Grazing Cover Crops

Nancy Glazier
Small Farms, Livestock
Cornell Cooperative Extension
NWNY Dairy, Livestock & Field Crops Team

I think everyone knows (or should know) the value of planting cover crops – soil health, erosion reduction, and nutrient capture. How does rotational grazing fit with cover crops? It can extend the grazing season for livestock producers and provide gain on fresh forage. But, does it save money? It can be an excellent collaboration between a livestock farm and cash crop farm.

Mike Baker shared with me his data from grazing feeder calves on oats from the late fall 2016. He had a neighboring farm that was intending to make baleage from a field of August planted oats. Conditions were dry and the yield was not there to justify making the baleage, so the neighbor offered it for grazing.

Mike took him up on it. There were 46 weaned calves averaging 484 lbs. that grazed about 75 acres for an average 73 days. They were moved to a new paddock every 3-5 days. The objective was to graze until it was not practical due to weather or no available forage. Average daily gain was 1.6 lbs. Looking at the value of the gain, the gross return was $120/head from solely grazing, based on feeder calf prices at the time. Sound good?

Mike admitted it was a labor intensive project. Two-strand perimeter fence was set up with one-strand interior fence. He initially used polytape and polywire, the tape for visibility for the cattle and deer. Polywire carried the charge much better and switched to that as the season wore on. Calves were familiar with electric fence from summer grazing, though they went through the single strand when they thought it was time to move. Cows would most likely respect the single strand for both perimeter and interior fence. He did not utilize a back fence as he normally does with summer grazing. Water was hauled to every paddock. It was a dry fall so mud was not an issue for getting the water out to the field or pugging. An alternative energy source was needed for the fence energizer. Mike used a battery for this and needed to keep track of the charge. A solar charger would have worked.

Feeding hay was eliminated for the additional 73 days of grazing. With 46 calves at an average weight of 541 lbs. (average of start and end weights) fed 3% body weight per day, 27 tons on a DM basis would have needed to have been fed. This does not include any wasted hay from storage or feeding. There was no manure to clean up, haul, or spread if they had been fed in confinement.

The farms will need to agree on a price, whether based on per head per day or acreage. In this scenario Mike paid $0.25/head/day, about $1850.

Benefits for the cash crop farm? Grazing the oats reduced the possibility of a heavy mat on the field in the spring. In most years, oats will winterkill, but could accumulate some significant fall growth. Removing this may be a benefit depending on spring tillage and crop rotation. Trampling could be a concern with extensive grazing (no rotation) or leaving cattle too long in one paddock. Keep in mind the original purpose of cover crops: the soil needs to remained covered for the reasons listed above. Don’t graze too short, leave 3-4” residual. If the original intent was grazing it would have been beneficial to
add triticale for continued plant growth. What about the benefits of animal impact on soil health? This includes feces, urine, trampling and salivation. This is a topic for another article!

This is a brief overview of an opportunity. It may not work every year and there are many cover crop options for grazing. A key point is remaining flexible and being able to adapt to what is available in the current year.