



CEREAL RYE COVER CROP,
COURTESY OF MIKE FINN

DECEMBER 2024 NEWSLETTER

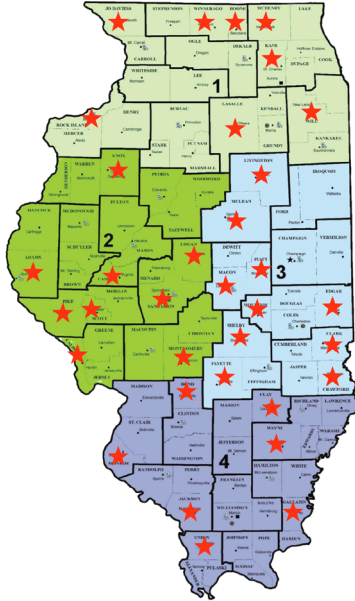
AGROECOLOGY + INNOVATION MATTERS

The Capacity Building Initiative promotes bottom-up agroecology, fostering sustainable innovation at the local level, and sharing progress through Agroecology + Innovation Matters (AIM) initiative communications.



AIMING FORWARD

UPDATES FROM AIM



NRCS Districts and locations of AIM Conservation Planners

history. Currently, Tim lives in Abingdon with his fiancé Alyssa and their four cats. He joined the Capacity Building Initiative in May of 2023 as a Conservation Planner.

December and Winter are already here and New Year’s is just around the corner. While the year is winding down, AIM is still working full speed ahead!

AIM has hired two new Conservation Planners for the upcoming year. Agnes Molek joins our team in Lee County in the Amboy Field office. Agnes has a M.A. in Biology from Miami University in Ohio and a B.S. in Biology from Lewis University. George Hickman joins our team in Ford County in the Paxton Field office. George has a M.A. in Plant Biology from University of Illinois and a B.S. in Environmental Science from Eastern Illinois University. Welcome to the team!

Along with our new hires, two of our current Conservation Planners have reached Level III status: Timothy Blackwell and Courtney Lercher.

Tim is based at the Knox County Soil and Water Conservation District. Originally from the southern Florida area, he came to Illinois to study at Illinois College and graduated in 2022 with a bachelor’s degree in



Level III Conservation Planner Timothy Blackwell.

Originally from Trenton, Illinois, Courtney studied at Illinois College and graduated in 2023 with a bachelor’s degree. Currently, she lives in Jacksonville with her partner Bryan and their two cats. She joined the Capacity Building Initiative in February 2023 as a Conservation Planner. She is based at the Scott County Soil and Water Conservation District.

Congratulations Tim and Courtney!

AIM has open positions, please contact Kristen Heaton (kristen.heaton@illinois.gov) to learn more about these positions.



Level III Conservation Planner Courtney Lercher.



CONSERVATION PLANNER SPOTLIGHT

COURTNEY LERCHER

Upon speaking with Courtney Lercher at the Scott County Soil and Water Conservation District, her environmental consciousness radiates along with her ambition to assist producers, and it comes as no surprise that she was one of the first Conservation Planners (CPs) to achieve Level 3 certification.

Her interest in agriculture started in high school when she and her parents began raising chickens, ducks, and geese in their small town in Clinton County. Her fondness for these birds is apparent as she speaks very affectionately about the different breeds they raised, sharing the unique personalities of each one. This activity led to her joining Future Farmers of America (FFA), where she began showing her birds. She said, "I won a couple prizes and started to get really into FFA... that led to me being part of the horticulture team, where I started studying plants and learning different facts about them."



Left to right: SCSWCD RC Lance Mueller, IDOA/NRCS CP Courtney Lercher, NRCS Area 2 Compliance Lead John Ford.



Courtney Lercher and former Conservation Planner Erin Hoover at the State Capital for Soil Health Day

Learning about plants, along with visiting state parks and taking nature-based vacations with her family, piqued her interest in environmental stewardship. She took a class at Illinois College called Emerging Issues in the Ag Industry, which made her start considering the possibility of combining her fervor for agriculture and environmentalism into potential career opportunities. In February of 2023, she was hired by the Conservation Capacity Building Initiative.

