Dubois County Soil & Water Conservation District

1486 Executive Blvd. Suite A • Jasper, IN 47546 812-482-1171 x3 • <u>www.duboisswcd.org</u>

Fall, 2022

The Conservation Conversation

Dubois SWCD Annual Meeting Keynote Speaker



This year's Dubois SWCD Annual Meeting will take place on Tuesday, February 14th at the Thyen Clark Cultural Center in Jasper. Doors will open at 6pm with opening remarks and dinner at 6:30pm. The cost is \$10 per person paid at the door. To RSVP for the event contact our office at 812-482-1171 ext 3 or duboisswcd@gmail.com. The deadline to RSVP is Friday, February 3rd.

Our keynote speaker is Kent Yeager, President of the Indiana Barn Foundation.

Yeager is a native of Harrison County, Indiana. He lives on the same farm where he was raised and his family has resided since 1873. Early in his life, Yeager was a farmer who volunteered in many agricultural organizations throughout his community.

In 1983, Yeager was named Indiana's Conservation Farmer of the Year, an award which recognizes Hoosier farmers who actively incorporate and practice conservation on the land.

In 1990, he became a field representative for Indiana Farm Bureau for the area that included Dubois County. He left Farm Bureau in 1993 to serve as the USDA Farm Service Agency State Executive Director, before returning to Farm Bureau as director of government relations in 1996. He retired from Indiana Farm Bureau in 2013, after serving as the director of government relations for 17 years.

In his various jobs, Yeager traveled extensively across rural Indiana. One thing that caught his attention was the alarming rate of decline in the number of Indiana's historic barns. In 2013, he became a founding board member of the of the Indiana Barn Foundation and has been the organization's president since 2019.

The Indiana Barn Foundation was established to unite those who value the legacy of Hoosier farmers who have worked against the odds, often single- handedly and with no financial incentive, to maintain and preserve these landmarks. They see Indiana's historic barns as being an asset to Indiana's larger cultural heritage; an asset worth preserving by assisting our farmers who struggle to maintain them. Their mission is to "Support the preservation of historic Indiana barns."

Join us in welcoming Kent Yeager to the Dubois County Soil & Water Conservation District's annual meeting on Tuesday, February 14, 2023.

Contents

Front Cover Annual Meeting Keynote Speaker

2 Annual Meeting Speaker

3Funding Available
&
Upcoming Events

4 Not So Heavenly Bamboo, Nandina domestica

5
Alternatives to
Heavenly Bamboo
&
Save The Date
Michael Homoya

6 & 7
Grazing Bites

Back CoverStaff &
Equipment Rentals

Healthy Soil is Like Chocolate Cake

Healthy Soil is like a good chocolate cake. It should be soft and crumbly and it should smell great. Use your senses: You can see, feel, and even smell the difference between healthy and unhealthy soils. Grab a shovel. Take a walk in your fields. And get to know your soils.

Look

Start by looking at the surface of your fields. Is there residue? Growing plants? Earthworm middens? Residue and growing plants protect the soil surface from the impact of rain. Raindrops hit the ground as fast as 20 miles per hour and can dislodge soil particles 3-5 feet away. Surface crusting and sealing is caused by a break-



down of soil aggregates due to raindrop impacts which detach particles that fill soil pores. Excessive tillage and lack of residue can damage soil structure, leading to increased soil sealing and soil erosion associated with rain events.

Dig In

Highly aggregated soils—those granular, durable, distinct aggregates in the topsoil that leave large pore spaces between them—are soils with good tilth and good structure. An interconnected network of pores associated with crumbly, highly aggregated soils allows easy movement of both water and air through the soil and provides habitat for a multitude soil organisms. In fact, there are more organisms in a teaspoon of healthy soil than there are people on earth, but you don't need a microscope to look for health – just look for living roots and earthworms.

Smell

Can your soils pass a sniff test? Soil should smell sweet and fresh. This is due in part to a compound known as geosmin, a metabolic by-product of certain actinobacteria. Geosmin is also responsible for the earthy taste of beets and is a strong contributor to the delicious smell of rain after a dry spell. If your soil smells sour, rotten... or maybe like a kitchen cleanser, it could be a sign of a soil that isn't functioning well.

Feel

Take the muddy boot challenge. After a rain events, even heavy ones, it's generally possible to walk across fields of healthy soils without bogging down in mud. In dry seasons, healthier soils have more give, similar walking on a padded carpet, whereas unhealthy soils tend to feel something more akin to concrete.

