



A FIELD OF NAOMI WOLLYPOD VETCH
PHOTO CREDIT: EDWIN REMSBERG AND USDA-SARE

JANUARY 2025 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

The new year is here already, and its starting off as a cold one in most parts of the state! We hope that everyone was prepared for the snow and is staying warm. 2024 is behind us, but AIM wishes everyone had a happy holiday season and rung in the New Year surrounded by loved ones.

CONSERVATION PLANNER UPDATE

We have our third Conservation Planner to reach Level III, Andrew Parks. He was one the original Conservation Planners hired when AIM launched in January 2023. He works out of the Adams County Soil and Water Conservation District. Originally from Quincy, IL, Andrew is a life long dairy goat farmer. Currently, Andrew is studying Conservation Management at John Wood Community College.

Andrew was featured in our very first Conservation Planner Spotlight in the November 2024 Newsletter. [You can learn more about Andrew’s career with AIM here.](#)

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

SUBMISSIONS WANTED

As we continue to grow the AIM Newsletter, we want to here from you the reader. If you have a Conservation Story that you think should be showcased in the AIM Newsletter, contact Communications Coordinator



Level III Conservation Planner Andrew Parks

Kayla Jeffers (kayla.jeffers@illinois.gov).



CONSERVATION PLANNER SPOTLIGHT

WYATT DOZIER

As a Conservation Planner in the Will County field office, Wyatt Dozier has had the opportunity to work on everything from raised beds in a vacant lot in Chicago to grazing plans for livestock in Kankakee. Wyatt’s enthusiasm for conservation began at an early age, as he grew up in a home surrounded by several acres of restored native prairie and frequently visited his grandfather’s farm. He said, “It instilled the importance of taking care of the land and being grateful for the resources that it provides. Having that imprinted on me from an early age made quite an impression and got me to where I’m at here.” As a student at the University of Illinois at Urbana-Champaign, he worked on many cover crop projects in the agronomy labs. After graduating, Wyatt worked for a remote sensing company called Intelinair, where he provided agricultural training to the machine learning department.

Explaining the work of Intelinair, Wyatt said, “It was all about trying to figure out different agricultural patterns from aerial imagery to make a diagnosis—say if a farmer has a particularly large operation where they are not able to scout everything in person- we would be



Conservation Planner Wyatt Dozier



In June, Wyatt participated in a river walk at Kankakee State Park.

L to R: Urban Agriculture Conservationist Alicia Lozano, Wyatt Dozier, Kankakee County Soil Conservationist Matt Raymond, Will County Soil Conservation Technician Kevin Culver.

able to take imagery of the field and sort of identify problems from there. Say we picked up on a nitrogen deficiency or a weed outbreak. It was a way to diagnose those issues so they could more efficiently run their operation. So, I worked there for a number of years prior to coming where we are at now with the Planner position.”

In January of 2023, he joined the Conservation Capacity Building Initiative, and his colleagues began taking him on site visits during his very first week. He said, “Whatever would help me get experience, they have been gracious enough to let me tag along. I’m just trying to keep my eyes and ears open and soak up as much as I can as far as knowledge of the programs.” Due to his location in Will County, he has had the opportunity to work with producers in a variety of different settings. Comparing this to the area where he grew up in central Illinois, he said, “Going from that relatively straightforward landscape to coming up here and seeing all these smaller and specialty operations... it has been pretty eye opening to see all the different approaches.”

The Urban Service Center is temporarily being housed in Will County, and Wyatt explained that he has learned a lot from being able to participate in some of these site visits as well. He said, “It has been quite an interesting mix because one day you’re on a city block standing in a lot between two buildings talking to somebody about putting in some raised beds, and the next you’re out on a several hundred-acre farm with nothing around you.” Along with raised beds, Wyatt has also assisted with irrigation, high tunnel, and nutrient management plans in urban locations. He said, “Meeting somebody who is trying to start a community garden versus the typical conversation you would have with a large-scale conventional farmer... it’s a very different conversation. It’s exciting and inspiring for me to see people in what you wouldn’t think of as an agricultural setting... to get something started on a small scale to help better their immediate surroundings and the community.”

According to Wyatt, many farmers in Will County have adopted cover crops wholeheartedly. During one of his first weeks on the job, Will County SWCD held a meeting for growers to discuss cover crop adoption, and attendees were very enthusiastic about sharing their ideas and success stories. He said, “There wasn’t any convincing that needed to be had. People were already on board, and they had been doing it for years. And it felt to me like they were all ahead of the curve.” Wyatt explained that in his college years, he spent a lot of time advocating for cover crops

and receiving quite a bit of pushback, so he was very pleased to see how many growers are now implementing this practice in his district.

