FALL '24

NPFA UPDATE

A QUARTERLY NEWSLETTER FROM THE NORTHERN PLAINS FORAGE ASSOICATION

WHO ARE WE?

NPFA is a grassroots association open to forage growers, buyers, industry partners, and anyone with an interest in forages. We are creating a networking and education group focused on annual forages/cover crops, alfalfa, silage, grazing systems, and more!

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WHERE TO FIND US

@npforage

Email: npforage@gmail.com
Membership Sign-Up:
https://sdstate.questionpro.com/NPFA

THE BEST CROPS TO PLANT THIS FALL FOR SPRING FORAGE

By Justin Fruechte, Product Expert with Renovo

Fall planting time is here! This season can be short lived and a bit more inconsistent from a moisture standpoint when compared to spring, but when planting conditions are good – you need to jump on the opportunity to take advantage of early spring moisture and move your harvest ahead the following summer.

The forage world has taken note of the benefits of fall planting and placed an emphasis on improving winter annuals to thrive in these conditions. As producers, we have more high-quality options than ever to select from.

Triticale is one of the crops that has seen vast improvements over the last decade. It was originally developed by crossing cereal rye with duram wheat – a cross that made it great for drought tolerance and winter hardiness. Personally, my favorite attribute of the crop is the fantastic quality. Research and development placed an emphasis on increasing leaf to stem ratio, giving the plant higher digestibility as a feed and better standability for harvest ease. Also, many of the varieties are now completely awn-less, so you don't need to worry about lump jaw or abscesses when feeding, like you do with rye or wheat.

NPFA ANNUAL MEETING DEC. 6 IN BRANDON, SD!

Join us for the 2nd annual NPFA annual meeting in the Sioux Falls area! We are excited to bring you a great forage speaker line-up, networking opportunities, and a brief business meeting. Speakers include Dan Putnam, Glen Arnold, Pete Sexton, and more! We'll discuss understanding forage quality info, relay cropping with forages, liquid manure applications and many more topics. Please consider coming and inviting your friends and family- the meeting is open to everyone! *We are currently working on promotion and logistics- please check our Facebook page for updates and registration!

NPFA UPDATE

"BEST CROPS TO PLANT THIS FALL FOR SPRING FORAGE" CONT'D

Because triticale is such an innovative crop, we sat down for a conversation with Racey Padilla, Small Grains Research Director and triticale breeder for TriCal Superior Forage on the Roots and Ruminants podcast. TriCal Superior Forage has the largest triticale breeding program in North America, and Padilla's farmer-first perspective fuels his breeding efforts. He's always trying to improve the stress tolerance and feed quality of the crop. Head to MillbornSeeds.com/Roots-Ruminants to hear Padilla talk through the history and improvements that have been made to triticale over the years.

The other winter annual that has gained momentum in the Western Plains is forage winter wheat. This plant is a true winter wheat, so if you also grow wheat for grain, it's a great option to alleviate volunteer issues that could come from other winter annuals. Montana State University has focused on improving forage winter wheat and most recently released MTF 1435, a very tall, awn-less variety that boasts high grain yields. This summer's reports of harvested fields were outstanding. They were seeing yields at 3-4 ton DM/acre and crude protein levels nearing 12%.

Generally, fall planted forages will be ready to harvest two to three weeks sooner than a spring planted forage. You're fast-tracking your farm's summer forage plan next spring by planting these quality winter annual options now, and it allows the ideal time to double crop with a warm season annual forage. Utilizing winter annual species that are higher yielding and higher quality, like triticale and forage winter wheat, will return a higher value to your livestock operation.

NPFA is in the process of developing a website! Stay tuned to our Facebook page for details and a release date.

NPFA BOARD MEMBERS

- President: David Elliot, Drumgoon Dairy, Lake Norden, SD
- Vice President: Jeff Jackson, Croplan Alfalfa and Forage Specialist/ forage producer
- Treasurer: Mark Rogen, Boadwine Farms, Baltic, SD
- Mike Bettle, Dellait Forage Consultant & Dairy Nutritionist
- Justin Fruechte, Renovo Seed, Director of Sales/ forage producer
- Paul Hahn, CHS Agronomy Sales Representative
- Eric Tieszen, producer, Canistota, SD
- Al Lenhart, KWS Cereals Regional Sales Rep/forage producer
- David Skaggs, Agrovive Biologicals, Dairy Product Manager
- Aaron Swanson, Forage Producer, Lake Norden, SD

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WINTER GRAZING STRATEGIES

By: Justin Fruechte, Product Expert with Renovo

Two of my favorite times of year are getting pairs on pasture in the spring and turning cows on corn stalks in the fall. As cattlemen, the seasons dictate our actions, and these turnouts seem to be representations of changing seasons. I love the sense of gratification and contentment on both the cow's and my part when the first corn cob is rolled around in their mouth. Without question grazing stalks is the most popular fall/winter feed strategy, but I want to highlight a few other less popular ideas.

