

Film 6, *Cowspiracy* and *Wasted!*

In 2019, author Jonathan Safran Foer published a book entitled *We Are the Weather: Saving the Planet Begins at Breakfast*, where he argued that each of us should adopt a plant-based diet if we want to save the planet from catastrophic climate change.

Hence, saving the planet begins when we eat breakfast and otherwise. Since such a switch could make a significant dent in the climate crisis if adopted by everyone, I definitely applaud this as a step in the right direction and think that is on to something.

According to Project Drawdown, which is the most comprehensive plan ever put forth to reverse global warming (and which is a reading for this course), the #1 thing that we can do to roll back global greenhouse gas (GHG) emissions does not involve wind turbines, solar panels, electric vehicles, or any sort of similar technologies.

Instead, noted in the previous lecture, what is required is a cultural change regarding food: we need to waste far less of it and to switch to largely plant-rich diets. Doing so will result in a staggering reduction of 155 gigatons of CO₂ or equivalent gasses (Project Drawdown, "Scenario #1").

In comparison to this reduction, globally shifting from fossil fuels to electricity generated by photovoltaic (solar) panels will roll back less than half this amount of emissions. The adoption of electric vehicles? Far less than ten percent. We should, of course, work on exploring a variety of technologies to help reduce our emissions, but it is important to keep their relative impact in perspective.

Worldwide, agriculture is the second largest emitter of greenhouse gasses, yet between 1/3 and 1/2 of all the food that we produce on this planet is wasted. Regarding the switch to a largely plant-rich diet, the same amount of greenhouse gasses are released in producing one pound of beef as are released in producing thirty pounds of lentils, also a great source of protein.

I know, changing how we eat doesn't sound nearly as sexy as a self-driving electric car, but it would nonetheless be ten times better for the planet.

This is not to say that these changes will be easy. Indeed, it is arguably far easier to change cars (such as by making them electric) than to change people's actions. And what and how we eat is deeply personal and often central to our cultural identity.

Nonetheless, we need to seriously roll up our sleeves and address the climate crisis at the breakfast table.

Cowspiracy is a documentary on the environmental impact of eating meat. Here is how the filmmakers describe it:

“*Cowspiracy: The Sustainability Secret*” is a groundbreaking feature-length environmental documentary following intrepid filmmaker Kip Andersen as he uncovers the most destructive industry facing the planet today – and investigates why the world's leading environmental organizations are too afraid to talk about it.”

“Animal agriculture is the leading cause of deforestation, water consumption and pollution, is responsible for more greenhouse gasses than the transportation industry, and is a primary driver of rainforest destruction, species extinction, habitat loss, topsoil erosion, ocean “dead zones,” and virtually every other environmental ill. Yet it goes on, almost entirely unchallenged.

Please note that filmmaker Kip Andersen gets a few of his facts wrong. Animal products account for about 15% of total greenhouse gas emissions, not over 50%. Nonetheless, it is still a striking, thought-provoking film.

By the way, what do you make of the fact that Andersen builds his argument on incorrect facts? Does it help it, by making the situation seem worse than it is? Or undercut it by harming his credibility?

You may already know about the environmental implications of large the plant-based diet, but here is a little fact that may come as something of a surprise: while how we eat (at breakfast and otherwise) can have a real impact on the climate – and the environment more generally – switching to a largely plant-based diet is not the biggest thing that we can do in terms of food.

Instead, we need to waste less food – far less food. This, as Project Drawdown made clear, would have a bigger impact in dealing with climate change than switching to largely plant-based diets.

Hence being freegan can be even more important than being vegan.

Not sure what a “freegan” is? This is hardly surprising, as the word only recently entered the English language. As the venerable Oxford English dictionary notes, a freegan is a “person who eats discarded food, typically collected from the refuse of shops or restaurants, for ethical or ecological reasons.”

I know, when you put it that way, it doesn’t sound very appetizing.

But the idea is important, as food markets throw away an enormous amount of food. For example, if one egg in a carton of 12 is broken, supermarkets are required (at least here in the state of California) to discard the entire carton. If they do so with freegans in mind, they might coordinate with local freegans to allow them to pick up this and all sorts of otherwise discarded food, such as those past the sell-by date listed on the package.