Wyatt spends a lot of time working with NRCS Soil Conservationist Technician Kevin Culver, who has a background in water protection and participates in RiverWatch, a program that was initiated by the Illinois Department of Natural Resources to measure water quality by training people to collect data on macroinvertebrates in local rivers and streams. Earlier this year, Wyatt assisted Kevin in conducting this research in the Kankakee River. Wyatt said, “those were some interesting field days, wading out in the water and scrubbing rocks. That is probably something I would wager not a lot of other planners have gotten to do.” According to Kevin, “We do three different sites within the Kankakee State Park, collect samples at the same place about the same time of the year and see if there’s any trending data or if it stays the same based on the bug populations there.”

Along with CRP reviews, Kevin said that Wyatt has helped him quite a bit with surveying. He said, “Wyatt helps us with anything we’ve asked. He helps go out when we do surveys... that’s mainly what I have him working on... So, we go out in the field, and he’s learning how to survey, along with the rest of us.” Wyatt explained the value of getting this hands-on experience with his colleagues. Describing a recent grassed waterway training, he said, “Some of the planners were taking notes, and it was their first experience with survey equipment or that kind of note taking. It was helpful that I had several instances under my belt before going there because otherwise I felt like I would have felt overwhelmed or lost. So, the fact that I had done it a couple of times made it a little less daunting.”



Wyatt working in the field.

He also spent quite a bit of time assisting with organizing CRP documentation. Prior to having a standardized spreadsheet, Wyatt explained that it was challenging to keep everything in order. He said, “It ended up there wasn’t much documentation from the past seasons, so I ended up building a sheet from the ground up... last season, we thought we had all the fields together, and then we would find another batch of them that was in a different filing cabinet. So then, I would have to go back out there and get a few more.” Now that NRCS has provided their own spreadsheet, along with a map tool, he said it has been much easier to complete reviews and keep everything in order. During CRP season, Wyatt spends most of his time in Kankakee County, where there is comparatively more acreage for CRP.

Wyatt said being outdoors is his favorite part of the job. “I don’t mind CRP necessarily being such a big portion of what we do, because those status reviews mean getting out and going to all those sites. It’s especially rewarding whenever you go out there and see that people are taking care of what they are supposed to, especially with the land because that means the local wildlife is going to benefit, and it makes you feel good that things are going according to plan.” Even on extremely hot days, Wyatt prefers being outdoors. With a chuckle, he said, “I spent a lot of time in high school and college doing marching band, so it was lot of being outside roasting in the sun, so I got used to it. And my first job was pollinating corn in July in high school, so I got used to hot temperatures.”

He also expressed an appreciation for learning about producers along with his colleagues. He said, “Especially when I was first on the job... Everyone we were working with at that point was just a name on a folder. So, you start putting more faces to names, you start learning more about each person, and it makes it that much easier to get things done next time you see them, because you feel like you have built up more of a rapport.”



THE ILLINOIS STAR REPORT

SAVING TOMORROW'S AGRICULTURE RESOURCES

By Julia Czarnecki, PhD & Natalie Kerr

Illinois STAR, an Affiliate of the national, non-profit Saving Tomorrow's Agriculture Resources (STAR) organization, is exploring the possibility of creating a new STAR Tool for evaluation of diversified food systems. Based on the nationally standardized STAR framework for evaluating and guiding conservation practice adoption, the free, voluntary STAR Tool, already available for row crops, is expanding to include urban/community based agriculture. The STAR framework not only helps producers to better understand the impacts of their own practices, but it also offers them a Conservation Innovation Plan with locally tailored recommendations and resources.

While urban/community based agriculture has several social, economic, and environmental benefits, there are unique conservation concerns when compared to conventional, large scale agriculture. There are many exciting urban agriculture initiatives gaining momentum in Illinois and across the nation. Illinois STAR seeks to support and amplify these initiatives with the innovative STAR tool to serve and reward farmers, and to advance conservation within our food systems.