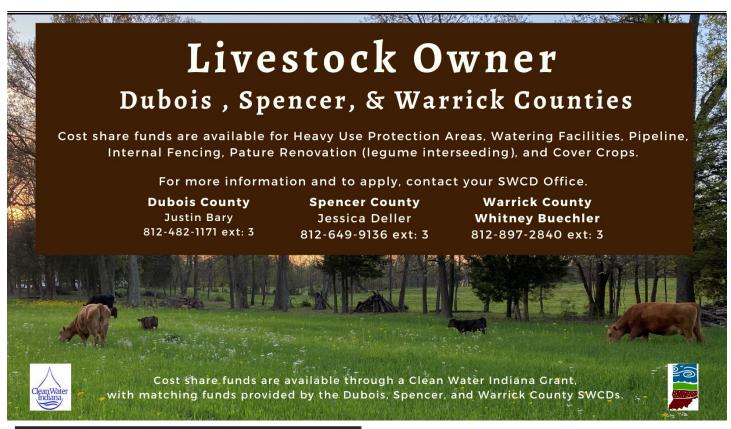
Get Your Hands Dirty

Healthier soils should crumble easily in your hands. A soil that is hard to break apart could be a result of a variety of factors: compaction, breakdown of soil aggregates and destabilized pore structure, and loss of soil-stabilizing exudates of living organisms.

Use your senses – and get a sense of your own soils' health... And get started towards a soil that resembles a good chocolate cake.

This article was created by the Cover Cropping Systems Initiatives.







FEATURED SPEAKERS:
DR. GREG HALICH
UNIVERSITY OF KENTUCKY

DR. ALAN FRANZLUEBBERS
USDA-ARS NORTH CAROLINA

MR. JOHNNY ROGERS
COORDINATOR.

AMAZING GRAZING PROJECT, NORTH CAROLINA STATE UNIVERSITY

AND SEVERAL LOCAL CELEBRITIES TOO!

TOPICS TO INCLUDE:

BALE GRAZING

SOIL SCIENCE AND SOIL HEALTH

THE POWER OF MANAGED
GRAZING

GRAZING OPTIONS WITH SMALL RUMINANTS

SHARED EXPERIENCES FROM SEASONED GRAZIERS

MORE INFORMATION WILL BE POSTED ON INDIANA FORAGE COUNCIL WEBSITE AND FACEBOOK PAGE WWW.INDIANAFORAGE.ORG

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SAVE THE DATE



Jasper Chamber Home Expo

March 3 & 4, 2023 St Joseph Parish Center, Jasper

Learn about the Dubois SWCD and how you can help protect our waterways.



Not So Heavenly Bamboo, Nandina domestica

Common Names: Chinese Sacred Bamboo; Heavenly Bamboo; Nandina; Sacred Bamboo

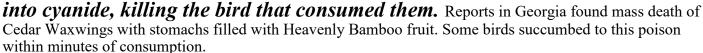
What is Heavenly Bamboo?

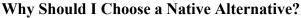
Heavenly Bamboo is in the barberry family (Berberidaceae) and not bamboo at all. This is a popular shrub used in landscaping because of its evergreen leaves and ability to grow in many climates. Heavenly Bamboo is native to Asia and India and was introduced in the US in 1804 as an ornamental shrub.

Why Shouldn't I Plant It?

Heavenly Bamboo is considered invasive in many southern states where it has formed dense stands in natural areas. These dense stands displace native plants that would otherwise thrive. While Heavenly Bamboo has not been observed spreading in Indiana, it is still harmful.

The fruit it produces contains cyanogenic glycosides. When these fruit are consumed by birds in late winter or early spring this glycoside is converted into cyanide, killing the bird that consumed them. Res





Native plants are not only beautiful, but also benefit birds and other wildlife. Unlike non-native species, these plants support multiple pollinators and insects, providing food for Indiana birds. Seedlings of native plants also play nicely in neighboring natural areas.

