



2019

ACCOMPLISHMENTS



MISSION

The mission of the Indiana Conservation Partnership is to provide technical, financial and educational assistance needed to implement economically and environmentally compatible land and water stewardship decisions, practices and technologies.

VISION

The ICP's land and water stewardship assistance will improve the quality of Indiana's streams, rivers and lakes; protect our drinking water; and increase soil quality to boost food and fiber production.

MEMBERS

- Indiana Association of Soil and Water Conservation Districts and our 92 SWCDs
- Indiana Department of Environmental Management
- Indiana Department of Natural Resources
- ISDA Division of Soil Conservation
- Purdue Cooperative Extension Service
- State Soil Conservation Board
- USDA Farm Service Agency
- USDA Natural Resources Conservation Service



ICP Accomplishments

2019

The Indiana Conservation Partnership (ICP) Training and Certification Program strives to improve efficiency in training amongst all ICP technical employees, resulting in a more highly skilled workforce and seamless delivery to customers. Employees from each agency (as well as the Indiana District Employees Association) have representation on the committee that leads the initiative. Trainings hosted in 2019 by the Training and Certification Program included two Pollinator trainings and five Soil Testing and Interpretation Results trainings.

The 27th anniversary of the Pathway to Water Quality Exhibit at the Indiana State Fair was celebrated this year. The PWQ Committee, consisting of representatives from the ICP tirelessly give countless hours to maintain and improve the exhibit. The committee is already working hard on updates and changes for 2020, including better ways to track attendance and improve the educational experience that is delivered. A special thanks to all the volunteers who worked at the exhibit this August. Without your help, we could not make the PWQ a sought after exhibit at the fair.

This year marked the 13th year for the Leadership Institute (LI) for SWCD supervisors, employees and ICP staff. Two workshops, “Impacting Community” and a special LI+ “7 Habits of Highly Effective People” were held, with a total of 39 staff and supervisors attending. Twelve of these individuals were new participants. Since 2006, 482 individuals have participated in the trainings and a total of 104 have completed the entire Cornerstone training series, including five new graduates this year.

Focus Area: Soil Health and Nutrient Management

Conservation Cropping Systems Initiative (CCSI)

CCSI continues to provide training, outreach, and other soil health education support for partners across Indiana – contributing to the State’s leadership in adoption of cover crops and other soil health practices. Activities for 2019 included:

Staffing:

- Welcomed new Northern Program Manager Sheila Schroeder. Trisha McLain, former CCSI Northern Program Manager accepted a position as Biological Scientist at Grissom Air Force Base.
- Lisa Holscher, Director (lisa.holscher@in.nacdnet.net)
- Joe Rorick, Conservation Agronomist (jdrorick@purdue.edu)
- Sheila Schroeder, Northern Program Manager (sheila.schroeder@in.nacdnet.net)
- Jessica Hoehn, Southern Program Manager (jessica.hoehn@in.nacdnet.net)

Material participation in 90 events, reaching approximately 3500 individuals.

The events included:

- Regional Ag Forum - Focused on target audience of traditional tillage farmers, this event was book-ended with Randy Kron, Indiana Farm Bureau President and Martin Barbre, USDA-Risk Management Agency Administrator. The term “soil health” was downplayed and focus was placed upon demonstrations (Barry Fisher and Stephanie McClain, NRCS) and presentations on financial returns (Rick Clark, Clark Land and Cattle). Survey results indicated a strong desire to “change a management practice” based upon the presentations.
- National Association of County Agricultural Agents Tradeshow - Coordination of booth featuring Indiana Partnerships and Soil Health. Organization of demos by CCSI Agronomist and NRCS State Soil Health Specialist. Booth visitors included +/- 300 Extension Ag and Natural Resource Educators from at least 29 states.

Hoosier Chapter Soil and Water Conservation Society

- In partnership with the Hoosier Chapter and CTIC – leveraged SARE funding and partner resources to develop Summer (Planting Green) and Fall (Selling Conservation) trainings for conservation professionals and increase membership/participation in the Hoosier Chapter SWCS.

