

Best Management Practices for Fall Grazing Cover Crops

Comments by Cooperators

Establishing cover crops following grain production is a proven tool to protect soil, reduce erosion, improve water quality and enhance soil quality. Extending the fall grazing season with cover crops has the potential to reduce feed costs but has challenges due to weather risk. Eighteen producers who have fall grazed cover crops for two or more years were interviewed about their experiences. This is a compilation of their comments organized according to topic.

General

- Six producers emphasized the importance of planning when it comes to grazing cover crops, while many others implied the same concept. They indicated it is important to have a plan B in place just in case plan A does not work. Many stressed that Mother Nature is in control. Some years grazing works great and other years not so great.
- All producers suggested the need to be flexible when integrating grazing cover crops into a row crop operation. That flexibility may need to come from planting cash crops later in the spring to allow for spring grazing or planting shorter season hybrids or varieties to better accommodate fall grazing.
- Six cooperators encourage first time cover crop grazers to start small but “just do it.” While fall grazing may not be a success every year, in the long run they feel it has been beneficial. They also encouraged new users to not give up if the first year doesn’t work well.

Agronomic

- Producers shared it is important to double check pesticide labels, especially herbicide labels to make sure it is legal to graze the cover crop. Not only do you need to check the crop rotation restrictions, but you also need to check for any grazing restrictions. This might require changes to be made with the intended herbicide program or cover crop species selection.
- Thirteen said the biggest key to success is planting the cover crop as early as possible whether that be via aerial or interseeding into the cash crop. Others prefer to drill the cover crop and will plant a shorter season hybrid or variety, and many took advantage of where they had chopped corn silage to establish cover crops early.
- When it comes to planting methods, there has been mixed success with aerial seeding. It all depends upon the conditions at the time of aerial seeding and getting good seed-to-soil contact. Most producers had better luck aerial seeding if they could time it right before a rain. Timing of aerial or broadcast seeding into a standing cash crop should be based on crop maturity, rainfall pattern, and calendar date (ideally August 15 to September 15). Try to aerial seed when the lower leaves have ‘fired’ up to the ear leaf in corn or when the leaves first begin to yellow in soybeans. Aerial seeding in dry conditions was not recommended by the producers in the survey. Most producers felt that drilling gave the most consistent stand, but biggest downfall with drilling is that it pushes the seeding date later.
- Most of the producers recommended seeding as early as possible but no later than the first part of October if planning to graze the cover crop, especially in the fall or winter. One producer made that comment that “one day in the fall is like one week in the spring.”
- With cover crop species selection, it is important to consider your goals. Cover crop species selection should also involve considering the animal’s nutritional needs, when grazing is going to be done (fall or spring), and limitations by pesticide label restrictions.
- Spring cereal grains and winter cereal grains were the most popular cover crop species used by producers. Spring cereal grains like oats or spring barely help to give more forage in the fall than the winter cereal grains like winter wheat, triticale, or cereal rye.

Continued on back

Agronomic (cont.)

- Nine of the producers have tried mixing in radishes or turnips with a small grain. There were mixed successes. The earlier the seeding date, the better the success with including a brassica in the mix. None reported any animal health concerns while grazing.
- Two tried using a legume like crimson clover in the mix, but they had little success and wouldn't recommend using a legume.
- Three have modified their cropping system to include summer annuals either after cover crops or before seeding cover crops.
- Seeding rates used by producers varied depending upon seeding methods and what species they planted. In general, producers said they used higher seeding rates if they broadcast or aerial seeded the cover crop, and they used lower seeding rates if they drilled the cover crop.
- The cost of cover crop establishment (seed + seeding method) ranged from \$20/acre to \$45/acre.
- Twelve do not fertilize the cover crop, while 6 of the producers do. Of the 6 producers that do fertilize, 4 apply manure and 2 apply some commercial fertilizer. Rates applied varied.
- Four producers suggest pulling livestock off when conditions become wet to avoid compaction issues or having a sacrifice area to put the livestock.
- If using an overwinter cover crop, producers recommended using a herbicide to terminate in the spring. If grazing in the spring, it is recommended to wait a few days after pulling the livestock off to allow the cover crop to grow back some before terminating with a herbicide.

Grazing

- Fifteen said they do not plan on any fall grazing and have adequate stored feed as a backup in case of bad weather. Some indicated they planned to sell excess stored feed, others shifted excess feed to other cattle enterprises, but all said weather was too risky to not have a backup feed supply.
- Four rotationally graze cover crops and stover; 14 continuously graze although several indicated they move from field to field so are essentially rotationally grazing by field. Rotating residue and cover crop fields provides additional dry matter in the ration and a more consistent quality diet.
- Six cooperators said planning ahead is important, especially what fields to seed to cover crops to provide supplemental forage, adequate water sources and ease of cattle movement.
- Six cooperators mentioned the importance of forage dry matter to complement the cover crop. That might be corn stover, waterways, grass fence lines, headlands, or simply providing additional forage. Due to the high water content of cover crops, dry matter is needed to slow passage rate and balance the diet. Cover crops tend to also be high in crude protein so is a nice companion to low quality forages improving nutrient intake and rumen digestibility of fiber.
- Two suggested to start grazing early, and don't let the cover crop growth get ahead of the cows. They suggested to start grazing when the forage is about 6 inches tall, or as soon as the forage is rooted enough to prevent pulling out when grazed.
- Another key consideration identified was fencing. Cows or pairs can usually get by with less fencing, but good fences are needed if grazing feeder calves that may have less respect for fences and are new to a field.

Some of the benefits of fall grazing cover crops identified include reduced feed costs, reduced labor while cows are grazing compared to providing stored feed, reduced volunteer corn the following year, in addition to the benefits to the environment and soil quality.

Prepared by Denise Schwab and Rebecca Vittetoe, November 2018

Iowa State University Extension and Outreach does not discriminate on the basis of age, disability, ethnicity, gender identity, genetic information, marital status, national origin, pregnancy, race, religion, sex, sexual orientation, socioeconomic status, or status as a U.S. veteran. Direct inquiries to the Diversity Officer, 515-294-1482, extdiversity@iastate.edu.