### **Dubois County Soil & Water Conservation District**

1486 Executive Blvd. Suite A • Jasper, IN 47546 812-482-1171 x3 • <u>www.duboisswcd.org</u> Fall, 2018

# **The Conservation Conversation**

## LSI Fall Soil Health Workshop

n August 29th, 2018, Adam Daugherty was the main speaker at the LSI Fall Soil Health Workshop held in the CTIM Building on the Vincennes University Jasper Campus. Daugherty is a NRCS District Conservationist in Coffee County, Tennessee. He started in the fall of 2013 with 8 long term no -till producers on a several thousand acres. He currently works with over 70 producers in Coffee County implementing diverse high biomass cover mixes to over half the cropland aces in the county. He has worked hand in hand with these producers from transitioning from long term no-till production into high functioning agro-ecological systems. He has been fortunate to be able to implement these systems across a wide diversity of producers and learned first hand how to handle the ever-evolving dynamics of managing and succeeding. He shared results of his district's 3-year study on cover crops seeded on 18 different farms, discussing the benefits to soil biological activity; as well as yields for corn, soybeans, and wheat. He also delved into the economic payback covers provided on these farms. He believes a no-till system for cover crops are necessary to prosper.

Other topics discussed where learning to assess soil and how well soil performs all of its functions now and how those functions are being preserved for future use. Soil health cannot be determined by measuring only crop yield, water quality, or any other single outcome. Soil health cannot be measured directly, so we evaluate indicators.



Contents

**Front Cover** *LSI Fall Workshop* 

**2** Megan Ritterskamp

**3** River Friendly Farmer Award

**4**Soil Judging
Competition

**5** Patoka Lake Clean up & Middle Patoka 319 Cost Share

**6**Grazing Bites

/
Grazing Bites,
continued

Back Cover
Staff
and
Rental Equipment

## Introducing Megan Ritterskamp, Invasive Species Specialist

The Dubois, Davies, Martin County Soil and Water Conservation Districts (SWCD) announce their new Invasive Species Specialist, Megan Ritterskamp. She is a Vanderburgh County resident and graduated from the University of Southern Indiana (USI). She grew up in Great Falls, Montana but has resided in Warrick or Vanderburgh counties since 1996. While at USI, she studied zoology, botany, ecology, environmental geology, and environmental policies/sociology.

Ritterskamp worked in healthcare for 15 years before returning to school to pursue a degree in Environmental Science. She previously worked at Seton Harvest, a Community Supported Agriculture (CSA) unit in Vanderburgh county, growing a wide variety of vegetables for community member and charitable organizations. She has also been involved in several research studies ranging from bluebird monitoring to trace element soil contamination.

As the Invasive Species Specialist, Ritterskamp will work primarily through the Jasper SWCD office but will serve Dubois, Martin, and Daviess counties. Her position is funded for 36 month through a Clean Water Indiana (CWI) grant, provided by the State Department of Agriculture. Ritterskamp will be working with area landowners and community organizations educating the public about the threat invasive species pose to the environment. Invasive plants that have been moving into Southern Indiana include: Bush Honeysuckle, Autumn Olive, and Poison Hemlock to name a few.

"I am excited to work with area landowners, helping them identify invasive plants on their property and provide information on the best way to control those plants."



Megan Ritterskamp, Dubois, Daviess, and Martin Counties SWCD Invasive Species Specialist

If you would like Megan Ritterskamp
to conduct an invasive plant site visit on your property,
or if you have any questions about invasive species in the area,
please contact her at 812-482-1171, ext 3
or by email at megan.ritterskamp@in.nacdnet.net

## River Friendly Farmer Award, 2018

Since 1999, key conservation and agricultural organizations have sponsored the River Friendly Farmer (RFF) program. The statewide initiative recognizes farmers, who through good production management practices help keep Indiana's rivers, lakes, and streams clean. Annually, each county's SWCD nominates up to two farmers who do an outstanding job of protecting their rivers, lakes, and streams through their every day conservation management practices on their farms. The award ceremony took place at the Indiana State Fairgrounds on Wednesday, August 15th, 2018. This

year's group of award winners brings the total number of River Friendly Farmers since the award beginning to 961.