American Society of Agronomy-Crop Science Society of America-Soil Science Society of America International Annual Meeting

- Invited symposium speaker on Collaborations at the National, Regional, and State Levels to Facilitate Transfer of Knowledge: Cover Crops and Soil Health

4R/IANA Field Day

- Soil Health Demonstrations to approximately 75 ag retail and conservation partnership staff.

Training

- 16 Train-the-Trainer events, 415 attendees. This included: A series of 4 Advanced Soil Health Systems focused upon strip-till equipment set-up and no-till planter modifications; 120 attendees; and, a series of 5 ICP Soil Testing and Interpretation Trainings; 145 attendees

Provided additional support to partners in their advancement of soil health, including:

- FFA State Fair Pavilion - Provided Cover Crop Grow Tubes and information for the FFA display during the Indiana State Fair
- Compilation and Publication of Prevented Plant Resources www.CCSIN.org/conservation-practices/prevented-planting-tools/
- Women4theLand Non-Operating Landowner Outreach Support - Development of Articles and Videos with CCSI Communications Contractor; Podcast with Hoosier Ag Today
- Soil Health Podcasts with Hoosier Ag Today along with supplemental materials ready for re-print or use in newsletters (www.CSSIN.org/podcast)
- Curation of soil health and cover crop images for reuse in publications. (www.CCSIN.org/visual-media-tools)
- Curation of Soil Health Events calendar and events newsletters, including new tool to submit events. (www.CCSIN.org/events)



Conservation Reserve Enhancement Program (CREP)

2019 marks the 14th year of the Conservation Reserve Enhancement Program (CREP) in Indiana. The program covers eleven priority watersheds within the Wabash River System touching 65 counties with an acreage enrollment goal of 26,250 acres, and a goal to protect 3,000 linear miles of water bodies in the Wabash River System.

- 2019 saw an enrollment of 2,305.67 acres in the Indiana CREP watersheds by interested landowners.
- In 2019, landowners completed or installed on the ground a variety of conservation practices and buffers with approximately 2,550.94 acres completed.
- An estimated 441,606 trees have been planted through bottomland timber establishment in the Indiana CREP in 2019.
- Also in 2019, 922.61 acres of wetland restorations were completed or installed, with 1,193.7 acres still planned for future installation.
- With the large number of practice acres completed in 2019, this resulted in the state paying out approximately \$946,867.00 in direct payments to participants for installation of practices, and \$94,686.70 in administrative fees to partnering SWCDs.
- Estimated Nutrient Load Reductions for CREP practices completed in 2019:
 - Sediment – 12,185 tons
 - Phosphorus – 15,163 lbs.
 - Nitrogen – 29,911 lbs.
- Since inception of the Indiana CREP in 2005:
 - Total acres completed are 17,763.15
 - Total acres enrolled are 19,959.52 (76% of the goal)
 - Total buffer lengths completed – 837.3 linear miles (4,420,929 feet) (27.9% of the goal)
 - Over \$7.39 million in state funds have been invested to implement these conservation practices, and for every state dollar that is invested, \$4-\$13 federal dollars are matched through the Conservation Reserve Program (CRP) incentives available through the FSA.
- The 2019 CREP Annual Report can be found on the ISDA website at <http://www.in.gov/isda/2837.htm>

INfield Advantage

INfield Advantage works with small regional groups of farmers who are interested in improving their nutrient use efficiency on their corn fields by sharing their management decisions and the resulting impact those decisions had on their production with a goal of creating personalized local guidance for future management innovations. This year the program completed its ninth year and continues to be one of the largest adaptive nutrient management farmer networks in the country.

INfield Advantage is offered to Indiana growers as a joint project of multiple local, state and national government partners and NGOs. Indiana State Department of Agriculture, Division of Soil Conservation, acts as the project coordinator shaping the program and ensuring that protocols are followed so that all growers will have a consistent productive experience. There are no additional charges for the growers to participate. Through the support of key partners, such as SWCD's and Purdue Extension, the program is able to run effectively. Each of the partners supplies local staff to help growers enroll their fields. The expenses connected to collecting aerial imagery and preparing the fields reports are covered by Indiana Corn Marketing Council/Indiana Soybean Alliance checkoff funds.