Sounds like “dumpster diving” and the fringe activity? In many ways it is, but in one of the films that we will be watching, *Being the Change*, Peter Kalmus, who is a climate scientist at NASA jet propulsion laboratory in Pasadena, CA, notes how he and his family are freegans. While not mainstream yet, freeganism certainly is gaining momentum.

Wasted! is a documentary on food waste. Here is how the filmmakers describe it:

“*Wasted! The Story of Food Waste*” aims to change the way people buy, cook, recycle, and eat food. Through the eyes of chef-heroes...audiences will see how the world’s most influential chefs make the most of every kind of food, transforming what most people consider scraps into incredible dishes that create a more secure food system. *Wasted!* exposes the criminality of food waste and how it’s directly contributing to climate change and shows us how each of us can make small changes – all of them delicious – to solve one of the greatest problems of the 21st Century.”

Before jumping into the comments, let's hear it what Project Drawdown about the environmental consequences of how we eat:

“Shifting to a diet rich in plants is a demand-side solution to global warming that runs counter to the meat-centric Western diet on the rise globally. That diet comes with a steep climate price tag: one-fifth of global emissions. If cattle were their own nation, they would be the world’s third-largest emitter of greenhouse gasses.”

[Sorry, but I can't help but repeat that: " If cattle were their own nation, they would be the world’s third-largest emitter of greenhouse gasses,” right behind China and the US.]

“Bringing about dietary change is not simple because eating is profoundly personal and cultural, but promising strategies abound. Plant-based options must be available, visible, and enticing, including high-quality meat substitutes. Also critical: ending price-distorting government subsidies, such as those benefiting the US. livestock industry, so that the prices of animal protein more accurately reflect their true cost.”

“Plant-rich diets reduce emissions and also tend to be healthier, leading to lower rates of chronic disease. According to a 2016 study, business-as-usual emissions could be reduced by as much as 70 percent through adopting a vegan diet and 63 percent for a vegetarian diet, which includes cheese, milk, and eggs. \$1 trillion in annual health-care costs and lost productivity would be saved.”

“As Zen master Thich Nhat Hanh has said, making the transition to a plant-based diet may be the most effective way an individual can stop climate change.”

In my little lecture that asks “Are you an architect of the future,” I take up the issue of food and climate further. But, for now, I am curious to hear what you make of *Cowspiracy* and *Wasted!*

Class discussion of *Cowspiracy* and *Wasted!*

Note that the following observations, which are in italics, have not been paraphrased or altered, though I do correct the occasional typo and, because of space concerns, often just part of the comment is reproduced here along with my reply. In working through these, I will first quote a student's observation, followed by my thoughts.

There were quite a few comments such as this one:

I watched "Cowspiracy" for the first time last year for my Environmental Science class. I haven't eaten red meat since.

And similarly, this one:

I have officially become a vegetarian!! While I have a lot of critiques on the film, it definitely swayed me over to the green side.

My friend and colleague John Foran, who is a professor in UCSB's Sociology Department, often takes exit polls when he screens documentaries for his classes. He noted that students responded, and responded positively, more to *Cowspiracy* than any other documentary that he had ever shown.

This underscores how incredibly important communication can be in mitigating the climate crisis. Many people simply do not realize how simple day-to-day activities, like what they eat (such as beef) and how they get around (for example, by car), can negatively and profoundly impact the Earth's climate.

The good news is that once they learn, some individuals, like the two people who made these comments, will immediately respond by changing their personal actions. Hence, just getting the word out can be crucial.

And going fully vegan isn't necessary, as Project Drawdown reveals that a vegetarian diet is also very good in terms of each of us reducing total GHG emissions. Indeed, as [roughly 10% of worldwide anthropogenic GHG emissions comes from cattle](#), and per capita, [US citizens](#) consume far more than twice as much beef as [the average person on earth](#), just cutting beef from your diet can make a huge difference for the average American. In other words, choosing a turkey burger over a beef one is, climate wise, a big deal.

