

**United States Department of Agriculture** 





# Fiscal Year 2017 Wisconsin Successes from the Field Featuring Local Farmers & Landowners



Wisconsin Natural Resources Conservation Service nrcs.usda.gov/







# Helping People Help the Land

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# CONTENTS

Welcome to Wisconsin	2
Offices by Area	2 2
Welcome from the State Conservationist	
Northwest Area Highlights	4
Area 1 Office Information	4
Area 1 Service Center Information	5
Barron County: Thinking Outside the Box	
Bayfield County: Raspberry River Streambank Stabilization Efforts	8
Burnett County: Surface and Groundwater Protection Efforts Pay Of	10
Chippewa County: Farmer Proves Value in Cover Crops	11
Clark County: No-TIII Dairy Farming Dunn County: Red Cedar Demo Farm Offers Hands-On Education	13 1/
Eau Claire County: If You Build It (Habitat), They Will Come	16
Jackson County: Local Producer Talks Organic Transition and Pastures	17
Pepin County: Partnering to Restore Fall Creek	18
Pierce County: A "Honey of a Program"	19
Rusk County: Wetland Reserve Easement Restored in Sheldon	20
St. Croix County: Students Plant Seeds to Benefit Pollinators	22
Taylor County: Planning is Key to Grazier's Success	23
Northeast Area Highlights.	24
Area 2 Service Center Information	24
Brown County: Rotational Grazing Affords Easy Profits, Less Work	26
Kewaunee County: For the Uncommon Love of Backyard Bats	27
Lincoln County: Early Successional Habitat in Aspen Stands	28
Manitowoc County: Small Non-Profit Proves Huge Impact in Community	29
Oneida County: Fishing Fun Day Promotes Conservation Education	32
Outagamie County: Hard Work Pays Off	33
Shawano County: Preserving Wetlands	35
Shawano and Waupaca County: Promoting NRCS as a Career	36
Vilas County: A Place of Solitude Winnehago County: Reginning Veteran Farmer Grazes His Way to Success	37 38
Winnebago County: Farmers See Benefit of No-Till and Cover Crops	42
Wood County: Central Wisconsin Family Farms Diverse and Sustainable	43
Wood County: Cranberries at the Heart of Cranmoor	44
Southwest Area Highlights	40
Area 3 Service Center Information	47
Crawford County: Beginning Farmer Revives Legendary Land	48
Grant County: Restoring the Sixmile Branch	50
Green County: Minicking Nature to Create a Pasture of the Future	51
lowa County: Beef Producers Use FOIP and a "Bazor" to Improve Pastures	54
Juneau County: Farmer Revitalizes Stream Habitat	56
Lafayette County: Beginning Farmer Revitalizes Former Mining Land	58
Monroe County: A Groundwater Protection Practice	60
Nionroe County: Pioneers of No-1III Richland Center: The Ridge and Valleys of Richland County	61
Sauk County: RCPP Reduces Erosion in the Baraboo River Watershed	64
Vernon County: EQIP Assists in Restoring Stream Function	65
Southeast Area Highlights	66
Area 4 Office Information	66
Columbia County: EOIP Helps Yorkshire Rose Farm Grazing Sheep	68
Columbia County: Natural Resources Education and Restoration	69
Dane County: Century Farm Restores Woodlands, Savanna and Trout Stream	72
Dodge County: A Leader in Conservation	73
Fond du Lac County: Frost Seeding Clover? It Works!	74
Green Lake County: Decades of Conservation	76
Jefferson County: Restoration Leads to Flourishing Wetlands	77
Rock County: Volunteer Efforts Restore Habitat for Rare Species	80
waiworth County: 16th Annual Prairie Walk Keturns to its Koots	81 פס
Wisconsin Leadership	83
Leadership Team	83
District Conservationists by Area	84

# WELCOME TO WISCONSIN

### - Offices by Area



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# GREETINGS

### - Welcome from the State Conservationist

Welcome to Wisconsin, America's Dairyland, with nearly 35 million acres of cropland, forests, lakes and terrain. Diverse in its resources and landscape, Wisconsin has over 68,000 farms and over 15 million acres in agricultural production. These farmers contribute to the state being number one in the country for American, cheddar and total cheese production, dry whey for human consumption, milk goat inventory, mink pelts produced, corn harvested for silage, snap beans for processing and cranberry production. Wisconsin cows produce 14 percent of the nation's milk supply. The state also ranks second in the number of organic farms.