This year INfield Advantage faced an unprecedented growing season. The program adapted to offer the growers enrolled a comprehensive understanding of the makeup of their fields through an aerial imagery approach.

In 2019, INfield Advantage's participants were provided with two aerial imagery flights, the first being a late-season imagery analysis of their fields. This imagery correlated closely with yield maps and looked at different indices to capture crop variability. The second flight was a bare soil imagery analysis that provided a zone map as well as an accurate representation of soil variability. This map distinguishes between soil types (i.e. rich/heavy vs. light/sandy) and in turn contributes to nutrient management decisions. The aerial imagery will be discussed at group winter meetings and will allow the growers to have a better grasp on the choices they are making on their operations.

2019 INfield Advantage statistics at a glance

- 52 participating growers
- 9 active local groups covering 18 counties
- 99 fields – (66 in soybeans)
- 7,000 monitored acres



Purdue

Over 100 Indiana Conservation Partnership staff participated in the Purdue “Soil, Water, Cropping Systems Forum: How Purdue is Moving Ag Forward in Sustainable Ways.” Twelve Purdue researchers highlighted their research in soil nutrients, soil health, water quality, climate, pesticides, and cropping systems. Table discussions focused on how the research findings could be applied to the work being done in our respective agencies and organizations.

Purdue Extension partnered with other land grants, associations and ag industry to host the 2019 North American Manure Expo July 31-August 1. Over 800 daily participants attended seminars, demonstrations and tours on improving manure management, safety, protecting the environment and optimizing available nutrients.

“Soil Testing and Interpreting Results” trainings were held statewide to enhance ICP staff members skills on the soil sampling process, soil analysis, soil nutrient interpretations/recommendations and environmental considerations.

The Indiana Watershed Leadership Academy will hold its 15th class from January to May 2020. Graduates are engaged throughout Indiana and beyond in improving environmental stewardship and water quality (<http://www.purdue.edu/watersheds>).

The Transforming Drainage project includes scientists from universities in 10 states, Purdue included, and collaborators from the industry to transform the way drainage is implemented across the agricultural landscape so that agriculture will be more resilient to climate change.

“Teaching Soil Health Principles” train-the-trainer sessions were conducted to empower educators to instill soil health knowledge to middle school and high school age youth. The sessions highlighted the Purdue Soil Health Education website (<https://www.asec.purdue.edu/soilhealth/>) which includes teacher resources, experiential learning activities, videos and photos.

Purdue is working with local and state partners in the St. Mary’s watershed to create a better picture of the state of soils and waters and suggest practices and procedures to enhance soils and waters of the region.

Purdue Agricultural Centers are conducting research on many aspects of cover crops, nutrient management and cropping systems to address the needs of Indiana agriculture.

Purdue Extension specialists and Educators developed resources and provided outreach to address adverse weather conditions and economic challenges producers faced in the 2019 cropping season.

Focus Area: Special Projects and Initiatives

The ICP continued to coordinate and partner on special projects and initiatives across Indiana, including:

- Coordinated on submitting new proposals for watershed projects, including the Regional Conservation Partnership Program, National Water Quality Initiative, Mississippi River Basin Initiative, projects in the Western Lake Erie Basin, 319 Nonpoint Source, Clean Water Indiana and Lake and River Enhancement projects.
- Participated in the Hypoxia Task Force and Domestic Action Plan for the Western Lake Erie Basin, and supported the State Nutrient Strategy, and Indiana Ag Nutrient Alliance goals.
- Supported all existing ICP Initiatives and projects.
- Implementing the State Nutrient Reduction Strategy and shared data on nutrient and sediment reductions (available on ISDA Division of Soil Conservation web page). Developed a workplan for a statewide Science Assessment.
- Coordinated efforts in the Western Lake Erie Basin, including the Annex 4 Domestic Action Plan, Regional Conservation Partnership Program project, WLEB Initiative, and SWCD projects (see Story Map housed on ISDA Division of Soil Conservation Web Page).
- Supported the Conservation Reserve Enhancement Program and the Indiana Corridors program.
- Supported education on watersheds through the Pathway to Water Quality.
- Supported work on Invasive Species with SICIM.
- Supported Indiana's Pollinator Plan and State Monarch Strategy.
- Supported the National Conservation Planning Partnership Campaign.



