Volume 2, Issue 3

The Flow

Clark County Soil & Water Conservation District

Partners helping to make our project happen:

- Clark/Jefferson/Scott County Health Departments
- Jefferson and Scott County SWCDs
- IDNR Division of Nature Preserves
- Indiana State Department of Agriculture
- Natural Resources Conservation Service

Update on Availability of Cost-Share Funds

The first year of the 3-year 14 Mile Creek/Goose Creek Watersheds Improvement Project has been very popular in terms of landowners taking advantage of the cost-share component of the project. In 2019, over 400 acres of crop ground was seeded to winter cover crops, five heavy use areas were approved, as were five alternative livestock watering sites, a waterway, over 180 acres of new forage seeding, and about 0.4 miles of interior livestock fencing.

With all this activity, new qualified applications are being put on a waiting list. Applications on this waiting list will be funded once either additional funds are secured or funds from previously approved projects are freed-up once their actual costs are submitted.

This isn't to say that landowners shouldn't apply for cost share assistance through this project; quite the contrary; landowners are encouraged to get applications in as quickly as possible. Having a wait list of significant projects that are highly ranked for improving water quality just might influence the Indiana Department of Environmental Management, who funds the project, to allocate more cost-share funds.

SWCD Spring Tree Sale

The Clark County SWCD's annual spring tree sale is now in progress. Trees offered in this sale are supplied by Woody Warehouse of Lizton, IN. These trees are 3-gallon, Grade 1 (nursery stock) container trees. Trees can be easily removed from their containers and directly planted.

Some of the species offered are: Red Maple, Red Chokeberry, Speckled Alder, Norway Spruce, Persimmon, Yellow Buckeye, Sugar Maple, Tulip Poplar, Yellow Birch, Black Walnut, and Sycamore. Trees are $28 each plus tax.

The deadline for orders is 4 p.m., Wednesday, April 1, 2020. Trees will be available for pick-up on April 14, 15 and 16 (8 a.m. to 4 p.m.) at the SWCD Office at the Clark County 4-H Center. For tree order forms or more information visit the web site (www.clarkswcd.org) or Facebook (Clark County Soil & Water Conservation District) or call 812-256-2330, ext. 3.

Inside this issue:

Water Wells and the Landowner's Responsibilities

Do you have an old water well on your property? Twenty-five years ago. Most rural residences in the 14-Mile Creek Watershed area had at least one private water well. Those wells were a necessity as many of the water utility companies hadn't yet extended service beyond a very limited geographical area. Today, I would say that there are very few parts of the watershed that don't have access to "city water". With the availability of "city water", many private water wells, especially those that were used for household water, were abandoned and homes were plumbed with municipal water as the source.

But, when those private water wells were abandoned, were they abandoned properly? Water wells are direct conduits between the land surface and the groundwater resource. If not sealed or plugged properly, abandoned wells can contribute to groundwater contamination. Common surface pollutants, including animal and human waste, pesticides, and fertilizers can take the path of least resistance down an abandoned well and into an aquifer. Abandoned wells can also be a serious safety hazard, especially for children. The 1988 Indiana water well drilling statute (IC 25 -39) requires abandoned wells to be sealed at the surface or plugged with impervious materials.

Landowners are responsible to make certain an abandoned well on their property is properly sealed or plugged. Sealing or plugging a water well may be a difficult task. Before attempting the job, a landowner should contact the Indiana Department of Natural Resources (IDNR) Division of Water and/or read the Purdue University Cooperative Extension Water Quality publication, "Plugging Abandoned Water Wells: A Landowner's Guide" (WQ-210. This guide, written in cooperation with IDNR Division of Water, is available online in PDF format from the Purdue Extension web site (https://mdc.itap.purdue.edu).

What's that Smell?

A failing septic system can wreak havoc on your health, your wallet and the environment. Malfunctioning septic systems can release excess nutrients into our streams and rivers. This contamination can stimulate algae growth. Excessive algae growth harms oxygen levels thus killing or negatively affecting fish and other aquatic organisms and reducing stream quality. E. coli can also enter our creeks and streams when a septic system is not properly functioning. Watch for signs of a nonworking septic system. Signs include foul odors, wet spongy ground or puddles of water near a drain field, lush plant growth near drain field and fixtures that drain slowly.

Here are some tips to properly maintaining your septic system

- Inspect your septic system annually
- Pump out your septic system every 3-5 years, using a licensed septic hauler
- Avoid or reduce the use of garbage disposals, they can contribute unnecessary solids to your septic system.
- Avoid drain field failures by avoiding hydraulic overloading. Install water efficient shower heads, faucets, and toilets to help limit wastewater levels and reduce the likelihood of septic system overflow.
- Obtain proper permits from the county health department before making or allowing repairs to your system.
- Don't plant anything over your soil treatment area except grass.
- Divert roof drains and surface water from driveways away from the septic system.
- Don't use your toilet as a trash can! Chemicals can corrode septic system pipes and might not be completely removed during the filtration process. They may also interfere with the proper function of your septic system. Keep grease, disposable diapers, tampons, gasoline, oil, paint, pesticides, etc. out of your septic system.

