

Feedlot Newsletter

Polk County | 2023

Grazing Small Grains

Small grains (wheat, rye, oats, and barley) do not have to just be a grain crop in northwest Minnesota. Grazing of winter wheat and winter rye during the winter months is a common practice across the southern plains. Growing winter rye or winter triticale, a cross between durum wheat and rye, for haylage or hay is gaining traction across the Upper Midwest. Grazing volunteer stands of harvested small grain fields, or fall seeded small grains for cover crops, makes for excellent fall grazing in Minnesota. As cover crops, spring wheat, spring barley, and oats, can be seeded any time after the previous crop has been harvested if sufficient soil moisture is available. No-till seeding greatly improves establishment when soil moisture is limited. Winter wheat and winter rye that you intend to keep for grain the next season should not be seeded before September 1st. Ideally you should wait to seed until September 15th to avoid problems with a few insect pests and fungal diseases that will use the winter wheat and winter rye to overwinter.

It's recommended that the small grain stand reaches the 3-4 leaf or tillering stage before grazing. During the tillering stage the seedlings are putting down crown roots. The crown roots anchor the plants and help the individual plants from being uprooted during grazing. Spring wheat, barley, and oats will follow their normal crop development as long as freezing temperatures do not cut the growing season short. With enough heat units, the crop will reach heading and, in some years, even grain fill. Cutting the crop for haylage at the boot stage makes for a very high-quality feed. Winter wheat and winter rye will also continue to grow but will not elongate and reach the boot stage in the fall. Instead, both crops just keep producing new leaves. If you plan to keep the stand for grain, grazing needs to be halted a minimum of two weeks before the first killing frost to allow the crowns to build up some reserves to weather the coming winter. Oats have several advantages over spring wheat and spring barley for fall cover crops and grazing. Oats are the most tolerant to seeding deeper than the ideal depth of 1 to 2 inches and therefore easier to seed into moisture. Oats are also the most competitive with weeds that emerge simultaneously, and it is not a host to Hessian fly. Be aware that crown rust can greatly reduce tonnage and quality in oats.



Upcoming Deadlines

NRCS—Natural Resources Conservation Service

Local Contact: Laura Schnapp | District Conservationist—218-563-2475 | laura.schnapp@usda.gov

- Conservation Stewardship Program (CSP) General Signup: **January 12th 2024**
- Conservation Reserve Program (CRP): Continuous Signup is Ongoing
- Environmental Quality Incentives Program: Accepting Applications Year-round

East Polk SWCD

Local Contact: Jenna Simonson | District Technician—218-563-2777 | wiersma.eastpolk@gmail.com

- Tree Orders due: **February 16th 2024**
- Minnesota Agricultural Water Quality Certification Program (MAWQCP): Accepting Applications Year-round

Extending the Grazing Season

Grazing Corn Residues

Grazing remaining residue following corn harvest is one way to extend the grazing season and lower feed costs. Winter feed costs are the largest expense and grazing corn residues offers a way to significantly reduce those costs. According to the Iowa State University Beef Cattle Center, for every acre of corn residues grazed, approximately a ½ ton of hay will be saved. Grazing crop residues will not impact crop yield the following year. Also, adequate residue is left on the field to reduce soil erosion.

By grazing crop residues, you are utilizing an abundance of forage that would otherwise be unused. For every bushel of corn harvested, typically 50 pounds of residue is left in the field. Corn residue includes the stalk, leaf, husk and cob, and downed ears. Cattle are selective grazers, and will eat any leftover corn first, then the leaf and husk material. They will consume only a limited amount of coarse stalk. It can be expected for cattle to consume 25% of available residue after selection and loss from weathering and trampling. The University of Nebraska has developed a spreadsheet tool that will calculate the acres of crop residue needed for the cow herd. They suggest 1.5 animal unit (1000 lbs of body weight) per months (AUMs) per acre is an appropriate stocking density on crop land that yields near 240 bu/acre. This would be the equivalent of one average beef cow per acre per month. Corn residue is low in protein, most minerals, and vitamin A. Dry beef cows in mid-gestation that are in good flesh are the best class of animals to utilize crop residues as they have lower nutritional requirements. Be sure to provide a vitamin and mineral supplement when grazing crop residues. As plant quality decreases, protein and energy supplementation will be needed.



