

The future of meat – Part 2

If the decline in the per capita consumption of meat in the US since 1976 along with the consolidation of the packing industry over the last 50 years were the only challenges facing US meat producers, they would have more than enough to worry about.

But, in many ways, those issues are just the tip of the iceberg.

Two decades ago, when concerns about human-induced climate change began to generate significant attention, livestock producers rolled their eyes when environmentalists identified cattle production as significant source of methane release into the atmosphere. From their perspective, cattle have been around for thousands of years—actually about 10,500 years with wild ox grazing the land long before that—so how could they have any significant impact on climate change? After all, they are part of the natural world, unlike the release of methane from oilwells.

The answer is numbers. Depending on the source it is variously estimated that there are between 1 and 1.5 billion cattle in the world, a far cry from the numbers of 1,000 years ago or even 100 years ago. As those numbers have increased, the release of methane has increased as well. At the same time there were forests that removed significant amounts of carbon dioxide from the atmosphere. As cattle numbers increased, the forested areas of the globe decreased.

By way of comparison, let's look at the automobile. When they were first developed, no one thought about the impact of their tailpipe emissions on the atmosphere. People may have coughed as one backfired in their vicinity, but other than that little thought was given to tailpipe gasses.

In the current setting, the automobile industry sees tailpipe emissions as a threat to their future. No longer is it sufficient for the industry to make better catalytic converters. Auto manufacturers are beginning the process of abandoning the internal combustion engine in favor of batteries and electrical motors. One of us even mows his lawn with a battery powered lawnmower—no more noisy air polluting gasoline engine.

While automobile companies have identified a way forward, the process is not so simple for cattle producers. Dairy producers and feedlot operators can install methane digesters to convert manure to electricity, but that is a partial solution.

On the other side of the equation, cattle producers, like the rest of us, are not just contributors to the increase in CO₂E (carbon dioxide equivalent) releases into the atmosphere, they also directly experience the impact of climate change on their operations.

Some areas are drier than they have been in the last hundred years, placing significant stress on the groundwater sources cattle producers depend on to provide water for thirsty animals. In other areas, flash floods kill animals while destroying pastures and feedstock. Some are unlucky enough to face severe drought one year and heavy rainfall events in the next.

From our perspective the time for engaging in the blame game is over. All of us from livestock producers to suburban residents need to begin to assess the way our daily activities contribute to a problem that threatens our way of life.

At this point, we need to remember the law of holes: if you find yourself in a hole, stop digging. That is harder to do than it might seem at first.

What do we do about our cars? How does the need for certain metals to be used to make the batteries threaten the lives of people half a world away?

How do we go about heating and cooling our homes in an environmentally sound way?

What is the embedded energy—and thus the release of greenhouse gasses into the atmosphere—in that item we just bought from a local or online retailer?

Suddenly, it is not as simple as methane from cattle.

We did not consciously make the decision to act in ways that have triggered the release of greenhouse gasses and global warming. We never really thought about it. We just wanted warm homes, reliable cars, a juicy steak, and all the things that make our lives a little more comfortable.

But we (food animal producers and consumers alike) will need to make a cascade of conscious decisions or the world we leave to our grandchildren and great grandchildren will force them to make the difficult decisions we were unwilling to make.

In the process of making these decisions, livestock producers, particularly small producers, will need help from science and public policy to establish transitional paths to more ecologically sound production systems.

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