Development of the science-based STAR Tool is informed by state STAR Affiliate Science Committees – with additional guidance and input from state Affiliate Steering Committees and national STAR – and is designed to optimize the potential for positive conservation impact. The STAR tool includes field forms comprised of a set of questions that address local natural resource concerns and relevant farming practices. Based on their responses to the field forms, farmers receive a simple field-level rating of 1 to 5 STARs, helping to enable consistent evaluation and tracking of conservation progress, as well as a guided opportunity for innovation and improvement through the STAR Conservation Innovation Plan.

While the expansion of the STAR Tool began with a focus on urban agriculture, this also presented the opportunity to look at specialty crops grown in Illinois including specialty grains, vegetables, orchards, berries, and greenhouse production. Diversified food systems, urban/community based agriculture, and specialty crops all come with unique conservation concerns and best practices. In order to capture these nuances, Illinois STAR is working with stakeholders across the state and incorporating feedback from other state STAR Affiliates across the country to determine appropriate next steps to implement this expansion while following National STAR's rigorous science development process.

These processes include developing state-specific field forms, scoring systems, and outcomes estimation methodologies that evaluate the implementation of conservation practices within a given cropping system to address local natural resource concerns. Step One involves completing a landscape assessment to gather critical agronomic and conservation information in the state to help set priorities for issues and practices to be included in the expansion of the STAR Tool and to help inform how practices are scored. The landscape assessment is done in two phases - the desktop evaluation and science assessment. The desktop evaluation identifies the production context – including local natural resource concerns, predominant crop types and production systems, and current and emerging conservation practices. This is followed by a science assessment to gather both quantitative and qualitative evidence for possible practices to be included in the field forms and their conservation impact potential. Currently, the desktop evaluation draft is complete and will be reviewed by stakeholders in the coming weeks. This work is made possible through a NACD/NRCS Technical Assistance Grant awarded to the Champaign County Soil and Water Conservation District.



Julia Czarnecki, PhD
Illinois STAR Urban
Agriculture Researcher

FEATURED NRCS CONSERVATION PRACTICE STANDARD

HIGH TUNNEL SYSTEM (CODE 325) WINTER GROWING IN HIGH TUNNELS

Although we have officially entered winter, some producers are still growing ample fresh vegetables inside **high tunnels**, for which NRCS offers funding through **EQIP**. There are several cold hardy crops that can survive in high tunnels (commonly referred to as hoop houses) over winter without any heating, including kale, cilantro, carrots, and turnips. If you are planning to harvest during the winter, it is important to start seeds a specific number of weeks before the last day with 10 hours of sunlight in your location to ensure the crops reach a certain level of maturity before their growth slows down substantially. This **chart** provides information on planting dates for these crops, whether they can be direct-seeded or transplanted, and includes the level of difficulty for beginners. Row covers can provide additional protection during extreme cold, and multiple layers can be used when temperatures are very low. Some producers remove the covers during the day once the internal temperature of the hoop house has increased to provide more ventilation and increase sun exposure to crops. Around mid- January to early February, once the days are long enough and the soil temperature is consistently above 50°F inside the hoop house, producers can begin germinating seeds for spring harvest.

This time of year, it is important to ensure that snow loads do not cause damage to your hoop house. Roof rakes or soft bristled brooms with extended handles are simple options to gently remove snow without damaging the plastic. Air circulation is another consideration during winter when hoop houses tend to be closed more frequently. The combination of high humidity and cool, wet conditions can cause fungal diseases like downy mildew or powdery mildew on leafy



vegetables. When the sun is out, hoop house curtains may be cracked in the daytime to allow fresh air to come in, reduce humidity, and prevent extreme temperature fluctuations that can cause stress for crops. On sunny days, even when the air temperature is very cold outside, hoop houses can heat up very rapidly. If electricity is available, fans may also be set up to assist with air circulation. Generally, when growth slows down and day length is less than 10 hours, hoop house

High tunnel spinach, radishes, and arugula in December 2019.

crops require very little water. Drip irrigation is the preferred method for most producers due to its precision and efficiency in delivering water directly to the roots, being able to easily control the amount, and reducing moisture on foliage. Along with requiring less care, another perk of growing vegetables in the winter is they taste sweeter due to starches being converted to sugars in response to cold temperatures. The below photo shows winter spinach, radishes, and arugula being produced in a NRCS funded hoop house with drip irrigation and row covers at Moon Girl Farm, a diversified fruit and vegetable operation in Pleasant Plains, IL.