She said, "I think entering this job has really opened my eyes to the fact that I can actually do something about conservation in this setting. I wasn't sure that I would be able to find a job where I could care about the environment and actually do something physically... where in this job, I am able to help producers and actually help the environment."

In her Scott County office, she works closely with SCSWCD Resource Conservationist (RC) Lance Mueller and NRCS Area 2 Compliance Lead John Ford who oversees wetland and highly erodible land determinations in 26 counties across west central Illinois. As one of the smaller counties in the state, they are the only fulltime employees in this office,



Conservation Planner (Sangamon Co. SWCD) Nick Werries and Courtney Lercher with before and after's a soil painting demo.

so they work on many different programs together. Lance said, "When Courtney came on board, that just means she got thrown into the thick of things, and she's always been very willing and open minded about jumping around from program to program. CRP is one of the programs that the district and IDOA planners work on quite a bit... She jumped right on-board doing field visits, evaluating the vegetation that's out there, and grasped early on what indicates compliance or non-compliance with the CRP contract. We must follow up with producers with a letter, explaining what's going on out there... Courtney did very well with developing the verbiage for that." Being such a small office, they partner with Morgan County for certain events like fish and tree sales or Envirothon. In fact, they also spent the summer working in the Morgan County office while theirs was being remodeled. Courtney said, "I love how big and open the new office space is. It really allows for open communication collaboration on projects with my coworkers."

The Scott County office is heavy in survey and design projects. According to Courtney, they were recently out surveying 3 to 4 days per week, which includes GPS data collection. This topographical information is required to design and complete projects like water and sediment control basins, for which cost share is provided through the state's Partners for Conservation program. Lance said, "Right from the get-go with the GPS survey equipment, Courtney jumped right on board and learned how to operate that data collector right away. I would venture to say that she's more proficient in that than some NRCS employees who have been here for years."

According to Lance and John, once a producer has implemented their first conservation practice, they often will follow up with an interest in doing more. Just being available to provide information goes a long way, as John explained, "Someone willing to take the time to interact with them, introduce them to new ideas, help them take those baby steps, and then it branches out from there." Lance agreed, adding, "I think you see a success story with almost every new participant. It's not uncommon for a farmer to come in for a cost share project... maybe they haven't done any conservation work on their farm for a number of years, and once they get that first project out of the way, they will come back and engage in another contract."

Courtney has established a connection with many of





Area 2 Field Day.

the producers who visit her office, explaining that hearing about how producers are implementing these practices makes them feel good about the work they are doing and helps them create better conservation plans in the future. John said, “Courtney will send out the letters for CRP status reviews, and they will come in here and have questions about it. She can get right up there and explain what’s going on and answer their questions and help them know what they need to do.”

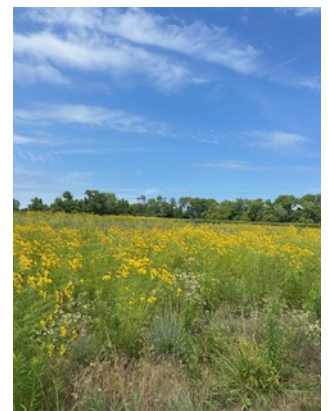
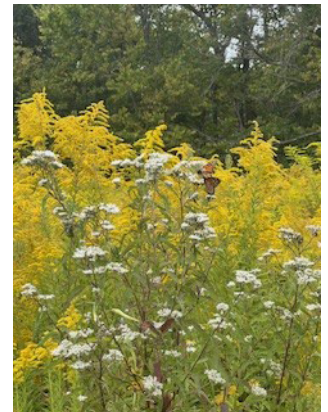
With John having 35 years of experience working with NRCS, and Lance being the SCSWCD RC for nearly 30 years, Courtney has gained a wealth of knowledge from both. She said, “Lance and John have really demonstrated how USDA employees and partners should work together in each office. They have each taken me under their wing and helped teach me new skills like surveying and how to use what I have learned in trainings during day-to-day situations in the office.”

