**Dubois County Soil & Water Conservation District**

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

**Fall, 2020**

# The Conservation Conversation

## Invasive Plants

**Invasive Plants are spreading on almost all private and public lands in the Midwest. Why should we care? Invasive plants, if left unchecked, will limit many uses on lands now and for future generations. Invasive plants can harm the natural heritage of our wetlands, prairies, forest, lakes, and rivers. Invasive plants can decrease your ability to enjoy hunting, fishing, mushroom collecting, bird watching, and other recreation pursuits. The longer we wait, the more expensive it will be to control invasive plants.**

**A logger or forester knows how invasive plants greatly impact the health and regeneration of forest lands. Most invasive plants depend on some kind of disturbance to get established in the forest. Forest management activities; such as, timber harvesting, create opportunities for invasives to get established and spread. Since loggers and foresters rely on the long-term supply of forest resources, it is in their best interest to ensure the healthy regeneration of forest stands to native tree species.**

**Invasive species not only threaten natural area but may invade home gardens and landscapes. Aggressive plants will decrease enjoyment of your property and increase the need to properly care of the plants that were originally planted.**

**Invasive plants are in the process of degrading and even destroying many hunting habitats. Invasive plants reduce the number and variety of forest wildlife, primarily by reducing the availability of food and suitable cover. Other invasive plant species can also form dense tangles that are difficult to push through even if they are not armed with thorns.**

**Invasive species can affect your ability to enjoy natural areas, parks, and campgrounds. Favorite hiking/biking trails or camping spots can be spoiled and some plants can have nasty effects on your health causing burns, blisters, skin discoloration, and eye irritation.**

**The spread of invasive plants threaten both the beauty of our area lakes and rivers and the ability to sustain fish and wildlife populations. Invasive plants can also increase the risk of flooding and soil erosion leading to cloudy water, lower water quality, impede navigation for anglers and boaters.** ***For more information, contact Midwest Invasive Plant Network***

MIPN.org
Midwest Invasive Plant Network

**Contents**

Many wildlife species are dependent upon surface water. For example, one pond, stream, or other water source per 160 acres of land can enhance turkey habitat; and deer require a sufficient water source per square mile. Developing a fishless shallow pond for deer and wild turkey can also benefit amphibians; particularly in heavily wooded, upland karst topography where standing water is not a common occurrence. Turtles, water snakes, toads, frogs, newts, and salamanders will benefit from these shallow ponds.

Openings in forested landscapes can be either natural openings; such as, glades that exist due to shallow drought-prone soils or openings created through intentional clearing. Where glades exist, they provide a distinct and important habitat type that many species utilize and benefit from.

The native species that occur on glades are very drought tolerant. It is recommended that glades be managed to promote these species by controlling cedar encroachment and using prescribed fire as needed. Nonnative species of grasses and forbs seldom survive the naturally dry conditions and are not recommended for these areas. Never attempt to grow a grain or green browse plot in a glade as any soil disturbance will likely lead to excessive soil erosion and unsuccessful plant growth.

Artificial clearings in the forest created to stimulate annual weeds, grasses, forbs, or grain can provide feeding sites for a variety of wildlife species and wildlife viewing opportunities. In most cases, these objectives can be achieved through normally planned forest management practices. Intentionally recreated openings; such as, food plots that will be disked and planted each year, need to occur on a fairly level location to avoid excessive erosion. As woody growth begins to reinvade openings, a combination of mechanical, chemical, and /or prescribed burning practices may be used to maintain them.

## Wildlife Habitat, continued

Many early successional habitat is dominated by shrubs and saplings less than 15 years old. It is an important habitat component for some species; such as, white-tailed deer, wild turkey, ruffed grouse, and eastern cottontail rabbit; as well as, songbirds like eastern towhee, white-eyed vireo, hooded warbler, indigo bunting, and yellow-breasted chat. This habitat can be created with regeneration harvest on forest sites and is also present in old fields; as well as, glades and woodland managed with thinning and prescribed fire.

