



United States Department of Agriculture



Wisconsin

Successes from the Field

Featuring Local Farmers
& Landowners

2021



Wisconsin
Natural
Resources
Conservation
Service

www.wi.nrcs.usda.gov/



Creating a Wildlife Habitat Oasis

Landowner Restores Property Through a Wetland Reserve Easement

Above: Landowner TJ Rogers (left), with NRCS District Conservationist Caleb Zahn (right), overlooking a scrape on the Wetland Reserve Easement site in Green Lake County.

Sandhill Cranes fly in, landing near the wetland scrape to feed and rest on TJ Rogers easement acreage. They disappear into the planted food plots as the sound of songbirds singing overwhelms the ears. The Wetland Reserve Easement, installed through a partnership with the USDA Natural Resources Conservation Service (NRCS), is an oasis for birds, pollinators and other wildlife to feed, nest and rest.

TJ Rogers purchased 60 acres in Green Lake County, Wisconsin, with the hope of restoring the land to its natural beauty by creating habitat and attracting wildlife. His grandfather and father were foresters, so as a child, TJ was always out in the woods, building and growing his conservation land ethic from the ground up.

TJ and his father rented out some acres as cropland and some acres were enrolled in the Farm Service Agency's Conservation Reserve Program. Each year, the cropland renters couldn't get into the soybean fields and the corn didn't grow well due to excess moisture and flooding. Once Rogers acquired the land and started actively managing it, he realized it didn't make sense to keep trying to farm it. "Farmers didn't want to farm the property because of all the moisture, and it didn't produce good yields. When the rest of the land came out of the CRP, I wanted to find a more permanent solution; I heard about NRCS Wetland Reserve Easements through a friend and contacted the local USDA Service Center to find out more," said Rogers.

TJ talked with Caleb Zahn, NRCS District Conservationist, and Brian Kind, NRCS Soil Conservation Technician, about the program. Rogers learned details about the program and saw value in putting the land back to its original purpose as a wetland, before tile was installed and the area was unsuccessfully farmed. "TJ Rogers' goals for his property aligned with NRCS goals for a successful wetland easement restoration," explained Zahn. "I knew this program would be just right for my land to

accomplish my wildlife habitat goals," added Rogers. Once TJ heard about the program details, he saw value in putting the land back into wetlands. "This land flows into the Puchyan River, which is the outlet for Green Lake, which meets the Fox River and eventually Green Bay. This land is vital in helping prevent runoff. We have had a lot of excess water and runoff this year, including fast snowmelt. This easement establishment will be a great help in holding that excess water in the area," explained Zahn.

The easement consists of five wetland scrapes, totaling 2.2 acres. Tile breaks were also completed based on a topography survey. "We surveyed the land topography as a whole to plan the project, completed tile investigations and broke tile, deciphering the best locations for scrapes in low areas and designed them," explained Kind. Once the design phase was complete, construction started. Construction on this project took two seasons because the ground needed to be frozen enough to dig the scrapes around four feet deep. "Once the scrapes were constructed it took around three weeks for them to fill completely with water and they have been full ever since; a great location for holding excess water," added Kind.

Along with the wetland scrapes, over 39 acres of native pollinator seed mix were planted, including species like Yellow Coneflower, Bergamot, Big Bluestem and Black-eyed Susan. NRCS recommended a diverse species mix of four grasses, and thirteen forbs/legumes. "Six mowings were also built into the easement contract to maintain the planted areas; TJ has done a great job in maintaining the easement and he is also working to alleviate invasive species, like Wild parsnip, on the property," explained Kind. "We cut the pollinator habitat three times the first year, two times last year, and this year, we plan to cut it three more times," added Rogers. Mowing in the first year before seed development is necessary to prevent weed and



Left: Caleb and TJ view a wetland scrape on the property.



Right: TJ and Caleb inspect native pollinator species.

Below: (Top to Bottom) Birds nest on the easement. Pollinator habitat thrives during the summer season. Easement food plot residue (turnips) in the spring.

invasive species establishment. Mowing the pollinator habitat also establishes new growth. “We are glad to have those areas seeded down now to prevent runoff, whereas before, they were so wet, we couldn’t plant or farm them well,” explained Rogers.

Rogers also worked with NRCS through the Wetland Reserve Easement contract to add three food plots on almost three acres, creating opportunities for more wildlife. “We planted turnips and some other species to bring wildlife in,” explained Rogers. “Food plots are common practices on easements; they can be up to five percent of the easement not to exceed five acres,” explained Zahn. Rogers also worked with NRCS to add trails on the property to monitor the scrape ponds as part of the easement contract.

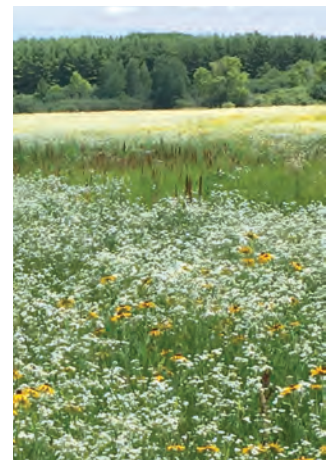
Rogers has seen the wildlife increase in the past three years since installation. “There were always geese flying over and now they are landing out here and actually have a place to feed and rest. There are so many more ducks than there have ever been, deer and turkey too,” added Rogers. TJ comments further, “what’s so cool about this whole project is how quickly it changed the landscape out here and how many more birds, ducks, song birds, pollinators and other wildlife and beneficial insects are around. It’s just amazing and rewarding to see.” Rogers allowed a conservation partner to complete a multi-year butterfly study on the property. The study observers found more species this year than they have ever before; proof of success is in the increase of wildlife and pollinators present on the property.

“NRCS easements are a great solution for marginal cropland that was originally wetland,” said Rogers. “Now we’ve restored the acreage to its original beauty and created great habitat for wildlife.” NRCS offers voluntary easement programs to

landowners who want to maintain or enhance their land in a way beneficial to agriculture and the environment. “We navigated the process together. Everyone at NRCS was great to work with; it was helpful to have office staff to explain things. The process was a real learning opportunity and NRCS staff are certainly experts in this field. Understanding the ecology and biology of the project and why they do certain things was eye opening and a great opportunity for me,” explained Rogers.

NRCS and TJ are very pleased with the conservation outcome. “TJ has been really great to work with; he sees the benefit for wildlife out there and the value of the wetland restoration, as far as keeping sediment out of the streams that leads to the rivers. He has even offered anyone interested in enrolling in the program, he would be glad to show them results and explain the process because he’s so happy with it,” explained Kind.

“If I could find a way to do this again I would do it in a heartbeat. My advice for potential landowners looking to enroll their land into an easement with NRCS would be to have an open mind, be patient and to enjoy the process. The process from the start was give and take. It really worked out great for us and the environment,” explained Rogers. “Conservation, in situations like this, where the land is better served as what it originally was, a wetland, those are the things that are important to me. If you have the ability to create something to help our natural resources and wildlife, you should do it for the betterment of our environment. If everyone does a little something, it certainly helps overall.”





Demo Farm Network Helps Deer Run Dairy Thrive *Demonstrating Advanced Farming Technologies*



Above: (L to R) Barry Bubolz, NRCS Area Great Lakes Restoration Initiative Coordinator, with Derek Ducat, on a field planted with barley, winter rye and radish. The field is planned to go into no-till alfalfa.

Step by step, Duane and Derek Ducat work to keep the farming legacy their grandfather started thriving. Establishing Deer Run Dairy LLC, in Kewaunee, Wisconsin, has helped the father and son team do just that, keep on farming the legacy. The dairy is owned and operated by Duane and Derek Ducat, and Dale Bogart. “My dad bought the farm in 1984 and we were milking 70 cows back then,” explained Derek. The family worked to expand the farm in small steps, working up to milking 120 cows in a stanchion barn. The family also grows crops and does custom work on the side. They wanted to grow and expand their dairy by making conservation-minded decisions along the way.

Through the custom work the family was completing on neighboring farms, they met Dale Bogart. “In talking with Dale, who lived nearby, we both wanted to expand and do similar things on our farms,” added Derek. The Ducats and Dale worked for over three years looking at different farms to combine their operations and grow. They found the right spot in 2007, and in the fall of 2008, they started milking 750 cows at Deer Run Dairy. Now, they milk 1,500 cows and manage 2,400 acres. They also complete around 1,400 acres of custom work in the area.

Derek heard about a new network of farms in the region that the USDA Natural Resources Conservation Service (NRCS) started, funded through the Great Lakes Restoration Initiative (GLRI). “Dad had always worked with NRCS to complete conservation practices on the farm; I knew I wanted to continue working to build the farm, with conservation in mind. When I heard about the opportunity to be a Demonstration Farm, I knew I wanted to join in on the effort,” explained Derek. The Ducats and Dale became one of four farms that demonstrate the best conservation practices to protect the Great Lakes, known as the Door-Kewaunee Watershed Demonstration Farm Network. The USDA-NRCS and the Wisconsin Department of Agriculture, Trade and Consumer Protection, are guiding this

effort in cooperation with Peninsula Pride Farms, a farmer-led organization.

Through the demo farms, Deer Run Dairy is focusing on testing low disturbance manure application methods, cover cropping, no-tilling, including “planting green” and installing a denitrifying bioreactor for tile lines. Their goal is to keep their soils healthy, grow the best feed for cow health and performance and have a thriving farm that enables the ability to adapt to changes in farm technologies, landscapes, weather and economies. “We’re proud to be a part of the Demo Farm Network, enabling access to new technologies and the ability for us to share with others a better way of doing things,” added Derek.

Through a partnership with NRCS and the Environmental Quality Incentives Program (EQIP), Deer Run Dairy practices residue and tillage management, no-till and cover crops. “In 2018, we did 700 acres of cover crops. We’ve been planting covers for 5 years. We started on wheat ground, where we planted mainly radish, rye, barley and turnips,” explained Derek. Deer Run Dairy has continued to expand its cover cropping with covers planted following corn silage and also on fields that will be no-till planted to alfalfa the following spring. “The ability to no-till plant directly into living cover crops this spring helped us deal with the wet conditions that were present,” stated Derek. “These no-till fields also allowed for easier silage harvest this fall with less damage done to the fields due to the increased carrying capacity of the ground,” he added.

Through EQIP, Deer Run Dairy also completed upland wildlife habitat management and wetland wildlife management. These practices enabled the farm to improve habitat for wood ducks and bats by placing some structures. The farm also installed filter strips to provide an area of herbaceous vegetation to remove contaminants from overland flow and conservation cover.



Deer Run Dairy planted conservation cover to provide permanent vegetative cover to reduce soil erosion and sedimentation. The farm also assessed possible energy improvements to the operation. They worked with NRCS through EQIP to complete lighting system improvements in their dairy barns and facilities.

“Our biggest challenge with expanding is incorporating manure,” explained Derek. Deer Run Dairy is working with the Demo Farms to find ways to reduce erosion and practice no-till, while incorporating manure. “We want to be able to apply manure in a no-till situation on growing crops,” added Derek. “Through the Demo Farms, we’ve been able to try and tweak low disturbance manure applications.” The farm also held a field day to show specialty equipment options to other farmers in the area and demonstrate the benefits of low disturbance manure applications. “We’re looking at minimizing the physical disturbance of the soil during application. Low disturbance manure applications can help with nitrogen and phosphorus retention, and is compatible with planting and maintaining cover crops,” added Barry Bubolz, NRCS Area GLRI Coordinator.

After Deer Run Dairy took off silage, they drilled a cover crop of winter rye in right away. Then, their custom hauler came in and broadcasted 5,000 gallons. “We did three applications of 5,000 gallons in the fall and in the spring, we were able to do another application; some before and after planting,” explained Derek. Deer Run Dairy also learned they can apply manure through tall rye. “We put a bit of early nitrogen down to recoup what the rye was holding and later, we didn’t have to side dress. The corn never stressed, our yields were great and I was very happy with the tillage savings,” added Derek.

Deer Run Dairy, with the help of the Demo Farms, will continue to experiment on the best ways to incorporate manure into a no-till system. They also plan to install a denitrifying bioreactor on some subsurface (tile) drained ground. The practice includes installing an edge-of-field structure containing a carbon source, such as wood chips, to reduce the concentration of nitrate-nitrogen in subsurface agricultural drainage flow via enhanced denitrification (i.e., removing the nitrates



or nitrites from soil, air or water by chemical reduction). “Bioreactors help improve water quality by reducing the nitrate-nitrogen content of subsurface agricultural drainage flow. We’re excited to see the results after the installation on the Deer Run Dairy demo farm,” explained Bubolz.

Through the Demo Farms, Deer Run Dairy has had increased public interest in what the farm is doing and trying on their land. The farm is taking the right steps in doing more active conservation and demonstrating it to the public. Derek also notes the cost share assistance can help farms in this tough economy do more. “It’s been great to have the other three farms and the partners to network with; sharing ideas, successes and failures help us all to succeed and make conservation work. We are able to do so much more because of the assistance from NRCS,” explained Derek.

Clockwise: (1) Deer Run Dairy hosted a field day where the State Governor attended to learn about the benefits of soil health. (2) No-till alfalfa, peas and oats into rye on June 21, 2019. (3) Deer Run Dairy Demo Farm sign. (4) No-till corn into winter rye on July 1, 2019. (5) Corn harvest on October 4, 2019.





Farm Perseveres Through Uncertainty

Conservation Helps Heal Landscape

Above: (L to R) Sara and Matt Hintz, of Amherst, Wisconsin, in their pasture set up for rotational grazing with the help of the USDA Natural Resources Conservation Service.

When you meet Matt and Sara Hintz, of Amherst, Wisconsin, you can feel their true passion for farming. They've weathered through difficult times, uncertain markets, bad crop years and a pandemic. It's a huge accomplishment these days to persevere and continue to run the family farm successfully.

Matt and Sara both grew up on family farms and knew they wanted to carry on the tradition. They started by renting land, and in 2009, bought their first farm of 9.5 acres. They eventually purchased the rest of the farm acres to completely own the 67-acre homestead originally set up as a horse farm. "We cropped the land the first year; we now have around 25 acres in pasture and crop the rest. We started grazing right away from the ground up, installing high tensile fence with our own funds," explained Sara. The Hintzs now take care of their home farm and also crop 1,600 rented acres across 40 miles in Portage and Marathon Counties.

The Hintzs enjoy having cattle wherever they farm. After the couple installed high tensile fence, they added more beef cattle. In 2014, they built a steer barn to raise cattle on-site. Today, the Hintzs have about 50 cattle on pasture and 120 Holstein steers in a barn. Sara oversees the cattle and moves them daily, sometimes two times a day, and completes some of the farm's book work. "I have always enjoyed animals and grew up on a pig farm; I really enjoy working with the cows; I like raising the Herefords here on-site also," said Sara.