John believes the process for becoming a Level 3 Certified Conservation Planner has become more complex over the years, and he’s been impressed with Courtney’s ability to complete this while also performing her job so effectively. He said, “I’m just

amazed at how organized she is... She keeps track of where things are at and stays on track... A lot of times I will look over, start talking to her, and realize that she’s getting training online... And not only that, but making it a priority to be available to go out in the field and learn these additional jobs that are part of being in a field office... She’s done really well.”

One of the final assignments in achieving Level 3 Certification is to create two Resource Management Plans, which address every resource concern you may have on farm (erosion, water quality, energy, etc.), for two producers. Once these are submitted, the CPs get feedback, make corrections, and submit the plans again. Courtney described this as a very detail-oriented and immersive month-long process. Most NRCS employees spend at least a few years working toward Level 3 Certification, but Courtney explained that the training process is very back-to-back for CPs, which made it easier for her to retain the information and apply it. She said, “A typical NRCS employee would take 3 to 5 years to get the Level 3 status, which means you are able to talk to a producer, explain things, and build a plan curated to their needs from the very beginning to end. But I got it done in less than two, which is exciting.”

Along with spending time outdoors, Courtney enjoys the fluidity of her job and getting to work on different projects each day. “When people ask what I do... I jokingly tell them that I look at grass,” she said with a chuckle. “That’s my favorite part... being able to look outside and identify plants... When native plants are in full bloom—getting to see the butterflies and bees.”



Photos of Scott County provided by Courtney Lercher.





THE ILLINOIS STAR REPORT

SAVING TOMORROW'S AGRICULTURE RESOURCES

GET YOUR FREE STAR SCORE FOR CROP YEAR 2024!

The STAR Tool is available for Crop Year 2024, and now is the perfect time to assess your fields if you haven't already!

With harvest behind us, many farmers are reflecting on what went well this season and what could be improved next year. Why not use the STAR Tool to identify how to incorporate conservation into that planning? The tool focuses on practices that enhance soil health and water quality, giving you a free benchmark of where your fields stand.

GET STARTED, NO MATTER WHERE YOU ARE

You don't need to have existing conservation practices in place to use the STAR Tool. It's designed to meet you where you are, providing a gateway to explore conservation practices at your own pace. Using the STAR Tool generates a detailed Score Report that breaks down the points awarded for each practice and shows the points that could be earned for alternate practices. This not only gives you a clear picture of your current approach, but also provides a clear, nonjudgmental road-map for exploring new conservation practices that could benefit your farm.

CONSERVATION AS A PRACTICAL SOLUTION

Exploring conservation practices through the STAR Tool doesn't have to feel overwhelming. With so much information available, it's not easy to know where to start—but that's exactly where STAR can help. STAR provides a clear, straightforward way to assess your fields and explore options at your own pace.

While conservation practices are good for the environment, their real value lies in how they support the long-term success of your farming operation. By addressing common challenges like weed resistance, soil erosion, and ponding, conservation practices build farm resiliency and offer practical solutions to problems faced by farmers across the state.

THE STAR CROP YEAR

STAR focuses on improving in-field management, with the Crop Year defined to capture all activities from post-harvest field prep through pre-planting and in-season activities up to the following harvest. If you inter-seed cover crops before harvest, those are included in the next Crop Year's data, not the crop year of the pending harvest.

The STAR Tool remains open for Crop Year 2024 submissions until the Crop Year 2025 form is released in late spring. Behind the scenes, the Illinois STAR Science Committee is already hard at work revising the Crop Year 2024 form to make improvements for Crop Year 2025.

Don't miss this opportunity to get your free STAR Score and gain insights into how conservation can work for your farm!



Clayton Coulter and Clayton Bosch in front of a Bosch Farms Five Star Field.