Fall rains in much of the Midwest have pushed new growth on forage fields. This late growth may have been harvested as hay or silage, but if not the practice of swath grazing could be used. Swath grazing is simply swathing the forage into a windrow and fencing off allocated windrows to graze in the winter. Most commonly warm season annual forages such as millets, sorghums and sudans are used this way in northern climates. These plants are harder to dry and cure out for hay which has led producers to leave the swath and graze it when winter freezes up. This method can lower feed costs by eliminating baling, hauling, and daily feeding. It can also be a great method to have manure spread on your field without having to haul it. The drawbacks to swath grazing would be fencing and unexpected quality issues to the windrow. Excessive fall rains can cause spoilage to heavy windrows when weather isn't conducive for proper curing. A common misbelief about swath grazing is that it cannot be done with high snow fall. This assumption has been proven wrong by many producers allowing their cows to dig through feet of snow to get their feed in the swath.

If you'd like to minimize the risk of spoilage in the windrow, go ahead and bale it but leave the bales in the field. This method has been termed as "bale grazing." Strategically placing the bales throughout the field, and then fencing those allocated bales for allotted time periods allow the cattle to feed themselves. This too, cuts feed costs by eliminating the time and resources it takes to feed your cows every day. Waste, however, does increase with this method but can also be used to your land's advantage. Promoters of bale grazing use the tactic to increase organic matter and soil quality on poor areas of fields. The litter and manure concentration can drastically boost the future productivity of that land which may in turn offset your loss in hay waste.

We all realize that when the cattle remain in fields grazing, herd health is better and feeding expenses are lower. Balancing the efficiencies of feeding mechanically harvested feeds versus the utilization rates of grazed feeds becomes the challenge. As feed costs rise utilization rates become more relevant. Keeping utilization rates high using lower costs mechanically harvested feeds becomes the ultimate challenge to keep winter feed costs in check this year.

VIRTUAL FORAGE FIELD DAY RECORDINGS AVAILABLE

SDSU Extension, Nebraska Extension, the Northern Plains Forage Association and I-29 Moo University hosted a virtual forage field day on August 6, 2024. If you weren't able to join us, check out the recordings online! The entire playlist is now available to you at no cost! Visit https://extension.sdstate.edu/agriculture/crops/forage to view presentations from the day!

Thanks to all who assisted, spoke, or attended! Our online edition was so successful, **we've decided to continue the program with a free winter webinar on December 10 at 7pm**. Watch our Facebook for updates and registration information!

NPFA UPDATE

2024 SDSU SOUTHEAST FARM FORAGE VARIETY TRIAL RESULTS RELEASED

Crop performance testing results are released annually through the activities of SDSU Extension and the South Dakota Agricultural Experiment Station at SDSU. The Southeast Research Farm near Beresford, SD recently released winter forage rye and triticale results. These trials are replicated and randomized, creating the most unbiassed environment possible. To see this year's results visit https://extension.sdstate.edu/forage-variety-trial-results and click on the trial of your choosing. Keep an eye out for the 2024 alfalfa variety trial results coming soon!

PRUSSIC ACID POISONING

By: Ruth Beck, Warren Rusche, and Sara Bauder-SDSU Extension

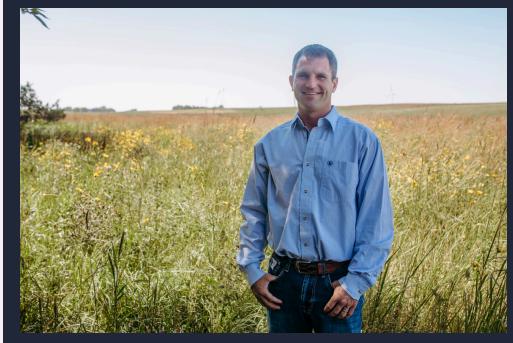
As the first frost date approaches, producers often have concerns about the risk of prussic acid poisoning in livestock. Certain forage plants, especially sorghums and related species are associated with an increased risk of death loss because of prussic acid poisoning. Understanding how poisoning occurs and what factors are involved in contributing to those conditions will help producers take management steps to minimize their risk.

