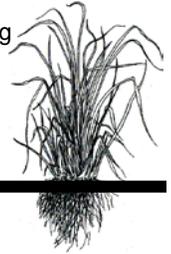




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PENNSYLVANIA FORAGE and GRASSLAND NEWS

Volume 26, No. 1, Winter 2016

Supporting Members of PFGC

Many businesses support the PFGC through their membership and involvement in many of the PFGC sponsored activities. Our supporting members for 2016 are listed below.

AgChoice Farm Credit	Agri Analysis, Inc
Ampac Seed Co.	Barenbrug, USA
Chemgro Seeds	Delmhorst Inst. Co. Dow
AgroSciences	Dupont Pioneer
Ernst Conservation Seeds	Farmshine Publications
Fulton Bank-AG	Kings Agriseeds
Lancaster Farming	New Holland N.A., Inc.
Northampton County Seeds	Rohrer Seeds
Seedway, Inc.	Timac, USA, Inc
W-L Research	

Forage Conference on February 24

The PFGC Forage Conference is set for Wednesday, February 24 at the Holiday Inn and Conference Center in Grantville, PA. Register by February 8 for the reduced rate.

Speakers include **Clayton Gerald**s who is a large hay grower from Munfordville, KY. He grows alfalfa and timothy hay on more than 720 acres and makes it into small bales that he sells to horse farmers. One of his keys to success has been the way he "rolls" equipment. Gerald has six small balers that are switched out of his fleet every four years. Within those four years, each baler will bale about 100,000 small bales.

Dr. Peter Ballerstedt is the Forage Product Manager for Barenbrug Seeds. He has an extensive background in forage production, utilization, and forage-based livestock production systems. His personal experience has led him to reexamine human diet and health. What he's learned doesn't agree with the advice you've gotten for the past several decades. This new understanding, combined with his forage background, has given him an interest in local, sustainable animal production systems; specifically in grass-fed beef production.

Kendall Guither of Walnut, IL has repeatedly won the top Commercial Balage award at the World Forage Super Bowl which is part of the World Dairy Expo held

annually in Madison, WI. Kendall attributes his outstanding balage to excellent fertility management and an intensive cutting schedule that maximizes both quality and per-acre profitability.

Getting Hay Equipment Ready for the New Season

Making hay is an expensive process and poorly maintained equipment can add unwanted expenses and downtime. The equipment itself and repairing broken equipment is costly as well, so efforts to maintain the equipment will pay off long term.

Below is a pre-season maintenance checklist for each piece of haymaking equipment.

Mowers:

Check the disk blades and replace knives if needed. Don't forget other parts such as wear plates or guards or other safety parts associated with the knives.

Check on the conditioning rollers and adjust the spacing as well as roll timing. Properly maintained conditioners crimp the forage so drying time is minimized.

Grease bearings and other moving parts according to the equipment manual. Worn out bearings on silage choppers and balers can heat up enough to cause fires. Use a laser thermometer to find the hot bearings.

Change the oil on the gearboxes in mowers and balers. Keep your machines clean from plant parts such as chopped or cut forage. Oil leaks can be detected more easily this way.

Check for correct operation of the disk blades. These are driven and synchronized through a gearing mechanism. In some rare instances this gearing can malfunction, causing costly repairs, so make sure the mechanical parts work properly and are serviced regularly.

Tedders and Rakes

While tedders and rakes may not be as mechanically complex as mowers and balers, they still need attention.

Never Let Yesterday Use Up Today.

Many times rake or tedder teeth are misaligned or broken, replace those or bend them back into shape if possible.

Setting the correct height on rakes and tedders minimized leaf loss while optimizing forage pick-up. Rakes and tedders likely need readjusting going into the new hay season. Check to see if the pick-up height is even across the width of the rake or tedder.

Balers:

Check the equipment manual for required service.

Inspect the belts and tension mechanism; replace belts if necessary to maintain uniform tension.

Do a test run by warming up the equipment to check for improperly working components.

For all equipment, refer to the equipment manual for maintenance intervals, placements of grease fittings, specification of replacement parts, and adjustment procedures. If the manual is lost, check with the manufacturer or look online.