However, sometimes, just getting the message out is not necessarily enough. Consider the following comment:

I remember when this film, “Cowspiracy”, was released and people talking about it, I was about 18/19 years old. I remember not wanting to watch it and continue in a state of ignorance because I was afraid of what the documentary would reveal and what I would be told, and I didn’t want to live in a state of guilt; terrible I know.

Well, this attitude is not all that terrible or, for that matter, all that unusual.

This is an essential point, as some people are aware of the validity of the climate crisis, and further believe that we need to collectively act, but when it comes to personal action and changes to our lives, things can begin to fall apart.

A big part of the problem is, of course, that habits, especially deeply personal ones, are tough to change. And the way that we eat is about as personal as you can get, as it is intimately tied up with family and culture.

Back in 2014, journalist Naomi Klein published a book about climate change entitled *This Changes Everything*. It is an apt title, as the climate crisis is going to necessitate that we change nearly everything about the way that we live. The way that we eat is just one example.

Because we are facing a range of problems, such as social justice ones, the good news, as Klein made clear, is that this is an opportunity to address a number of issues that have long been with us. In other words, as we have seen, fast fashion is a problem, but as a social justice *and* environmental issue. Hence, by tackling it, we can address both of these issues at once.

However, many people, like the person who made this comment, want to "continue in a state of ignorance" because, deep down, they suspect that, in big and small ways, including even what they have for breakfast, will have to change in response to this crisis.

This presents a communication challenge. Simply put, how do you reach folks like this when they already suspect they know what you have to say, but don't want to hear it, not because they don't believe it is true, but because they fear that it is – and, hence, will require them to change their lives?

Coming into this class with...a consumer-based, animal product heavy, and non-minimalist background makes me feel like the “bad guy” for why the crisis continues, which is why I want to continue to learn about little things I can change to improve how I live. But getting rid of meat is tough for someone who is 6’3 200 pounds and plays sports is kind of hard to ask. I do agree that big corporations need to stop thinking for profit alone and should consider the well being of the planet. As I won’t be cutting meat out of my daily meals, I can agree to be more mindful about what I’m consuming.

We have long been told (for many centuries, in fact) that we need to eat animal products, and especially meat, to be healthy. Hence, to be at the pinnacle of fitness, which is required of competitive athletes, would definitely seem to necessitate eating meat.

Although this sounds intuitively correct, it is, in fact, simply wrong.

If you're interested in this topic, I suggest starting with the documentary [*The Game Changers*](#), which may still be streaming from Netflix. As Arnold Schwarzenegger notes in the film, "I ate a lot of meat. They show those commercials...selling that idea that real men eat meat. Serious man food. But you gotta understand, that's marketing. That's not based on reality."

As the filmmakers note, in the film, the narrator, James Wilks, "travels the world on a quest for the truth about meat, protein, and strength. Showcasing elite athletes, special ops soldiers, and visionary scientists to change the way people eat and live."

Along the way, he meets a variety of competitive athletes who eat almost exclusively plant-based diets. These range from triathletes and competitive cyclists to bodybuilders, weight lifters, football players, and heavyweight boxing champions. Like Kip Anderson in *Cowspiracy*, the makers of the documentary *The Game Changers* arguably cherry pick their data, but the basic thesis, that athletes do not need to eat animal products to be competitive, has been proven to be correct.

Another point to bring up is that people just might not know the amount of emissions agriculture produces. Honestly, I didn't know about it until I watched this documentary. So, how are people, who don't have an education on the environment, supposed to know to stop eating meat? It goes back to the narrator questioning why no environmental groups have shined a light on the issue. We need to get the word out there and help people ease into an environmental way of living. We can't just expect them to do it themselves without the right type of guidance.

Since its release in 2014, *Cowspiracy* has greatly helped in getting the message out to the public about the climate footprint of what we eat. And plenty of environmental groups, including some of those critiqued in *Cowspiracy*, are also doing their part.

Ideally, this information would be available wherever we purchase food. As I have noted "Denmark is planning, as part of his effort to become a carbon neutral country, to put 'climate' labels on food in the same way that we have nutritional labels. In this case, such a label would tell you just how good or bad the food is – not for your body – but for the planet."