Quick ID Hints

- Terminal cluster of bright red berries.
- Fruits are green berries that mature to a bright red and are very attractive to birds.
- Flowering occurs in the spring, when small, white flowers develop in large panicles at the ends of the stems. Flowers have 3-6 reflexed petals.
- Medium evergreen shrub with cane-like growth.
- Bi or tri-pinnately compound leaves, 1-2' long.
- Reddish new growth and fall foliage
- Additional native alternatives include: American Beautyberry (Callicarpa americana), Possumhaw (Ilex decidua), and Elderberry (Sambucus canadensis)

Bloom: Spring Foliage: Year-round in Hardiness Zones 6 to 9 Fruits: Fall and Winter







Photos courtesy of Will Stuart, Stefan Bloodworth, Stephanie Brundage, Bruce Leander, Lady Bird Johnson Wildflower Center; Robert Flogaus-Faust, Sten Porse, Creative Commons; Doreen Wynja, Monrovia.com

Alternatives to Heavenly Bamboo

Goat's Beard (Aruncus dioicus)

- Aka. Bride's Feathers
- Herbaceous perennial best for moist fertile soil
- Full sun or part shade
- Bushy clump-forming plant with large showy blooms, 4-6 feet tall



Winterberry (Ilex verticillata)

- Showy red berries in fall and winter
- Prefers acidic to medium soils but tolerates clay, wet soil, and pollution
- Need male and female plants to produce fruit



Black or Red Chokeberry

(Aronia melanocarpa;

A. arbutifolia

- Spring flowers in May
- Fruit (black or red) in late summer and fall
- Beautiful fall foliage
- Good for hedges and rain gardens.



For More Information

- Indiana Native Plant Society: www.indiananativeplants.org
- Indiana Invasive Species Council: www.indianainvasivespecies.org
- Local SWCDs: iaswcd.org/contact-your-local-swcd/
- Contact Emily Finch (SWCD Invasive Species Specialist) at 812-482-1171 x3, Emily.Finch@in.nacdnet.net.



Victor Shelton Grazing Bites

Keeping your animals fed throughout the winter requires preplanning and caution to ensure your animals are receiving the needed nutrients from your stockpiled forage.

I hear quite often from people who have read a recent Grazing Bites. Two people recently have referred to the article as grazing "bits" not "bites," but I really don't care what you call it as long as you're reading it and hopefully getting something out of it. For future reference, though, most "bits" are nouns - the sharp point of a tool, a horse bridle, a small amount of something, a minute computer unit, an old monetary value or perhaps a past tense bite! "Bite" is a verb to cut, grip, or tear with or as if with the teeth —



hence grazing forages with teeth. Perhaps though, grazing bites are also bits of grazing information.

It didn't take too many windy and rainy days to shed the trees of any remaining leaves, provide us a surprise early snow and declare that winter was truly moving forward. My wife likes the changes of the seasons, but if it was up to me, I'd consider moving lock, stock, and barrel to a warmer spot for a short while every year. I've known a few people who did move some of their cattle southward during the winter so they could continue to graze – usually on winter annuals. There are some years that can also be accomplished here in the Midwest.

If you can get cereal rye planted early enough to get sufficient growth to graze, then grazing can begin in the fall once plants reach 6-12 inches tall and can be grazed to a height of 3-4 inches. That can't be done if it isn't planted until early November – the earlier the better. Mid to late August is really ideal to provide the most growth for grazing in the fall. Later seedings will only get started and will delay more growth until spring providing good cover for the field, but little or nothing to graze until spring.

For most people, if your livestock are still grazing at this point, you are probably either grazing stockpiled forage, perhaps some corn residue, left over fall annuals or grazing pastures that should have been exited a long time ago. I hope it is stockpiled forage.

Stockpiled forage is technically defined as standing forage allowed to accumulate for grazing at a later period, usually for fall and winter grazing after dormancy. Tall fescue makes some of the best stockpiled forage because it holds quality better and doesn't fall apart with freezing weather mainly due to a waxy layer on the leaves. I love orchardgrass, but it doesn't hold up very long at all after several hard freezes. If you have stockpiled orchardgrass, use it first. Quality stockpiled tall fescue quite often has better feed values than a lot of hay that is fed at the same time.

You may cuss tall fescue, especially old Kentucky 31 endophyte infected tall fescue during the growing season, but the KY 31, low endophyte varieties and endophyte friendly varieties all stockpile very well. The first thought from some might be - what about fescue toxicity from the KY 31 tall fescue? Research from the University of Missouri indicates that ergovaline and total ergot alkaloid levels decline significantly within 30 days when tall fescue is cut, dried, and baled for hay.