Matt takes care of the Holstein steers and farms all the cropped acres. He also works an off-farm job as a seed dealer. "We grow field corn, sweet corn, soybeans, winter wheat, rye, peas and hay. We also grow feed for a nearby dairy farm and they partner to chop it themselves. It's just my wife, myself and our 7-year-old son, Thomas, living on the farm, so we're happy to partner with other farms; we do have two part-time helpers that assist also," explained Matt.

As Matt and Sara took on renting more acres, new challenges arose with each plot of land. They saw erosion, ponding and other conservation issues. Matt was at the local USDA Service Center and asked the Farm Service Agency about no-till drills. They introduced Matt to the Natural Resources Conservation Service (NRCS) and the relationship evolved from there.

Matt and Sara partnered with the NRCS to improve their soil's health. Through the Environmental Quality Incentives Program, they did residue management, implemented no-till and planted 47 acres of multi-species cover crop. A few years after implementing cover crops and no-till, they partnered with NRCS through the Conservation Stewardship Program to scavenge excess nitrogen, apply phosphorus below the soil surface and used precision application technology to apply nutrients.

In 2019, they worked with NRCS and a Technical Service Provider to write a grazing management plan and are continuing to implement conservation. "We now have over 30 different paddocks I move the cattle into, so we have a rest period that works well for regeneration," explained Sara. The Hintz family also learned about the NRCS Upper Fox-Wolf Demonstration Farms Network through a farmer group Matt is Chairman of, Farmers for Tomorrow. The Hintz family decided to sign on as an official demonstration farm.

The Upper Fox-Wolf Demonstration Farms Network is an agreement between the NRCS and Waupaca County Land & Water Conservation Department, in partnership with Fond du Lac, Green Lake, Marquette, Outagamie, Portage, Shawano, and Winnebago counties and the Green Lake Association. The partnership supports a network of farms that demonstrate the best conservation practices to reduce phosphorus entering the Great Lakes basin. The network, funded through the NRCS Great Lakes Restoration Initiative, enables conservation farmers



Left: Meagan Hoffmann, NRCS, and Sara Hintz inspect cover crops in standing corn.



Right: (L to R) Derrick Raspor, NRCS; Sara and Matt Hintz and Meagan Hoffmann, NRCS; look at pasture growth.

Below: (Top to Bottom) Cattle grazing in the pasture. Matt moves recently delivered cover crop seed into the barn. Sara tends to the cattle grazing on pasture.

to demonstrate to other farmers and the public that the right combination of traditional conservation practices and other new, innovative technologies functioning on the landscape can produce viable and sustainable economic and environmental benefits.

As a new demonstration farm, they started by inter-seeding a multi-species cover crop, Italian rye and clover into standing corn, and were very happy with the results. They've held field days and are planning to implement more conservation through the network. "The Hintz family plans to look into relay cropping next and aerial seeding of 125 acres of cover crops," explained Derrick Raspor, Waupaca County NRCS Soil Conservationist. "We also have plans to fence more land in and incorporate the cattle into grazing of crops. We're interested in trying more regenerative agriculture practices, while decreasing inputs," added Sara.

"I see the progress of what we are doing over the years on the ground and in the soil. We are doing more no-till and cover crops and it's really helping our soil health. Being a part of the demonstration farms has given us more opportunity to think about trying new things out, new species and methods. We're just getting started and excited to try more," added Matt. "I like to see the progress now, after a few years of doing soil health practices. It's really rewarding to see the fixed areas of erosion and ponding. Sometimes no-till and cover crops get a bad rap, but our yields are pretty good compared to neighbors that use traditional tillage. It's working for us. We have been doing no-till since 1999 and covers since 2011 and we will continue to do so."

When Matt and Sara first started working with NRCS they met with Amy Neigum, NRCS Marathon County District Conservationist on the farm to assess conservation resource concerns. Amy assessed the acreage and saw they had added waterways and other conservation practices themselves to some of the landscape. "I had this one plot of land I took over and the first year I got the combine stuck in a washout and wondered why a waterway wasn't here. So, I added one; I knew it was washing out and I tried my best to fix it. We shouldn't be farming non-profitable areas. I know I can plant grass on the red spots of the yield map to help pollinators and other wildlife, while making my fields more profitable." The Demonstration Farms Network is working with farmers, like Matt and Sara, to improve local water quality through promoting and implementing conservation. Matt explains, "Farmers can be a big solution to the water quality issues around here. By implementing no-till, cover crops, grassed waterways and other practices, our farm is making good conservation decisions for water quality and others can too."

Matt and Sara plan to continue adding conservation on their farm as part of the Demonstration Farms Network, so they can keep their land in good condition while protecting natural resources for future generations. "We want to keep this farm thriving by making good decisions for the future of our land; we want to leave the farm in great condition for our son, Thomas, if that is what he chooses to do," explained Sara. Matt explains further, "A big goal we have is every acre getting a cover crop and no-tilling almost everything too. Cover crops and no-till have helped us in so many ways, with weed suppression, keeping chemical costs down and I like having all the residue there to keep the soil covered and protected." Matt and Sara look forward to teaching others, through the Demo Farms, about how they can help heal their land through soil health practices.



**Wisconsin
Natural
Resources
Conservation
Service**

wi.nrcs.usda.gov/





Deep Rooted Organics Provides Fresh, Local Flavor



Above: Tiffany Cade, of Deep Rooted Organics, at her farmers market booth, selling organic produce and products.

Organics are at the heart of Tiffany Cade's passion for providing her community with produce that has fresh, local flavor. Deep Rooted Organics is a Certified Organic Farm in Westby, Wisconsin. In 2012, the unfortunate loss of Tiffany's stepfather, Brian, left Ski Hill Greenhouses without management. Tiffany knew, with her passion for organic farming, she wanted to take over the greenhouses as a tribute to him. Tiffany and her partner, Jimmy Fackert, began planning their move and preparing for the next growing season. Tiffany had been traveling and living in Chicago, working for an organic vegetable farm and completing various community farming projects and Jimmy came from the Detroit area. Both had grown up with country roots and were ready to move back to rural life. In 2013, they decided to purchase the Ski Hill Greenhouse business, moving to Westby, Wisconsin, full time.

Over seven seasons, the couple has managed the farm productively and made many changes and updates. Both Tiffany and Jimmy value organic methods and care deeply for the environment. They chose the name Deep Rooted Organics for the reenvisioned farm and made the leap to be certified organic immediately. The farm yields and markets have increased with an annual production of over 35,000 pounds of tomatoes, all sold within 60 miles of the farm. Produce is delivered twice weekly to ensure freshness and quality to local restaurants, grocery stores and co-ops. Deep Rooted's produce is also available at their farm and at farmers markets in La Crosse and Viroqua, Wisconsin.

The farm grows more than just tomatoes. They grow a wide variety of certified organic vegetables and herb seedlings, along with a selection of annuals, perennials and native plants. One of the farm greenhouses is used as a nursery in the early season to offer the large selection of certified organic vegetable and herb seedlings. The greenhouse is also used for annual bedding plants, baskets and planters. Visitors can expect those

during late spring and early summer. From spring to late fall, the farm offers cut flowers and a wide variety of tomatoes, peppers and specialty produce.

Tiffany and Jimmy have always cared about their land and are interested in making sure it is healthy, while also meeting their business needs. As a beginning farmer, in 2012, Tiffany reached out to the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS). She learned about seasonal high tunnels, funded through the Environmental Quality Incentives Program (EQIP), applied and was funded. Considered an NRCS beginning farmer at the time, someone who has not operated a farm for more than 10 consecutive years, she was also able to qualify for special incentives and streamlined delivery of technical and financial assistance.

A high tunnel system, commonly called a "hoop house," is an increasingly popular conservation practice for organic farmers and is available with financial assistance through EQIP. With high tunnel systems, farmers can improve plant quality and soil quality, reduce nutrient and pesticide transportation, improve air quality through reduced transportation inputs and also reduce energy use by providing consumers with a local source of fresh produce.

High tunnels also protect plants from severe weather and allow farmers to extend their growing seasons—growing earlier in the spring, later in the fall, and sometimes, year-round. High tunnels prevent direct rainfall from reaching plants. Farmers can use precise tools, like drip irrigation, to efficiently deliver water and nutrients. This practice also offers farmers a greater ability to control pests and can even protect plants from pollen and pesticide drift.

Perhaps the best thing about high tunnels for Tiffany, is they help her provide the surrounding community with healthy,



organic, local food for much of the year—food that requires less energy and transportation inputs.

As a beginning farmer interested in organic farming, Tiffany was a great fit for NRCS programs. The completed seasonal high tunnel has been invaluable to extend the growing season for Deep Rooted's specialty crops.

In 2014, Tiffany again partnered with the NRCS, receiving a contract through the Conservation Stewardship Program (CSP). The CSP can help organic farmers, like Tiffany, by building on their existing conservation efforts, while also strengthening their operations. Tiffany partnered through the CSP to improve the soil health of the remaining 15 acres of land on the farm that had become worn out through a history of conventional farming methods.

NRCS District Conservationist, Sam Skemp explains, "Tiffany and Jimmy are enthusiastic promoters and providers of locally grown food in Southwest Wisconsin. Their success and growth during challenging times in the agriculture sector has been great to witness. Deep Rooted's partnership through the CSP to build their soil health with conservation practices is key to making their farm sustainable over time. This program aligns really well with their organic needs and goals."

Because the first high tunnel was such a success, Deep Rooted applied for funding through the 2020 EQIP Program to expand their fresh produce and cut flower capacity with an additional seasonal high tunnel. They were selected for funding and installed a second tunnel. They have also chosen to continue their soil health efforts through CSP by renewing their contract to complete more soil health practices.

Next, Tiffany is very interested in pursuing how to save energy on the organic farm. Tiffany has an application in for the 2021 EQIP On-Farm Energy Initiative. This initiative helps farmers make voluntary improvements that can boost energy efficiency on their farm. Through the initiative, farmers can receive financial assistance in completing an energy audit to inventory and analyze farm systems that use energy and identify opportunities to improve efficiency through development of an Agricultural Energy Management Plan.



Farmers can look into reducing input costs, increasing productivity per unit of energy consumed by equipment and lighting and reducing air pollutants and greenhouse gas emissions caused when energy is generated for agricultural use. Tiffany has also recently invested in adding solar to the farm.

"I am very pleased to see Tiffany take her conservation efforts one step further by applying for an energy audit. She is very interested in pursuing additional energy efficiency practices and more efficient heaters and lighting in her high tunnels and greenhouses," said Skemp.

Tiffany is committed to improving the health of her land and developing healthy ecosystems, including also looking into options for providing more habitat for beneficial insects and pollinators. Tiffany has plans to partner with NRCS again to complete a pollinator planting on the farm.

During 2020, COVID-19 introduced additional challenges in connecting producers and customers. Tiffany continues to adapt with the times, by expanding the use of online resources and adjusting access to products beyond the traditional farmers market sources.

Sam explains the relationship best, "Tiffany and Jimmy have been a pleasure to work with. They are very enthusiastic about our partnership and speak often about the benefits of NRCS programs to others. We're thankful they are advocates; farmers call our NRCS Service Center often referencing Tiffany and Jimmy. NRCS looks forward to continuing to help Deep Rooted thrive as an organic farm and assist other organic farmers too."



(Left to Right) Tiffany greets customers at the Deep Rooted store on the farm.

Tiffany Cade and Jimmy Fackert on the farm.

Tomatoes growing in a high tunnel funded by the NRCS Environmental Quality Incentives Program (EQIP) at Deep Rooted Organics.

Tiffany with a happy customer.

**Wisconsin
Natural
Resources
Conservation
Service**

wi.nrcs.usda.gov/



Brown County Success from the Field

Innovative Farmer Has Sights Set on Soil Health



Background

Pat Kane is a seventh generation dairy farmer at Kane Dairy LLC, in Denmark, Wisconsin. His family has been in the business of dairy farming since the early 1800s when the original farmstead was purchased just across the road from the present-day farm. Like many other dairy farms, they have seen substantial growth. In 1988 they milked 60 cows—today that number is 800. With a land base of about 2,800 acres, they can grow all of the forage for their animals, which also includes heifers raised on-site. Pat has slowly been taking over the farm from his father's management and has progressively tried new field techniques with the goal of reducing labor, inputs and improving the soil.

Highlights

For Pat, the thought of building healthy soils began four years ago after talking with Brown County Land and Water Conservation and participating in field days. No-till and cover crops made economic sense to Pat, who stated that the practices "require less man power and save fuel." Really the biggest hurdle was the uncertainty behind implementing new practices. Together with his dad and NRCS Soil Conservationist Julie Hager, Pat applied to implement a no-till and cover crop system through EQIP. His conservation plan was approved and with assistance from the NRCS Great Lakes Restoration Initiative, he implemented several hundred acres of cover crops and no-till.

So far, the benefits of no-till and cover crops have not gone unnoticed by Pat on the farm, or by members of the conservation community. In fact, Kane Dairy was one of the farms featured during the latest Save the Bay Farm Field Day. One of the greatest benefits Pat has observed is the ability to get manure out on the fields in summer. Not being limited to when manure can be applied has allowed their manure pit to sit below 40% capacity. In years before no-till and cover cropping, capacity this time of year was roughly 75%. This is a tremendous burden lifted off a busy dairy in the fall.

Generally, larger farms struggle to seed all of their cover crops in time given various limitations; however, Pat has solved this problem by being innovative with the equipment he uses, namely a vertical tillage unit (see picture). Pat expressed that



Pat Kane of Kane Dairy LLC, next to his vertical till cover crop seeder that allows for quick and efficient planting of cover crops on several hundred acres in variable conditions.

the vertical till has been great for wetter conditions and has nowhere near the soil compaction that a traditional horizontal tillage unit has. Only one tillage tool can be found on the farm with no field cultivator or chisel used for the last three years.

Future Plans

Looking ahead to the future of the dairy farm, Pat hopes to have all open acres covered and use less herbicide and fertilizer. He is encouraged by other farms in the country that have been able to reduce their fertilizer program by getting their soils built up through a regiment similar to his farm's. He hopes, with the continuation of cocktail mix forages and in season application of manure, that this will be a real possibility in the years to come. He also plans to upgrade his cover crop seeder to allow for even more efficiency with an upgraded seed flow unit and toolbar. Next year he also plans to interseed more cover crops between corn silage. Each year continues to bring new lessons and new successes! NRCS looks forward to continuing to work with Pat to meet his conservation goals.

Wisconsin
Natural
Resources
Conservation
Service



Brown County Success from the Field

Managing Land One Generation at a Time

Andy Vanderloop's 120-acre property in Greenleaf, Wisconsin, has been in his family since the early 1900s. The property is dominated by 100 acres of rocky forestland, with the remaining 20 acres in cropland. In the early 1900s, Andy's grandfather grazed beef cows throughout the woods while running a business as a local cattle purchaser. When Andy's dad took over, the woods were not used as much and the fields were used for hay production.