Wisconsin farmers are leaders and are committed to producing quality produce and products. The USDA Natural Resources Conservation Service (NRCS) is committed to helping Wisconsin farmers and landowners meet their economic goals, while also caring for the land through voluntary conservation.

NRCS strives to help private landowners care for the land, use it productively and excel as stewards for the future. Wisconsin's working lands produce food and fiber, clean air and water, wildlife and healthy soil. Farming can be one of the most environmentally compatible uses of land there is.



Angela Biggs, State Conservationist

Meet and learn about these farmers, landowners and conservationists from across the state. Read about how they partner with NRCS to put conservation on the ground while maintaining viable business operations providing food, fiber and energy that contribute to the economy, creating a more sustainable future for all of us.

We encourage you to visit our website at www.wi.nrcs.usda.gov for information regarding all of NRCS–Wisconsin's technical tools, services and assistance available to farmers and landowners. NRCS looks forward to delivering one-on-one, personalized advice on the best solutions to meet the unique conservation and business goals of those who grow our nation's food and fiber.

Angela Biggs, State Conservationist



- Area 1 Office Information

AREA 1

#### **ALTOONA AREA OFFICE**

1304 N. Hillcrest Parkway, Suite A Altoona, WI 54720-1601 (715) 832-6547

#### **JOSH SHERMAN**

Assistant State Conservationist, Field Operations



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### - Area | Service Center Information

ALMA SERVICE CENTER 407 S 2nd Street, P.O. Box 88 Alma, WI 54610 (608) 685-4454

DENNIS REIMERS District Conservationist

COUNTY: Buffalo

ALTOONA SERVICE CENTER 1304 N. Hillcrest Parkway, Suite A Altoona, WI 54720 (715) 832-6547

JENNIFER ROETTER District Conservationist

COUNTY: Eau Claire

**ASHLAND SERVICE CENTER** 2014 3rd St W Ashland, WI 54806 (715) 682-9117

GARY HAUGHN District Conservationist

COUNTY: Ashland, Bayfield, Douglas, Iron

BALDWIN SERVICE CENTER 1960 8th Ave, Ste 122 Baldwin, WI 54002 (715) 684-2874

KEITH ZYGOWICZ District Conservationist

COUNTY: St. Croix

BALSAM LAKE SERVICE CENTER 941 Mallard Lane, Room 103 Balsam Lake, WI 54810 (715) 485-3138