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Avoid Pasture Bloat

Bloat is a common problem in ruminant animals (sheep, goats, cattle), if they can't get rid of extra gas produced by the rumen microbes during digestion. Putting hungry animals on lush legume pastures, such as alfalfa – especially in the pre-bloom stage – is most dangerous. The situation becomes less dangerous once plants are mature and have a lower protein level. Small grain pastures (like winter small grains) that are high in protein content and low in structural fiber can be a risk as well under certain conditions.

Dr. Ron Gill, Texas A&M, says that in areas where wheat is grown, bloat is common on highly fertilized fields and immature stands. "We get bloat with a flush of growth, along with high nitrogen content, or a change in pH in the rumen that shuts things down a little. There are also issues with calcium imbalance. A lack of calcium in the animal's diet affects smooth muscle contractions and may hinder an animal's ability to push some of that gas out of the rumen," he says.

The occurrence of bloat can also be related to weather patterns. Sometimes cattle don't graze at regular times (perhaps waiting out a storm) and then overload. Another factor is related to days of rapid plant growth followed by cloudy days when nitrogen accumulates in the leaves but doesn't have enough sunlight the next day to complete photosynthesis (converting nitrogen into plant proteins).

Here are some tips to minimize bloat.:

*Products like Bloat Guard (poloxalene) are very effective if consistently consumed, but they only help prevent bloat; they aren't a treatment. With any of these bloat interventions, animals must be trained to consume them before they overeat the forages. If the plan is to use an ionophore in a mineral, or a poloxalene block, animals must be exposed to that product and trained to eat it well before they go on a bloat-prone pasture and they must continue to consume this product.

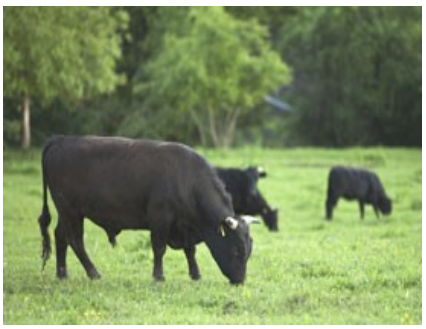
*One practice to help reduce risk of bloat is to fill animals up on a good, high-fiber hay before they go out on bloat-prone pasture. This should help reduce overeating.

*With small grains pastures, the incidences of bloat can be related to the amount of pre-planting nitrogen fertilizer applications. Research indicates that no more than 50 pounds of nitrogen be applied pre-plant if producers plan to graze those small grain plants. Additional nitrogen can then be applied top dress once animals are removed if those fields are to be harvested for grain later.

*Some folks provide long-stem hay free choice, such as big bales in the corner of a pasture. Doing this allows animals to address their fiber needs by eating a little hay.

*Another tactic is to let the small grain forage become more mature, so it isn't so lush, and then graze it during the frost-free period. This is because anything that disrupts photosynthesis in the actively growing plant (such as frost) can cause bloat.

*Another strategy is feeding a high-energy supplement while on these small grain pastures.



Adapted from an article in Feedlot Magazine, Oct. 8, 2019, by Heather Smith Thomas

Clark County Soil & Water Conservation District

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For additional information or details on the Fourteen Mile Creek/Goose Creek Watersheds Improvement Project, contact David Trotter, Watershed Coordinator, at 14mcwatershed@gmail.com

Here's a Flow Fact for You!

Trees protect our precious water resources! It would be an endless argument trying to decide which is more important for life as we know it – air, soil, or water. All are essential and deserving of our best stewardship, but this is a newsletter about water and water quality. Trees provide a valuable protection to our water resources by:

*Intercepting rain to reduce polluting runoff in urban areas.
*Reducing the impact of stormwater on infrastructure such as sewers and retention ponds.
*Reducing flood waters.
*Preventing soil erosion.
*Shading streams and otherwise improving aqueous habitat.
*Recycling water to the atmosphere through transpiration and evaporation.

Acknowledgement: Thanks to the Arbor Day Foundation newsletter of January/February 2020 for this Flow Fact.

Last Printed Edition of Watershed Newsletter

This is the last printed newsletter for the 14-Mile Creek/Goose Creek Watershed Improvement Project that will be mailed to you. After this, quarterly newsletter will be sent electronically to folks who have provided us with their email address. Get your email address to us by sending a note saying "I want to continue to get the watershed newsletter via my email." and send that to david.trotter@in.nacdnet.net . Future issues of the newsletter will also be available at our website (14milecreekwatershed@weebly.com).

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