ILLINOIS STAR TOOL STILL AVAILABLE FOR CROP YEAR 2024

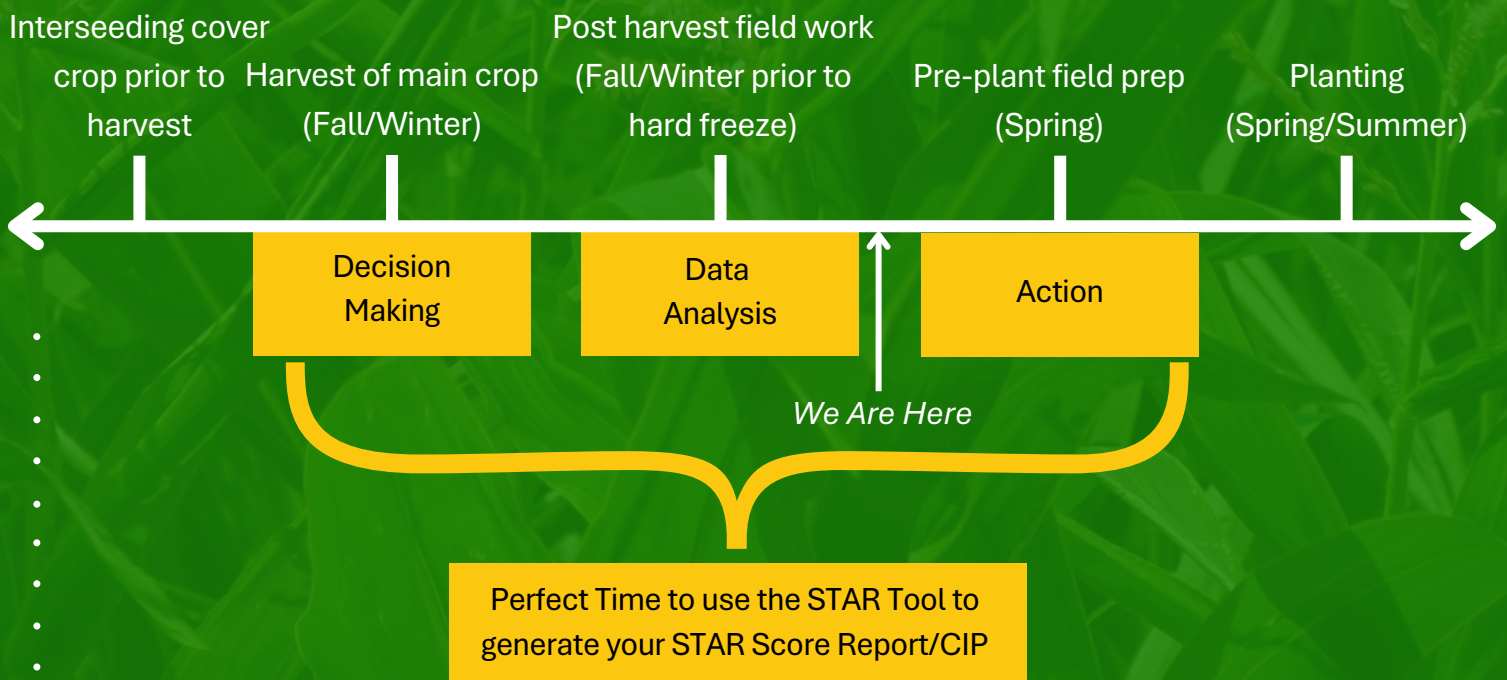


**USE
THE
STAR
TOOL
ONLINE**

STARTOOL.ORG



STAR's Crop Cycle



SOIL HEALTH

COMPOST & SOIL HEALTH

Composting is one of the most environmentally practical ways to enhance your soil by taking advantage of the food web. In a **fact sheet** produced by the US Composting Council (USCC), they noted that by increasing soil organic matter (SOM), improving water retention, and boosting plant nutrient uptake, compost can reduce nutrient losses. This document also states that every 1% increase in SOM can increase water holding capacity by 27,000 gallons per acre. Soil Scientist Vytas Pabedinskas conducted a trial in Lake County, IL that revealed faster germination, growth, and greening up in corn after the addition of organic matter. Captured in early June, one month after planting, the below drone photo of the trial field illustrates 4 darker green vertical stripes where compost was applied.



