



# Conservation News

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## Water Quality and Critical Areas of the South Fork Wildcat

### SAVE THE DATE!

Please plan to attend the Clinton County Soil and Water Conservation Districts' annual dinner meeting on Wednesday, March 7th, 2012 beginning at 6:30 PM. The event will be held at the Clinton County Fairgrounds in the Community Building.

The SWCD will be highlighting accomplishments from the past year, providing updates and recognizing several individuals for their conservation accomplishments. USDA staff will be providing timely updates on current Farm Bill programs.

The South Fork Wildcat Creek Watershed Partnership and the Clinton County Soil and Water Conservation District (SWCD) will host 2 public meetings to discuss water quality issues in the South Fork Wildcat Creek Watershed. Greg Bright of Commonwealth Biomonitoring, a company specializing in water quality and aquatic biology studies, will review the existing water quality of the South Fork Wildcat Creek Watershed on **December 6<sup>th</sup>** at the Frankfort

Public Library. Mr. Bright recently completed a water quality assessment of the watershed as part of a Watershed Management Plan currently being developed for the South Fork Wildcat Creek. On **December 8<sup>th</sup>**, Ben Reinhart of the Clinton County SWCD will discuss the selection of Critical Areas in the watershed. Critical Areas are specific locations within the South Fork Wildcat Creek Watershed where

conservation practices, and other implementation efforts, will be focused during future initiatives. Both meetings will start at 6:00pm and end no later than 7:00pm at the Frankfort Public Library Theatre in the Skanta Theatre. For more information please contact Ben Reinhart at the Clinton County SWCD (765-659-1223 x.3, [benjamin.reinhart@in.nacdn.net](mailto:benjamin.reinhart@in.nacdn.net)).

## Cost Share Assistance for Wildlife Habitat Restoration

The Greater Wabash River Research & Development Council, Inc. has been awarded grant funding for financial assistance removing invasive species within the Wildcat Watershed which encompasses land within Carroll, Clinton, Howard, Tippecanoe, and Tipton Counties. Grant funds will be distributed through Natural Resource Conservation Service (NRCS). The grant focuses on the removal of invasive species covered under NRCS practice 314 Brush Management, which includes: Bush Honeysuckle, Multi-flora Rose, Autumn Olive, Tree of Heaven, Glossy Buckthorn, and Periwinkle in forestland or grassland. Although half of the funds have been appropriated, there is still financial

assistance available to eligible landowners. Applications are ranked according to their proximity and resource concern to Wildcat Creek and its tributaries. If application becomes funded, financial assistance is distributed over a three year contract and acreage is determined by the percentage of invasive species present within the larger woods.

The NRCS 314 Brush Management Practice is carried within the Wildlife Habitat Incentive Program (WHIP). Removing invasive species and continual maintenance will allow native species to regenerate and create a healthy forest ecosystem. Grant funding from the *Mississippi River Basin Initiative* has also been procured for wildlife habitat

establishment. Financial assistance is available for WHIP practices such as tree & shrub establishment, wetland creation, enhancement, or restoration, and native grass plantings. Financial assistance varies and is scheduled by practice. Although this funding is limited to the watersheds encompassing the Middle and South Fork of Wildcat Creek, Brush Management and other Wildlife Habitat Incentive Program practices are federally funded and available throughout the state. Regardless of whether your property is located within this highlighted watershed, if you are interested in either invasive species removal or wildlife habitat establishment or improvement, please contact your local Soil & Water Conservation District for more information.

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## Review of Water Quality for the South Fork Wildcat Creek Watershed

The Clinton County Soil & Water Conservation District along with the South Fork Wildcat Creek Watershed Partnership has recently completed an assessment of current and past water quality impairments for the South Fork Wildcat Creek and its tributaries. Common problems included elevated levels of bacteria and pathogens, sediment, and nutrients being discharged by a variety of different sources.