Source: Dirk Philipp, University of Arkansas

Forage Variety Trials Report Available

The 2015 Penn State "Forage Variety Trials Report" will soon be available, at your county extension office. It can also be downloaded from the web at <http://pubs.cas.psu.edu/FreePubs/pdfs/uc068.pdf>

PFGC Supports Grassland Evaluation Contest

The Pennsylvania Grassland Evaluation Contest took place on October 1 at Penn State's Special Events building located at the Ag Progress Days facility. The contest is an experiential education opportunity for PA high school students enrolled in FFA and 4-H programs,



Participants complete pasture evaluation during competition.

or members of high school affiliated clubs. Contest programs focus on the value and benefits of pasture management, wildlife, livestock grazing and soil health.

Winning teams receive scholarships toward their secondary education at any accredited institution. Winning teams also have the opportunity to compete in a National Competition in Missouri.

Ten student teams from across the Commonwealth competed in this year's events. The 2015 winning team from Cambria County 4-H (pictured below) included students Morgan Watt, Audrey Ritko, Ricky Wagner and Brandon Davis, led by faculty advisors Virgil Wilford and Genny Christ. All first place team members received a \$500 scholarship for further schooling. SVRCS FFA Team took second place with students Jacob Jeffries, Shelby Bohartz, Colden Geisewite and Dakota Baker receiving a \$250 scholarship. Jacob Jeffries, SVRCS FFA, was the highest placing individual for the contest and received an additional \$500 scholarship toward a school of his choice.



The contest sponsors congratulate all students competing for the time and effort taken in preparing for the event. Major event sponsors include: PA Forage & Grassland Council; South West PA Project Grass; PA Livestock Association; PA Grazing Lands Coalition; Penn's Corner RC&D; PSU-Ag Progress Days; Conservation Districts from Allegheny, Somerset, and Cambria; and the USDA-Natural Resources Conservation Service. For more information or to sign up for next October's event, please contact: Dan Griffith, Westmoreland Conservation District, at (724) 837-5271 or by email at wcd@wcdpa.com

Penn State Hires New Forage Extension Specialist

Dr. Jessica Williamson joined the Penn State Department of Plant Science faculty as the Forage Extension Specialist. Jessica grew up just a few miles from Pennsylvania in the rural western Maryland town of Flintstone, where her family has a cow-calf and hay operation.

Dr. Williamson received her Bachelor of Science degree in Animal Science from Morehead State University in Kentucky and her Master of Science in Animal Science with an emphasis in Ruminant Nutrition from the University of Arkansas. She completed her PhD at the University of Kentucky in Plant and Soil Science, with an emphasis in Grazing and Forage Management.

Jessica possesses a unique knowledge of the plant-animal interface, and her current research focuses on ionophore supplementation and grazing management;

weed control through grazing; and alternative forages. Some of her future research interests include grazing interseeded cover crops, improving the quality and quantity of harvested forages, extending the grazing season, and improving the quality and profitability of forage-fed beef.

Currently, Dr. Williamson is working with a team of Extension educators to launch a state-wide tour of grazing workshops in the early spring and a weekly Grass Fed Beef series in central Pennsylvania in March. She is looking forward to her career at Penn State University as the Extension Forage Specialist and the opportunity to help forage producers optimize their profitability and meet their operational goals through the maximization of forage quality and quantity. Dr. Williamson can be reached at jaw67@psu.edu.

Kevin Jamison Receives PFGC Scholarship at Penn State

This year's PFGC scholarship recipient at Penn State is Kevin Jamison. Kevin is a junior at working towards a degree in Agroecology and minors in both Horticulture and Soils. Kevin did not come from a farming background but discovered his love of agriculture through working on his best friend's orchardgrass and beef cattle farm near his hometown of Edinboro, Pa. He spent many summers on this farm adventuring and working.

Kevin is also employed part time while at Penn State in the Weed Science project as a field technician. This past summer he interned with Dwight Lingenfelter in the same doing research on herbicides and weed management strategies.