Dubois County SWCD nominated Roger Sermersheim for this award for his continued conservation practices on his farmland that protects local waterways and beyond. Sermersheim was one of 49 farmers who received the statewide award of 'River-Friendly Farmer'.

Sermersheim Farms utilize WASCOB's, grassed waterways and grassed buffers to keep nutrients and sediment from leaving their property Continuous No-Till has been used with a cover crop system started by Sermers-



Roger Sermersheim accepting his award from Lt. Governor, Suzanne Crouch and Randy Kron, President of the Indiana Farm Bureau

heim's father in 1968. Water is clean and clear when leaving their fields with nutrients and sediment being filtered before it leaves the property. Sermersheim and his wife, Brenda, share their conservation practices and successes in variety of community groups including their local SWCD, their church, county FFA Advisory Board and local cemetery board.

Interested in what is available for farming and forestry in Dubois County?
Interested in water quality or improving the soil?

Contact Dubois County SWCD for more information 812-482-1171, ext #3

## 2018 Dubois County SWCD Soil Judging Competition

he 2018 Dubois County Soil and Water Conservation District's Annual Soil Judging competition went very well this year. Over 100 students from 10 different schools representing 8 different counties participated. The competition results are as follows:





### 1st Place Team Award—North Harrison, Senior Team #1:

Ariel Camm, Isabelle Nordhoff, Jackson Metz, Sarah Norskov, and Coach Archie Sauerheber.

2nd Place Team Award - Gibson 4-H Senior Green Team: Caedmon Doyle, Josiah Georges, Joseph Loehr, Jacob Munro, and Coach Julie Loehr.

3rd Place Team Award - Gibson Southern: Kiersten Rexing, Josh Pohl, Hunter Tackett, Jacob Cullom, and Coach Jessie Schermerhorn.

Ist Place Individual Award—Gibson 4-H Senior Green Team: Caedmon Doyle

2nd Place Individual Award—North Harrison Senior Team #1: Ariel Camm

3rdPlace Individual Award—North Harrison Senior Junior Team: Robbie Case

4th Place Individual Award—North Harrison Senior Team #1: Jackson Metz

5th Place Individual Award—Gibson Southern: Kiersten Rexing

Monarch butterfly enjoying Swamp Milkweeds along the edges of the VUJC LSI Project fields.

Passionflower and fruit found along the edges of Jahn's Creek of the VUJC LSI Project fields.







## Patoka Lake Clean Up Day or Middle Patoka 319 Watershed

Everyone is busy bringing in the harvest, but thoughts of covering that land till spring should still be a priority. For this fall, there is funding available that could pay up to 75% of the cost of cover crop seed and application if you are a landowner or producer in once of five Patoka subwatersheds.

These 'critical' zones are target areas with the goal of improving water quality by reducing sediment and nutrient loads. In Pike County, these zones include portions of Jefferson and Monroe Townships. In Dubois County, these zones include portions of Bainbridge, Cass, Ferdinand, Jackson, Madison, and Patoka Townships.

If you have land in production in one of these areas, please call watershed coordinator, Julie Loehr to see if you qualify for the Middle Patoka cost-share program. Julie will need your farm and tract numbers to verify location to confirm, so please have those ready.

Also, there are other **BMPs** available beside cover crops. You may contact Julie to find out more information what's available or to ask questions about the cost-share pro-Email gram.



her at Julia.loehr@in.nacdnet.net or call her cell at 812-779 -7924. You may also stop in at either the Dubois County SWCD or Pike County SWCD offices for information, a cost-share brochure, or to apply.

his year's Patoka Lake Clean-up had a record number of volunteers with over 200 people assisting with shoreline and roadway clean-up. All ages volunteered with a very nice representation of the youth of the surrounding communities. This fantastic effort resulted in over 3,000 pounds of trash being removed from the perimeter of the lake including 8 tires and 600 pounds of recyclable plastic, aluminum, batteries, and other materials.