As an adult, Andy lived and worked away from the farm, but he always had a close connection to the land that he explored as a child. Recently, he moved his family to live on the property with hopes to manage the land in a more natural way, while also earning some income. Andy learned about opportunities with the USDA Natural Resources Conservation Service (NRCS) while attending a woodland owners workshop and contacted the local USDA Service Center to see if there were any programs that could help him achieve those goals.

"To be honest, I was very skeptical about inviting agency staff out to my property; were they going to be critical on how I currently manage my land?" said Andy, "but once I was able to walk the land with them and learn from them, I soon realized they were in the business to help, rather than to criticize."

Andy wanted to manage his land properly, but was concerned about the expense to apply some of those management practices. After the NRCS visit in spring 2019, it was clear that much could be done through the Environmental Quality Incentives Program (EQIP) and the Conservation Stewardship Program (CSP) to complement Andy's goals.

Ryan Jacques, Soil Conservationist (Glacierland RC&D), walked the property with Andy and saw how his goals were aligned with these programs. "Just in talking to Andy out on his land, I can see how passionate he is about managing his land responsibly for wildlife and how much he just wants to do the right thing for the land," said Ryan. The forestland was previously in the DNR Managed Forest Law (MFL) tax incentive program for 50 years and was managed to maintain diverse and robust stands of timber. Andy wanted to continue to make good decisions for his woods, but was worried about making decisions without guidance from a forester. EQIP was able to fund a forest management plan and now Andy will be able to be confident in making wise management decisions for his woods. He also plans to use the updated management plan to re-enroll his forestland back into the DNR MFL program.



Agricultural fields were in continuous row crop for 7 years, but now are contracted to be converted to 15.3 acres of monarch butterfly habitat.



As prescribed in the forest management plan, girdled trees create snags and den trees to enhance wildlife habitat throughout the forest.

In addition to the forest management plan, Andy is in the first year of CSP for both his forest and agricultural land. As part of these contracts, he will convert 15.3 acres of cropland to prime monarch butterfly habitat by establishing a pollinator flower and milkweed seed mixture that contains more than 15 species.

Within the forestland, Andy will establish a similar mix to provide food habitat for pollinators and beneficial insects and plant a patch of trees and shrubs that will provide food and cover to a variety of wildlife species.

On his own since 2000, Andy has periodically planted pine trees near field edges to make them more visually appealing and to create a visual screen from the road, but is now looking to add more to the land and replace the row crops completely.

During the site visits with the NRCS, Andy learned about the invasive species that were present on his land, how to identify them and how to control them. Now, he is actively working towards controlling their spread.

Andy is grateful for the technical and financial support NRCS has provided and is excited to continue working in partnership over the next five years.

Wisconsin
Natural
Resources
Conservation
Service



Buffalo County Success from the Field

Conserving for the Next Generation



Background

M-Line Farms Inc., was established in 1971 in rural Alma, Wisconsin. Current members are Randy Mueller, along with nephews, Blake Brommer and Mike Larson, who joined the operation in 2016. Together, M-Line Farms Inc., is a diversified no-till farming operation consisting of 1,500 acres of cropland (of which about 750 acres are owned) where they grow corn, soybeans, small grains and alfalfa. They also have a 50 cow/calf beef herd, raise steers, as well as custom-raise dairy heifers. If that isn't enough, M-Line Farms Inc., also provides custom planting, spraying and combining services. Their interest in conserving soil and water for the next generation led them to the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) for assistance.

Highlights

For over 30 years, the farm has partnered with NRCS and the Buffalo County Land Conservation Department to control soil erosion and improve water quality on their acreage. Farming in the Driftless Region of Wisconsin brings many challenges due to steep slopes and fragile silt loam soils. In both 2012 and 2016, large rainfall events of 10–12 inches of rainfall in 24 hours, caused severe erosion issues across the county.

With assistance from the NRCS Environmental Quality Incentives Program (EQIP), the farmers installed numerous grade stabilization structures and grassed waterways to eliminate soil erosion. Most recently, they utilized EQIP to adopt planting multi-species cover crops following a small grain crop on over 200 acres annually.

Since 2018, M-Line Farms Inc., also participates in the NRCS Conservation Stewardship Program (CSP). Through CSP, they annually plant 200+ acres of winter rye cover crops following corn silage and soybeans, have established over 23 acres of pollinator/monarch habitat, as well as completed a pasture seeding and tree planting.

M-Line Farms Inc., has seen the value of implementing no-till farming practices. Planting green into cover crops has reduced weed pressures and keeping grassed waterways in concentrated flow areas has helped improve soil and water quality. Whether it's laying out contour buffer strips on steep slopes or just needing advice, they don't hesitate to call the local



(Left to right) Randy Mueller, Blake Brommer and Mike Larson stand in a July 2020 constructed grassed waterway.



A multi-species cover crop of oats, radish and winter peas was successfully no-tilled after spring wheat harvest.

NRCS Service Center for technical assistance. "It has been a pleasure to work with such conservation minded farmers," said Dennis Reimers, NRCS Buffalo County District Conservationist. When asked, why do you do all this conservation work, Mike replied, "to leave the land in better condition for the next generation."

Future Plans

M-Line Farms Inc., has future conservation goals including expanding their beef cow/calf herd while adopting some rotational grazing practices and developing a Comprehensive Nutrient Management Plan (CNMP).

Wisconsin
Natural
Resources
Conservation
Service



Buffalo and Trempealeau Counties Success from the Field

Precision Agriculture: Bragger Family Dairy Finds Profitability in Grass

Background

The Bragger Family Dairy is a dairy and row crop farm with a mix of cattle, cropland, pasture and woodlands. The farm is located near the Buffalo and Trempealeau county line in the heart of Wisconsin's Driftless Region. Joe Bragger runs the farm with his brother (Dan), mother (Hildegard), and wife (Noel). Joe's parents settled in Wisconsin in the 1960s and liked the area because it reminded them of their homeland Switzerland.

Highlights

Joe was one of the original founding members of the Buffalo Trempealeau County Farmer Network in 2016. This farmer group is part of a statewide network of producer-led watershed groups supported by grants from the Wisconsin Department of Agriculture, Trade and Consumer Protection. "This group has tremendous momentum and opportunity to share ideas, brainstorm and use discussion to come up with new ideas and hammer out the details on current practices," explained Joe.

Historically, the group has partnered with UW Discovery Farms to conduct on-farm research related to nitrogen use efficiency and cover crop establishment. In 2020, the group partnered with Precision Ag and Conservation Specialist, Scott Stipetich, a position in partnership with Pheasants Forever Inc and the U.S. Department of Agriculture's Natural Resources Conservation Service to collect data on the farms and create precision ag farm business plans. These plans provide farmers like Joe, sub-field profitability analytics. "What's great about the profitability maps is that all the data input comes directly from the farm. We are able to use Joe's yield data, variable rate inputs and budget information to create very specific maps for his operation," said Stipetich. "The maps allow us to identify specific areas within a field that might be dragging whole field yield down or areas that are difficult to farm."

Joe already had an idea that some areas of his fields were not as profitable as others. In 2019, he planted 30 feet of grass on the edges of crop fields that were adjacent to woodlots. These crop areas were competing for sunlight and moisture with the adjacent trees and the crop was losing yield. Stipetich was able to analyze these fields to support Joe's assumption with the actual numbers. Thirty feet around the one 30-acre field was about five acres total. By not planting this area to traditional grain crops in 2020, the whole field was 5 acres less and net profit was \$200 more than the prior year.



Top: Joe Bragger (L) talks to Trempealeau County Communications TV about why he installed the grass borders. Bottom: Before and after field analysis created by Stipetich.



Before: 2017 – 30.1 ac Corn Production	
Acres:	30.1
Yield:	190.9 bu/ac
Profit:	\$134.93/ac
ROI:	26.6%
Total Field Profit:	\$4,061.39

After: 2019 – 25.0 ac Corn Production + 5.1 ac Grass Strip	
Acres:	30.1
Yield:	209.6 bu/ac
Profit:	\$140.35/ac
ROI:	33.1%
Total Field Profit:	\$4,224.53

Joe stated that he is still farming that outer 30 ft. "Every acre on the farm has its purpose and we are still farming that strip, just not in the traditional way you might think," explained Joe. Joe has plans to cut the strip for hay in some years and let it grow in others.

Future Plans

After the 2020 harvest, Joe is working with Stipetich to analyze the remainder of the farm and discuss additional areas that might benefit from alternative management plans. "We are currently discussing management ideas and fields to look at this year," added Joe.

**Wisconsin
Natural
Resources
Conservation
Service**



Calumet County Success from the Field

Good Weather and Good Conservation



Farmers have faced many challenges in the past few years, including inclement weather due to a changing climate, price fluctuations, and more. With all the changes, Calumet County, Wisconsin, had one constant in 2020—good weather for conservation implementation. A Calumet County farmer took advantage of the good weather, choosing to partner with the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) to implement conservation on the ground and is seeing established benefits in 2021.

Background

The Calumet County farmer started partnering with NRCS back in August of 2017. The summer weather forecast looked good for warmth and heat, the perfect opportunity to install a grassed waterway. A well-established grassed waterway helps conserve soil resources to control and prevent soil erosion, while also providing flood prevention and the conservation, development, utilization and disposal of water within a district. In partnership with NRCS, the farmer worked to install a grassed waterway during a two-week time frame.

The farm sits within a half mile of Lake Winnebago, offering an opportunity to protect water quality in the surrounding area. The almost half-mile long grassed waterway construction began, seed was planted and the erosion control blanket had an opportunity to begin establishment. In spring of 2018, a very heavy rainstorm with over four inches of rain falling in one night wreaked havoc on the new waterway. The grassed waterway was in dire need of repair (see the top photo).

Highlights

The farmer connected right away with the local NRCS Calumet County Service Center for assistance. The farmer and NRCS partnered to develop a cohesive plan of action to fix the site. The farmer's goal was to stabilize the soil on his fields and in the waterway so it didn't end up in Lake Winnebago.

The conservation plan was developed in 2019 to fix the site permanently by lining the waterway with large rip-rap. In 2020, good weather in Calumet County permitted the repair. With direction from NRCS, the half-mile long, lined waterway took less than a week to complete. The farmer is pleased with the results and in the past year, the lined waterway has stabilized the site. See the bottom photo taken in August 2020, after completion.



In May 2018, a four-inch rainfall took place overnight, damaging the newly installed grassed waterway.



In August 2020, the newly installed, lined waterway with established cover has greatly stabilized the site.

Wisconsin
Natural
Resources
Conservation
Service

wi.nrcs.usda.gov



Chippewa County Success from the Field

Restoring Marginal Cropland Into a Waterfowl Refuge



Farming History

Stanley Ewings is a Dairy Farmer right in the heart of Chippewa County, Wisconsin. He operates 360 acres of cropland around the Jim Falls area and has been farming his entire life. Stan bought his dad's farm in 1973 after he came back from his service in the United States Army. His military service included a tour of duty in Vietnam from 1971 to 1972. Over the last couple of years, the Ewings' farm has transitioned from a cow dairy into a goat dairy. According to Stan, "Goats are easier to work with than cows and the goat dairy is kind of my retirement plan." Goats are not the only animals that can be found on Ewings family farm. There are a range of different livestock, including ducks, chickens and even peacocks on the Ewings' farmstead.

Highlights & Successes

Stan started working with the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) 20 years ago. He was approved through the Environmental Quality Incentives Program (EQIP) to build a manure pit, but he decided to back out of the project because it was too expensive. It was a hard call for Stan at the time, but building a manure pit is a major undertaking. There are numerous factors a producer must consider before completing any project. Of course, how much will it cost? How long will it take to pay off that expense? Will the benefits justify the cost? And, will the producer be around long enough to see those benefits? Those are a few factors producers should think about when making decisions for change on their farm.

Seventeen years later, Stan reached out to NRCS about the Wetland Reserve Easement (WRE) program to restore some 67 acres of cropland that had been a thorn in his side for years. For decades, the field had been drained and the wet spots were filled in, but even after all that effort, there was very little gain from the land. Stan realized that no matter how much filling or drainage was done on the field, the wet spots were still present. Those issues ultimately lead Stan to stop fighting with the area and put the land into a program that would benefit wildlife.



Stan Ewings poses next to folk art on his farmstead.

In 2017, Stan was approved for a WRE to restore the land back to wetland and prairie habitat. The project was set to begin in 2018, but because it was so wet that year, the contractors didn't break ground on the project until 2019. Now, the wetland is flourishing. Old drainage tile lines were broken and berms were put in place to suppress runoff and collect sediment. Scrapes were dug out to create little ponds for amphibians, reptiles and waterfowl. These ponds were created along a slight grade and had spillways linked to a channel leading down to a wetland area at the bottom of the slope. The hydrology is regulated using a water control structure on the highest pond. The level of water can be dropped or raised to manage the restoration and vegetation. The upland pond is constantly monitored to protect the tamarack bog on the east side of the pond. Tamarack trees can tolerate somewhat saturated conditions but are sensitive to overly saturated conditions. In the area surrounding the wetland, a cool season mix of grasses and clovers like timothy, orchard grass and red clover, were planted to create nesting areas for endangered bird species like the Bobolink. Stan noted, "The waterfowl that have utilized the area this spring are a few hatches of ducks and geese on the site."

Wisconsin
Natural
Resources
Conservation
Service



Chippewa County Success from the Field (continued)

Stan has also been involved with the Cornell School District and the Township of Cleveland Board, which shows great commitment to his community. He served the land as a conservationist by putting 67 acres of land into WRE. Stan explains, "There was resistance from the neighbors at first, for me turning cropland into wetland habitat. But now, they are starting to see its true potential as wetland habitat." David Jorgenson, NRCS Civil Engineering Technician, Barron USDA Service Center, designed the project and noted, "This was an interesting site, in that we restored three different types of wetlands on the same site. We restored small wetlands in the upland topography by removing tile and scraping out fill, down to the original wetland surfaces, improved and added a water control structure to an existing embankment to manage water levels in a tamarack bog and plugged a ditch to restore wetlands in the lowland areas of the easement."

This WRE has a compatible use agreement, so Stan will continue to take one hay cutting off every year after the bird nesting season. Stan is very proud of the work that has been done on his land. The once marginal farmland now serves a greater purpose. As Stan states, "Let the land grow what it grows best, not corn and soybeans, but ducks." Stan's commitment to land stewardship, his community and his country are really things to look up to.

**Story written by Barrent Herman, Chippewa County NRCS Pathways Summer Intern. Barrent is a native of Trempealeau County, majoring in Crops and Soil Science at the University of Wisconsin—River Falls.*



A board is being pulled from the water control structure to lower the water level 6 inches in the upper pond. To raise the water level, more boards can be added.



One of the wetland scrapes on the Ewings property.



