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Two cows leisurely spend their time on this spring day chewing their cud.

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Chewing their Cud

You just got done eating that big Sunday meal and you retire to the couch to watch a football game. As the sun streams in from a window and the room warms up, you find yourself dozing off as your body switches metabolic priorities and now puts you into digestive mode. Multiple chemicals from the digestive process enter the blood stream and now the body wants to spend time digesting and not working.

Life is so different for cattle than ours. While we spend less than an hour eating, a ruminant animal such as cattle, sheep, and goats spend about 4 hours. The first place our food goes, is into the stomach. It makes up about 17% of our digestive capacity while many forage-consuming animals have a lead digestive organ called the rumen that makes up around 70% of its digestive tract.

After spending four hours of consuming a forage-based diet to fill that large rumen, there isn't time to sleep but still a chance for the body to rest. For about the next four hours it is cud-chewing time. In this process a ball of previously consumed forage is regurgitated or pushed back up into the mouth to be rechewed. During this process the long forage fibers are broken down to smaller more digestible pieces that will again be swallowed and are now more available to the protozoa, bacteria, and fungi that live inside the rumen. They do the actual digestion.

Standing by an animal that is in the cud-chewing mode can be a stinky experience. One of the chemical offshoots of this process is methane. On my farm you could be standing face to face with a goat, scratching its neck when it decides it is time, during this non-stressful event, to chew its cud and then the foul breath emanates from its mouth. Some animals smell worse than others as the various digestive organisms in their guts may be different from others. Also, what they have eaten will also affect the resulting smell as well as genetic difference between animals.

When you hear that ruminant animals are a contributor to global warming due to their methane emissions, it is not what is going out their back end but what is coming out the front that is mostly the problem. Only about 5% of the methane escapes from the rear.

There is a lot of finger-pointing and dueling statistics going on concerning global warming and ruminant animals. There are researchers trying different means to reduce the methane emissions including feed additives, genetics, and diet changes. For example, cattle on corn silage produces more methane than those on alfalfa silage.

The animals on my place show little concern for all this science. While all the humans discuss, argue, debate and frankly, "chew the cud" on this environmental issue, it is now time to spend the next four hours sleeping, only for them to wake up and start the grazing cycle all over again. Life comes first.

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