for strong limits on emissions over a decade, "we aren't sure that we'll be able to fully get rid of farting cows and airplanes that fast."

Airplanes don't fart. But cows?

Exasperated by merciless mocking from Republicans on this matter, Democratic Sen. Debbie Stabenow of Michigan lectured the Senate majority leader, Mitch McConnell, on the floor of the chamber last month.

"The Republican majority leader said that we want to end air travel and cow farts," Stabenow said. "By the way, just for the record, cows don't fart. They belch."

The Associated Press surveyed global experts on [global warming](#) on this question, as well as an author who wrote the definitive science book on gassy animals, which comes with funny pictures.

THE FACTS: Cows fart. That contributes to global warming. But cow burps are worse for the climate.

"Cows are pretty disgusting eaters, with methane coming from both ends," said Christopher Field at the Stanford Woods Institute for the Environment. "But most of it comes from burping."

Field cited the "classic quote from the technical literature" on the topic: "Of the CH₄ (methane) produced by enteric fermentation in the forestomach 95% was excreted by eructation (burp), and from CH₄ produced in the hindgut 89% was found to be excreted through the breath."

In a nutshell, belches are bad news.

At Tuscia University in Viterbo, Italy, environmental scholar Giampiero Grossi said methane emitted by ruminant livestock accounts for about 5.5% of the [greenhouse gasses](#) that come from human activity. More than 70% of livestock emissions are from cattle, he said.

"Ruminants are a significant source of methane," which traps more heat than carbon dioxide but doesn't last as long in the air, said Kristie Ebi, director of the Center for Health and the Global Environment at the University of Washington in Seattle. "The belches have to do with digesting their food" in the stomach compartments, not intestines, and that fermentation produces methane.

Warming from the burning of fossil fuels is roughly 10 times to 17 times greater than warming caused by livestock burping and farting, Field said.

GASEOUS POLITICS

For all of that, the Green New Deal does not seek to ban cows or planes as it sets ambitious targets to eliminate most [greenhouse gas emissions](#)

responsible for global warming by 2030.

The deal, introduced in the House by Democratic Rep. Alexandria Ocasio-Cortez of New York as a nonbinding resolution, not legislation, proposes massive spending on clean energy and energy efficient buildings and transit. It proposes working "collaboratively with farmers" to remove pollution and greenhouse gas emissions from agriculture "as much as is technologically feasible."

"It's not to say we're going to force everybody to go vegan or anything crazy like that," Ocasio-Cortez said in a Showtime interview.

Democratic leaders in Congress have largely shunned the plan, considering it politically fraught. Many Republicans are a hard sell on the reality of human-caused climate change at all and apt to be dismissive about livestock's part in it.

Politicians and other nonscientists who reject mainstream climate science cite cow farts and airplane travel as "a go-to rhetorical weapon they use against having a serious discussion" about how [climate change](#) is already causing dramatic and deadly changes, such as the extreme weather of 2018, Georgia Tech climate scientist Kim Cobb said.

"It's a form of mockery," said Anthony Leiserowitz, director of the Yale Program on Climate Change Communication. "They're trying to whip up their own base's opposition to any kind of action."

According to the U.S. government's 2018 National Climate Assessment report: "Climate change is transforming where and how we live and presents growing challenges to human health and quality of life, the economy, and the natural systems that support us."

WHAT FARTS, WHAT DOESN'T?

"Does It Fart?" a book by Dani Rabaiotti of the Zoological Society of London and Virginia Tech conservationist Nick Caruso, answers the question it poses about dozens of species.

Millipedes fart, no doubt discreetly.

Several species of herring communicate with each other that way. If you startle a zebra, says the book, it will fart with each stride as it runs away. Flatulence signals a baboon is ready to mate.

For the Bolson pupfish, found in Mexico, it's fart or die. They feed on algae that make them buoyant, easy prey near the surface. Farts sink them to safety. Similarly, manatees may let loose when it's time to dive deeply.

Whale farts are, of course, epic.

Birds and most sea creatures don't. Clams clam up, though they've been known to throw up.

The jury is out on spiders: More research is needed.

From London, Rabaiotti said methane emissions from cattle are belch-focused because the gas is produced near the start of their digestive system and comes up when they regurgitate their food to chew the cud.

One answer, she says: "Just cut down beef to, say, once a week or once a month and replace it with chicken or pork or options without meat. Emissions from dairy are lower per food serving than emissions from beef so cutting down dairy will reduce your carbon footprint less but it's another area where people can easily lower their emissions, particularly

for people that are already vegetarian."

And for the record, says this authority on the animal kingdom's ruder moments, "Yes, cows do fart."

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