Columbia County Success from the Field

“Five Green Acres” Never Smelled Sweeter



Background

Mary Jo and Andrew Borchardt, along with their two children, came from the east side of Madison to find what is now Five Green Acres, a flower farm in Poynette, Wisconsin. Chickens were already on the property when they purchased the land in 2008. Mary Jo was looking for a way to marry her love of design and interest in farming—flowers fit the size of their family and farm.

Highlights

The Borchardts began working with the U.S. Department of Agriculture’s Natural Resources Conservation Service (NRCS) Columbia County Service Center in 2017 and participated in the Environmental Quality Incentive Program (EQIP) to aid in the construction of a high tunnel. The structure has “opened opportunity for wedding flowers,” Mary Jo stated. Ranunculus is a cool season flower that does great out of water for an extended period of time, making it ideal for boutonnieres and bouquets. Typically, ranunculus will die in the summer, however, using the high tunnel has extended their growing season. “It was amazing to see the effects of the high tunnel extending the growing season while visiting with Mary Jo and Andrew on their farm. There had been a frost a few days before and the difference was striking,” remarks NRCS Soil Conservationist, Lizzy Dawson.

In addition to wedding floral design, Five Green Acres retails bouquets online, as well as at farmers markets in the Madison area. The extended growing season has made it possible to allow certain flowers, such as tulips, to flower two or three weeks earlier than the field. This means Five Green Acres is able to provide their clients with beautiful, local arrangements in time for Easter and Mother’s Day; a feat many of the other growers in the area cannot achieve.

The high tunnel proved a mitigating factor for their wind issues. The soil is loose and with the wind protection, there is no longer a concern over wind erosion. Also, the stems are able to grow straighter without the pressure from the wind. Another added benefit is weed suppression. The high tunnel has a drip irrigation system for the flowers, restricting water access to the weeds and limiting their growth.

The most enjoyable aspect of the operation for Mary Jo is working with the flowers and enjoying the magnificent aroma.



She also greatly enjoys “working with the brides to make their vision a reality.”



Mary Jo and Andrew in their high tunnel at Five Green Acres.

Photo Credit: Treasure People Photography

Five Green Acres offers a variety of products and services including design for weddings and events, local delivery or shipped wrapped bunches, vase arrangements, bulk buckets of fresh flowers and greenery, and succulent gardens (local delivery only). To learn more and see their exquisite work, please visit their website: www.fivegreenacres.com.



The same variety of flower, one growing in the high tunnel (left) and the other in the field (right). The pictures illustrate how the high tunnel extends the growing season.

Future Plans

In the coming years, Five Green Acres would like to add an additional hoop house that would allow them to expand their business and offer more full service weddings. They are looking into what they will need to grow to support the greater volume of blooms to create arbors, bouquets and vase arrangements.

Five Green Acres offers a variety of products and services including design for weddings and events, local delivery or shipped wrapped bunches, vase

Wisconsin
Natural
Resources

Columbia County Success from the Field

From Gravel Pit to Wildlife Oasis



Background

Just outside Wisconsin Dells, away from the excited shouts of water-park goers and the hustle of tourists, there exists a quiet little piece of heaven abounding with wildlife. Owner, Pete Legee has spent years lovingly working to improve a parcel of unproductive farm land to the thriving ecosystem that exists today. While his brother had worked the cropland for row cropping, Pete saw potential to use it in other, more productive ways. As Pete puts it, "What I love, poor unproductive land, that with a bunch of TLC, could be turned into something beautiful and productive." From an early age Pete has had a passion for the outdoors. After a car accident left him physically impaired, Pete couldn't be kept away from enjoying the great outdoors. "His passion for nature and knowledge is inspiring," remarks Lizzy Dawson, NRCS Soil Conservationist. "When he observes something on the property and wants to know more about it, he will contact experts in that subject to get the most accurate, up-to-date information he can obtain on it. I'm always excited to see what I will learn from him next!"

What started in 2008 as a 3,500 tree planting to improve wildlife habitat for deer and turkeys, as well as making the land more productive, led Pete to working with the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) and the Farm Service Agency (FSA) to enroll his property in the NRCS Conservation Stewardship Program (CSP) and the FSA Conservation Reserve Program (CRP).

Highlights

Pete first started working with the NRCS when he enrolled the crop fields into CRP native prairie plantings. "With all one reads these days about how pollinators are struggling, it's good to know we're doing something to try to give them a boost in our area," explains Pete. Once the flowers started to bloom, Pete described the feeling of finding the first native forbs flowering to be very rewarding. From there, Pete was enthusiastic to do more. He pursued a CSP contract for his nonindustrial private forest. Through CSP, he converted an old gravel pit to a 4.6 acre native prairie planting and planted an additional 300 aspen trees as recommended by his forest management plan. Pete describes his journey in gathering information for his projects; "There are great sources out there to provide you guidance through the process, your county NRCS staff, county forester, University of Wisconsin Extension and native plant nurseries. If natives will grow on the worst my property has to offer, the floor of an old gravel pit, they will make it just about anywhere."



Above: A couple of monarchs enjoying one of the native prairie plantings on the property. Below: Pete diligently checking on the progress of some White Pine seedlings in their first year after planting. Photos provided courtesy of Pete Legee.



Future Plans

Pete continues to find ways to add and improve his property. As his prairies mature and produce vibrant blooms, he has partnered with local apiaries to allow the hives to utilize the native pollen. He continues to tend to the management of the prairies as well as plant dozens of trees every year. As more less than desirable cropland becomes available in the area, Pete has found himself contemplating expanding his property to help convert more land back to a native and thriving state.

Wisconsin
Natural
Resources
Conservation
Service

Crawford County Success from the Field

Evolving Practices for a New Normal



Background

Josh and Solitair Tamling, of Tamling Family Farm in Boscobel, Wisconsin, started their 23-acre beef farm in 2014. Josh grew up on a family farm and introduced Solitair to a rural lifestyle that includes hunting, raising livestock and adopting conservation practices to care for the land. Over the years, Josh and his family have had several enterprises including renting out their land for crops, beekeeping and direct marketing beef. Josh also works full-time as a land manager in Seneca, Wisconsin, where he rents cropland, manages woodland for deer hunting and is restoring native grasslands. “Josh has done a lot of restoration on his property over the years to prevent soil erosion and to improve the land for grazing and wildlife,” said Karyl Fritsche, Crawford County USDA Natural Resources Conservation Service (NRCS) District Conservationist.

Highlights

Shortly after acquiring their farm in 2014, Josh began to look for guidance and financial assistance to accomplish restoration projects on their property. He contacted Karyl Fritsche in March of 2015 to discuss the goals and concerns he had on their cropland and pasture. “When I got the property, the pasture was nothing but brush and the main waterway on the crop field had eroded three feet deep from runoff,” said Josh.

Karyl referred Josh to Southwest Badger Resource Conservation and Development (RC&D) Council Grazing Specialist Dennis Rooney to develop a prescribed grazing plan for Josh’s pasture under an agreement between NRCS and the RC&D. Josh then applied and was accepted for an NRCS contract under the Honey Bee Pollinator Fund Pool in the NRCS Environmental Quality Incentives Program (EQIP). In 2017, Josh installed 1,700 feet of permanent electric high tensile fence, 600 feet of livestock pipeline, a winter waterer and interseeded 13 acres of existing pasture with a diverse mix of legumes and grasses that would benefit multiple pollinator species, as well as provide high quality grazing for livestock.

In 2018, Josh’s success with EQIP led him to work with Dennis to develop a second grazing plan to convert all of his cropland to pasture. In 2019, Josh applied and was accepted for an NRCS contract under the Southwest Coulee and Ridge—Pasture Fund Pool in the NRCS EQIP. In 2020, Josh installed 1,860 feet of permanent electric high tensile fence, 400 feet



Solitair and Josh Tamling take pride in pasturing their beef herd and selling to local consumers. Photo courtesy of Josh Tamling.

of livestock pipeline, a watering tank and re-seeded 8 acres with a customized mix of grasses and legumes. “I have really enjoyed having specialists from RC&D and NRCS to tell me what looks good, how I could improve and how to get the funding to get stuff done,” said Josh.

Future Plans

Josh is already on his second EQIP contract and has plans to continue improving his grazing operation. He recently started working with Golden Sands RC&D Council Grazing Specialist and Soil Conservationist Robert Bauer to evaluate his progress with his prescribed grazing plan. Robert added, “I recommended that Josh stockpile five acres of his new pasture for winter grazing in order to reduce hay costs and return nutrients to the soil. He has a little extra pasture right now and the meadow fescue in the new seeding will stockpile well.”

Josh also looks forward to reducing soil compaction that has developed from past equipment traffic on cropland. He plans to interseed new forbs and grasses into his pastures to have diverse root systems to breakup soil compaction. “These big rains are the new normal, so we need to evolve our practices” he explains. NRCS looks forward to continuing to work with Josh on his grazing and soil health efforts.

Wisconsin
Natural
Resources
Conservation
Service



Dane County Success from the Field

Experimentation Leads to Further Envelope Pushing



Background

Karl and Courtney Sime farm with Karl's parents, Bruce and Kim, on about 600 acres in the Lower Yahara Watershed, just outside Stoughton, Wisconsin. They have permanent pasture, cash grain and hay in rotation. Currently the farm supports a 50-head cow-calf operation on pasture and seasonal cover crop grazing, as well as 250 steers in the old dairy facility. Karl and Bruce also do custom planting, haying and baling for the neighbors.

Highlights

Bruce started working with the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) in 2014 through the Conservation Stewardship Program, but then shifted into the Environmental Quality Incentives Program (EQIP) and cover crops by 2016. Bruce and Karl were noticing a lot of compaction at the home farm from years of silage and heavy machinery in the fields. They tried aerial seeding of Spring Barley in fall following silage harvest on about 40 acres to alleviate compaction. Disappointed in the result of such little growth and no overwintering cover, Bruce and Karl quickly looked for a better option. In 2017–2019, they switched to cereal rye aerial applied on about 250 acres throughout the farm. Throughout this time, Karl started to listen to podcasts and videos about regenerative farming, grazing, cover crops and livestock integration. "Karl is a classic early adopter," Marie Raboin from Dane County Land Conservation Department states, "he wants to experiment with everything, push the boundaries and figure out what works for him." By 2019, Karl had utilized several local county programs to convert over 80 acres to permanent pasture, fence the entire perimeter of the home farm and started grazing cover crops throughout the growing season. "Without those first few EQIP payments for cover crops, I would not have had the ability to experiment and figure out how cover crops work in my rotation," Karl says about using government programs to get him started down a path to better soil health. In one 80-acre "experiment" they planted corn into standing rye without a crimper—eventually the corn caught up and it gave them enough confidence to keep going. Karl's new goals are to reduce and eliminate outside fertilizer and pesticide use, as well as continue to diversify the cover crop mixes on the farm. In spring of 2020, he built an interseeder and experimented



Karl and Bruce pushing the envelope using 60 in. corn rows with cowpea interseeded.

with several different cover crop mixes in 60 in. and 30 in. corn plots. In addition, Karl and Bruce used roller crimpers to plant every acre of corn and soybeans green into standing cereal rye. Karl also rebuilt a tractor this past winter, which allowed him more flexibility planting small grains, pasture and cover crops this year.

Future Plans

Karl is going to continue to push for more diversity on his farm, more livestock integration, less inputs and higher profitability once he gets his soils looking like "black cottage cheese." As Adam Dowling, NRCS District Conservationist in the Madison Service Center pointed out, "hopefully neighboring farmers will stop and ask the Simes what's happening on the other side of fence and maybe, just maybe, start experimenting themselves."

Wisconsin
Natural
Resources
Conservation
Service



Dodge County Success from the Field

The Definition of Innovators

Background

Nancy Kavazanjian and Charlie Hammer, farming together as Hammer & Kavazanjian Farms, operate over 1,950 acres in Dodge County, Wisconsin. Together, they have been and continue to be active members of the local agricultural community. They enjoy focusing on learning and implementing new practices, while they advocate for soil and water conservation and sustainable agriculture.

Highlights

Nancy and Charlie recognized early on, the importance of protecting the bee population. They partnered with the USDA Natural Resources Conservation Service (NRCS) and the USDA Farm Service Agency (FSA) to implement pollinator habitat across their operation. They utilized the NRCS Conservation Stewardship Program (CSP) and the FSA Conservation Reserve Program (CRP) to help meet their conservation goals. They continue to increase wildlife habitat by providing acres of overwinter wildlife food sources.

As innovators, Nancy and Charlie do not take a wait and see approach to conservation. Currently, through the CSP, they are adapting their management to reduce the risk of nutrient loss through precision agriculture technology and remote monitoring. They are also taking their pesticide management to the next level with improved integrated pest management planning and increased refuge plantings to slow resistance in Bt crops. Long-time no-tillers, they are adding cover crops to more of their rotation, experimenting with mixes, timing and inter-seeding. Nancy and Charlie are always willing to share their experiences and knowledge by hosting and presenting at local workshops and field days.

Future Plans

Supporting the local Fox Lake district and partnering with private engineers, Nancy and Charlie are working on a phosphorus mitigation system to capture and store excess mobile-P before entering into the nearby Fox Lake watershed. These are just a few examples of the ways in which Nancy and Charlie support their community and grow their operation.



Above: (L to R) Charlie Hammer and Nancy Kavazanjian next to their farm sign. Below: Pollinator habitat thriving on farm.



Nancy and Charlie have been partnering with USDA for over 15 years. Their commitment to education, hard work and a willingness to try new things has been on-going and continues today, providing conservation benefits now and into the future.

Wisconsin
Natural
Resources
Conservation
Service



Douglas County Success from the Field

Bee Friendly Pollinator Planting



Background

When Paula Pedersen and Sara Thomsen purchased their first 40-acre Oakland Township property ten years ago, it was intended as a buffer from development. They quickly learned that the 3-acre field across the road from their other acreage in Hawthorne Township was the perfect spot for their vegetable gardens, orchard and solar array. However, it wasn't until after an NRCS Forest Management Plan, financed through the Environmental Quality Incentives Program (EQIP), that they began to put even wider ranging goals to work on their properties. Paula and Sara, hobby beekeepers and organic gardeners, looked to the fallow field as a new habitat for pollinators.

Through EQIP assistance, Paula and Sara received financial support and technical guidance to implement native pollinator plantings with species that bloom throughout the season.

Due to their involvement in sustainable agriculture and environmentally based groups in the Duluth/Superior community, they partnered with a local natural landscaping contractor to establish native habitat, providing a long-term, ecologically sound landscape adapted to the existing conditions of the site.



Post herbicide prep



Controlled burn of pollinator site.



No-till drill planting.

