

Cover crops as forage for grazing, know the risks and avoid them

By PETER SCHARPE Minnesota Farm Guide

Apr 11, 2019



Jim Paulson of Fieldstone Consulting presenting to local growers at the North American Farm and Power Show in Owatonna.

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OWATONNA, Minn. – In a spring when forage supplies are dwindling and getting scarce, a fall planted cover crop is a great way for a livestock producer to save on pasture grazing. The benefits of cover crops in a cash crop rotation are well known, but do not always include yield bumps or returns on investment. Making use of that forage with livestock might offset the costs – given the right scenario and planning.

“If we have got livestock, either your own or a neighbor’s, something like that, we are more likely to get even better benefits and pay back,” said Jim Paulson of Fieldstone Consulting, during a presentation at the North American Farm and Power Show.

Just as there are multiple ways to include cover crops into a cropping rotation –planting after a shorter growing season crop, inter-seeding during the mid-growing season or late growing season – there are multiple ways to incorporate livestock into that system. Cattle could graze in the fall through winter or in the spring prior to planting. The crop could even be cut and harvested as a baleage crop.

“If we can get two months of grazing in the fall, we bring some livestock in and well that is some pretty cheap gains,” said Paulson. “Then, they also are providing some manure, they are stopping and stirring stuff up and we are getting a healthy breakdown going on.”

There are some risks to turning cattle out to graze a cover crop field. Many of them are associated with the type of plants used and the weather conditions.

Two potential issues are prussic acid poisoning and nitrate poisoning.

“There is a concern about the Sorghum Sudan grasses, if we're doing those in certain situations, we can get prussic acid,” he said. “We see that either in a frost and we get some regrowth or even after a drought, but most likely in a frost situation.”

The same is true for the nitrate poisoning. The risk is increased after a frost or a drought.

“One of the ways we can avoid some of those risks is do not turn hungry cattle into high risk paddocks,” he said. “Obviously, like one day after a frost, that would be potentially bad really, don't graze right after a frost.”

Another way to make use of those higher risk forages is to cut and harvest them. Instead of grazing those fields, pile the forages and let them ferment for two weeks to a full month. The fermentation process will break down the acids and nitrates making it safe for cattle to consume.

Another option is to plant millet varieties in the field instead of the Sorghum Sudan grasses. Millets do not have the risk of prussic acid or nitrate poisoning.

Paulson recommends at the very least, do not plant a straight Sudan grass mix. Dilute that plant with others in the field.

With any type of cover crop planting, it is always best not to turn hungry livestock out into a new, lush green pasture. It is also a good idea to have dry hay available to the livestock, especially for the first few days.

It is in those first few days where the animals are more susceptible to bloat. The risk is increased if plant diversity is low and they overfeed on the green forage. Dry hay can help with the digestion by forming a good rumen mat and preventing bloat.

“Also, there is this potential for something called fog fever,” said Paulson. “I had never heard of it until about five years ago when we were trying to figure out what was wrong with these feeders turned out into a really nice cover crop mix in the fall.”

The symptoms were very similar to pneumonia. Except, all treatment was completely ineffective. The cattle never got better and seemed to be struggling to breath.

The cover crop mix that was planted contained oats, clover, radishes, and turnips – too many turnips.

The tops of turnips contain a high amount of soluble protein and cattle really enjoy the turnip tops. When they were turned out to graze, they went straight for the turnip tops which lead to the fog fever.

“Never put more than 2 pounds of turnips into a mix, this was like 6 pounds of turnips,” he said. “The cattle loved them and there is something about that soluble protein in those cattle that they actually got like a pneumonia kind of a condition.”

This is another issue easily prevented by having a proper diversity of forages in the mix.

“How much diversity, well, I have planted anywhere from 1-21 (plant species), you can have a lot,” said Paulson. “One of the things you do is you spread your risk a little bit, but you also add to your cost. I personally think 9-10 (species).”