Photo by Tom Fisk

Use of Cover Crops for Grazing

The use of cover crops prevents soil erosion, increases soil organic matter and microbial activity, improves soil water retention, recycles nutrients, and decreases soil compaction. Cover crops also provide an excellent way to extend the grazing season. In Minnesota, commonly used cover crops for grazing include cereal rye, winter wheat, and annual ryegrass. Winter legumes such as red or white clover, berseem clover, and field or winter peas can provide high quality forage for grazing. Legumes provide the additional benefit of nitrogen fixation. Brassicas, such as turnips, radishes and sugar beets, are high quality, deep rooted and grow in dry conditions.

Cereal rye is a great choice for those needing fall and early spring grazing. Cereal rye also has the advantage of growing under a wide range of soil conditions. Wheat produces less fall forage than cereal rye in the fall but matures later in the spring extending the grazing season well into April. Annual ryegrass is a great fall and winter cover crop to graze if planted in early September to ensure establishment. It has an extensive root system that establishes well in most soil types.

Brassicas makes excellent feed and produces highly digestible fiber. This highly digestible forage has a rapid rate of fermentation that can lead to a buildup of gas that may cause bloat. Using feed additives such as poloxalene or ionophores, as well as providing long stem roughage, can aid in the prevention of bloat.

Grazing can begin after cover crops grow six to eight inches tall for the grasses and above ten inches for brassicas and legumes. Ideally, livestock should be moved twice weekly. A good option is to strip graze cover crops. With strip grazing, a set amount of forage is allocated at a time which meets the needs of the livestock. A prime example of a local cattle and cover crop operation is Trinity Creek Ranch located near Red Lakes Falls, MN. They graze cover crops in strips, moving cows every two to three days. As winter weather worsens, they give cows access to bales set out in pastures and have successfully kept their cattle grazing year-round.

When grazing cover crops, do not overgraze an area, making sure to leave at least four inches of plant cover. Trinity Creek Ranch's rule of thumb is to have the cattle grazing 50% of the plant and then leave 50% intact to prevent the death of the plant's roots. Once animals have grazed an area to this height, cattle should be rotated to another area to optimize future regrowth. A good management practice is to observe the amount of ground cover frequently for overgrazing or under grazing and adjust rotation of cattle accordingly. Application of grazing practices on cover crops can aid in the distribution of manure and increase soil organic matter. In order to reduce animal compaction, plan and utilize a specific area during wet conditions.

Invasive Weeds

Restrictions

- Wild Parsnip, Leafy Spurge and Common tansy are all Minnesota Department of Agriculture Prohibited Noxious Weeds on the Control List meaning that efforts must be made to prevent the spread of seeds or other propagating parts. Additionally no transportation, propagation, or sale is allowed.

What this means:

- Sale of Hay containing any of these weeds is prohibited; which can lead to economic loss for a producer—if hay cannot be sold/ transported or even cut

Wild Parsnip

Toxic to:

- All livestock
- Cattle are especially prone—causes decrease in appetite
- Horses

Symptoms:

- Photosensitivity—burns and blisters on the skins—usually around muzzle and nose of animals
- Eye injury and in some cases blindness
- Decreased appetite
- Mouth sores due to blistering



Leafy Spurge

Toxic to:

- Most Animals
- Cattle
- Horses



Sheep and goats are used to control the Leafy Spurge and Common Tansy through prescribed grazing—both sheep and goats have a higher tolerance and resistance to toxicity caused by the noxious weeds and are rarely affected by it.

Symptoms

- Reddening, swelling and blistering of the skin may occur if skin comes in contact with the milky sap. Blindness could occur upon contact with the eyes.
- Excessive salivation, vomiting, colic and diarrhea may occur in animals

Caution:

Sheep will lose weight if on a diet exclusively consisting of leafy spurge. Leafy spurge does not provide a nutritious diet by itself.

Common Tansy

Toxic to:

- Cattle
- Horses
- Llamas & Alpacas



Symptoms

- Skin irritation or contact dermatitis
- Consumption by cattle over time will cause liver damage or abortion
- Can cause neurointoxication, cardiac and respiratory depression, gastritis, convulsions, and death



East Polk SWCD
240 Cleveland Ave
PO Box 57
McIntosh, MN 56556

Phone: 218-563-2777
www.eastpolkswcd.org



Contacts

Local County Feedlot Contacts

East Polk SWCD
PO BOX 57
McIntosh MN 56556
218-563-2777



MPCA Area Offices

Detroit Lakes:
218-847-1519

Metro:
651-296-6300

Brainerd:
218-828-2492

Toll-Free Number:
800-657-3864

Duluth:
218-723-4660