

News Column

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## PRUSSIC ACID POISONING

While I've made lots of mistakes over the course of my lifetime, there aren't many things on which I'd take a do-over if it was offered. Instead, I consider mistakes to be lessons, with the most expensive lessons being the most memorable lessons.

I took about a \$3,000 hit at the Farm Service Agency office in the early 1980's when I learned I was a "co-tenant" with a neighbor on my great uncle's farm. Two farmers. One set of base acres. They put up the alfalfa and I planted the other crops.

I was oblivious to what was about to happen.

The other farmer tore up the alfalfa and planted wheat and I was suddenly over-planted and out of the government program. Three thousand dollars was a lot of money to me at the time, but I learned to look deeper, ask more questions, and not give up too quickly. I should have pushed to have all of the base acres assigned to the land I was farming – the other farmers didn't participate in the government farm program anyway.

In the livestock business I learned that big pigs get hotter and are more likely to die from heat than are smaller pigs. I learned that the best cow will cross the fence on a frosty spring morning and die from bloat in an alfalfa field. And I learned that some sheep are just looking for a good place to die.

I'm kidding about the sheep. What I have really learned is you can often pick out a sick sheep by looking at their eyes. If you see something wrong, then the sheep needs to be treated

quickly. Once a sheep starts hanging its head, then it is looking for a good place to die.

It wasn't my money, but the picture of three dead cows, each with bellies blown up tight as a drum and two feet pointing toward the sky, will stay with me forever. Those three black cows had crossed the fence onto a neighbor's field where they found tiny Johnsongrass plants and died from prussic acid poisoning.

I suppose I was 12 or 13 years old at the time, old enough to know that dead cows were lost income, and also old enough to sort of understand how prussic acid poisoning worked.

Prussic acid is also known as hydrogen cyanide. Cyanide is what was in the little capsules the spies would take when they got caught by the enemy in the old movies. Instant death.

Cyanide was also the active ingredient in the cartridges my dad used to thin the coyote population in the late 1960's or early 1970's. He loaded these cyanide cartridges in some sort of trigger device stuck in the ground. The cyanide cartridges were baited with an attractant that would cause the coyotes to bite the cartridge and pull on it.

The biting and pulling triggered the release of cyanide directly into the coyote's mouth, and the coyote died soon after. Those contraptions have been illegal for many years now, but they were very effective. Coyotes rarely traveled more than a few hundred feet before dying.

The reason I tell the coyote story is because it gives a picture of what hydrogen cyanide does when a cow encounters it. Cows don't travel far before dying either, if they get a good shot of hydrogen cyanide (aka prussic acid) from eating tiny sorghum plants.

And that's my point for today. I urge anyone grazing milo stalks to be very cautious about turning cows out when there might be small re-growth at the base of sorghum plants. Newly emerged sorghum plants and re-growth (suckers) can be dangerous – they sometimes

contain hydrogen cyanide.

When cows chew on small sorghum plants containing hydrogen cyanide the chewing action ruptures the plant cells and releases the cyanide. A dead cow, or multiple dead cows, is the end result.

The solution is to wait at least a week after a hard freeze before turning cows out on milo stalks. Many cattlemen get lucky and never lose a cow to prussic acid poisoning. Others, like me, will never forget the expensive lesson, and will forever be cautious when grazing milo stalks.

You may think you got that hard freeze last week – and you may be correct – but I would never open the gate without first walking the field to look for sorghum regrowth.

If you have questions, you can reach me at the Riley County Extension Office at 785/537-6350. Or, you can send e-mail to [gmclure@ksu.edu](mailto:gmclure@ksu.edu).

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