Patoka Lake is the primary source of clean drinking water for 11 southern Indiana counties affecting more than 100,000 people. Some 5000, visitors come annually from miles around to enjoy the recreational activities Patoka Lake provides.



# Save the Date!

Please join your neighbors in cleaning up our roadside ditches and creeks to help improve water quality!
All groups and individuals are welcome! Children much be accompanied by an adult.

# **Dubois County Creek Sweep**

Saturday, November 3rd, 2018 9:00 am

## Grazing Bites by Victor Shelton, September, 2018

The older I get, the more I tend to philosophize about things. I've been asked about a few times why I am such an advocate for sound grazing practice. Best management grazing practices, just like conservation practices for reducing or preventing soil erosion on cropland, help preserve and or regenerate resources not only for present generation, but also for future generations. Keeping a field in forages will save more soil and conserve more water than almost all other erosion control practices. As the world population continues to increase and the acres of viable land that we can grown food on continues to decrease, we have to be more efficient and more productive with what remains while also maintaining and improving water quality. Food quality and, nutrient density need to also improve.

I'll refrain from getting too deep and prevent you from possibly thinking you need to put on gum boots. I will say that there is satisfaction having a public service position that can provide a positive influence on someone else or on the resource. But, like any position, especially thinking about teachers, it has its challenges. You can lead the horse to water but you can't make it drink.

I mentioned last month that we are on a county down to the first frost. I'm thankful for timely rains and that most of our cool-season grasses will continue to grow even after that first frost; as long as, there is moisture working with declining light hours. Most producers, Including myself, would benefit from being more efficient. That efficiency is achieved first by optimizing forage growth. I'll probably be lying on my nursing home bed, raising up my grazing stick cane and still repeating the line, "Don't over graze it, maintain that solar panel, and keep the ground covered!" Every growth day now is an opportunity to grow more forage for later use. Most of the Midwest will be short in hay this winter so you may really have to be creative or think outside your normal box to keep enough feed in front of your livestock.

What can you do to maximize forage growth? The more you can grow now, during these remaining autumn days, the more you will have to graze and the less feed will be needed. The first thing to think about it what can be grazed right now so forages continue to grow?

There will be a lot of corn that will be harvested soon. Grazing corn fields can certainly buy you some forage growth days. Every day the livestock are out ingesting some corn residue, they are not grazing forages and so your stock pile is able to grow.

Corn residues normally are best utilized within 60 days of harvest and also allocated out in portions to reduce waste. In general, corn stalk have a crude protein value of about 8% and a total digestible nutrient value of about 70%. The nutritional value falls over time to about 5% crude protein and to about 40% digestibility. This reduction can be two-fold. First, if livestock are not managed in such a way to allocate the residue out over time, they will eat their dessert first which is the most palatable, and leave the broccoli for later. Second, nutrient content decreases over time as the residue weathers and soluble nutrients leach out. Stalks are bet utilized for spring calving cows due to lack of sufficient energy for lactating or growing animals; especially over time, unless winter annuals or brassicas have been added.

The addition of annuals; such as, my favorite combination of oats, a brassica; such as, turnips or radish, and a winter hardy annual like cereal rye make an excellent addition to stalks if they can be planted early. This mixture; especially, if it has a lot of brassica in it, needs to be balanced with some dry material to be utilized most efficiently. Those high nitrogen and water containing turnips or radish are too rich to be razed alone and are a great addition to corn residue. Adding these annuals not only helps stretch out those resides, but it helps the grazing livestock make better use of this feed and usually means a higher rate of gain.

Rough estimating, corn stalks should be stocked at the rage of 1,000 pounds live weight per acre per 30 days. Though it can vary a lot, most corn produces about 56 pounds of residue per bushel. So, a 200 bushel corn crop should yield about 11,000 pounds of residue. Of that residue, about 40% is leave and husk, the part that is mostly consumed. So in this example, there is about 4,400 pounds of desirable grazable fodder available or about 75 animal unit days at 50% harvest efficiently; and yes, there are going to waste some. One animal unit, which is 1,000 pound live weight, will consume about 3% of their weight in dry matter per day or roughly 30 pounds of fodder. You can do your own math from there using your livestock numbers and acres that can be grazed. Certainly, if annuals are also part of the picture, then there is even more available.