As this person rightly notes of the general public, "[w]e can't just expect them to do it themselves without the right type of guidance."

The problem, of course, is that the food industry he's not likely going to voluntarily do such labeling. They didn't do it with nutritional labeling until the FDA got involved in the early 1970s. Even so, there is a long history here, as the FDA did not mandate such labels until the 1990s.

As with so many issues that we are taking up in climate crisis 101, what is needed here is the government intervention to mandate climate labels on food. And this, in turn, would require us to put politicians into office who would champion such climate actions.

This week's documentary "Wasted" highlighted the lack of consideration human's take regarding food waste. To accommodate our population growth since the industrial revolution, humans have mastered the mass production of food. Humans have ended up producing more food than we actually eat. One shocking statistic that came from the documentary was that "10 millions tons of produce goes unharvested each year."

Through the application of "[fertilizers, pesticides and irrigation to create conditions in which high-yielding modern varieties...\[of plants, like corn, soybeans, and wheat\]...could thrive](#)," the so-called Green Revolution of the 1960s and 70s was, rather astonishingly, in some ways able to keep up with the population explosion in the last 70 years (the global population in 1960 was about 3 billion people, today it is over 7.75 billion).

Incidentally, the Green Revolution is not necessarily a good thing, as it has introduced agricultural practices that are hardly sustainable.

In any event, while we might hope that this increased food production would have alleviated hunger worldwide, unfortunately, we are now simply wasting a good deal of this increased production. This is happening both in wealthy countries like the United States, as well as low- to middle-income countries.

The great irony here is that "[1 in 9 people \[on earth\] go to bed hungry](#)" and a "[child dies from hunger every 10 seconds](#)."

In other words, we grow enough food so that no one on the planet needs to be hungry, and because we waste nearly half of what we grow, people are dying and all this wasted food is unnecessarily contributing to the climate crisis.

Indeed, "[\[T\]he world wastes one third of the food intended for human consumption every year- around 1.3 billion tons, enough to feed 3 billion people](#)."

The film "Wasted" was one of my more enjoyed films thus far. I am always so interested in what I can do personally and using my food to the fullest is something I never considered. The fact that it takes 25 years for a head of lettuce to fully decompose in a landfill is wild!... This fact was absolutely surprising to me and has already made me rethink what I will do with my food waste in the future, but after seeing all of the solutions available to fix these problems I was upset with our government again. The system of charging people for the food waste they throw away we see in South Korea is a great way to do it.

If you enjoyed and benefited by watching *Cowspiracy*, you might also want to watch *Wasted! The Story of Food Waste*.

One of the reasons that I selected this particular documentary is that it surveys a number of solutions to the food waste problem that are currently being implemented. One example is South Korea, which, in 2013, introduced a compulsory food waste recycling program nationwide. Prior to the introduction of the program, only 2% of food waste was recycled through composting and other means. [In 2021, that number dramatically increased to 95%.](#)

By comparison, "[\[o\]ver 90% of wasted food in the US ends up in landfills,](#)" Where, as this person rightly notes, it can take 25 years for a head of lettuce to fully decompose.

I've heard of "Cowspiracy" before but have always been afraid to watch it because I thought it would be another source of vegan propaganda where they show gruesome videos from slaughterhouses. Thankfully, I was wrong and the film takes a much more logical than emotional approach. I think this tactic makes the movie much more digestible to the general public that isn't already vegan or vegetarian.

This is an interesting comment for two important reasons.

First, the notion that there is "vegan propaganda where they show gruesome videos from slaughterhouses."

Although animal rights activists have existed for at least 400 years in the West (and much longer in other parts of the world), in the past 60 years or so there has been a definite uptick of activity. I suspect that many people do indeed see it as "vegan propaganda."

But it is worth clarifying that *Cowspiracy* is not, generally speaking, a documentary advocating for animal rights. In other words, the documentary is not primarily suggesting that we reduce or eliminate the consumption of animal products in order to reduce the suffering of livestock animals. Filmmaker Kip Anderson certainly seems sympathetic to animals (for example, he is definitely moved when a backyard farmer slaughters a duck in the film), but that is not the primary focus of the film.