Highlights

In late summer 2016, the site was treated with herbicide to kill off weeds 30 days before disturbing vegetation. They also removed dead vegetation with a controlled burn and disk/tilled the site to stimulate weed seed germination. In spring 2017, once weed seed germinated, the site was sprayed with



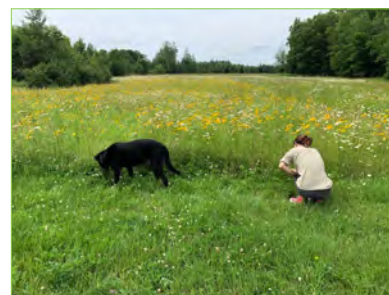
herbicide prior to planting. Next, they prepped the soil by using a harrow to create a smooth seedbed. In spring/summer of 2017, they also planted seed by no-till drilling. To combat erosion, they also planted a cover crop, along with the native grasses and flowers.

In 2018, during the first growing season, they actively managed the plot by mowing and completing annual weed control. In the following seasons, they completed monitoring, prescribed burning, mowing, spot spraying, spot mowing, herbicide wicking or hand weeding.

According to Paula, the biggest surprise of the project was the effort it took to kill the existing weeds and seed. They tried their best to garden organically but were unable to successfully prepare the field properly without use of non-organic chemicals. "As with many things, it felt like a conflict of values. The pollinator field won," explained Paula.

Future Plans

Paula and Sara plan to continue to maintain the field, add to the gardens and orchards, as well as partner with NRCS again to add a high tunnel through the EQIP program.



Wisconsin
Natural
Resources
Conservation
Service



Dunn County Success from the Field

More Bushels Don't Mean More Dollars

Background

Mike Wold of Ridgeland, Wisconsin, took time out to assess his cropping operation coming off unprecedented high commodity prices; he knew something had to change. Mike realized he couldn't change the majority of his farm's sandier soils, but he could alter his farm's environmental footprint. With any large operation, Mike has a diversity of soils, from irrigated sands to silt loams, where he grows a crop rotation of conventional soybeans, food grade soybeans, small grains, corn and kidney beans. His operation has lands with bedrock near the soil surface and lands near rivers, streams and wetlands, leaving room for surface and ground water quality contamination and the potential to make a positive difference. The diverse landscape potential in causing resource concerns within Northern Dunn County are great, but Mike is doing a great job of taking steps to improve the environmental footprint of his operation.

Highlights

Mike had goals to change and diversify his operation for better environmental protections. He initially contacted the USDA Farm Service Agency and enrolled some acreage into the Conservation Reserve Program (CRP). While completing the conservation planning, Mike wanted to help local pollinators, so, he chose to plant a mix of native grasses and flowers to enhance the site for pollinating insects. Through discussing opportunities to enhance the economic return of the acres enrolled in the CRP, the Wisconsin Department of Natural Resources Voluntary Public Access and Habitat Incentive Program was discussed. Mike decided he would enroll to open the property up to public access, allowing all users to enjoy his property. As Mike witnessed the wildlife usage increasing, he also noticed his income level rising. Mike started looking closer at other nonprofitable acres on his farm. He noted other areas with historically low production and converted them to pollinator friendly habitats partnering with the USDA Natural Resources Conservation Service through the NRCS Environmental Quality Incentive Program (EQIP).

Mike is leading by example, as an active member in the Hay River Farmer-Led Watershed. His experiences are paving the way for additional producers to truly look at their operations



Pollinator habitat blooming on Mike Wold's farm. Notice the common milkweed, wild bergamot, black-eyed susan and yellow coneflower species.

and realize more bushels don't always mean more dollars. Mike continues to work on his return on investment on other acreages he is farming. Upon crunching numbers and assessing his operation further, he subsequently enrolled additional acres in the Farm Service Agency's Conservation Reserve Enhancement Program to increase profitability and improve water quality. His environmental conservation journey continued down the path to assess improving surface and ground water quality next. In 2019, Mike partnered with local conservation staff to look at nitrogen efficiency on his irrigated and non-irrigated cropland, altering his use of nitrogen.

Future Plans

As Mike continues along his conservation expedition, he has goals to improve his farm's overall soil health. He has been experimenting with cover crops on various soil types, crops and application methods to find an effective establishment method. Mike plans to pursue EQIP again to move his operation into a no-till system with cover crops. In addition to cover crops and no-till, Mike would like to explore nutrient management or nutrient budgets within his operation, improving his farm's soil health and long-term environmental benefits even further.

Wisconsin
Natural
Resources
Conservation
Service



Fond du Lac County Success from the Field

Forever Teaching, Forever Learning

Background

Julie Fitzpatrick owns and operates 14 acres of pastureland in Larmertine township of Fond du Lac, Wisconsin. She has always believed in preserving her pasture with conservation cover, a perennial vegetative cover to protect soil and water resources on her land. Much of her land was previously enrolled in the Farm Service Agency's Conservation Reserve Program and when that expired, she wanted to bring the land back into production without planting row crops. Her solution? Sheep! She currently pastures 52 sheep on her acreage.

Highlights

Julie has always had a passion for science and the environment. She was a science school teacher for over 25 years in the Fond du Lac school system. Upon retirement, she wanted to use her love of science and the environment to take up a new endeavor, raising sheep. Just as she always encouraged her students to do, she did her research first. She attended numerous pasture walks to learn. She visited numerous area sheep producers. She asked area grazers questions about herd health, forage needs, fencing and watering systems. She also visited the local Natural Resources Conservation Service (NRCS) office to talk about opportunities on her land. Cory Drummond, NRCS District Conservationist in Fond du Lac said, "From day one, you could see that Julie had done her research and wanted to raise sheep in a way that would be good for the animals and for the land. We worked with Julie to develop a prescribed grazing plan in 2013. Everything that she has incorporated has been based off that initial plan."

Julie enrolled in the NRCS Environmental Quality Incentives Program, where she received cost share assistance for hard practices such as fence, waterlines, tanks and agronomic practices such as interseeding grasses and legumes to promote a better forage base. When she began this journey, Julie had 25 head of sheep. She now pastures 52 head, moving the herd every 5–7 days. Julie also participates in the NRCS Conservation Stewardship Program. She has incorporated practices such as rotation of supplement and feeding areas and wildlife-friendly fencing.

Forever the teacher, Julie has also hosted grazing field days to inform others of how her operation is functioning and



Julie Fitzpatrick (right) discusses pasture management with two attendees at a grazing field day on her farm.

educates on what has and hasn't worked for her. A goal of Julie's is to share experiences so that others, especially beginning farmers and grazers, are aware of potential issues and ways to address those issues. She is happy to be an advocate for NRCS and share information and opportunities. "I want to make others aware that there are resources out there to help farmers of all sizes, including smaller scale producers like myself. I also want people to know that I learn something new everyday, with my herd," explained Julie.

Future Plans

Julie intends to keep grazing her sheep and being an advocate for conservation. She says she would definitely participate in the NRCS Conservation Stewardship Program again if offered a renewal opportunity. She hopes to keep learning and offering opportunities for others to learn by hosting grazing days in the future. NRCS looks forward to her partnership in continued conservation.

Wisconsin
Natural
Resources
Conservation
Service



Forest County Success from the Field

Northwoods Family Farm Goes Organic



Background

Gerald "Ted" Medow Jr. owns and operates Medow Farms Organic LLC, on his family's heritage farm near Wabeno, in southern Forest County, Wisconsin. Medow Farms produces USDA-certified organic beef, chickens, hay, small grains and honey on 400 acres, of which Ted owns 267. The cow-calf operation features Limousin genetics, including offspring of cattle that had been sold from the farm by Ted's father and purchased and brought back to the farm by Ted.

Highlights

Ted has always had a love for the outdoors, studying forestry in Montana and living among the redwoods of Northern California. He started partnering with the Natural Resources Conservation Service (NRCS) in 2010, shortly after returning to Wisconsin and purchasing the Forest County farm. As a beginning farmer, seeking to explore all avenues of production and restore the land as a fully working farm, Ted entered into Environmental Quality Incentives Program (EQIP) contracts in 2011, to install a high tunnel system and have a forest management plan developed. Ted began producing organic vegetables in the high tunnel system and completed a timber sale in accordance with his forest management plan. He also entered into Conservation Stewardship Program (CSP) contracts, to enhance 100 acres of forestland, add wildlife habitat on the farm, and install a flush bar on his haying equipment. With an expanding beef herd, Ted entered into additional EQIP contracts, in 2013, 2016 and 2020, to convert 30 acres of cropland to rotationally grazed pasture and to install an all-season stock water tank, to restrict livestock access to surface water.

"Medow Farms is a jewel of the Northwoods, with rolling pasture and hayfields at the base of a forested moraine in the adjoining Chequamegon-Nicolet National Forest," according to Michael Stinebrink, District Conservationist, for the USDA NRCS in Rhinelander. The farm is at the headwaters of both the East Branch of the Lily River, which is a tributary to the Wolf River and Range Line Creek, which is a tributary to the North Branch of the Oconto River. "There's a rugged individualism in Forest County, to match the rugged landscape," added Stinebrink. "It takes hardy souls to make a go of it, and Ted, like his parents and grandparents before him, is a tireless



Medow Farms is a certified organic farm producing beef, chickens, hay, vegetables and honey, with sound forestry and wildlife management in Forest County, Wisconsin.

worker and effective steward of the farm and forestland. He is also an effective communicator. He puts conservation on the ground and then graciously shares his experiences with his neighbors, advocating for conservation and often putting them in contact with NRCS, to consider projects for their land."

Future Plans

Ted's most recent EQIP contract will enhance foraging opportunities for honeybees, including the 18 hives kept at Medow Farms. Ted's conservation plan includes frost-seeding alfalfa, alsike clover and white Ladino clover into long-term, grass hay fields and rotationally grazing the new pastures to ensure that some paddocks are allowed to go to flower for honeybee forage.

Ted feeds steeped barley to his cattle, using a family heirloom recipe, to augment the grass diet. He markets his organic beef to restaurants, organic markets, grocery stores and individual sales throughout northern and central Wisconsin. "If you're cutting into a good steak in a fine restaurant in Wausau, there's a good chance that it came from Medow Farms," added Stinebrink. NRCS is happy to continue working with Ted on his conservation goals.

Wisconsin
Natural
Resources
Conservation
Service



Grant County Success from the Field

Sixmile Habitat Success

Background

Mary Stanek owns a 240-acre farm just upstream from the confluence of the Blue River and Sixmile Branch in the north-east corner of Grant County, Wisconsin. These two river systems represent 15 years of partnership with the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS), the Harry and Laura Nohr Chapter of Trout Unlimited and numerous local landowners. Over twenty miles of stream habitat work has been completed on these systems providing a bounty of recreational opportunities for the local residents and the many out-of-state tourists that frequent the area.

Highlights

The Nohr chapter originally approached the Stanek family about pursuing a project. After consultation with the chapter's habitat team and some local neighbors who too had completed projects on their property, while also viewing some of the many completed sites around the area, the family decided this was something they would like to see completed on their land. This is the first farm bill program in which the Stanek's had enrolled into. The project was funded under the Regional Conservation Partnership Program through the Environmental Quality Incentives Program, Driftless Area—Habitat for the Wild and Rare.

Site conditions before the project were typical in this region, a stream choked with sediment and numerous tall eroding streambanks. These banks contributed tons of sediment into the systems each spring and after the numerous large rain events.

The site was bordered on the northern side by abandoned pasture, which the Staneks had no intention of utilizing for grazing animals in the future. "This presented a unique opportunity, as the vast majority of our projects are bordered by working lands with future production in mind," stated Joe Schmelz, District Conservationist in Grant County. Not only did the project include 2,100 ft. of streambank stabilization, 2,500 ft. of bank shaping and 28 stream habitat structures. It also included 3 large wetland scrapes, all roughly 0.5 acres in size.

"We were really pleased with the project's outcome and how the whole process was handled," explained Mary. She went



One of three wetland scrapes that were installed in the adjacent floodplain. Each of these wetlands was 0.5 acres or slightly larger in size. Other features, such as the log drops, were installed to add a variety of habitat features.

on to say she has received many compliments from area residents and has noticed a real uptick in the amount of utilization on her stretch of the river.

Future Plans

Mary is looking forward to being able to sit on her porch and listen to the chorus of frogs whom are now taking up residence in the newly constructed scrapes. She is also proud to be able to leave the farm in a better state than when they found it, as her late husband, William had always wanted.



Green County Success from the Field

Wetland Restoration on the Sugar River

Background

The Strathman Family has been farming in the Brodhead area of Green County, Wisconsin, since 1970 with a continued goal to maintain and protect the land for the next generation. The family currently owns and operates 620 acres of farmland, along with running a cow-calf and swine operation.

Conserving natural resources has always been a high priority for the family's operation, especially with their crop land adjacent to the lower Sugar River. They have enrolled around 230 acres in the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) Wetland Reserve Easement and Emergency Watershed Protection Program.

Program Successes

The flood plain of the Sugar River was ditched and diked between the 1930s and the 1960s. Tom Strathman remembers missing school to be able to drive tractor on the flat black bottom ground where some of his family's best crops were harvested. Throughout the 1970s and 1980s Tom only remembers one flood where the family lost their entire crop on the river bottoms.

"The Sugar has changed throughout the years with the urban development north of the Sugar River and the use of pattern tiling to improve farmland for draining," explained Tom. "These factors have all contributed to the more recent regular flooding of the Sugar several times a year." With anything there is always give and take, and through tiling fields, it enabled the Strathman's land to be better and improve yields, which was an important goal for the family. The Strathmans enrolled 105 acres into the Emergency Watershed Protection Program 10 years ago and were also able to enroll 129 acres into a Wetland Reserve Easement in 2019.

Wetland restoration, through a partnership with NRCS, will allow the family to capture the value of the land while still maintaining ownership. The restoration will also assist in reviving the property back to native prairie grasses, wildlife and natural habitat that greatly helps improve and maintain good water quality of the Sugar River waterway.

"Since putting the river bottoms into these programs, I have seen many ducks and pheasants out in the field, as well as



Restored wetland on the Sugar River on a frosty December morning.

deer, which makes a great place for hunting many species of animals," Tom mentioned.

Older generations in the area share stories of the Sugar River flood plain before it was ditched and diked, explaining the land was mostly pasture and meadow hay that was harvested yearly. Currently, there are over 3,000 acres along the lower Sugar River that are enrolled in wetland programs. This land is all helping to improve the quality of the waterway and protect the wildlife in the area.

In today's agriculture, farmers cannot risk losing a crop to flooding. Tom and his family are very happy with the opportunity to partner with NRCS to return the ground to what it was years ago.



Iowa County Success from the Field

The Gruenenfelder Family's Grazing Dairy



Background

The Gruenenfelder family lives and farms in Moscow township in Iowa County, Wisconsin. Jason, Kris and their children Halle, Jaxon, Cal, Lydia and Cheyenne live in a valley overlooking rolling hills of southwest Wisconsin. Jason grew up on a dairy farm and has been running his own operation since graduating college. He milks his 90-cow herd once a day.