As with old-growth, early successional stands are under-represented in most of forested landscape. In large timbered blocks (>500 acres) it is desirable to have around 10 % in some form of temporary structure; such as, regeneration areas or natural openings to provide early successional habitat. Managers should evaluate the abundance of habitat in the landscape and adjust treatments to enhance early successional habitat quantity and distribution.

Edge is the transitional zone between habitat types. It can include 'hard' edges between a forest and a crop field, or 'soft' edges between a forest and the temporary regeneration opening created by a clear-cut. Edges can also be natural; such as, those between a woodland and a glade or between a bottomland forest and a slough. Edges typically provide an abundance of grasses, forbs, shrubs, vines, and small trees that provide food and cover for many wildlife species. A seed-producing herbaceous layer of vegetation attracts a diversity of insect life, which can reduce the need for artificial food plots.

Edge feathering is a technique that can effectively create better edge habitat at the border between timbered lands and crop fields or old fields by cutting trees in a 15-30 foot swath along these borders. Another wildlife practice that can be done in conjunction with edge feathering is the creation of brush piles. Brush piles offer good heavy cover and are utilized by rabbits and other small mammals, reptiles, salamanders, insects, and a host of bird species.

*Source – Missouri Department of Conservation*

## District Showcase Award

The 2020 District Showcase award will be presented to Dubois, Martin, and Daviess Soil and Water Conservation Districts for partnering on a project, with Emily Finch as Invasive Species Specialist. This project was funded by a Clean Water Indiana grant.

The District Showcase is awarded annually to Indiana Soil and Water Conservation Districts who demonstrates exceptional work and are making a difference in their local communities. This award is sponsored by the Indiana Conservation Partnership leaders and will be presented virtually in January at the Indiana SWCD Annual Conference.

The tri-county project, which began in 2018, has a goal to help landowners eliminate invasive plants on their property. The Clean Water Indiana grant has provided funds for cost share for invasive species removal, education, and outreach programs. Finch has planned and hosted invasive species workshops, field events, wildflower walks, and workdays. Billboards were also located throughout the project area, informing of the threats of specific invasive species. During the pandemic, Finch also became proficient with the creation of YouTube videos featuring specific invasive plants and methods to control their growth and spread.

During the scope of the project, a Cooperative Invasive Species Management Area (CISMA) has been formed in Daviess and Martin County, in addition to the already established Dubois County CISMA.

The project has yielded measurable environmental and conservation benefits in the project area. A minimum of 47 landowners have had site visits by Finch with over 2,500 acres impacted. $15,852.21 has been allocated to cost share. To date, 59.77 acres has received treatment to control and remove invasive species and landowners have worked in excess of 1,200 hours to complete this work. While many events in 2020 have been cancelled due to the pandemic, 40 events in 2019 were attended by 921 people. 745 volunteer hours were donated by partners and volunteers at events and planning meetings.

## Lower East Fork White Watershed News

As the Lower East Fork White watershed coordinator, Julie Loehr has been busy behind the scenes working with Indiana Department of Environmental Management (IDEM) to draft a Watershed Management Plan (WMP) for the watershed. Once this WMP is reviewed and approved by Environmental Protection Agency (EPA), Loehr will be able to use it to help manage land resources in a way to protect our local water resources. There is already funding secured for a cost-share program to implement water quality improvement practices in the watershed.

Anyone interested in assisting in this program can join the #LeaveNoTrash movement that began October 26, 2020. One can also get outside, pick up some trash, and post your efforts to social media, making sure to use the hashtag #LeaveNoTrash. If you'd like, you can take the "no trash" pledge on the Leave No Trace website at LNT.org.