FEATURED PRODUCER- MULTIPLE HARVEST LLC

In 2023, shortly after moving from Chicago to a 6-acre lot in Beecher, IL, Beatrice Kamau started exploring options to expand her vegetable production business, Multiple Harvest LLC. She visited the Will County USDA Service Center and expressed interest in building a high tunnel. She said, “They were very helpful because they listened to me, and they said they would like to come and visit the space so they can determine what size of high tunnel I would need. So, we scheduled a day. They came over to the farm in Beecher. We walked the land, and I was trying to explain to them the different conservation practices that I am trying to implement, and they were able to recommend what is doable and what is not.”

She said they were very supportive in walking her through the paperwork and explaining the different forms that were required. The application was submitted in March, and by September she was notified of her approval. She said, “I was excited because I was not expecting it to go through, because that was my first time. I didn’t know they were going to consider my application.”

While her application was being reviewed, she had already done some homework on high



Drip irrigation lines inside Multiple Harvest LLC’s high tunnel.

tunnel production companies and decided that she liked **Nifty Hoops**, which offers a “**community build**” option where a couple of staff guide volunteers in assembling the structure. Since she launched her vegetable production business in Chicago as part of the **Urban Growers Collective**, Beatrice had networks that she could rely on for assistance. The community build was originally planned for December 5, but they had to reschedule due to snow. Nifty Hoops proposed a date in June, and two of their staff came out the afternoon

before to lay the foundation and prep materials. Beatrice said she had 8 to 9 volunteers working in shifts the following day, and they were able to complete the structure by late afternoon. The biggest challenge, she explained, was battling the wind while putting the cover on. She wished she had more volunteers for that, but everything worked out!

Her heavy clay soil, which she described as being like “concrete,” has presented some

challenges in her production system. She plans to plant cover crops, and she is currently amending it with wood chips and compost. She said, "I'm using wood chips to suppress the weeds, to retain moisture, and to build the soil... eventually I'm hoping that we will have good soil. Because right now, I have very hard clay, and I have not done any tilling. I like it that way. As much as possible, I will try to do minimal tillage because I just want to maintain the topsoil of whatever area of the high tunnel or any area where I'm going to grow vegetables. I want to be organic and take care of the soil and try to minimize disturbance." Over the summer, they hosted an educational workshop with [Advocates for Urban Agriculture](#) on how to install drip irrigation inside a high tunnel.

Currently, she has a small amount of Swiss chard growing in her structure, but she plans to grow a wider variety next year once she has all her materials in place. According to Beatrice, she plans to use her high tunnel to produce culturally significant African crops like jute leaves, amaranth, cowpea leaves, pumpkin leaves, and white eggplant alongside more common vegetables. Most of her sales for this niche produce are direct to customers, which she developed with African and Caribbean communities while growing in Chicago. At that time, she delivered to Yado African and Caribbean Market, and she's currently communicating with a couple of African grocers in the south suburbs. She also sells larger amounts of tulsii and collard greens to the Black Oaks Center through the Local Food Purchase Assistance program. Moving forward, she has plans to implement agroforestry and alley cropping projects, which has also been awarded funding by NRCS. Beatrice worked with the Savanna Institute to identify which crops would grow well on her land. Some of the ones they selected include pear, apple, plum, cherry, persimmon, blackberry, chokeberry, and elderberry.

NRCS Assistance

Along with extending your growing season, other benefits of high tunnels include improved protection for crops from chemical drift or inclement weather conditions and the ability to reduce water waste and apply nutrients efficiently through micro-irrigation. For more information on assistance with high tunnels, please visit this [NRCS website](#) or stop by your local USDA Service Center. Some practices to consider along with high tunnels include: [Mulching \(484\)](#), [Cover Crops \(340\)](#), and [Microirrigation \(441\)](#).



WE WANT TO HEAR FROM YOU

Have a conservation story you want highlighted? Contact us!

 kayla@aimillinois.org  www.aimillinois.org



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.



This month's lesson plan is **FARMING FOR THE FUTURE: AGROECOLOGY AS A PATHWAY TO SUSTAINABLE AGRICULTURE**. Designed for grade levels 9-12, this lesson plan will take 90 minutes to complete.

Agroecology is a way of farming that works with nature to grow food and materials while also caring for the environment and people. It focuses on balancing the interactions between plants, animals, humans, and the environment to keep farms productive, healthy, and sustainable over time. It isn't just about growing crops—Agroecology also values protecting natural resources, supporting communities, and ensuring farming is good for both people and the planet.

