BIG PINE CREEK WATERSHED

2017 trash hauled from Big Pine Creek thanks to volunteers and members of the Big Pine Creek Watershed working group.

Cover Crops Boost Yield and Weed Control

Following the use of cover crops, farmers reported increased yields of corn, soybeans and wheat, and improvement in the control of herbicide-resistant weeds, according to a nationwide survey. In addition, the survey of 2,012 farmers showed acreage planted in cover crops has nearly doubled over the past five years.

Survey participants—88% of whom use cover crops—reported that after cover crops:

•Corn yields increased an average of 2.3 bushels per acre, or 1.3 percent;

•Soybean yields increased 2.1 bushels per acre, or 3.8 percent;

•Wheat yields increased 1.9 bushels per acre, or 2.8 percent.

This marks the fifth consecutive year in which the survey reported yield increases in corn and soybeans following cover crops. It is the first year the survey team was able to calculate the impact of cover crops on wheat yields. The poll was conducted by the Conservation Technology Information Center (CTIC) with help from Purdue University and funding support from USDA's Sustainable Agriculture Research and Education (SARE) program and the American Seed Trade Association (ASTA).

Herbicide-Resistant Weed Control

"In addition to yield increases, farmers reported other benefits to cover crops, ranging from improved soil health to better control of herbicide-resistant weeds," notes Rob Myers, Regional Director of Extension Programs for North Central SARE at the University of Missouri. "For instance, 85 percent of the farmers who used cover crops said they have seen improvements in soil health. That reflects long-term thinking and a growing understanding of the enduring value that cover crops deliver."

Myers adds that 69 percent of the respondents said cover crops always or sometimes improved control of herbicide-resistant weeds. That is a significant number, he notes, as a majority of respondents—59 percent—reported having herbicide-resistant weeds in at least some of their fields.

Planting Trends

Since SARE and CTIC began their annual cover crop survey in 2012, there has been a steady increase in cover crop acreage among participants. In this year's survey, farmers said they committed an average of 400 acres each to cover crops in 2016, up from 217 acres per farm in 2012. They expected to increase their cover crop planting in 2017 to an average of 451 acres.

The timing of cover crop planting is also evolving. Cover crops are typically planted in the off-season from cash crops, providing ground cover, nutrient sequestration and scavenging, weed suppression and soil health improvements. Approximately three out of four cover crop acres in the survey were planted after harvesting a cash crop, but the practice of inter-seeding covers into growing cash crops is an emerging trend—27 percent of the respondents said they seeded cover crops at sidedress fertilization time or in late summer.

At the other end of the cycle, "planting green"—seeding cash crops directly into living, green cover crops, then terminating the covers—had been tried or used by 39 percent of the respondents. They said the approach helped suppress weeds, manage soil moisture and maximize other benefits of cover crops. Planting green was uncommon just a few years ago.

Business Opportunities

The last USDA Census of Agriculture found that farmers planted more than 10 million acres of cover crops in 2012. The new agricultural census, which will begin this fall, is likely to find several million additional acres of cover crops planted in 2017.

The growth of cover-crop use is likely to expand a range of business opportunities throughout agriculture. Twelve-percent of the surveyed cover crop users hired aerial applicators to seed their cover crops, while 8-percent hired an ag retailer or co-op, and 6-percent hired another farmer to do the planting. Asked who they wanted to buy cover crop seed from in the future, 43 percent said they would like to buy from specialized dealers.

"The SARE/CTIC Cover Crop Survey is a great opportunity to gather insight into the purchasing decisions of farmers when it comes to cover crops," ASTA President and CEO Andy LaVigne says. "The data from the previous four years' surveys shows this is an important time to be involved in this space within the agriculture community, and ASTA members are pleased to support the efforts of SARE and CTIC to gain insight into the cover crop seed needs and requests of farmers nationwide."

Cover Crop Motivations

One of the most important outcomes of the SARE/CTIC Cover Crop Survey is insight into what motivates farmers to use—or start using—cover crops, notes Chad Watts, Executive Director of CTIC in West Lafayette, Indiana.

