

NPFA UPDATE

FALL '25

A QUARTERLY NEWSLETTER FROM THE
NORTHERN PLAINS FORAGE ASSOCIATION

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.com



@npforage

Email: npforage@gmail.com

TIPS ON PUTTING UP SILAGE SAFELY AND SUCCESSFULLY

By: Ron Kuber, Connor AgriSciences- adapted by Mike Bettie

This 12 step system for silage production is authored by and reproduced with the permission of Ron and Connie Kuber, owners of Connor Agriscience and developers of Sealpro Silage Barrier Films. They have been giving the forage industry advice for 25 years, so I see no point in altering any of the advice given on their website. Thank you Ron and Connie for letting us reproduce this for our members information.

1. EVALUATE -

- Last year's silage - is it "great" or just "good enough"?
- Are your animals healthy, productive, and converting feed into milk or meat at their genetic best?
- What worked - how can you improve? Seed selection, growing practices, harvest dry matter (DM), inoculant choice and application, kernel processing, chop length, packing density, sealing issues, safety.

2. PLAN HARVEST -

- Consider digestibility - what levels, at what cost, and what will it take to attain them?
- Estimate tonnage per field - helpful for ordering inoculant and sealing, estimating fill rates, packing equipment needed, and personnel.
- Order fields by probable maturity and dry matter.
- Set goals for DM, chop length, kernel processing, packing density, inoculants, and covering. Remember that as packing density increases, dry matter losses decrease. How can this be achieved?
- Match the delivery of silage to the packing capacity of your pack tractors. Allow no more than one ton of silage delivered per hour for every 800 pounds of pack tractor weight. For example, one pack tractor of 4,000 pounds divided by 800 equals 50 tons per hour of balanced delivery. This translates to approximately six to eight semi-truck dumps per hour.
- Build the pile in thin 4-inch to 8-inch layers at a time, using a long shallow ramp.
- Slow the pack tractor down to a crawl, no wheel spinning
- Pack the ramp and follow by packing perpendicular to the ramp as the pile is being built. Forward, reverse, repeat on this step, with tires stopping just at the edge to maximize tractor weight on the pile.
- Tour the storage area. Set pile or bunker area sizes and location. Don't think you have enough room for safe drive over piles? Can you clear weeds, old equipment, etc. to find room?

NPFA ANNUAL MEETING DEC. 5 IN BRANDON, SD!



Join us for the 3rd annual NPFA annual meeting in the Sioux Falls area! We are excited to bring you a meaningful talks, networking opportunities, and a brief business meeting. Our committee is working on an awesome speaker line-up you won't want to miss! Please consider coming and inviting your friends and family- the meeting is open to everyone! *We are currently working on promotion and logistics- we will announce registration opening; please check our Website and Facebook page for updates.

“TIPS ON PUTTING UP SILAGE SAFELY AND SUCCESSFULLY” CONT'D

3. GATHER YOUR TEAM - If you hire it out, meet with silage chopping and/or covering contractors. State expectations for:

- Harvest timing, inoculant procedure, fill rate, extra equipment and personnel needed; especially for packing
- Test procedures and parameters for DM, kernel processing and particle size (chop length)

4. PREPARE -

- Equipment, pads, and tires and/or gravel bags
- Note seed variety growth and progress to plan for next season's planting

5. ORDER - Silage inoculant and pile or bunker sealing film (if you cover your own).

6. SAFETY -

- Host an all-employee silage safety meeting. Issue safety vests or other bright-colored clothing if not already an SOP, and make sure employees know to wear them at all times.
- Emphasize communication, eye contact in the field and at the pile or bunker.
- Practice self-care: eat and rest well during off hours, and set expectation for no drug or alcohol use.
- Notify neighbors of trucks and increased traffic.

7. MONITOR -

- Set up to test hourly: DM, kernel processing, particle size (chop length).
- Too wet or dry? Stop for the day, adjust field order, and/or inoculant choice as needed.
- Correct chopper kernel processing and particle size settings as needed.

8. START! - If you use a covering contractor, call now. Estimate when covering should take place and update as needed. Be aware that a fresh crew first thing on a calm morning may be better than a tired crew on a windy night.

9. SEAL - Seal piles or bunkers as soon as possible, overlapping sealing film and leaving at least a 3-foot film "hem" to seal the edges.

10. MANAGE - Practice safe, smart face management after opening the silage pile or bunker.

11. EVALUATE - What steps did you take? How did harvest go? What worked? What would you do differently?

12. PLAN FOR NEXT YEAR - Begin researching next year's seed corn options and note any product or program improvements to be made.