At this point in his life Kevin is very interested in diverse cropping systems, and at Penn State, has learned successful and responsible strategies in creating cropping systems. Upon completion of his degree, Kevin hopes to find a position that will enable him to make a positive impact on the agricultural industry.

Tips to Cutting Your Winter Feed Losses

It's estimated that winter feed makes up more than half of the annual cost of keeping a beef cow in some regions of the country. That being the case, maximizing the feeding value and minimizing the waste in harvested feed are important considerations.

"For starters, hay stored outside usually has more spoilage during storage and lower palatability than hay stored inside", says Robert Kallenbach, University of Missouri Extension agronomist. And that presents further challenges in feeding. "Cattle will waste a greater percentage of poor-quality hay than they will of good-quality hay. Animals fed high-quality hay early in the season will often refuse poor-quality hay when it is offered later."

Research conducted at the University of Tennessee a few years ago studied hay losses in storage. Here's

how various storage methods of large round bales fared in the UT research:

- Stored on the ground with no cover, 37% loss.
- Stored on tires with no cover, 29% loss.
- Stored on the ground and covered, 29% loss.
- Stored on tires and covered, 8% loss.
- Net wrapped and on the ground, 19% loss.
- Stored in the barn, 6% loss.

The research shows that losses can be significant depending on the type of storage used. The data also suggest that storage losses occur from moisture getting into both the top, and bottom of the bales. Thus, if hay can't be stored inside a barn, the next best option is to at least get the hay off the ground and under a tarp or plastic cover.

In addition, Kallenbach suggests the following steps to reduce losses:

1. Feed hay in small amounts or in a feeder to minimize waste. When fed a limited amount of hay at a time, cattle have less opportunity to trample and soil the hay. Feeding hay in a rack or a "hay ring" also limits the opportunity that animals have to trample or soil hay, and will reduce waste substantially if you intend to provide more than a day's worth of hay at one time.
2. Feed hay in well-drained areas.
3. If you intend to feed hay in a single location all winter, provide a footing such as crushed gravel or concrete to help minimize mud. Perhaps more cost effective is to move hay-feeding areas around the farm to minimize the damage to any one area of the pasture.
4. Feed hay stored outside before hay stored inside.

Source: Beef Magazine

Narrow Window for Frost Seeding Forages

Forage seed can be broadcast without tillage in late winter (a.k.a. frost seeding) on the soil surface of fall-sown cereals or existing forage stands. Success is greatest when the ground is freezing and thawing daily and the soil surface is moist. Freezing and thawing action (honeycombing of the soil surface with ice crystals) along with rain will cover seed with soil and create good seed-to-soil contact. The window of time when the soil is freezing and thawing on a daily basis is frequently very narrow, so producers need to be prepared and ready when the time is right. Early morning frost seeding is recommended before the soil surface begins to thaw. If the soil surface is slimy then stop and wait until the next morning when the soil is frozen again.

Pennsylvania



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Frost seeding works best when pasture and hay stands are thin and where the field was heavily grazed or harvested the previous fall. Red and white clover establish better via frost seeding than most other legumes. Other legumes and timothy can be frost seeded with slightly less success than clovers. Grasses, other than timothy, are difficult to establish with frost seeding because the seeds are large and fluffy. For more information on successful forage crop establishment see Penn State Publication, Agronomy Facts 49 at

<http://cropsoil.psu.edu/extension/facts/agfacts49.cfm>.

Key points to remember:

- Frost seeding is generally less successful than seeding in rows with a no-till drill.
- Frost seeding is successful only during short periods when soil and climatic conditions are right.

Thanks for Your Support

Twenty five years ago this month I started writing and editing this Newsletter. This issue is my last. No, I'm not retiring, just changing responsibilities. With the hiring of Dr. Jessica Williamson as the Forage Extension Specialist at Penn State, my responsibilities will shift to doing more teaching and forage research.

I just want to extend a BIG THANK YOU to all who have shared this newsletter and the past 25 years with me. Marvin Hall

PFGC Officers and Board

The following is a list of the current officers and Board of Directors of the PFGC. If you have questions, concerns or suggestions on how the PFGC could serve you better, please contact one of these people.

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