"Among cover crop users, we are seeing great enthusiasm for the soil health benefits of cover crops, with a widespread appreciation for the long-term benefits of covers," Watts notes. "We're also seeing openness to practices like inter-seeding and planting green, which raises cover crop use to the next level in terms of creating new options for species and mixes, and new opportunities to get even greater benefits from their covers.

"Among non-users, we're getting a strong signal that they want more information and training," he adds. "The feedback we're hearing through the survey will help guide the research and extension agenda to gather and share the information farmers need in order to adopt and succeed with cover crops."

In addition to the contributions of SARE, ASTA and Purdue, support for the survey was provided by ASTA members Beck's Hybrids, Grassland Oregon, Justin Seed Company, La Crosse Seed, Monsanto and Seedway, with additional help from Penton Agriculture.

The complete 2017 Cover Crop Survey Report is available online at www.sare.org/CoverCropSurvey.

Benton County Farm to Fork Event a Huge Success!

A special thanks to all the sponsors and attendees of the first annual Farm to Fork. The event, that celebrated local food and agriculture in our community was attended by nearly 150 people and raised $6,500 for the historic Fowler Theatre!

-Photo courtesy of Twin Sisters Designs

Ag Day

Benton Central FFA students along with Purdue Extension and Benton County Soil and Water Conservation District hosted 3rd-6th graders from The Benton Community School Corporation and Sacred Heart at the fairgrounds in Boswell October 12th for the annual Agriculture Day. The event is completely planned by the FFA students and centers around teaching the kids' different areas of agriculture. This year, students were able to learn about whole grains, conservation planning, soils, and worked first hand with a variety of livestock. A special thanks to the FFA for planning this awesome event!

-Photo courtesy of Mr. Jon Charlesworth

November 9th, Farming for the Future Field Day

The event will be held on November 9th, 2017 from 9:00 a.m.-4:00 p.m. CST at 5400 East 1000 South, Brook, IN 47922. Event speakers include the soil health guru Ray Archuleta and Dr. Armstrong from Purdue University talking about reducing corn inputs study that is occurring on site! The morning includes the main speakers and breakout sessions, followed by a delicious, hot lunch for those that RSVP. After lunch, explore the site on your own and enjoy the root beer float social. Experts and skeptics will be present to facilitate discussion and answer questions. This event is FREE to attend thanks to our many local sponsors: Conservation Cropping Systems Initiative, CISCO, Carlile Ag, Fennig Equipment, Saddle Butte, KB Seeds, Stuart & Branigin, Bi-State Air, Performance Farm Solutions, Shuter Sunset Farms, Air Scout, Manchester Ag, Solid Rock Ag, Fratco, and the Law Office of Michael Riley. Further support has been provided by your regional Soil and Water Conservation Districts.

Interested in Conservation?

There are lots of opportunities for cost-share assistance. Please contact your local Soil and Water Conservation District or Leslie Fisher, Benton County SWCD, for more information. Hurry, the next application deadline for cost-share is December 15th!

Hotel Mudlavia

Hotel Mudlavia was founded in 1890 by Harry Kramer near Attica, Indiana. The site that the hotel sat on is now known as Kramer although Kramer is not an actual town. The site was discovered in 1884 by a farmer and former Civil War soldier by the name of Samuel Story. He found a natural spring and drank from it during a break from digging a drainage ditch. He suffered from Rheumatism and found that his symptoms gradually receded the more he drank from the spring. This caused people to believe that the water on the site had healing powers.

Hotel Mudlavia opened on Christmas Day of 1890. The hotel was a place for people with Rheumatism and other achy ailments to go for treatment. The resort was known for the water and its mud baths, which is how the hotel got its name. People also came just for some rest and relaxation. The hotel featured buggy riding trails, a golf course, tennis courts and a chapel. The picturesque setting and the amenities attracted many well-known people. James Whitcomb Riley, the famous poet frequented the hotel. John Dillinger and his gang are rumored to have stayed there. The legend has it that they were ambushed and everyone but himself in his gang were killed. It is also rumored that Al Capone stayed there. The creepy thing is that it is confirmed that discarded bodies were found in the wells of the property!