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In collaboration with

IOWA STATE
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2025 Forage Webinar Series Continues

Wednesday, September 17, 2025 | 7 pm – 8:30 p.m. CDT

Agenda

7:00—7:30 Getting A Handle On Weeds In Hay, ID And Control—Wess Everman, ISU

7:30—8:00 Alfalfa Quality Trends, Targeted Cutting Strategies and Frost Cutting—Jeff Jackson, CROPLAN

8:00—8:30 Hay Market Outlook—Luke Schubert, Schubert Auction Service, Pierz, MN

8:30 Q&A and adjourn

There is no fee to attend the webinar, but you must register at least one hour prior to the webinar at:

<https://go.iastate.edu/FORAGESEPTEMBER2025>

For more information contact:

Fred M. Hall, 712-737-4230 • Jim Salfer, 320-203-6093 • Ben Beckman, 402-254-6821 • Sara Bauder, 605-995-7378

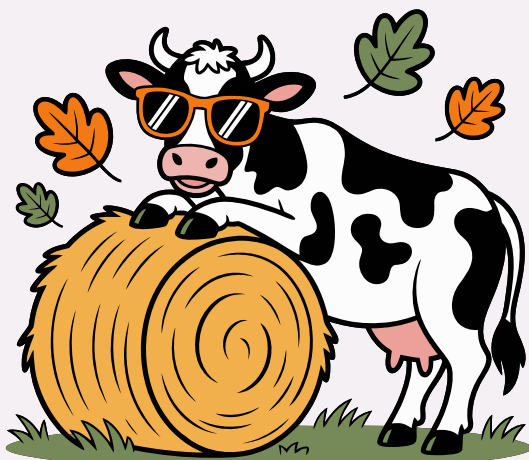
FOR MORE INFORMATION AND TO VIEW ARCHIVES:
[I-29moou.com/webinar](https://i-29moou.com/webinar)

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JOIN IN THE FUN FOR OUR FIRST FALL FORAGE DECORATING PHOTO CONTEST!

WE'RE TRYING SOMETHING NEW!

- PICK A FORAGE (BALES, PILES, SILOS, ETC)
- CHOOSE YOUR FAVORITE FALL THEME TO DECORATE IT WITH AND SHOWCASE YOUR FORAGE!
- TAKE A PHOTO OF YOUR DESIGN
- SUBMIT YOUR PHOTO TO US **BY OCTOBER 15 (SIGN UP INFO COMING SOON)**
- PHOTOS WILL BE JUDGED BY NOV. 15
- WINNERS RECEIVE A PRIZE AND GET EPIC BRAGGING RIGHTS!
- ALL ENTRIES WILL BE POSTED ON OUR FACEBOOK PAGE
- GET YOUR IDEAS FLOWING- MORE DETAILS REGARDING REGISTRATION, RULES, AND PRIZES WILL BE SENT OUT SOON AND POSTED ON OUR WEBSITE!



PRUSSIC ACID PRECAUTIONS

By: 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.

Under normal conditions there 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.



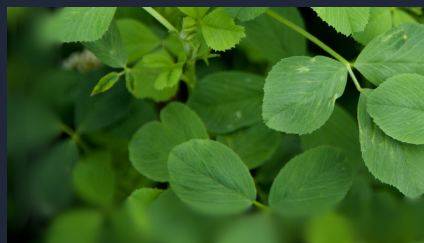
Cyanogenic glucosides that can lead to prussic acid formation are found in the greatest concentration in the leaf portion of young, rapidly growing plants. New regrowth following drought, grazing, or any other form of environmental stress is often dangerously high in prussic acid. Plants grown in soils 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.

CURRENT 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, Simplot 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
- Colin Geppert, Forage Producer/ Sales Account Manager, Hubbard Feeds



“PRUSSIC ACID PRECAUTIONS” CONT'D

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 7-10 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.

TABLE 1. LEVEL OF PRUSSIC ACID IN FORAGE (DRY MATTER BASIS) AND POTENTIAL IMPACT ON LIVESTOCK.

HCN, ppm (DM basis)	Effect on Livestock
0-500	Generally Safe
600-1000	Potentially toxic, should not be the sole source of feed
Greater than 1000	Dangerous to cattle, do not feed

HAVE YOU CHECKED OUT OUR NEW WEBSITE?

After many drafts and edits, we now have a live website to host information, recordings, events, ideas, membership sign-up and more! Please check it out and let us know if you have suggestions for content you'd like to see! It will continue to evolve and be updated as needs and suggestions arise! Kudos to Novel Designs (<https://www.thenoveldesigns.com/>) for getting this set up for us!



NPFORAGE.COM



MEET OUR ASSOCIATE MEMBERS

Being a new, grassroots organization, we have relied heavily on 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!



UPCOMING REGIONAL FORAGE-RELATED EVENTS

- World Dairy Expo; Sept. 30-Oct. 3 @ Madison, WI
- NPFA Annual Meeting; Dec. 5 @ Brandon, SD
- Managing Soil: Maximizing Profit; Dec. 9 @ Freeman, SD
- MFA Wisconsin Dells Symposium; Feb. 16-18 @ 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**