What about stockpiled KY 31 tall fescue then? When grazing fescue in the late fall or winter the threat of fescue toxicity is reduced. The reduction is probably a combination of time, similar to the hay, and freezing conditions. Most people think that ergovaline doesn't pose a problem in stockpiled fescue because ergovaline appears to concentrate in seed heads and stockpiled fescue is generally vegetative. Livestock eat stockpiled fescue better after a couple of hard frosts or freezing conditions. Most studies have found that ergovaline content drops fairly fast after mid-December. Sadly, as long as endophyte infected tall fescue is growing, it probably is still producing some ergovaline – another good reason to not start grazing stockpile until completely dormant.

I've tested a lot of stockpiled forage the last couple decades or so and tall fescue has rarely disappointed me. The stockpiled forage quite often is better quality than if the same forage had been harvested for hay – higher amounts of crude protein and total digestible nutrients.

Victor Shelton Grazing Bites

Even in late February, stockpiled fescue is still holding value and not unusual at all to have a crude protein value still of 11% and digestibility of 58%. I certainly don't expect most people to test forages, especially during the winter. Knowing the value of the stockpile provides the information needed to know if supplemental feed is needed or not.

A very quick and easy way to get a little bit of information on the value of the stockpile without testing it is to look at the manure from the grazing livestock. Yes, look at the cow piles. I've received a few odd looks during a pasture walk when I intentionally took my boot across a manure pile to critique it.

Unless quite a bit of nitrogen has been added to the stockpiled forage, the crude protein value isn't going to be nearly as high as lush spring forage and creating a thinner more "splattable" manure patty. At best it is going to be more the consistency of pudding or pumpkin pie filling. My wife often complains when I make such a comparison to food – but people understand food type descriptions. The pudding-pumpkin pie filling is that nice smooth textured manure - yes, I've looked at way too much manure. This manure will have a crude protein range from 12-15% with digestibility in the 60's this time of year on stockpiled forage. At this stage, quality of the forages consumed is fairly well balanced and stays in the rumen long enough to allow good absorption of nutrients and thus decent performance.

True "piles" indicate then that forage quality is lower and probably more like in the range of 6-8% crude protein with moderate total digestible nutrients. This type of manure usually indicates a declining forage quality and is more maintenance quality at this point. Poor quality hay will do the same thing. The consistency of the manure is a rough indicator of crude protein and digestibility of the consumed forage. Low-quality forages take longer for ruminant animals to digest. They remain in the digestive tract for longer periods, and more moisture is removed prior to elimination of waste.

Low-quality forages generally contain more non-digestible fiber, but they're also usually low in protein. Providing supplemental protein to ruminants actually feeds the rumen microbes. Those rumen microbes are necessary for the cow to utilize forages efficiently. Addressing dietary protein needs can improve rumen fermentation, increase the rate of passage and boost forage consumption.

Actual forage analysis is the best way to know what level of various nutrients forage resources can provide but observing manure can provide a quick idea. Consult an animal nutritionist when needed to balance out nutritional shortfalls, especially for growing and lactating animals.



Remember, it's not about maximizing a grazing event, but maximizing a grazing season! Keep on grazing!

Victor Shelton is a retired Agronomist/Grazing Specialist with the Natural Resources Conservation Service (NRCS). He continues to write Grazing Bites in his spare time from his property in southwest Indiana.

Reminders & Opportunities More pasture information and past issues of Grazing Bites are available at News | Natural Resources Conservation Service (usda.gov)

Grazing Bites has changed. Please send comments or questions to grazingbites@gmail.com.



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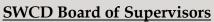


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Rental Equipment Available Dubois County SWCD

No-Till Drill—\$10 Per Acre, \$100 Minimum

Great Plains No-Till drill has a seeding width of 7 feet, and can be used to plant soybeans, wheat, legumes, grasses, etc. It can also be used to plant native or warm season grasses.

No-Till Seeder—\$10 Per Acre, \$100 Minimum Great Plains 9' No-Till Seeder

Stapler/Staples—\$10/Rental fee, \$50/box of 1,000 staples.

This stapler is for erosion control blankets. The plunger simply pushes the staples into the ground. Buy staples and the stapler rental fee is waived.

Spinning Jenny—No Rental Fees.

Use to install high-tensile wire fences. Load with wire and set on the ground. Walk away pulling the end of the wire and it will spin, preventing your wire from tangling. Slow down gradually before stopping to prevent over-spinning and tangling. Can also be used to rewind wire in the field.

Tile Flags—\$7.00/bundle of 100.

Flags on 36" wire staff can be used to mark underground power lines or surveying jobs.