The first building, which was by far the most beautiful, was destroyed by a fire in 1920. In 1960, a retirement home by the name of Pleasant Valley Lodge was built on the site. It also was mysteriously destroyed by fire in 1968. The site was developed again in 1971 as the Mudlavia Restaurant. In 1974 it too was destroyed by fire. The charred and gutted remains of the restaurant still stand. You can still make out where the original hotel once stood as some of the foundation is up and no trees have grown where the building was, just around it! Today, the Perrier Water Co. bottles and sells the water from the springs.
The property is private property and off limits due to safety reasons except to the Perrier Company.

Mudlavia was a world-renowned mineral springs and resort in the early 1900s. Although the hotel is gone, local mineral springs are still bottled and sold nationally.

-Photo by Wikipedia

Natural Area Preservation in Pig Pine Creek Watershed

In 1989, Dr. Betz and Herbert Lamp wrote a paper reporting on the composition of species from a portion of the forty-five prairie cemetery remnants they had identified in Illinois and Indiana.

Briscoe Cemetery (Warren County) along Mud Pine Creek was one of the remnant prairies discovered, with 30 species of prairie plants identified, including cream wild indigo (state threatened), shooting stars, prairie rose and two bush clovers.

The discovery of this site led to the DNR in 1994 to work with the township trustee to manage the property, which primarily involved the thinning of woody vegetation to reinvigorate the prairie plants that need to ample light to thrive.

Tom Swinford, Division of Nature Preserves employee remembers the site as a beautiful dry location with puccoon, hazelnuts and shootings stars overlooking the creek.

Unfortunately in 1997, after the DNR cleared the site, the township trustee bowed to people wanting “to honor the deceased” and began mowing the site, which effectively kills the non-grasses in a couple of years and furthers the dire plight of native plants in the Big Pine Creek watershed.

In 2008, Bryce Hewitt donated 163 acres to NICHES Land Trust to protect. The property includes a mile of frontage on Mud Pine Creek north of Briscoe Road, and is adjacent to Briscoe Cemetery.

NICHES Land Trust staff and volunteers have worked to thin woody vegetation and returned fire to the portion of the property on the west side of the creek next to the cemetery and have been rewarded by the reinvigoration of shooting stars, prairie rose and bush clovers, and we have our fingers crossed about a return of the cream wild indigo.

The majority of the land in the Big Pine Creek watershed will be devoted to the growing of food crops, but surely we can do a better job of allowing areas of lawn to be restored to native vegetation and our few remaining prairies, oak woodlands to be reinvigorated with fire and invasive species management so that the lands and waters of the region are a healthy blend of productive lands and natural areas.

-Article contributed by Gus Nyberg

On Improving the Property

They laid the trilliums low,
and where drifted anemones and wild sweet phlox
were wont to follow April's hepaticas — they planted grass.

There was a corner that held a tangled copse
of hawthorne and young wild crabs
bridal in May above yellow violets,
purple-twigged in November.
They needed that place for Lombardy poplars — and grass.

Last June the elderberry was fragrant here,
and in October the viburnum poured its wine
beneath the moon-yellow wisps of the witch-hazel blossoms.
They piled them in the alley and made a burnt offering — to grass.

There was a slope that a wild grapevine had captured long ago.
At its brink a colony of mandrakes held green umbrellas close,
like a crowd along the path of a parade.
This job almost baffled them; showers washed off the seed
and made gullies in the naked clay.
They gritted their teeth — and planted grass.

At the base of the slope there was a hollow
so lush with hundreds of years of fallen leaves
that maiden-hair swirled above the trout-lilies,
and even a few blood-roots lifted frosty blossoms there.
Clay from the ravaged slope washed down
and filled the hollow with a yellow hump.
They noticed the hump — and planted grass.

There was a linden that the bees loved.
A smug catalpa has taken its place,
but the wood ashes were used to fertilize the grass.

People pass by and say: "Just look at that grass —
not a weed in it. It's like velvet!"
(One could say as much for any other grave.)

by May Theilgaard Watts