During this lesson, students define agroecology and understand its role in sustainable agriculture. As well as identify principles and practices of agroecology. Students discuss the environmental, economic, and social benefits of agroecology and explore real-world examples of agroecological farming systems in Illinois.⁴

[Lesson Plan Hyperdoc](#)

IN THE FIELD



Photos of in the field work looking at a potential new easement from Conservation Planner Ashley Barry. She is located at the Boone County Soil and Water Conservation District in Northern Illinois.





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.

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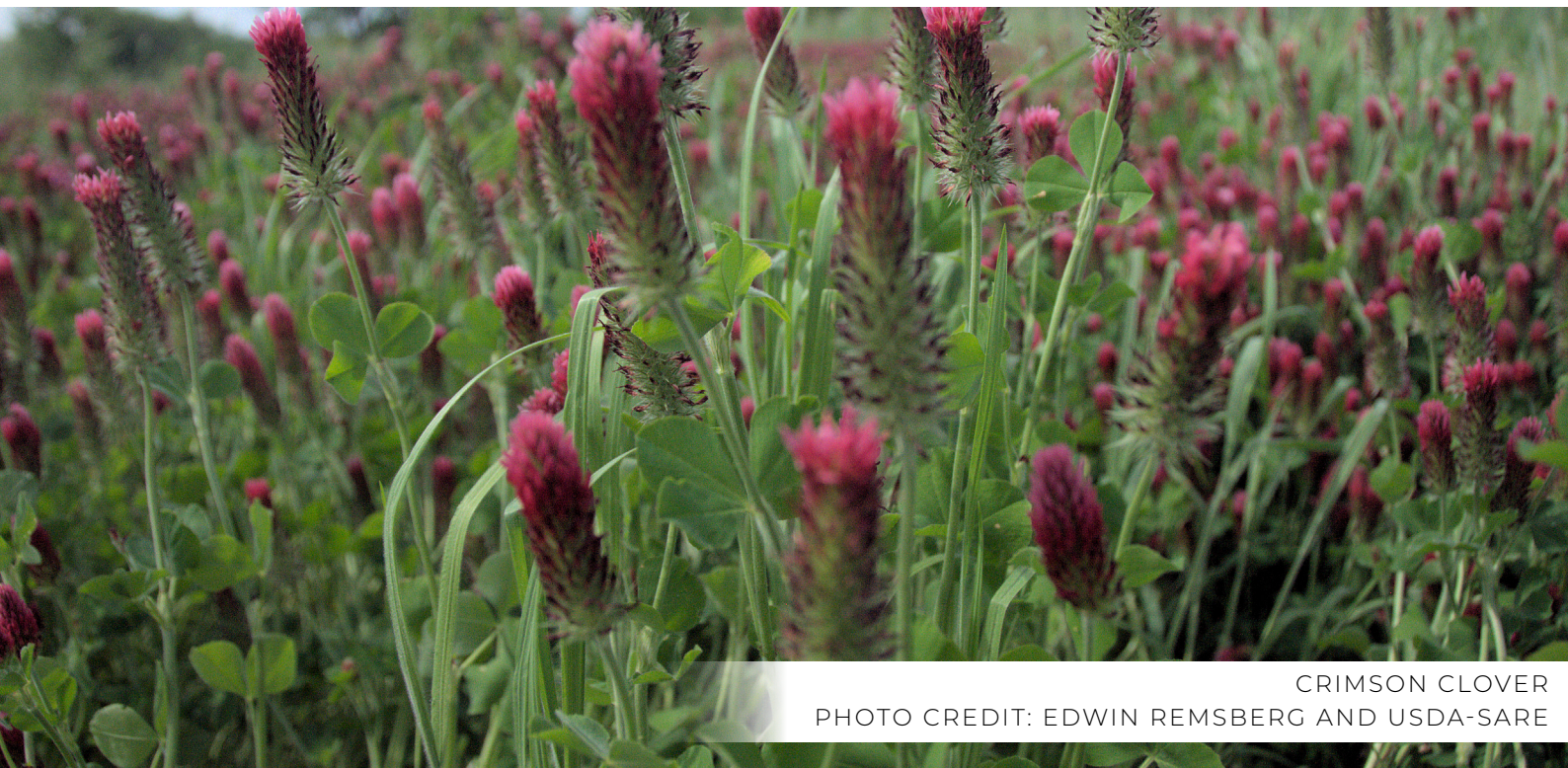
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