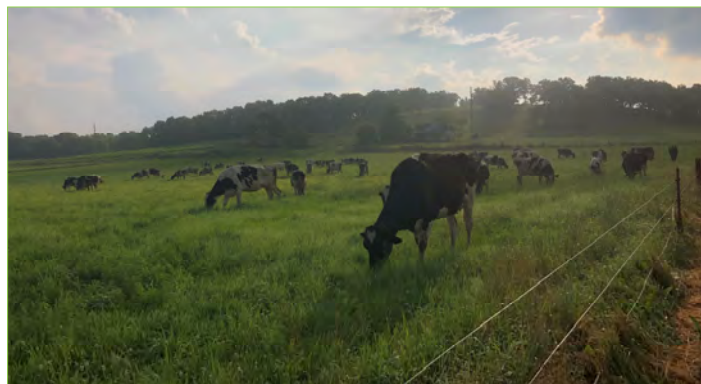
Highlights

In September of 2018, Jason Gruenenfelder called the U.S. Department of Agriculture's Natural Resources Conservation Service in Dodgeville with some questions about rotational grazing. He had a conventional dairy farm and wanted to shift the way he did things. From that first conversation, it was clear that Jason's goals for the farm extended beyond himself. Jason is very intentional about creating a farm that is enjoyable and safe for his whole family.

The initial call sparked extensive conservation planning efforts to convert Jason's row crop acres to year-round grass and legume pasture. Dodgeville Soil Conservationist, Kaitlin Schott recalled, "This was a large-scale project that required a lot of back-and-forth between Jason and NRCS staff. The time invested in planning upfront paid off in the finished system."

This project encompassed establishing and maintaining over 130 acres of forage and biomass planting, putting in 1,400 feet of access road, 2,000 feet of trails and walkways, 8,200 feet of livestock pipeline, 10 portable tanks and over 5 and a half miles of interior and exterior fence. Jason is currently rotating his cattle on over 200 acres of pasture. This work was completed as part of an Environmental Quality Incentives Program (EQIP) contract through the Beginning Farmer Initiative and with continued Conservation Technical Assistance.

Jason's sentiments at the tail-end of his first season rotationally grazing dairy cattle were summed up when he said, "I wish I'd done this sooner." Since shifting to grazing, Jason's workload changes have him feeling "semi-retired" and he's experienced health benefits from spending less time standing on concrete and operating machinery. Jason has been teaching his children about pasture plant species and watches them admire the bird and insect species that also call the pasture home. With the cows on the pasture, Jason was able create



The Gruenenfelder herd grazes on newly-established pasture.



The whole family is involved in moving the cows to fresh grass.

an additional revenue stream for the farm by using barn space previously used by his dairy herd to raise hogs.

Future Plans

Never one to rest on his laurels, Jason is always trying new things on the farm. With two more years of prescribed grazing through the EQIP program, Jason will continue adapting his operation to meet the needs of his cattle and family. After that, he is interested in applying for the Conservation Stewardship Program to incorporate new conservation practices on his farm. Jason continues to learn from other local farmers and recently toured farms that incorporate pastured poultry into their grazing operations, something he may try on his own farm.

Wisconsin
Natural
Resources
Conservation
Service



Jackson County Success from the Field

Farm Transformed to Help Wildlife and Pollinators



Background

Located in northwest Jackson County, Wisconsin, near the town of Northfield, is a 35-acre property, Dale Bigler and his wife, Barbara, moved to in 2008. Dale worked as a welder in southeast Wisconsin for most of his life and decided when he retired he would buy his own property and live in the country. Dale is an avid outdoorsman that loves hunting and has a passion for creating wildlife habitat to help them thrive.

Highlights

In the late summer of 2008, Dale and Barbara contacted the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) in Black River Falls to inquire about any potential programs their land may qualify for. They were interested in converting some of their steep cropland acres that had been in row crops for many years into a native prairie. Ryan Swatek, NRCS District Conservationist, and JD Armstrong, NRCS and Pheasants Forever Farm Bill Biologist, met with Dale and Barbara to walk their property. They took inventory and analyzed resource concerns, potential solutions and what the land had to offer.

After the initial walkover, some gully sites and highly erodible cropland acres were identified. A new Conservation Reserve Program (CRP) initiative, State Acres for Wildlife Enhancement (SAFE), was just released that focused on restoring habitat for the federally endangered Karner Blue Butterfly in Jackson and Eau Claire Counties. Dale was very interested in the program and decided to enroll 5.4 acres of cropland, establishing the Karner Blue Butterfly prairie mix.

Dale then shifted his attention to the gullies identified a few years prior. As a beginning farmer, Dale signed up for the NRCS Environmental Quality Incentives Program (EQIP) in 2013 and was awarded a contract to install two grade stabilization structures on his property to stabilize the erosion.

In 2018, Dale was ready for the final piece of the transformation, to convert the rest of his remaining



Dale Bigler proudly shows off a Wild Lupine plant in his CRP-SAFE Karner Blue Butterfly planting.

highly erodible land into more wildlife habitat. Dale again applied for the EQIP under the Regional Conservation Partnership Program for Improving Working Lands for Monarch Butterflies (RCPP-EQIP). He was awarded a contract to convert 5.5 more acres into native prairie mix designed for monarch butterflies.

"Dale has a lot of passion for his property and has been a pleasure to work with through the years," explained Swatek.

Future Plans

Dale continues to make improvements on his property. He recently installed wildlife shrubs and a wildlife food plot to go along with all the habitat work. He is currently looking forward to watching how the wildlife adapt to the new surroundings.

Wisconsin
Natural
Resources
Conservation
Service



Lafayette County Success from the Field

Flown-on Cover Crops Offer Potential Benefits

Amongst the rolling hills of Southwest Wisconsin, Larry Redfearn grew up farming with conservation practices that helped keep soil in place, including conservation tillage, grassed waterways and contour farming. The youngest of eleven children, Larry bought the family farm in 1983. Shortly after that, he transitioned to no-till farming in order to keep his operational costs down. Reducing the amount of farm implements to a few pieces, including a no-till drill—"a good one," he said—made row crop farming more efficient by cutting fuel and machinery maintenance costs significantly.

In recent years, Larry decided to find new conservation solutions to protect his land from increasingly erosive rain events. He turned to the USDA Natural Resources Conservation Service (NRCS) for help. At the Darlington USDA Service Center, Larry worked with Melissa Bartz and Matt Miller to evaluate and plan practices to continue reducing the soil erosion on his steeper cropland. In 2018, Larry aerial seeded cover crops into standing corn and soybeans for the first time with financial assistance from the USDA-NRCS Environmental Quality Incentives Program (EQIP).

In the shorter growing seasons of northern climates, it can be a challenge to grow a cover crop in the fall after a late harvest or when soils are too wet to plant with a drill. Aerial seeding into the standing cash crop can give cover crops more time to grow and provide effective winter cover. Larry liked the results he saw from his 2018 cover crops. "I saw less soil erosion on the fields that had cover crops," Larry said.

In addition to preventing soil erosion, one of the biggest benefits Larry hopes to gain from the cover crops is better fertilizer use efficiency. He is willing to experiment with cover crop species and seeding dates to try to get the best growth and benefit from his investment. "It doesn't need to be perfect," Larry said about the cover crop and no-till system, "it just needs to work." When asked if the aerial seeding application was worth it, he responded with a quick "yes." Then, he explained, "If I can get enough growth to capture and hold nutrients for the next crop and even produce enough nitrogen to reduce fertilizer inputs, then, the extra cost of the plane could be justified." Matt Miller added, "The financial incentive through EQIP is important—it provides an opportunity for farmers to begin using new conservation practices that they might not otherwise try on their own."



Above: Larry Redfearn (right) and Matt Miller (left) inspect Larry's aerial-seeded cover crop mix of oats, radish and berseem clover.

Below: Aerial seeding allows time for frost-killed species, such as the radish and clover seeded in Larry's fields, to grow well before winter.



Larry plans to continue experimenting with cover crops to manage nutrients and protect his soil. In 2019, he began seeding cover crops on his rented cropland, which he plans to continue to do every year for the next four years through the Conservation Stewardship Program (CSP).

Wisconsin
Natural
Resources
Conservation
Service



Lincoln County Success from the Field

Cover Crops and Strip Tillage in Northern Wisconsin



Background

As young boys wishing to drive big equipment and as teenagers growing up helping local dairy farmers, brothers Marv and Matt Podgorski were led to start their own operation called Podgorski Grain Farms LLC. The farm is located in Lincoln County, near Merrill, Wisconsin. Together with their brother, Johnny, they manage over 5,000 acres of land, focusing on more than 2,700 acres of corn, soybeans and oats.

Highlights

The farm has partnered with the U.S. Department of Agriculture, Natural Resources Conservation Service since 2012. Initially, the farm partnered through the NRCS Environmental Quality Incentives Program (EQIP) to install an access road and complete a stream crossing project. The farm also applied for and received a Conservation Stewardship Program (CSP) contract, which they recently extended for another five years. Practices implemented through CSP include leaving standing grain crops for wildlife and evaluation of their pest management strategies.

Marv, Matt and Johnny understand the need to maintain good soil health and apply conservation practices because many of the fields they own and manage have highly erodible soils. The operation has long-standing efforts in conservation, such as implementing contour farming and contour buffer strips. Recognizing the need to disturb the ground less, save time, reduce fuel usage, increase diversity in their grain rotation and build more organic matter, the Podgorskis again contacted NRCS for an EQIP application to move from traditional tillage to strip-tillage and to incorporate cover crops in their rotation. In 2020, the Podgorskis transitioned to only using strip-tillage for planting crops. In August 2020, cover crops were broadcasted on approximately 230 acres of oats and in September 2020, the farm had an additional 700+ acres of cover crops broadcasted using aerial application on soybeans. "The soil must be kept in the field; band applying nutrients in the strips so the crops can best utilize the fertilizer and reducing our inputs so us three brother's can manage our acres without hiring workers is common sense," says Marv Podgorski. NRCS District Conservationist, Peggy Winter, adds, "working with a farm that is self-motivated to try new things like cover crops and strip-tillage in Northern Wisconsin is a rewarding experience."



Top: Spring barley, berseem clover, and tillage radish are shown on a Podgorski Grain Farms LLC oat field. Left: A close-up of the mix thriving.

Future Plans

Adjusting tillage and incorporating additional species in their rotation motivates the Podgorski brothers to further evaluate their nutrients, inputs, placement and what is being removed through harvest.

"We want to maximize our crop use efficiency, make sure nutrient credits are recognized and we only want to be applying what the plant needs when it needs it most," explained Marv. Podgorski Grain Farms LLC plans to apply once again for EQIP; this time they will be looking to obtain a written nutrient management plan. "Nutrients have been evaluated every year and are something we have always communicated with our agronomists; we have taken soils tests in the past, but it is time to complete a written plan." NRCS looks forward to continuing the conservation partnership with Podgorski Grain Farms LLC.

Wisconsin
Natural
Resources
Conservation
Service



USDA is an equal opportunity provider, employer, and lender.

Success Story • June 2021

wi.nrcs.usda.gov

Manitowoc County Success from the Field

Protecting Water Quality Through Leachate Collection

Background

Kocourek Bros. is a family owned and operated dairy farm located outside of Reedsville, Wisconsin. The Kocourek brothers, Dennis and Donald, built their first barn in 1995 for 300 cows. Today Dennis and Donald, along with their three sons, continue to run the growing farm and operate over 2,000 acres. Their latest expansion, in 2016, tripled their milking herd and raised their total animal number to just over 1,000.

Program Successes

Kocourek Bros. came to the USDA Natural Resources Conservation Service (NRCS) in July of 2016, after their latest expansion, with concerns about proper containment of leachate running off of the corn silage feed pad. The feed pad is slightly uphill and less than 50 yards away from an intermittent stream. This stream flows through the Collins Marsh State Wildlife Area, into the Manitowoc River, and eventually into Lake Michigan, only 20 miles east of the farm. After the 2016 expansion, Kocourek Bros. became a Department of Natural Resources permitted farm. With this change, they had to start considering the impact their farm might have on local water quality. "We never really realized how bad the placement of our feed pad was until we made our latest expansion and had to start looking at these things more closely," said Dennis.

When Dennis and Donald came to NRCS, they wanted to build a leachate collection pond to catch the runoff from the feed pad in order to protect water quality through the Environmental Quality Incentive Program (EQIP) Great Lakes Restoration Initiative (GLRI). Kocourek Bros. had worked with NRCS in the past, so they were aware of the program and the benefits it had to offer.

In January of 2017, their application was selected for funding through EQIP-GLRI and construction began that summer. Concrete was added around the existing feed pad and was sloped towards the newly constructed waste storage facility, which was lined with reinforced concrete and has a capacity of more than 135,000 cubic feet of storage. Subsurface drain was also put in around the feed pad in order to prevent any percolating water from reaching the groundwater.

Now that the contract is complete, Dennis and Donald could not be happier with how it turned out. "We never would've imagined how bad the runoff from that feed pad looked until we started collecting it and pumping it out," said Dennis. "NRCS was so easy

to work with and we were very happy with the cost sharing and just NRCS in general."



(Above) The newly constructed leachate collection facility.

(Below) The farm's feed pad, a short distance uphill of an intermittent stream that runs through the farm.



Matt Rataczak, NRCS District Conservationist in Manitowoc County, also had a positive response to the leachate collection facility. "I feel this is a unique success story of a conservation practice that typically gets a bad wrap, in that they are just collecting more water to handle, when in reality, there is some unpleasant runoff that comes off the feed storage areas, so proper storage and handling is critical for the environment," explained Rataczak.

Future Plans

Although Dennis and Donald's EQIP contract is now complete, they continue to use both NRCS and their leachate collection facility to further their conservation efforts on the farm. They are also on the third year of a Conservation Stewardship Program (CSP) renewal contract and they hope to apply for the program again after this contract is complete.

The Kocourek's are a family of outdoorsmen who care about the environment. They will strive to continue improving their impact on the environment, on their own, and with the help of NRCS whenever possible.

**Wisconsin
Natural
Resources
Conservation
Service**

wi.nrcs.usda.gov

Marathon County Success from the Field

The Evolution of a Conservation Farmer



Background

Mark Easker, of Norrie Lake Dairy Farm in Birnamwood, Wisconsin, lives the story of what has happened to many dairy farms in Wisconsin. Although the farm name is Norrie Lake Dairy, Mark hasn't had cattle since spring of 2008. Today, he farms 280 acres of corn and 250 acres of soybeans following the key principles of soil health to protect his land.