*Photo: Crimson Clover & Cereal Rye Grass
Credit: Edwin Remsberg and USDA-SARE*

Focus Area: Monitoring, Reporting Outcomes, and Outreach

Conservation Accomplishments

The ICP continues as a national leader in conservation data sharing to identify statewide impacts, efficiently target resources, and demonstrate outcomes.

- With assistance from the ICP, landowners installed over 22,000 brand new conservation practices on the ground in 2018 with over 60 percent of these practices having direct positive impacts on water quality.
- Over 14,000 water quality improving practices kept sediment and nutrients on fields and out of State waters.
- 892,487 tons of Sediment were reduced
- 940,271 pounds or 4.7 train cars of Phosphorus were reduced
- 1.9 million pounds or 9.5 train cars of Nitrogen were reduced
- Top 10 counties for installing new conservation practices in 2018: 1. Washington, 2. Allen, 3. Adams, 4. Whitley, 5. Decatur, 6. Greene, 7. Harrison, 8. Posey, 9. Kosciusko, 10. Noble

Additional information regarding Indiana's conservation accomplishments can be found on the ISDA website at <https://www.in.gov/isda/2991.htm>

Cover Crop and Tillage Transect Survey

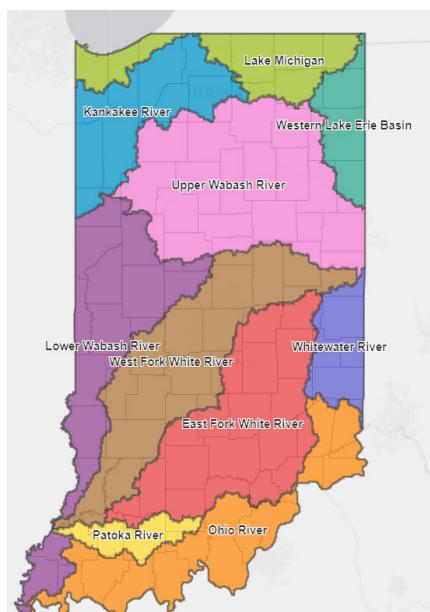
The ICP continued the Cover Crop and Tillage Transect Survey in 2019, resulting in the following:

- 38% of Indiana's corn and soybean acres managed with no till, a 440% increase since 1990
- 53% of Indiana's corn and soybean acres managed with conservation tillage, a 332% increase since 1990
- 9% of Indiana's corn and soybean acres managed with cover crops, a 434% increase since 2011

Additional information regarding Indiana's Cover Crop and Tillage Transect Survey can be found on the ISDA website at <https://www.in.gov/isda/2383.htm>

Interactive Web Tools

- **Indiana's Sediment and Nutrient Load Reductions Web Application** – ISDA receives numerous requests throughout the year for nutrient load reduction and conservation workload data pertaining to smaller HUC 12 watersheds. In an effort to streamline these requests ISDA created an ArcGIS web application that allows users the ability to select/query watersheds of interest on a map and download the nutrient load reductions and conservation workload to a CSV file. The web application can be found on the ISDA web page at <https://www.in.gov/isda/2991.htm>.
- **Cover Crop and Tillage Transect County Reports** – ISDA created an interactive web map which allows users to select a county and view a report featuring the latest no till, conservation tillage, conventional tillage and cover crop results for corn, soybean, small grains and specialty crops. The interactive map can be found on the ISDA website at <https://www.in.gov/isda/2383.htm>.
- **Story Maps** - ISDA updated Indiana's major river and Great Lake basin ArcGIS Online story maps with the 2018 land use, nutrient load reduction, water monitoring and tillage transect data. The 2019 data will be published in April 2020. The story maps can be found on Indiana's Nutrient Reduction Strategy web page at <http://www.in.gov/isda/2991.htm>.



Your Indiana Conservation Partnership

Indiana Conservation Partnership
www.icp.iaswcd.org

Indiana Conservation Partnership Reports
www.in.gov/isda/icpreports/

Pathway to Water Quality
www.pathwaytowaterquality.org