Bacteria and pathogen levels were measured by estimating the presence and amount of E.coli in water samples across the drainage area. While E.coli itself isn't necessarily harmful, and is actually found within the digestive system of most warm-blooded animals including humans, they serve as an indicator for other, disease-causing bacteria and pathogens. Water samples throughout the watershed during both spring and fall months indicate E.coli levels exceeding water quality standards for full body contact recreation. Sources of E.coli can commonly include

agriculture- and livestock-related activities such as land applications of manure fertilizer, surface runoff from Confined Feeding Operations, and allowing livestock access to streams and waterways. However, recent research and modeling projects have indicated more development-related activities are significant sources of harmful bacteria and pathogens. The Indiana State Department of Health has estimated that roughly 1 in 4 Indiana septic systems are failing thus allowing approximately 15.3 billion gallons of sewage to enter local waterways. One estimate from the

*The vision of the South Fork Wildcat Creek Watershed Steering Committee is a clear, natural and inviting stream highly regarded for recreation and wildlife opportunities.*

Indiana Department of Environmental Management has estimated that failing septic systems account for as much as 20% or more of bacteria levels. While you might ask where the other 80% is coming from remember that the total amount of area which is taken up by septic systems is extremely small compared to other land uses. This means that, when comparing acres to acres, failing septic systems likely contribute far more bacteria and pathogens than other surrounding land uses.

Sediment and nutrients (i.e. nitrogen and phosphorus) have long been pollutants of concern for the South Fork Wildcat Creek and its tributaries. Much of this relates to the fact the watershed is comprised of approximately 80% agricultural lands dedicated to cropland and/or livestock. Many improvements are still being made within the agricultural realm however, with more and more

producers adopting conservation tillage practices, utilizing cover crops within their existing crop rotations, and integrated pest and nutrient management plans, much of the local impacts from agriculture can be minimized while producers are finding more efficient and profitable ways of farming. Based off of the 2011 Clinton County Tillage Transect almost 500,000 tons of productive farm soil and 250,000 gallons of diesel fuel were saved thanks to conservation tillage practices. Well established buffers of native grasses, shrubs, and trees along our streams and waterways are one of the best ways to limit the amount of sediment and nutrients reaching our local waters, keeping the resources on the farm and out of the stream. More developed areas also benefit from stream side buffers filtering the runoff of lawn chemicals, sediment, and providing a more stable streambank.

Large wooded riparian buffers can even help minimize flood damage and provide recreational opportunities. Currently, almost 60% of our lands within floodplains or next to smaller waterways are cultivated, hayed, grazed, or developed leaving few areas with well established riparian buffers.

Sections of the South Fork Wildcat Creek, along with downstream sections of Kilmore Creek, are currently recognized on the State of Indiana's Outstanding Rivers List. This elite group of waterways includes less than 9% of all stream miles in the state. The South Fork Wildcat Creek Watershed Partnership includes groups such as The Wildcat Creek Foundation, the Wildcat Guardians, local municipal and county governments, Purdue Extension, and active community members. To find out more about how you can help protect a local community treasure, the South Fork Wildcat Creek, please visit [www.clintonswcd.org/south](http://www.clintonswcd.org/south).

Special Holiday Sale! 10% off sales price for rain barrel orders placed by 12/16!



## Second Annual Stream Clean-Up Engages Local Citizens and Students to Protect the South Fork Wildcat Creek

Frankfort, IN – Early this fall, over 30 community volunteers gathered together to help clean up a section of the South Fork Wildcat Creek north of Frankfort. The South Fork Wildcat Creek Watershed Partnership and the Clinton County Soil & Water Conservation District (SWCD) hosted their second annual South Fork Stewards Stream Clean-Up on Saturday, September 17<sup>th</sup>. “We had a great group of volunteers and students from the Clinton Central FFA show up for the cleanup. They really worked hard and were a lot of fun to host.” said Ben Reinhart, Resource



Conservation Specialist for the Clinton County SWCD and one of the coordinators of the event.

This year’s South Fork Stewards Stream Clean-Up focused on the section of water downstream of the State Road 75 bridge, continuing to approximately County Road 130

West. The final totals for the day included over 2 tons of tires as well as almost 1.5 tons of metal and trash, all collected along approximately 1.5 miles of stream. This cleanup built off of last year’s efforts where over 8 tons of tires, metal, and trash were collected from areas around and just upstream of the State Road 75 bridge. “We had more weight last year but we were able to cover almost twice as much water this year.” says Reinhart. “Our general idea is to keep moving downstream cleaning up one section at a time, some years we may get more weight whereas other years we might cover more water. The South Fork Wildcat Creek really is a pretty stretch of water. These cleanups are meant to help protect this beauty but also allow people the opportunity to experience the South Fork and see what is right outside their back door.” The South Fork Wildcat Creek, from the U.S. 421 bridge downstream to its confluence with the Middle and North Forks, have garnered a number of accolades from the Indiana Natural Resources Commission. These designations include being a High Water Quality River, State Scenic River, and possessing an “outstanding ecological importance”. Less than 9% of all river miles in Indiana are included on Indiana’s Outstanding Rivers List.