Loehr, with the help of several Pike and Daviess SWCD staff, also has been out to the Portersville and Highway 231 bridges over the White River to get a trailer-load of trash in a few hours in one afternoon. (See picture.) Special thanks go to Dubois County Solid Waste for their help in gathering, hauling off and properly disposing all of these items!

Please consider joining in the Leave No Trash movement. Together, we can mend our environment, beautify our communities, and make a positive change that helps to improve our water quality.

YouTube

Here's the link for YouTube playlist of all of the Dubois County SWCD staff videos.

https://www.youtube.com/playlist?list=PLEWqT_8rlzkt5f8alADr0kNVhLn7C8fd7


## by Victor Shelton, November, 2020

The rains are finally replenishing reserves in most areas. Though a bit late for some things, it is still a boost for forages that have been stockpiled and they have leaped in compensatory growth! Ideally, this stockpile is best used after it goes dormant in order to not slow next spring's growth. Dormancy often requires several nights in a row at 25 degrees or lower. That type of weather isn't far away. Once dormant, the forage can be grazed with less harm to the plant's energy reserves. When it is grazed, it can be taken down a bit closer than normal but leaving good residual. That good stop grazing height will slow runoff over winter, reduce any erosion and help springboard growth next season. If you open up the sod too much in early winter, you also possibly open the site up for more weeds too.

It is always a good idea to evaluate and balance grazing livestock with available feed. It is better to know now than later. First, take different grazing animal classes (cows, heifers, stockers, ewes, etc.) and figure an average weight per class and then multiply that number times the number in each class. Now you have a total live weight. Multiply the live weight by .03 to get an average daily intake. For example, 20 cows averaging a weight of 1,100 pounds is 22,000 pounds live weight. Multiply that by .03 (three percent dry matter intake) and it equals 660 pounds of dry matter needed per day.

Now what are you going to feed those animals? It could be hay, stockpiled forage, crop residue, supplements or most likely a combination of these. Stockpiled forage is usually going to be tall fescue with some other grasses and legumes mixed in. You can lay a clipboard on top of the standing sward and measure the height of the compressed forages to estimate it. If the stand is dense, there is usually about 300 pounds per acre inch of dry matter. So, if you happen to have 10 inches, that is 3,000 pounds of dry matter per acre. You do not want to remove it all, so let's say you remove six inches. That is 1,800 pounds available for grazing times the number of acres of this stockpiled forage. Fields do vary. Adjust as needed. The efficiency of grazing will depend on how you allocate it out. If you let stock have the whole field, then expect 60-75% utilization. At best you'll have 1,800 pounds available. If you allocate it out like you are feeding hay with temporary fence providing one- or two-days' worth at a time, you'll find the efficiency to be up near 90%. In areas with plenty of moisture, the stockpiled fescue is good quality and quantity and will provide a lot of good grazing. There is always some waste, it just can't be avoided. That waste will help feed the next year's growth.

Inventory any hay you have on hand. You should have an idea on how much bales weigh and how many you have of each. For example, if you have fifty 1,500-pound bales (about 1,300 pounds dry matter) on hand, you essentially have 65,000 pounds available. The efficiency of this hay is also dependent on how you feed it, in addition to how it is stored. The worst-case scenario is feeding hay free-choice without any feeder structure and storing hay outside on the ground, which sadly wastes about 45% of the offered hay. Feeding enough hay for only 2-3 days at a time creates some competition between cows. In ring or cone type feeders and storing bales inside is efficient with an average of about 15% waste assuming that the hay is good quality. Small bales are probably the most efficient, but are certainly a little more labor intensive and not used as often as in the past. If you have silage or balage on hand to feed, figure it into the plan and generally expect 90% efficiency adjusted to dry weight.

The nutritional value of corn stalks can certainly vary from year to year. Stalks will start out in the 8% crude protein range with approximately 70% total digestible nutrients (TDN) and over a period of about 60 days drop to 5% crude protein and 40% TDN. Spring calving cows will meet most of their energy needs during mid gestation. Growing animals such as calves and fall calving lactating cows may be lacking in energy and protein and most likely will need to be supplemented if run on stalks.

