



St. Joseph  
County  
Soil & Water  
Conservation  
District

# CONSERVATION KALEIDOSCOPE



**Today's Visions for Tomorrow's Future**

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## What's Going On...

*Events hosted by the St. Joseph County SWCD  
& Our Partners in Conservation*

### May

May 11th – CISMA call out meeting, 6pm

May 18th – May board meeting, location and time TBA

May 28th – County Holiday

May 31st – Memorial Day – office closed

### June

June 15th – June board meeting, location and time TBA

June 21st - 27th - Pollinator Week. Visit [www.pollinator.org/pollinator-week](http://www.pollinator.org/pollinator-week)



Funds available for Cover Crops, No-Till, Nutrient Management, Filter Strips and Pollinator Habitat. Contact our office for an application.

## Cooperative Invasive Species Management Areas (CISMAs)

### What is a CISMA?

A partnership of federal, state, and local government agencies, tribes, individuals, and various interested groups that manage invasive species in a defined area. They can be organized in a variety of ways, but they share six basic characteristics:

1. They operate within a defined geographic area, distinguished by a common geography, weed problem, community, climate, political boundary, or land use.
2. They involve a broad cross-section of landowners and natural resource managers within the CISMA boundaries.
3. They are governed by a steering committee.
4. They have a long-term commitment to cooperation, usually through a formal agreement among partners.
5. They have a comprehensive plan that addresses the management of invasive species within their boundaries.
6. They facilitate cooperation and coordination across jurisdictional boundaries.

### Why should we form a CISMA?

Invasive plants threaten our economy, environment, and even human health. Natural resource managers and land owners across the country spend huge amounts of resources trying to manage invasive plants that are encroaching into natural areas, agricultural lands, backyards, and other properties.

State, federal, and private natural resource managers have worked together to reduce populations of invasive plants for years, but often the scale of the cooperative effort is confined by political or land ownership boundaries. As anyone who has grappled with invasive plants can tell you, invasive plants know no boundaries. Even the diligent, intensive control efforts of land managers won't be successful in the long run, if invasive plants can find refuge on a neighboring property.

**CISMAs are highly visible, building community awareness and participation.** Cooperative efforts can bring the issue

of invasive plants to the attention of state and federal legislators and demonstrate broad support from the community for preventing and controlling invasive species. **CISMAs can improve control efforts** by training all partners in the use of best management practices. Training local landowners in control methods can reduce non-target damage and help them select the most appropriate methods for their situation.

**CISMAs can provide an early detection and rapid response network** by ensuring that all the partners are aware of and are able to identify and respond to new invasive species in the area.

**CISMAs can help secure funding.** An established CISMA can access multiple funding sources, including government grants, private foundation grants, and donations. The "working together" concept is attractive to many funders.

### Call out meeting

The St Joseph and Marshall County SWCDs will be hosting a call out meeting for interested community members who would like to learn more. This will be a virtual zoom meeting on May 11, 2021 at 6pm EST. To attend, visit [www.marshallcountyswcd.org](http://www.marshallcountyswcd.org) and select "Click here to join CISMA meeting." Meeting ID: 921 4104 9308 Passcode: 668552.



MARSHALL CO.  
& ST. JOSEPH CO.

## CISMA Meeting

CISMAs are Cooperative Invasive Species Management Areas. Learn why invasives species are a problem and why we need your help!

**MAY 11, 2021 | 6 PM EDT**  
**VIRTUAL ZOOM MEETING**

# Bridging the Gap: Urban Ag Opportunities for People with Autism

Photos and article by Brandon O'Connor, USDA NRCS

The growing season in Indiana is supposed to be over. The calendar has flipped to December, corn and soybean harvests have been completed for more than a month and now farmers will spend the winter preparing for the next planting season.

But for Jan Pilarski and her staff at Green Bridge Growers in Mishawaka, this mid-December morning will be used for planting.

The beehives have been closed for the winter and the two and a half acres of growing space at the back of the farm have been harvested for the season. The lifeblood of the farm, though, are the two high tunnels that stand side-by-side behind the farmhouse that has been converted into the farm's base of operations.

A light dusting of snow clings to the ground refusing to melt after falling two days earlier even as the temperatures climb just above freezing. Winter sunlight reflects off the sides and roofs of the high tunnels making them glow and warming the inside. Bundled against the cold in a faded work coat and a blue knit sweater, Pilarski's work boots leave footprints in the snow as she walks through the small farm she has built from scratch over the past five years.

As she grabs the handle and lifts the door to the high tunnel, it is like Pilarski is entering a portal to another place far away from the near freezing temperatures and snow-covered ground that mark an Indiana winter. Warm, humid air escapes as she quickly enters and closes the door behind her to trap the heat inside. A thermometer hanging on the back-wall hovers near 60 degrees, a stark difference from the reality outside these walls. And in defiance of the season and weather, inside the high tunnel rows of kale are in the early stages of growing with more seedlings soon to join them.