Prussic acid, also known as hydrocyanic acid or cyanide, is a rapidly acting, lethal toxin. Prussic acid inhibits oxygen utilization by the animal at the cellular level resulting in suffocation. Ruminants are more susceptible because the rumen microbes have enzymes that release the prussic acid in the digestive tract. Death often occurs within minutes of exposure.

Some plants, particularly sorghums and sudangrass, accumulate cyanogenic (prussic acid producing) glucosides in the outer tissue layers of the plant. The enzymes that would trigger the prussic acid production and located in other plant tissues, specifically the leaf.

BOARD SPOTLIGHT

My name is Justin Fruechte from Ward, SD. I have worked in the forage industry for 14 years with Millborn and Renovo Seed and am currently the Product Expert. My wife Crissa and I have five children and a farm that raises Katahdin sheep and Red Angus Cattle. I've been passionate about the forage industry since I was in high school watching my Grandpa fall graze cows on turnips and sudangrass. I enjoy growing alternative forages and quality livestock, coaching and watching wrestling, and judging and showing sheep. The Northern Plans Forage Association is a great group of forward thinkers that ties together a wide array of operations.



"PRUSSIC ACID POISONING" CONT'D

Under normal conditions these is no contact between these compounds and therefore no risk of poisoning. However, any factor that causes the plant cells to rupture and these compounds to combine can lead to prussic acid release. The damage could be caused by frost and freezing, or anything else that leads to cell rupture such as crushing, trampling, chewing, or chopping.

Cyanogenic glucosides that can lead to prussic acid formation are found in the greatest concentration in the leaf portion of young, rapidly growing plants. New regrowth following drought, grazing, or any other form of environmental stress is often dangerously high in prussic acid. Plants grown in soils with high levels of nitrogen, but low levels of phosphorus and potassium are also a greater risk.

Cyanide is a gas and will gradually dissipate as frosted tissues dry. Waiting seven days or more for gases to completely leave plant tissues greatly reduces the risk of loss under grazing conditions. Prussic acid content also decreases greatly during hay curing or the ensiling process. Most losses in grazing conditions occur when hungry or stress animals consume young plants or regrowth.

It is difficult to give precise answers as to what levels might cause problems due to variation between areas of a field, from one sample or plant to another, and because of differences in amount (and speed) of forage intake. These values should be interpreted as general guidelines.

Table 1. Level of prussic acid in forage (dry matter basis) and potential impact on livestock.
HCN, ppm (dry matter basis)------Effect on Livestock
0 - 500----------Generally safe
600 – 1000----------Potentially toxic, should not be the sole source of feed
Greater than 1000-3---------- Dangerous to cattle, do not feed

Here are some suggested management steps to reduce the risk surrounding grazing or feeding forages with the potential for prussic acid production.

- Do not graze sudangrass, sudangrass hybrids, or sorghum until the plants are at least 18 to 24 inches tall.
- Be especially cautious grazing short regrowth that occurs after grazing, harvesting, or a light frost.
- Never turn out cattle that are hungry.
- Do not graze susceptible forage crops following a series of light frosts. Wait 7 to 10 days (or longer) before grazing under those conditions.
- Defer grazing after a killing frost until the plant has dried, usually about 7 days.
- Harvesting as hay or silage usually results in lower concentrations of prussic acid compared to fresh samples. Test any suspect hay or silage samples before feeding.

NPFA UPDATE

THANKS TO OUR 2024 ASSOCIATE MEMBERS

Being a new, grassroots organization, we have relied heavily on event sponsorships, goodwill, volunteers, and associate members. We would like to specifically recognize our associate members who have gone above and beyond to support the Northern Plains Forage Association in its infancy! If you would like to see your business or operation listed here- contact us!

Valley Ag Supply Inc.

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UPCOMING REGIONAL FORAGE-RELATED EVENTS

- World Dairy Expo; Oct. 1-4@ Madison, WI
- NPFA Annual Meeting; Dec. 6 @ Brandon, SD
- Managing Soil: Maximizing Profit; Dec. 10 @ Wagner, SD
- Forage Field Day 2.0 Webinar; Dec. 10 @ 7pm (watch NPFA FB for details)
- Feedlot Forum 2025; Jan. 14 @ Sioux Center, IA (email doranb@iastate.edu)
- MFA Wisconsin Dells Symposium; Feb. 17-19 @ Wisconsin Dells, WI

*This is the best list available at time of publication- if you would like a forage-related event listed here, please contact Sara Bauder at sara.bauder@sdstate.edu.