About one acre of typical corn residue will be needed per animal unit per grazing month. Weekly allocations seem to work very well so you need to figure how many acres of stalks will be needed for one week of grazing for your herd. Higher yielding corn certainly produces more residue and more potential grazing. You can usually bank on about 12-15 pounds of desired residue to graze per bushel of corn. Stalk grazing should be avoided under wet conditions.

*Winter is around the corner; are you ready?*

*Photo by Chris Hollen*

Compare the amount of dry matter you will need for the livestock with how much you have. Now you know about how much dry matter you are going to need to get them through the winter and an idea of how much you have available to feed them. If you are a little short on forages, you can add some supplements such as corn gluten, soybean hulls, etc. into your feeding plan. In fact, you may want to anyway if hay quality is lacking, or if more energy is needed. We used 3% for the intake estimate which is actually a little high, but if we have a wet, cold winter, energy needed to keep warm will increase and any growing animals will also have higher needs. It's better to overestimate than to be short. Cold, wet and especially muddy conditions will increase energy requirements. If you are still short on feed, then you may want to purchase some hay or consider reducing numbers.

Summer annual warm-season grasses — such as sudangrass or sorghum-sudangrass hybrids and johnsongrass produce a cyanide compound when frosted and quickly start shutting down, causing the production of the prussic acid. To be safe, livestock should be removed from these forages for at least two weeks to allow for the forages to "dry down" and the prussic acid to dissipate before grazing again. These forages can be harvested for balage right after being frosted and later fed as long as they are allowed their normal fermentation process time period of three or four weeks. Dry hay containing these is generally fine. Johnsongrass tends to be a bit more toxic than sorghums. Frosted areas could be only "pockets" in a field to start with. Any regrowth from the base of the plant after a frost can also be very high in prussic acid. If in doubt, wait.

Lastly today, if you haven't checked your winter-feeding pads, it would be better to do that now and add more lime topping or aggregate as needed. Also, it's not a bad idea to take the time to double check winter watering tanks while the weather is still good. I like the fall weather, but it never seems to last long enough.

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

**Reminders & Opportunities**

**Southern Indiana Grazing Conference –** March 10, 2021 – In-person conference has been canceled. Other options are being considered.
**Northern Indiana Grazing Conference –** Feb. 5-6, 2021; and **Heart of America Grazing Conference –** March 2, 2021**.** Details to be announced once decisions are made.

More pasture information and past issues of Grazing Bites are available at https://www.nrcs.usda.gov/wps/portal/nrcs/in/technical/landuse/pasture/

*Past issues of Grazing Bites are available at https://www.nrcs.usda.gov/wps/portal/nrcs/in/technical/landuse/pasture/*

Dubois County Soil & Water Conservation District
1486 Executive Blvd. Suite A • Jasper, IN 47546
812-482-1171 x3 • www.duboisswcd.org

# The Conservation Conversation

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

**OFFICE HOURS: MON-FRI 8 AM TO 4 PM**

**OFFICIAL BUSINESS NEWSLETTER**

**For address corrections or to be taken off the SWCD newsletter mailing list, please contact the SWCD office by emailing patti.schroeder@in.nacdnet.net or by calling 812-817-3447**

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

*Follow NRCS on Twitter!*
***twitter.com IN_NRCS_Dubois***

## 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
Justin Bary, Resource Technician
Melissa Ruschau, Program Technician
Bart Pitstick, Technical Specialist
Emily Finch, Invasive Species Specialist
Patti Schroeder, Administrative Assistant

## Partnership Staff

Taylor Gundlach, NRCS District Conservationist
Andrea Gogel, ISDA DOSC

## Rental Equipment Available at Dubois County SWCD

**No-Till Drill**—*Rental fee is $8/acre or minimum of $50.*
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.

**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.

**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.