Instead, *Cowspiracy* urges us to eat a largely animal-based diet for environmental reasons, especially with respect to the climate crisis.

Similarly, one could eat this way for social justice reasons that have nothing to do with either animal rights or the environment. It has been argued "[that if humans consumed the crops \[i.e. corn and soybeans\] instead of feeding them to animals, the world supply would be enriched by approximately 70 percent more food, which would adequately support another 4 billion people.](#)"

Of course, someone could eat a plant-based diet for all three of these reasons: animal rights, social justice, and environmental. In that sense, it is a win-win-win proposition.

Returning to this comment in the observation that *Cowspiracy* did not show "show gruesome videos from slaughterhouses," the decision to not do so may have stemmed from the fact that

animal rights were not the focus of the documentary. Instead, the horrific consequences that we saw generally had to do with how our planet and its climate are being harmed, rather than animals.

The film "Cowspiracy" immediately made me think back to a steak house I went to that had a sign saying "Hey Vegetarians stop eating my food's food". After watching this film that slogan is even more ridiculous to me because if we used this food's food to feed humans we could feed so many more people using a lot less resources such as land and water. Seeing how much water is used to produce beef upset me because I had recently learned about environmental injustice in California that makes it so a lot of people don't have access to clean running water.

Another apt comment, which makes clear that consuming meat and animal products has wide-ranging implications.

If, as this person notes, we used the crops that we currently used to feed livestock animals to instead "feed humans we could feed so many more people using a lot less resources such as land and water." Although I just made a similar statement in response to the last comment, this person adds an important additional social justice issue to the discussion.

Not only are livestock animals fed food that could feed people, the production of animal products, especially meat (and in particular beef) consumes all sorts of resources, such as land and water. As this person notes, there are people here in California (which is, generally speaking, a wealthy state) who do not have access to clean running water. While there are a range of reasons why this is the case, it is noteworthy that California ranks [#3 in the nation for states that have the most livestock animals](#) and has [more milk cows than any other state](#).

In other words, not only would we have enough food to feed everyone on the planet by a long shot if we fed the food that we grew to people rather than the livestock animals, we also have more than enough water to ensure that everyone in California has access to clean running water.

As I noted in response to the last comment, eating animal products touches on a range of environmental, animal rights, and social justice issues.

Watching this movie, I was incredibly disturbed, not only by our inhumane treatment of animals, but our wastefulness as humans. I knew from my environmental science classes that as you go up the trophic levels, the amount of energy conserved is less and less, so eating meat is not, and never will be, the most efficient way to consume food. That being said I had never really pictured just how wasteful this system really is. We grow all these crops, like grain and corn and instead of feeding it to the 3.5 billion people in poverty and with food insecurity, we feed it to livestock. In addition to the grain, we use 2,500 gallons of water to produce a single pound of beef, a statistic that is literally baffling to me. In a world where we are already running out of resources, we are taking precious farmland, water and food and essentially wasting it, by feeding it to animals which only a small percentage of our population can afford to consume.

Although we have been addressing a number of the issues that this comment touches upon, it nicely brings them together.

First, as this person noted in reference to trophic levels, it is simple science: "eating meat is not, and never will be, the most efficient way to consume food."

Second, well I noted that one and nine people go hungry every night, this is in many ways just the tip of the iceberg, as nearly half of the world's people live, as this person writing the notes, "in poverty and with food insecurity."

Third, the production of animal-based food consumes all sorts of resources. For example, it takes "2,500 gallons of water to produce a single pound of beef."

Fourth, as this person succinctly notes, "In a world where we are already running out of resources, we are taking precious farmland, water and food and essentially wasting it, by feeding it to animals which only a small percentage of our population can afford to consume."

And finally, there is the climate issue. One study has shown that replacing beef with a plant-based diet would reduce greenhouse gas emissions by a factor of 25. Allow me to restate that, plant-based food has just 4% of the climate footprint of beef.