Highlights

In 2014, Mark became familiar with the U.S. Department of Agriculture's Natural Resource Conservation Service (NRCS) when he signed up for cover crops financial assistance through the NRCS Environmental Quality Incentives Program (EQIP). At that time, the cover crops gave him an advantage over other farmers looking for cropland to rent. The landowners in his area were sportsmen who wanted cover crops on the fields for over-winter wildlife food. The first cover crop he planted was a mix of annual ryegrass and tillage radish. The landowners thought it was good cover for wildlife. Mark thought it was one of his best established cover crops aerial seeded over soybeans.

As the years went by, Mark planted different cover crop mixes using aerial seeding. He has had his share of successes and failures trying different mixes and applications. White mold devastated his soybean yield in 2016. He observed that the beans that had less tillage were not damaged as much by white mold as the beans in the fields with more tillage. In 2016, he added no-till to his management system. Mark realized that he was saving time and money without doing extra tillage.

"Mark has expanded his conservation efforts into the forest that he owns through the NRCS Conservation Stewardship Program," said Amy Neigum, Marathon County NRCS District Conservationist. He took his conservation efforts one step further by installing nine bat houses near surface water. He also erected a barrier to exclude deer browse so that natural regeneration of the forest could take place.

Future Plans

Mark recently requested technical and financial assistance to increase irrigation efficiency on 101 acres through the EQIP program.



A multi-species mix of cover crops was interseeded into corn.

Mark shared that NRCS technical assistance helped to motivate him and expand his knowledge about cover crops. He is also thankful for the financial assistance provided by the NRCS, which helped when problems arose on his land and helped with subsequent costs. NRCS looks forward to continuing to work with Mark to meet his unique conservation needs.



Monroe County Success from the Field

Upward Trends in Soil Organic Matter Levels Through the Decades: A Family-Operated Grain Farm's Story



Background

The Kortbein family operates a 550-acre grain farm northwest of Tomah, Wisconsin. The picturesque farm straddles the watershed divide of the Upper La Crosse River Basin and Lemon-weir River Basins, both contributing to the Mississippi River.

Highlights

The Kortbeins started working with their local conservation office to implement conservation practices back in the 1980s. At that time, they started the conservation tillage practice of No-Till with the help of the Conservation Technical Assistance (CTA) program, which allows farmers to develop a farm conservation plan with the help of their local conservation office. Tim states that they have seen their soil organic matter levels rise over the decades, from a 1980s level of 1.5–2.0% average to current levels of 2.5–3.5% average. Tim has observed over the years that they are seeing better infiltration of water during heavy rain events. He states that over time the family has seen various soil health improvements on the farm. Tim explains, “We see better water holding capacity, better nutrient holding capacity and better crops.”

During this time, the family had also worked with the USDA Natural Resources Conservation Service (NRCS) and the Monroe County Land Conservation Department to implement diverse conservation practices, which include nutrient management, pest management and cover crops, as well as installing grassed waterways and erosion control structures through the Environmental Quality Incentives Program (EQIP). The farm's wildlife habitat has been further enhanced by their choice to leave grain crops standing over winter as a wildlife food source and create woodland wildlife habitat through participation in the Conservation Stewardship Program (CSP).

Future Plans

With the recent passing of Don, the Kortbein family is planning for the future and the transition of the family farm to the next generation. Future plans involve the construction of additional grassed waterways and earthen dams to manage runoff, as well as an increase in the operation's use of variable rate technologies for more efficient fertilizer use. Mark and Matt have plans to become professional Certified Crop Advisors (CCAs), and to build a business providing



USDA is an equal opportunity provider, employer, and lender.



Tim, Mark and Matt Kortbein on their family farm in Warrens, Wisconsin (above), where soybean residue provides a natural mulch for the subsequent corn crop.

agronomic services, including the development of nutrient management plans as NRCS-registered Technical Service Providers. The future of the family farm looks bright, with soil health, erosion control and improved fertilizer applications contributing to a true vision for the decades ahead.



Don with the 1947 John Deere B he drove home from the dealership for his father William at the age of 12. Mark and Matt are 4th generation owners of Don's favorite family heirloom.

Wisconsin
Natural
Resources
Conservation
Service

wi.nrcs.usda.gov

Outagamie County Success from the Field

Pollinator Planting Blooms Throughout Growing Season

Background

In 1991, Gerry Mich purchased 230 acres of cropland, grassland and forest in northern Outagamie county. With the help of a Forest Management Plan through the USDA Natural Resources Conservation Service's (NRCS) Environmental Quality Incentives Program (EQIP), he has since been working tirelessly at managing the land for timber and wildlife purposes. Throughout the years since he purchased the land, Gerry has continued to educate himself on management techniques that assist him in his goal for a diverse and sustainable property.

Program Successes

Timber and wildlife habitat, for deer in particular, have always been a priority in the established property management and goals. However in 2017, Gerry decided to pursue new ideas to help diversify his land. Gerry applied and received a contract through the NRCS Conservation Stewardship Program (CSP). Under the program, he would continue to improve his property by eliminating invasive species within his forest, such as spotted knapweed, and improve his grassland fields by planting them to a monarch habitat mix. Site preparation was key. Throughout late 2017 and spring/summer of 2018, Gerry worked diligently at making sure the field was properly prepared for the first of his two plantings that would occur in 2018 and 2019.



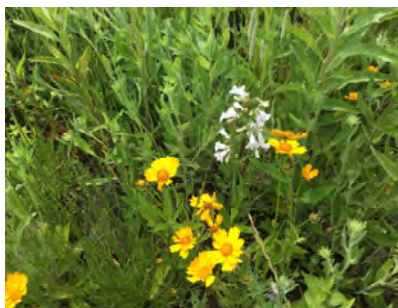
Pictured left:
The field before
Gerry began site
prep. The field was
a mix of reed canary
grass, clovers and
other cool season
grasses.

The site preparation process was again, completed the next year for the second of the two plantings accounting for a total of four acres. The management doesn't stop there. Gerry continued to mow the monarch/pollinator plantings throughout the first growing season, preventing the annual weeds from

becoming a problem and insuring the perennial flowers that were planted had a chance to flourish. Gerry found out that it was a lot of hard work but, it certainly has paid off! The plantings looked excellent in 2020. Flowering plants were observed throughout the entire growing season, some of which include: Foxglove Beardtongue, Golden Alexanders, Common Milkweed, Black Eyed Susan, Bergamot, Coreopsis, New England Aster, and many others.



Pictured left: (Top) Vervain, Boneset and Black Eyed Susan thrive after the monarch/pollinator planting. **(Bottom)** Coreopsis and Foxglove Beardtongue in bloom on the property.



Future Plans

When Gerry's CSP contract is up for renewal, he plans on planting more acres to monarch/pollinator mix. The entirety of his farm will continue to be holistically managed so that his family will have a diverse and beautiful property for generations to come. Gerry sums it up best himself, "I have found working with Lynn and Tony (NRCS staff) very educational. I knew little about prairies, but I now have four acres. I could not have done it without the encouragement and advice from NRCS. I've found you can trust NRCS to help you be successful. EQIP helped me get a management plan for my property and CSP has helped me plant a prairie. It is reassuring to work with friendly folks who are knowledgeable. I like to share photos of all the different flowering plants that I find. It's like Christmas with pretty surprises throughout the summer."

Wisconsin
Natural
Resources
Conservation
Service



Ozaukee County Success from the Field

Stewardship, Sustainability and Economic Viability



Background

Stewardship, sustainability and economic viability are just some of the goals at Red Line Dairy, in Belgium, Wisconsin. For Matt Winker, they go hand in hand on the 125 cow dairy farm where he and his family grow corn, soybeans, alfalfa, and covers crops on 450 acres. Since 2014, Matt has been practicing no-till and cover crops to increase his conservation efforts, and in turn has increased his yields, profits and ability to ride the roller coaster of the crop and dairy markets of most recent years.

Highlights

Redline Dairy Farm is within 4 miles of Lake Michigan and has seen/heard many of the challenges of cooler, wetter and increasingly heavier rainfall weather, as well as working with some tight clay soils. Matt has seen the benefits of the conservation he's implemented including increasing his soils ability to infiltrate the heavy rain falls, decrease soil movement in his fields, as well as warming up sooner due to the increased soil biology and structure.

Matt started working with the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) in 2014 through the Great Lakes Restoration Initiative—Environmental Quality Incentives Program (EQIP) to develop a Comprehensive Nutrient Management Plan (CNMP) to help identify resource concerns on the farmstead and cropland. In 2015, a manure storage was built to manage the nutrients from the dairy herd and to be applied during the proper times of the year, as well as implement soil health practices more effectively. At the same time, Matt was experimenting with no-till and how it could work on his operation. Matt made some adjustments to his planter by removing the wavy no-till coulters to reduce the amount of soil moved outside the seed trench and achieve better seed/soil contact and installed newer double disk openers and closing wheels. As new technology comes onto the market, Matt continues to make changes to see what works best for him. While using no-till, Matt also implemented cover crops into his crop rotation. He primarily planted winter cereal rye or winter wheat, but in 2019, started to experiment with interseeding a multi-species cover crop into corn. Matt has found that the cover crops "promote soil health, deter weed pressure, and if needed, is another feed source".



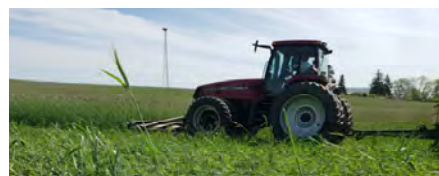
Above: Matt standing in one of his rye cover crop fields near the farm.
Below: In June 2020, Matt crimped winter rye and planted corn at the same time.

Early in Matt's soil health journey he realized that it was important to manage the manure on his operation by limiting the amount of manure applied to less than 7,000 gal./acre, as not to overwhelm the soil biology and ensure that the soils natural ability to convert carbon/nitrogen cycle remains intact. To help continue his soil health journey, Matt enrolled in the Conservation Stewardship Program (CSP), where he implements cover crops and wildlife habitat.

In 2018, Matt became a Demonstration Farm, part of the Ozaukee County Demonstration Network funded through the NRCS Great Lakes Restoration Initiative. Demo farm partners include the Ozaukee County Land & Water Management Department, USDA-NRCS, agronomists and other leading-edge producers. Through this partnership, Matt has been able to experiment with new practices and management and share his experiences with area farmers. The most recent practice Matt has tried, is crimping six-foot tall winter rye and planting corn right behind the crimper. Matt will be the first to tell anyone "trying something new is scary and not always easy, but once you start, it gets better."

Future Plans

Matt will continue to improve his no-till and cover crop program and is working towards planting corn and soybeans without any type of seed treatment.



**Wisconsin
Natural
Resources
Conservation
Service**



Pierce County Success from the Field

Conservation Stewardship Program Success



Background

John Robey and his wife Monica, of Rock Elm Dairy, Inc., are dairy farmers in Elmwood, Wisconsin. They operate roughly 200 acres of cropland and have a mosaic of associated agricultural land and forest land adjacent to the crop fields in the northern tier of Wisconsin's Driftless Area. John signed up for the Conservation Stewardship Program (CSP) with the hopes of making wildlife improvements to his already conservation-minded operation. Before signing up for CSP, John had been implementing a diverse conservation crop rotation with a long-term hay rotation, mulch tillage and followed a nutrient management plan.

Highlights

John applied for CSP in the spring of 2017. During the initial inventory of the farm, John and a U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) representative, Mark Biel, started discussing potential activities available through the CSP. While there were many options available, John was most interested in the wildlife options to convert marginal cropland into monarch habitat. He operated quite a few acres of wet or steep and stony ground that was not always profitable in a production environment. Converting the land to monarch habitat was a win-win by creating diverse habitat for the declining populations of monarch butterflies, as well as lessening his production costs and protecting soil and water quality resources. The habitat plantings have allowed John to enjoy all his farmland versus the annual struggle that came along with farming these challenging acres.

John has converted about 30 acres of cropland to monarch habitat. The monarch mix included over 10 species of native forbs and 2 species of native grasses. The mix includes monarch-friendly plants, such as Common Milkweed, Black-eyed Susan, and Bergamot. In addition to monarch habitat, John has improved wildlife habitat on his farmstead through other CSP program offerings, such as planting additional trees on his farmstead. John is very happy with the results of the tree and monarch plantings so far. He stated, "Monarch butterfly habitat is one of the best uses for these marginal lands. The CSP has benefited both my operation and the land. We have seen an increase in wildlife including deer, turkey,



John and Monica Robey of Rock Elm Dairy are standing in a 13.9-acre plot of monarch habitat established in 2019. Black-eyed Susan, Purple Prairie Clover, Wild Bergamot and several other pollinator species were seen in bloom during a site visit in August of 2020.

butterflies and other insects since planting the monarch habitat." Pierce County District Conservationist Jason Barrick added, "Especially in the challenging financial years, it is rewarding to see success with producers in finding financially and environmentally beneficial conservation practices."

Future Plans

Rock Elm Dairy continues to evaluate the profitability of their acreage and will be working with NRCS to evaluate other conservation opportunities on their lands. John will continue to manage and inventory the habitat plantings annually to maintain the high quality habitat for monarchs, pollinators and other wildlife to enjoy for years to come.

Wisconsin
Natural
Resources
Conservation
Service



Polk County Success from the Field

Woodlot Restoration Efforts After Devastating Storm



Background

G.P. Forest, LLC, is a 160-acre family owned and managed forest woodlot in Polk County, Wisconsin. In 2019, a portion of their woods became mangled and unrecognizable after a storm went through large portions of northern Wisconsin. The owners were beside themselves, not knowing what to do with a block of woods that they were unable to even walk through. They contacted the U.S. Department of Agriculture's Natural Resources Conservation Service to see if they could provide any assistance.

Highlights

On July 19, 2019, a combination of tornadoes and straight-line winds hopped across Wisconsin wreaking destruction in its path. The G.P. Forest, LLC, woodlot was largely blown down and in some areas, showing 90% tree loss. All access points to the woodlot were closed by downed trees. Nothing like this had ever happened in the 63 years since the owners had put this land into a management program.

The family was very proactive and a planning process started immediately after the storm. They consulted with the NRCS Balsam Lake Service Center. The NRCS staff provided guidance and the family enrolled the woodlot and was selected for funding into the NRCS Environmental Quality Incentives Program (EQIP). The program provided for erosion control measures on trails and woody residue treatment for the acres of severely damaged and non-salvageable trees. The EQIP also allowed the family to accept engineering and cost sharing assistance to build a stream crossing. "The family contacted our office at just the right time after the storm to allow time for planning on what could be done to help and meet the EQIP program application deadlines," stated Keith Zygowicz, NRCS District Conservationist in Polk County.

The stream crossing was comprised of graded rock and geotextile underneath, being only 1,890 square feet, it was a vital part of the salvage logging operation. Without it, a large portion of the tract would be inaccessible to heavy logging equipment. Tyler Trimpe, Balsam Lake's Soil Conservation Technician, did a great job designing and supervising the construction to be sure the project was completed per NRCS standards and specifications. Kent Wilson, family lead-planner, stated,



The finished stream crossing makes it possible to salvage timber from the other side of the property without having sediment-filled water running off into the nearby lake.