KEITH ZYGOWICZ District Conservationist

COUNTY: Polk

BARRON SERVICE CENTER 335 East Monroe Avenue Barron, WI 54812 (715) 537-5645

PATRICK RICHTER District Conservationist

**COUNTY: Barron** 

#### **BLACK RIVER FALLS SERVICE CENTER**

409 County Road R Black River Falls, WI 54615 (715) 284-4515

RYAN SWATEK District Conservationist

COUNTY: Jackson, Trempealeau

#### CHIPPEWA FALLS SERVICE CENTER

1160 Weather Ridge Rd Chippewa Falls, WI 54729 (715) 723-8556

TAMMY LINDSAY District Conservationist

**COUNTY:** Chippewa

#### DURAND SERVICE CENTER

740 7th Avenue West Durand, WI 54736 (715) 672-8663

DENNIS REIMERS District Conservationist

COUNTY: Pepin

#### **ELLSWORTH SERVICE CENTER**

412 West Kinne Street Ellsworth, WI 54011 (715) 273-5522

MARK BIEL District Conservationist

COUNTY: Pierce

#### LADYSMITH SERVICE CENTER 1120 Lake Avenue West Ladysmith, WI 54848

(715) 532-7629

PATRICK RICHTER District Conservationist

COUNTY: Rusk

#### MEDFORD SERVICE CENTER

925 Donald St Rm 102 Medford, WI 54451 (715) 748-4121

MELISSA KNIPFEL District Conservationist

COUNTY: Price, Taylor

#### MENOMONIE SERVICE CENTER

390 Red Cedar Street, Suite B Menomonie, WI 54751 (715) 232-2614

JOHN SIPPL District Conservationist

COUNTY: Dunn

#### **NEILLSVILLE SERVICE CENTER**

4 Boon Boulevard Neillsville, WI 54456 (715) 743-3164

JANE REIGEL District Conservationist

**COUNTY:** Clark

#### SPOONER SERVICE CENTER

800 N. Front Street Room 102 Spooner, WI 54801 (715) 635-8228

RON SPIERING District Conservationist

COUNTY: Burnett, Washburn, Sawyer

#### WHITEHALL SERVICE CENTER

36270 Tower Drive, Ste 300 Whitehall, WI 54773 (715) 538-4396

RYAN SWATEK District Conservationist

**COUNTY:** Trempealeau

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### Ashland County

#### High Tunnels Take Hold in Northern Wisconsin

High tunnels are simple greenhouse structures typically unheated and used primarily to improve the quality and quantity of summer vegetable production while extending the growing season in the spring and fall. Plants grown in high tunnels are grown directly in the ground or in raised beds as opposed to in pots or on benches as is common in traditional greenhouses. High tunnels are a great resource for beginning farmers, in particular, as the structures are relatively low-cost and easy to install. In Ashland and Bayfield counties, the season is very short and soils are slow to warm-up. High tunnels are an essential part of commercial vegetable production in those counties. In recent years, the USDA–NRCS Environmental Quality Incentives Program (EQIP) has been provid ing cost-share assistance for farmers to install high tunnels as a means to reduce pesticide use in vegetable production.



High tunnels are used to significantly increase production of summer crops, such as tomatoes and to extend the season in the spring and fall.

In researching survey reports and NRCS records, there are 56 high tunnels in Ashland, Bayfield and Douglas counties. These high tunnels range in size from 20 ft by 14 ft to 146 ft by 30 ft. Twenty-five of the 56 high tunnels were installed with cost-sharing assistance through NRCS. Combined, there are 1.9 acres of land under high tunnels in the Chequamegon Bay area. An additional 10 high tunnels were cost-shared in the 2015 round of EQIP funding and will be installed in 2016. Given the high productivity of high tunnels, this acreage represents significant production capacity. For example, if all of the high tunnels were used for commercial tomato production in the same year and the tunnels averaged 2.1 lbs of tomatoes per square foot, the tunnels could produce roughly 174,000 lbs/yr of tomatoes. Based on USDA per capita fresh tomato consumption of 12.6 lbs/yr and a total population of Ashland and Bayfield Counties of 30,800, the tunnels could supply roughly 45% of total annual fresh tomato consumption. In practice, not all high tunnels will be used to grow just tomatoes every year, but the calculations illustrate the significance of the growing capacity in the current high tunnels. That said, even using all the high tunnels in the region cannot fully supply even a single product for the Ashland and Bayfield market.

High tunnels in the region are used for a mix of commercial vegetable production and as means to grow food for the family. Respondents reported using high tunnels to grow over 60 different types of vegetables. In terms of production practices, 70% of respondents reported being organic but not certified, 13% reported being certified organic, 9% reported using organic pest control but conventional fertilizers and 4% reported using conventional production practices. Roughly half of the respondents plan to increase vegetable production.

High tunnels are an important tool for vegetable production in the Chequamegon Bay region of northern Wisconsin. They create a better and longer growing season creating more revenue and profit potential for commercial growers and more produce for subsistence growers. High tunnels are an economically important tool for vegetable growers and will continue to grow in popularity.

### - Barron County

#### Thinking Outside the Box

Alex and Mary Olson of Breezy Hill Dairy, in Dallas, Wisconsin, operate a 550 cow facility. They also plant crops on 1,000 acres and strictly practice no-till. The Olson's dairy farm was purchased in 1949 by Alex's parents. Alex joined his parents in the operation in 1981 and started a partnership in 1983. The farm family is an advocate of conservation and progressive in utilizing the newest innovative technologies. In fact, they hosted the most popular Wisconsin farm show, Farm Technology Days, in 2013 showcasing innovative technologies on their dairy farm.