The event included both local and regional sponsors who were integral in providing not only services such as trash disposal, which can be one of the most challenging and expensive components of a stream cleanup, but also donations of money and materials to cover equipment for volunteers (e.g. shovels, life jackets, canoes) as well as food and drink. The South Fork Wildcat Creek Watershed Partnership and the Clinton County SWCD would like to thank our sponsors including Republic Services, Inc., Wampler’s Services, Inc., The Farmer’s Bank of Frankfort, Wal-Mart of Frankfort, 3-D’s Pizzeria, Bruno’s Pizzeria, Frankfort Municipal Utilities, MCF Farm and Hardware, Wildcat Creek Foundation, Indiana Smallmouth Bass Alliance, Wildcat Creek Canoe and Kayak Too, Clint Orr Farms, Barrett Farms, and Mathews Farm Buildings.

## SWCD Holds Soils Judging Competition

Forty-five students making up 11 teams participated in this year’s soils judging competition held near Cutler. Three schools from Clinton and Carroll counties participated in the event. The competition is held annually by the Clinton and Carroll County SWCD to help prepare local students for regional competitions.

### *Congratulations to the winners!*

*Top Senior Team—Delphi*

*Top Junior Team—Delphi*

*Top Senior Individual—Ivan Veach, Delphi*

*Top Junior Individual—Kaleb Kinsler, Delphi*



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## Purdue Agronomist—Consider Costs Before Tilling

Farmers should take soil drainage, fertilizer and planting needs and economic thresholds into consideration before making tillage decisions, a Purdue Extension agronomist says.

“The first thing to consider when looking at tillage is whether we benefited from the tillage we did last year,” Tony Vyn said.

“Once again this year, there was very little yield advantage for those that did conventional tillage.”

No-till soybeans continue to perform as well as conventional tillage options, he said. No-till has also been found to be consistently successful for corn in rotation with soybeans when comparisons are based on similar planting dates for alternative tillage systems. But for farmers who intend to plant earlier, incorporate lime or band-apply fertilizers such as phosphorous below the soil surface, strip tilling and vertical tillage are two relatively new options that still protect the soil resource.

“These new, intermediate systems can preserve surface residue while enabling successful establishment of corn,” Vyn said. “However, we have not achieved success

with no-till operations when corn follows corn on poorly drained soils. As with any tilling system, with farmers paying more than ever for seed, we want to make sure that the final populations are not compromised and the yields are consistent.”

Both minimum-till systems enhance soil drying while leaving much of the soil undisturbed. Strip tilling disturbs only one-third of the area and results in comparable yields to the standard fall chisel system in corn planted after either soybean or corn, Vyn said. Shallow vertical tillage operations involve high-speed coulter and harrow operations that typically penetrate no more than the top 2-3 inches of the soil, cut and redistribute residue and help level the field surface.

Other farmers in Indiana are considering double-row strip tillage, which involves strip-tilling (for instance, between former corn rows), followed by planting soybean rows between 7 and 8 inches apart near the center of the strip. With this planting system, the soybeans can form an

earlier canopy cover.

Farmers should consider planting methods during the fall before tilling any more than necessary, Vyn said.

“Before making any tillage decisions, growers should consider an accurate reflection of the total cost,” he said. “Conventional tillage usually means three full-width passes in the field – sometimes more. We’ve noticed very little yield gain, so typically the expenditure isn’t worth it.”

Minimal or no-till systems can save farmers more than \$20 per acre in equipment maintenance, fuel and labor. But the complete savings are realized when soil productivity is considered.

“Full tillage and subsequent soil loss can quickly lead to negative implications for your land’s long-term productivity,” Vyn said.