"This stream crossing was vital to the project to provide needed access and prevent sediment run off into the nearby lake."

Future Plans

The family intends to regenerate the woodlot. NRCS looks forward to partnering in the future land development process. The project will include trail stabilization and woody residue treatment. The family hopes, in the very near future, to restore the woodlot to its full recreational and commercial potential.



Straight-line winds damaged the woodlot in Polk County, Wisconsin.

Wisconsin
Natural
Resources
Conservation



Portage County Success from the Field

Building a Home for Butterflies, Bees and Prairie Chickens



Butterflies, bees, and prairie chickens have a new place to call home in the Buena Vista Grasslands of Portage County, Wisconsin. The Buena Vista area in central Wisconsin is a former marsh once dominated by tamarack, black spruce and cattails that is now a mix of irrigated cropland and grasslands.

It is one of the most extensive grasslands east of the Mississippi River and one of the few remaining areas in Wisconsin considered home to the greater prairie chickens. Found only in North America, the greater prairie chicken is listed as a threatened species in Wisconsin and relies on grasslands for habitat.

In 2005, USDA Natural Resources Conservation Service (NRCS) set out to enroll 278 acres of irrigated cropland in the area into the Wetlands Reserve Program (WRP), which is similar to the Agricultural Conservation Easement Program (ACEP) now available to producers. NRCS met with landowners Robert and Germaine Patrykus and Dave and Kelly Beggs of Bancroft, Wisconsin, about options for the irrigated marginal cropland they owned.

At the time, the landowners were transitioning from growing potatoes to carrots. This tract of land was not ideally suited for carrots due to its drainage and soil properties. Discussions between local NRCS staff and the two families ultimately led to them enrolling their land into a permanent easement. In 2007, they began restoration work on their wetlands and uplands.

Unfortunately, in the following decade, the upland areas became a monoculture of brome grass, with scattered patches of goldenrod and spotted knapweed. While this provided marginal habitat for pollinators and other upland species, the lack of diversity was not ideal for supporting pollinators and birds.

The Patrykus and Beggs families approached the local NRCS Service Center about further enhancing some of the upland area to butterfly habitat. Local NRCS partnered with Pheasants Forever, a non-profit conservation organization that aids in reestablishing upland wildlife habitat throughout the United States. The NRCS staff, a Pheasants Forever biologist, and landowners developed a plan using dedicated WRP funding to establish a 10-acre pollinator planting for part of the uplands. A multi-species, pollinator friendly seed mix of Indian grass and little bluestem, along with several native forbs, i.e., butterfly weed, common milkweed, black-eyed susan, purple prairie clover, bergamot and many others, were chosen for the site based on the area's soil properties.



Top: Prairie chickens thrive on the newly established permanent easement. Photo courtesy of Wisconsin Department of Natural Resources.
Bottom: A landscape view of the Buena Vista grasslands.



Through the landowner's dedicated hard work and patience and partnership with NRCS and Pheasants Forever, this area is now a lively prairie with many thriving grassland species and a multitude of pollinators. On a recent visit early this fall, NRCS staff saw many bees and butterflies enjoying the blooming flowers. Bobolinks, meadowlarks, a burrowing owl, and several prairie chickens were also observed. This restored habitat is a win for the landowners, partners, and the natural resources we all enjoy.

The plant species diversity increases each year. With the landowner's interest in the flowers and plants and the butterflies and birds they attract, this prairie should continue to improve and provide habitat for a variety of species for years to come.

Wisconsin
Natural
Resources
Conservation
Service



Price County Success from the Field

Helping Those Farming Dreams Come True



Background

Gayle Strobach and her husband, Dean, own and operate a 50-cow/calf pair grazing operation in Ogema, Wisconsin. The Strobachs both work full-time in addition to owning their farm in Southern Price County. Gayle's grandparents first settled on the land in the 1920s from Minnesota. They cleared the land with horses and started farming. The Strobachs purchased their first two beef cows in 2009 from Dean's cousin, who lives just down the road. They named the cows Abby and Aggie after each one of their grandmothers. Utilizing managed grazing on about 160 acres, their herd has since grown to 53 head of Angus/Simmental cross cattle.

Highlights

The Strobachs first heard about the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) from Dean's cousin, she comments, "When we first started out, we needed the NRCS's help with everything. If we didn't have the NRCS's help, we wouldn't be where we are today." Just this past spring, the couple had a total of 84 head. Gayle explains, "If you would have told me back when we started that we would have 84 cows, I would not have believed you. But, when you figure out the correct time to move the cattle from paddock to paddock and the need to utilize every single blade of grass, then it becomes realistic." In 2010, they applied and were accepted for a NRCS contract under the Beginning Farmer Fund Pool through the Environmental Quality Incentives Program (EQIP). With that contract, the Strobachs were installed over 4,000 feet of permanent interior fence, 2,100 feet of livestock pipeline, added a couple water tanks, and re-seeded 33 acres with a customized mix of grasses and legumes.

The Strobachs run their cattle on certified organic land in two groups, one as cow/calf and the other being their steers, which they grass finish. Dean and Gayle direct market their steers utilizing mostly word of mouth, but they also partner with Community Supported Agriculture (CSA) and are members of the Grass-fed Beef Association. In 2015, the Strobachs applied and were accepted for the NRCS Conservation Stewardship Program (CSP). With the CSP, the Strobachs were able to build on their existing conservation efforts from EQIP, while also strengthening their operation. NRCS District



Gayle Strobach with her herd of beef cows.

Conservationist Melissa Knipfel explained, "Gayle may not say it herself, but she is a leader in the Price County prescribed grazing effort. Through Gayle's dedication and willingness to learn new concepts, she has improved her farm to be a highly productive grazing system that she should be proud of!"

Future Plans

In the future, the Strobachs would like to experiment with some new pasture mixes, plant turnips to help with the compaction issues in one of their paddocks and install a permanent loading dock. When Melissa asked, "Gayle, what made you want to raise beef cows?" Gayle responded, "who wouldn't want to raise beef cows?" Gayle has always wanted to retire raising beef cows, and even though her and her husband aren't retired yet, they can still raise beef. It just takes a few extra resources, such as more temporary fence and extra water tanks. Whenever Gayle has a day off, she likes to spend that extra time working with the cows. You can tell this because each one has a name and they are not afraid to come up to you and get their head scratched.

Wisconsin
Natural
Resources
Conservation
Service



Racine County Success from the Field

Cover Crop Success Cultivates Forest and Wildlife Conservation



Background

Jeff Rice, a Racine County, Wisconsin, farmer utilizes all the opportunities that his land offers him. He farms corn, soybeans and wheat, while also raising pheasants, mallard ducks, partridge and quail for hunting. Jeff also leases his land for bird hunters in the fall and allows mentoring hunts for turkey in the spring. Jeff has partnered with the U.S. Department of Agriculture's Natural Resources Conservation Service for several years to improve his soil and water quality, while also creating wildlife habitat on his farm. He is quite happy with the conservation outcome.

Highlights

In 2017, Jeff started partnering with NRCS through the Conservation Stewardship Program (CSP). He focused on improving his cropland by adding cover crops into his operation. He was so pleased with the results, he decided to utilize the CSP on his forestland. "This is my first year in the CSP Nonindustrial Private Forestland program and I can tell a difference all ready," Rice explains. Jeff has also started brush management and creating additional habitat by creating snags and brush piles. In the 28 years he's been on his farm, clearing out the brush and opening the woods has allowed more birds than ever before, access to the wood lots.

Jeff also recently applied and was accepted into the Environmental Quality Incentives Program (EQIP). Through EQIP, he is adding additional acres of cover crops and no-till to his operation. Additional bonuses Jeff sees are, the cover crops provide cover for the birds during hunting season and he has noticed increases in wild birds, beneficial insects and improved soil structure. Jeff has also seen a great improvement in weed reduction from no-till. There are no new weed seeds being brought to the surface through tillage. Jeff has been able to reduce the amount he spends on chemicals because the cover crops and no-till have greatly reduced weed competition.

Future Plans

The biggest benefit from the NRCS partnership Jeff sees are the opportunities to learn about the benefits of the different



Top: Grass sorghum with a clover cover crop establishing underneath.
Bottom: Clover seeded into a cereal rye cover crop.



conservation practices. "I have seen the benefits and learned so much just by working with the NRCS staff," he said. Jeff looks forward to continuing the partnership with NRCS by continuing to implement conservation practices on his land for years to come. NRCS looks forward to continuing the conservation partnership with Jeff as well.

Wisconsin
Natural
Resources
Conservation
Service



Sawyer County Success from the Field

Buckthorn Invasive Species Management

Background

Landowners throughout Wisconsin partner with the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) to combat invasive plants and pests. Many would agree the most troublesome invasive is common and glossy buckthorn, a shrubby plant that invades woodlands and fence-rows with a vengeance. In Wisconsin's northern counties, buckthorn is often sporadic, existing in scattered pockets here and there. Many landowners are looking to rid their land of the invasive species. Targeting these scattered pockets of growth can put a halt to buckthorn expansion.

Program Successes

David Shadis is the caretaker of his grandfather's farm outside of Winter, Wisconsin. The roughly 275-acre property is mostly forestland consisting of white pine, northern hardwoods, aspen and black spruce swamps. The property has had buckthorn present for many years, however a recent timber harvest released the buckthorn present in the understory resulting in almost no regeneration of desirable native tree species.

"This stuff is the nastiest, most persistent plant I've ever dealt with," explained Shadis, a retired U.S. Forest Service Soil Scientist and Ecologist. David contacted the NRCS to help tackle the buckthorn infestation on his grandfather's land.

David partnered with Ron Spiering, Sawyer County NRCS District Conservationist, and Jared Elm, Ruffed Grouse Society Forest Wildlife Specialist, to develop a plan to combat the invasive species. Utilizing funding through the NRCS Environmental Quality Incentives Program, heavy mechanical equipment was used for one year, such as a forestry mower and brush saw, to remove the standing stems of buckthorn. Once the material is removed, two years of follow-up foliar treatment will be implemented with a herbicide application on stump sprouts and germinating seedlings.

Future Plans

Since the buckthorn infested area received a thinning from timber harvest with little regeneration previously, the area is a blank slate. David plans to plant butternut, white oak and other species not present in other forest stands on the property.



Buckthorn-infested pine stand prior to treatment.



Buckthorn-infested pine stand after treatment.

Wisconsin
Natural
Resources
Conservation
Service



Shawano County Success from the Field

Providing Beauty with Pollinator Habitat



Background

Betley Farms LLC., operates a family run 5,000+ acre dairy farm in Maple Grove and Lessor Townships. The bulk of the dairy farm drains to the south, towards Seymour into Black Creek, which is a part of the Shioct River Watershed. Creeks within this watershed are known for their cold-water fishing. Conservation in this watershed is very important to Betley Farms.

Highlights

Jeff Betley and his family are now the third generation on the farm, which was started back in 1943 by Jeff's grandparents. He initially contacted the Natural Resources Conservation Service back in 2016 with an interest in the Conservation Stewardship Program (CSP). Knowing how important pollination is to plant and insect communities and their declining numbers, Jeff became interested in establishing pollinator habitat on his 10.1-acre field as one of his CSP enhancements. Jeff was interested in providing adequate sources of food, shelter and nesting sites on this field. Conservation and good land stewardship has always been at the forefront of his farm. Moreover, Jeff thought it would be nice to beautify his farm for onlookers, since his farm is located near a county road intersection.

NRCS Acting District Conservationist, Sherrie Zenk-Reed, was able to bring to the table her technical expertise with the selection of the correct seed mix and her advice on site preparation.

The pollinator planting occurred in 2017, and by 2020, the project was in full bloom. Jeff partnered with the Wisconsin Department of Natural Resources (WDNR) for the use of their no-till drill which Jeff states, "was critical to the plantings success." Much of the planting progress was because Jeff worked hard to do good site prep up front and he continued with good weed control through mowing. Sherrie Zenk-Reed states, "this is one of the best pollinator plantings in the county. It appears as if every seed germinated!" Jeff is pleased with the planting as he has already seen the site heavily used by monarch butterflies and honey bees, as well as a variety of other pollinator species.

Future Plans

Jeff's main goal is to continue his dairy operation and maintain his newly established pollinator habitat. NRCS looks forward to continued conservation efforts through the partnership.



CSP pollinator habitat planted in June 2017 by Betley Farms, LLC., in Shawano County, Wisconsin.



No-till drill used for planting. (WDNR)

Wisconsin
Natural
Resources
Conservation
Service



Winnebago County Success from the Field

Let the Cattle Take the Load Off



Background

The Tritt farm in Omro, Wisconsin, has been in the family since the 1860s and is now share-managed by siblings Gary, Terri and Kenneth. Another brother, Tony, works off the farm. Gary recollects that his great, great, great grandfather homesteaded the land and left behind his family of 8 to go off and fight in the U.S. Civil War. He became a prisoner of war but survived and eventually came home and lived into his 90s. The farm was a dairy farm until the 1980s and has been beef and row crops since 2019, when it was converted to pasture for grazing.

Highlights

"I met Gary at a pasture walk in 2018," said Merrie Schamberger, Natural Resources Conservation Service (NRCS), District Conservationist in Oshkosh. "At that time, they were grazing about 100 head of cattle on 60 acres and had another 50 acres of cropland rented to a neighbor. They were buying hay to feed their cattle in winter. Gary was inspired at the pasture walk to introduce some changes on his farm to make it easier for he and his siblings to manage." NRCS is working with the Tritt family to establish a rotational grazing system on the farm. They seeded the 50 acres of cropland to pasture last spring and installed fencing and watering systems through the Environmental Quality Incentives Program (EQIP). The family is looking forward to the cattle doing some of the work for a change.

Terri had this to say, "Today, as I watched my brothers and nephew move the cattle into the open pastures for the very first time, I realized that this was a sight I'd never experienced in my lifetime here on our family farm. I have anticipated this day for a long time now and am overcome with emotion watching my family working together moving the cattle that are so excited to be running in green luscious pastures. I am overwhelmed at the sight of the grazing cattle and can only imagine how happy and proud our father would be. Thank you Adam Abel (NRCS Grazing Specialist), we are beyond grateful as without you, this would not have been possible."

Future Plans

Once the system is set up, Gary, Ken and Terri are committed to rotationally grazing for at least three years. The goal is to make the farm more sustainable and attractive to the next generation of farmers. The Tritts would like to encourage their neighbors to do the same and will host a field day in the future.



Top: The view from Terri's house of the newly completed rotational grazing system that was planned by Adam Abel and funded through EQIP. **Below:** Ken, Terri and Gary Tritt on the farm.



Wisconsin
Natural
Resources
Conservation
Service





www.wi.nrcs.usda.gov

Natural Resources Conservation Service

Helping People Help the Land