Courtesy of Vytas Pabedinskas, 2021.

The Compost Council of Canada's study **Improving Organic Waste Diversion through a Field Test of Greenbin-Derived Compost** included trials at individual farms across Ontario. According to their study, "Through its addition of natural nutrients and organic matter to farm soils, soils are realizing increased microbial activity, enhanced moisture control and soil structure, helping produce healthier plants more resistant to drought, pests and disease." Although the benefits of utilizing compost as a soil amendment have been scientifically proven, they noted significant barriers to widespread adoption of this practice amongst farmers, including financial constraints, time commitment, hesitancy of short-term lessees to invest in long-term soil health benefits, and lack of government support for the compost industry.

SOURCING & APPLICATION CONSIDERATIONS

The National Center for Appropriate Technology's ATTRA Sustainable Agriculture program provides **information** on suggested amounts of compost, costs, and timing of application. According to ATTRA, many farmers apply in the fall, which allows time for the compost to incorporate into the soil by spring and avoids the risk of not having appropriate weather for spring application. However, if there is a dry period, a late winter or spring application may be done to reduce the chance of nutrient leaching. In their conservation practice standard for **Soil Carbon Amendment (Code 336)**, NRCS recommends using compost products that are low in soluble phosphorus and ensuring that measures are taken to prevent runoff when applying on slopes greater than 8% that are within 100 feet of a surface water body. They also endorse the USCC's Seal of Testing Assurance (STA) certification to verify quality product. To receive this certification, commercial compost producers must meet very **specific requirements**, which includes lab testing protocols to ensure the product is free of heavy metals, pathogens and other contaminants.

USCC's website contains a list of STA-certified **participants**, including six in Illinois, noting the frequency of testing for each one. The **Illinois Food Scrap and Composting Coalition (IFSCC)** also provides a **map** of quality compost providers, indicating which ones sell directly on site and which ones are resellers of IFSCC member compost. Along with educating the public on the benefits of compost, IFSCC advocates for policies that reduce food waste and promote composting across the state. Their policy agenda for 2025 includes a bill that would require landfills to install methane gas collection and control systems within one year of opening or expansion, a food scrap diversion bill, and a compost market development bill. Each year during the first full week in May, IFSCC also participates in **International Compost Awareness Week**, and the 2025 theme is Sustainable Communities Begin with Compost. IFSCC member Vytas Pabedinskas said, "In terms of sustainability,

compost takes the material that is treated like trash – yard waste and food scraps – and turns it into a glue that holds soil to the land, a sponge that keeps water in the ground, a habitat for microbes to flourish, and a bank to save up carbon.”

CASE STUDY

In a recent presentation to the Illinois Urban Growers Network, Larry Christiansen of Christiansen Family Farms shared information about their [20-acre compost site](#). Along with applying up to 20 tons per acre of the compost as a fertilizer on their cash crops, they sell their finished product to landscapers and fellow farmers. Shortly after the 1990 state ban on the disposal of yard waste in landfills, Christiansen Family Farms began collecting these items from landscapers and waste haulers and eventually began using it as a carbon source in their composting. They utilize a high-speed grinder to break the leaves into finer pieces and mix in fresh grass as a nitrogen source to form 700 ft windrows that will each be turned 10 to 15 times before being screened and moved to a stockpile. They test moisture, oxygen levels, and temperature weekly and try to keep the moisture content around 50%. He said, “For the first three weeks, we monitor and watch these windrows and make sure they are maintaining the proper temperature of over 132 degrees and make sure it’s turned five times in two weeks... If there are any indicators of foul odors... we can look at our temperatures and oxygen levels and add carbon or something to make sure the levels are where they need to be.” After the first three weeks, the windrows are turned once per week, and the material will stay in the windrows for up to three months before being screened. The screener will remove the larger pieces, which get mixed back in with new materials. The screening process also removes contaminants, such as plastic, by utilizing a vacuum that is connected to the trommel screen. According to Larry, their system removes 3 to 5 tons of lightweight plastic per week. Most of their compost goes through a ¾ inch screen, which is the preferred size for farmers to apply as a soil amendment and stores better. They also have a 3/8-inch screen, which is the preferred size for landscapers. Once the compost is finished, they create 30 ft tall stockpiles where it sits for 2 to 8 months. According to Larry, their finished compost generally has a 15 to 1 carbon to nitrogen ratio. Christiansen Family Farms is tested by the USCC every three months.