The plants will be ready to harvest in early March and after they've finished their lifespan tomatoes will take their place. Next door, lettuce growing in an aquaponics system fills the high tunnel. The two houses have combined to turn Green Bridge Growers from an idea into a viable operation that can grow crops through all four seasons.

"The high tunnel has paid for itself at least a couple times over with the sales of our kale," Pilarski said. "The nice thing about it is that when you grow kale and some other winter crops, like spinach, in the cold, the sugars really come into the leaves of the kale or the spinach. So, it's just incredibly tasty."

Green Bridge Growers was born out of a desire to make an impact. Pilarski's son Chris is on the autism spectrum and after graduating from college he couldn't find a footing in the agricultural industry despite a passion for the work. So, Pilarski set out to create a space where her son and others with autism could gain hands on experience in farming.

"We were really feeling that people on the autism spectrum have so many talents and gifts," she said. "It struck us also that, that kind of aptitude, the interest in getting to the bottom of a problem and problem solving, the ability to follow through on routine and scheduling, those are all the things needed for farming."

They originally started with a demonstration high tunnel in 2013 on the property of a South Bend, Indiana not-for-profit called Hannah and



Jan (R) discusses high tunnel operations with NRCS DC Deb Knepp (L)

Friends, which works with people who have special needs. There, Pilarski and her budding operation were able to try different growing methods including their first attempt at aquaponics, while beginning what would be a two-year search for a permanent location.

They eventually settled on a plot of land in Mishawaka, which had previously been used to grow ornamental grass, and set about turning it into what Pilarski calls a "peri-urban" farm because of their location just on the outskirts of town.

She came equipped with a Master Gardener certificate and some farming experience from watching her father while growing up, but as a new farmer she knew she needed help. For the business side of things, she was able to attend bootcamps at local colleges, but they couldn't teach her about setting up a new agricultural operation. For that, she turned to Purdue Extension to learn more about how to set up her operation. Very early on she also contacted the USDA's Natural Resources Conservation Service (NRCS) for help implementing conservation practices that would allow her small urban farm to flourish such as building a high tunnel. The NRCS has funding available to help beginning farmers and also programs designed for urban farmers like Pilarski and Green Bridge Growers and she quickly worked to gain access.

They moved into their permanent location in 2015 and that same year she submitted her first application to the NRCS' Environmental Quality Incentives Program (EQIP), which provides technical and financial assistance to farmers to put conservation on the ground. Her application was approved that first year and Green Bridge Growers received financial assistance to build one of the high tunnels they still use. They then raised the money for the second high tunnel through crowdfunding and were able to hit the ground running.

"Green Bridge Growers would not be where we are today without NRCS," Pilarski said. "As beginning farmers, we appreciate their guidance in helping us scale our operations and introduce sustainable conservation practices to our farm. Their expertise helped us successfully manage four-season growing with the construction of our high tunnels, and they supported us every step of the way in the research and design decisions we encountered during the application process."

The relationship with the NRCS has continued in the five years since that first EQIP and Green Bridge Growers was recently approved for a second enrollment in the program. The new funds will be used to plant a pollinator habitat as well as build a second high tunnel, with construction and planting scheduled to begin in the spring. With the help of the NRCS and the local county staff, Pilarski has been able to make the impact she set out to make. The farm employs seven people, including five who are on the autism spectrum. They've also been able to provide more fresh produce to the community whether it is someone buying directly from the farm, a restaurant using what they grow or people purchasing their kale, tomatoes, lettuce and other crops from local grocery stores.

"There was definitely a passion that I've discovered while working here and I've been loving every second of it," said Nate Karam, who has worked on the farm for a year and a half. "It doesn't feel like work."



# An Introduction to Integrating Cover Crops Into a Corn-Soybean Rotation

Authors: Eileen Kladivko, Robert Nielsen, Shaun Casteel, Keith Johnson, and James Camberato, Purdue Department of Agronomy; Christian Krupke, Purdue Department of Entomology; William Johnson, Bryan Young, and Kiersten Wise, Purdue Department of Botany & Plant Pathology

Interest in cover crops has increased among farmers in the eastern Corn Belt. Cover crops have many potential benefits, but farmers need to manage them carefully to avoid or reduce the risks to crop production.