## Grazing Bites by Victor Shelton, continued

Corn fields used for grazing that are highly erodible (HEL) must still comply with Farm Bill requirements after grazing, which can add even more value to grazable cover crops interseeded into the stubble. Refrain from feeding any supplements or hay in crop fields or leave livestock in the field over extended time frames; especially under wet conditions to prevent compaction issues the next crop year. Crop residue should be tested for nitrates if there was a crop failure or chance that applied nitrogen was not normally utilized. Livestock water should also be readily available and ideally moved with the livestock to new allocations of stalks.

Something tell me that we could have an early fall, so remember, earlier than normal, that sudangrass and sorghum-sudan hybrids, and johnsongrass produces a cyanide compound when frosted causing the production of the prussic acid. Livestock should be removed from these forages for at least two weeks to allow the forages to 'dry down' and the prussic acid to dissipate before grazing again. Frosted areas can start with only 'pockets' in a field. Any regrowth from the base of the plant after a frost can also be very high in prussic acid. If in doubt about nitrates or prussic acid, test before grazing!

When forage is limited and if white snakeroot is present, remember this poison plant can be a problem. At this time of year the plant has numerous heads of small white flowers and is quite common along woodland edges, woods, and streams. Livestock normally will avoid consuming white snakeroot under typical growing conditions, but as ample desirable forage declines or disappears, poisonous weeds start looking good. Whether eaten in large amounts at one time or in small amounts over a period of time, both can be fatal. Nursing animals are often affected from the mild which is commonly fatal



with no signs of ailment from the adult. If your grazing livestock have accuse to potential problem areas, it would be best to scout the area ahead of grazing. Small patches of plants can b removed but if there are too may, keep the livestock out! Leaves of the white snakeroot are opposites, have toothed edges and taper to a point. I have been seeing quite a bit of this plant this fall. If you have problems identifying this plant contact your local extension office for assistance.

I will end this article encouraging you to think about not only how you are managing your pastures, but also encouraging you to think about how you might be influencing others. Just don't let it get out of hand. As a really smart person once said, "if you get to thinking, your are a real person of influence, just try ordering someone else's dog around." Keep on grazing!

(For more pasture information and/or past issues of Grazing Bites—http://www.nrcs.usda.gov/wps/portal/nrcs/main/in/technical/landuse/pasture)



OFFICE HOURS: MON-FRI 8 AM TO 4 PM
OFFICIAL BUSINESS NEWSLETTER

NON PROFIT ORG US POSTAGE PAID JASPER IN 47546 PERMIT NO. 191

For address corrections or to be taken off the list, please contact the office by email at patti.schroeder@in.nacdnet.net or call 812-817-3447





# Follow the SWCD on Facebook! facebook.com/dcswcd

### **SWCD Board of Supervisors**

Brenda Sermersheim, Chair Glenn Goeppner, Vice Chair Glenn Menke, Member Pat Eckerle, Member Alex Hohl, CCA, Member



### **Dubois County SWCD Staff**

Judi Brown, Executive Director
Melissa Ruschau, Program Technician
Justin Bary, Resource Technician
Radius Weisman, Technical Specialist
Megan Ritterskamp, Invasive Species Specialist
Jennifer Knable-Thompson, Program Support Technician
Patti Schroeder, Program Assistant

### Partnership Staff

USDA NRCS DC Andrea Gogel, ISDA DOSC



# Follow NRCS on Twitter! twitter.com IN\_NRCS\_Dubois

#### Rental Equipment Available at Dubois County SWCD

#### No-Till Drill

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. *Rental fee is \$8/acre* or minimum of \$50.

#### • Stapler/Staples

Installing erosion control blankets? This stapler makes completing the job easy! The plunger simply pushes the staples into the ground. Rental fee is \$10/use and box of 1,000 staples is \$50 per box.

#### • Spinning Jenny

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. *No Rental Fees*.

#### Tile Flags

Flags on 36" wire staff can be used to mark underground power lines, or surveying jobs. *Cost is \$7.00/bundle of 100*.