Special thanks to Vytautas Pabedinskas for sharing many of the resources included in this article.

UPCOMING EVENTS

EVENTS FOR ALL LEVELS OF CONSERVATION

DECEMBER

- Dec. 8 Common Ground North, A Gathering of Land Seekers & Owners ([Registration](#))
Crystal Lake, IL
- Dec. 11 Illinois Cover Crop On Farm network Monthly Call ([Information Here](#))
- Dec. 14 Pasture Walk, Illinois Grazing Lands Coalition (Contact logan@ilgrazinglands.org)
Ina, IL
- Dec. 17 Illinois Soybean Growers Farm Futures Business Summit ([Contact Ashley Barry](#))
Malta, IL

JANUARY

- Jan. 7-10 National NO-Tillage Conference ([Registration](#))
Louisville, KY
- Jan 15. Conservation and Farming Regenerative Practices (RSVP to Mercer County- (309) 582-5153 or Henry County- (309) 937-3377 x 3)
Alpha, IL

CONSERVATION IN THE CLASSROOM

PREPARING THE NEXT GENERATION

We need to inspire, educate, and provide more opportunities for the next generation to enter the agroecology workforce. From elementary school to college, we need to foster interest in natural resources, teach the importance of conservation, and provide young people with the requisite tools and pathways to pursue further education or professional opportunities in related education, trade, science, etc. fields.

The goal of **Conservation in the Classroom** in the AIM Illinois newsletters is to provide classroom and community engagement resources regarding featured conservation agriculture topics. We “aim” to support educators in discussing these vitally important topics and fostering excitement for the future of agroecology with their students.



Winter Soil: What happens in Farm Fields During Winter is this month’s lesson plan, which focuses on soil conservation practices used in winter to prevent soil erosion, improve soil fertility, and promoting sustainable farming. Students will create a presentation that illustrates different winter soil conservation methods and their impact on soil health.

This lesson plan is designed for Grades 9-12 and will take 1-2 class periods to complete. See the link below to download the full set of materials. It features a PowerPoint presentation, an investigation worksheet, and presentation rubric.

[Lesson Plan Hyperdoc](#)





AGROECOLOGY + INNOVATION MATTERS

The AIM project was initiated through a state/federal leveraged funded Capacity Building Initiative between the Illinois Department of Agriculture and the USDA Natural Resource Conservation Services (NRCS). Our 40 Conservation Planners and Coordinators aim to enhance soil health, reduce nutrient loss, maintain clean waters, and bolster the advancement of best conservation practices by collaborating with NRCS field offices, soil and water conservation districts, producers, and landowners across the state.

Our team strives to communicate best practices stories and provide educational resources for our community. AIM empowers producers and landowners to explore agroecology and innovative infield and edge of field practices like cover crops, conservation tillage, vegetated buffers, grassed waterways, prairie strips, and constructed wetlands.

WEBSITE

aimillinois.org

EMAIL

ilaimproject@gmail.com

FIELD STORIES

kayla@aimillinois.org

EDUCATION

whitney@aimillinois.org

FIND US ON:



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