## General Considerations

Before you start using cover crops in your corn-soybean rotation, it's important to keep these principles in mind:

- **Take a long-term view.** The benefits of cover crops accrue over a number of years, and most soil health benefits will not be evident in the first year or two. Cover crops have their greatest potential when you consider them as a practice that will increase the resiliency and long-term sustainability of your soils resource.
- **Do your homework and start slowly.** Attend workshops; talk with other growers who have successfully implemented cover crops; and consult resources from the SWCD & NRCS, Purdue and other land-grant universities, and the Midwest Cover Crops Council ([www.mccc.msu.edu](http://www.mccc.msu.edu)).
- **Plan ahead,** Start with a small part of your farm, and expect to fine-tune your management over the first few years. If you use an ag retailer to apply your herbicides, have a discussion with them about your cover crops, how they will affect the timing and choice of herbicides, and then formulate a plan together.
- **Adjust your planter and practices.** Many cover crop considerations are similar to those for no-till, but cover crops result in additional surface residue cover on the soil. Be sure to adjust the planter so that it operates properly and effectively for conditions in the field. Also, be prepared for greater than expected cover crop growth in the spring. Consider equipping your planter/drill with coulters, row cleaners, and/or heavy-duty furrow closers. Avoid trapping or "pinning" surface residue into the seed furrow, planting seed at an uneven depth, and leaving the furrow open. Strongly consider equipping your corn planter with 2x2 starter fertilizer applicators, and aim for a starter fertilizer rate that provides no less than 30 pounds of actual N per acre and up to 50 pounds of actual N per acre. These starter fertilizer rates will help minimize the effects of N immobilization by the decomposing cover crops during the first 30 to 45 days after planting corn. Adjust the remainder of your corn N fertilizer program to account for the N applied as starter fertilizer.
- **Scout for insects.** Living green material (cover crops, weeds) can attract both beneficial and pest insects in the spring. Successfully integrating cover crops into a cropping system must include a commitment to scouting for insect pests on a timely basis and treating if and when it is needed. The effects of many insect pests, especially those that migrate from the South (black cutworms, armyworms), can be lessened by terminating the cover crop early or at least two weeks before planting the following crop, or by using cover crops that do not overwinter.
- **Be timely.** It is important to seed cover crops, terminate them, and scout at the proper times. If you plant a cover significantly after its recommended seeding period, it is not likely to produce enough benefit to be worth the cost.
- The Midwest Cover Crops Council website ([www.mccc.msu.edu](http://www.mccc.msu.edu)) features selector tools for choosing cover crops. In these tools, the "Reliable establishment dates" are based on 30-year normal frost date values for your county. "Reliable establishment" means that there is generally enough time for the cover crop to establish and grow to provide benefits to the soil and the following cash crop. Of course, in some years winter will come earlier while in others winter weather will start later, giving either less or more time for cover crop growth than indicated by the charts.
- **Use good quality seed.** Be sure to work with reputable seed dealers who know your area and who provide strong technical support for cover crop management and not just seed sales. For cover crops other than cereal grains, be cautious of using VNS ("variety not stated"). Avoid cheap deals from unknown sources. It is important to know where your seed comes from and to know if the dealer took any measures during the cleaning process to keep out unwanted weeds like Johnsongrass, Canada thistle, waterhemp, and Palmer amaranth. These weeds are particularly difficult to control and have been known to appear in seed used in different types of conservation plantings. Planting reliable seed is good advice in general, not just for cover crops.

If you would like to try cover crops on your land, contact our office at (574) 936-2024 Ext. 4. We have funds available through a Clean Water Indiana Grant and programs through USDA NRCS to help with cost share to implement cover crops and other soil health practices.





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## St. Joseph County Soil And Water Conservation Partnership

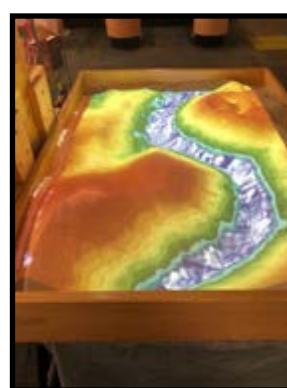
### Educational Supplies Available

Did you know we offer educational supplies that your school or group can borrow?

We currently have:

- A wildlife education kit containing pelts, skulls, and replica tracks of Indiana wildlife.
- The augmented reality sandbox, a hands-on experience that is great for teaching about watersheds, landforms, and topography.
- The Enviroscope model, a tabletop non-point source pollution model.
- The Watershed Game, in which players (typically upper middle and high school age) work together in teams to learn about the relationship between land uses within a watershed, water quality, and community.

Supplies can be borrowed for short periods of time year-round. Please contact our office if you are interested in borrowing educational supplies.



**Are you ready to “GO GREEN” and help us save money and natural resources? We can deliver your “Conservation Kaleidoscope” newsletter by email ... Give us a call or send us an email and tell us you’d like to “GO GREEN” THANK YOU!!!!**



Scan me to go Green!

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