Over the years, Breezy Hill Dairy has partnered with the United States Department of Agriculture, Natural Resources Conservation Service (NRCS) through the Environmental Quality Incentives Program (EQIP) and the Conservation Stewardship Program (CSP). EQIP is a voluntary program that provides financial and technical assistance to agricultural producers to plan and implement conservation practices that improve soil, water, plant, animal, air and related natural resources on agricultural and forest land. Breezy Hill Dairy takes their conservation one step further by partnering with NRCS through CSP, which helps farmers build on their existing conservation efforts while further strengthening their conservation efforts and sustainability of their operation. Personal interaction and farm visits contributed to a successful conservation partnership and relationship with Alex and Mary. According to Patrick Richter, Barron County NRCS District Conservationist, "A consistent conservation message from Barron County Soil and Water Conservation District (SWCD) and NRCS has helped this farm succeed at reaching its goal of 100% no-till, in 2016." Alex and Mary are advocates of no-till and are willing partners in conservation efforts. They enjoy collaborating with NRCS and the SWCD to receive conservation technical assistance and funding. In recent communications with Alex and Mary, they stated "We are still learning, but want to say thanks to the soil and water conservation department and the NRCS for helping us think outside the box!" Local NRCS staff and SWCD partners look forward to working with Breezy Hill Dairy in the future to continue in helping them help their land and foster their learning of conservation and sustainability.



Alex completes a no-till planting into cover crop and corn silage residue at Breezy Hill Dairy.

### - Bayfield County

#### **Raspberry River Streambank Stabilization Efforts**



Volunteers work to stablize the eroded streambank on Spirit Island by completing plantings.

The Red Cliff Reservation, established during the treaty of 1854, is one mile wide and 14 miles long, located at the top of the Bayfield Peninsula, on the shores of Lake Superior in northern Wisconsin. The reservation has 7,021 total enrolled tribal members. Natural resources and conservation has always been of the utmost importance to those members. Spirit Island is a small piece of upland land surrounded by an extensive, frequently flooded marshy area and coastal estuary for the Raspberry River system on the south shore of Lake Superior. "The island is located within the Red Cliff Band of Lake Superior Chippewa (RCB) Reservation and has significant historical and cultural value to the Red Cliff Tribe," said Todd Norwood, Project Coordinator, RCB. For many years, community members and tribal councils expressed concern that the southwest facing bank of Spirit Island along the Raspberry River was heavily eroding and depositing the sandy soil downstream and at the mouth of the river. "Not only did the erosion and sedimentation cause a potential threat to fish, wildlife and wild rice habitat, it also raised concern about the longevity of the island itself," said Chad Abel, Division Administrator, Treaty Natural Resources Division, RCB.

In 2012, following a heavy rainfall event of 5–6 inches in 24 hours, Red Cliff Treaty Natural Resources (TNR) staff observed the Spirit Island streambank eroding more heavily along its 335 foot distance. "Numerous large pine trees were now losing their underlying support and falling into the river, taking large portions of the streambank with them," said Chad. As a result, TNR staff approached the

U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) for assistance though their Environmental Quality Incentive Program (EQIP). "NRCS places special emphasis on working with tribes and building tribal partnerships; we were excited for the opportunity to work with the Red Cliff Band of Lake Superior Chippewa to restore their streambank, putting conservation on the ground and directly into the watershed," said Tom Krapf, NRCS Assistant State Conservationist for Programs.



Project site prior to restoration. Note the tree root and erosion issues.

In an effort to assess damages and focus on conservation planning and implementation, in spring 2016, NRCS engineering and conservation staff, along with TNR staff, surveyed the stream channel from the river mouth to upstream of the erosion site. The results suggested that the extensive wetland network in the Raspberry River estuary

### - Bayfield County (continued)



*Left: Volunteers and staff work to drive stakes that hold bio-logs in place. Middle: Volunteers and staff work during the second planting event on the streambank. Right: Volunteers and staff work on the streambank stabilization.* 

helped prevent high velocities that would erode the toe of the streambank at the project site. It was determined the erosion was mostly the result of the lack of streambank vegetation that resulted in an unstable bank condition. Based on survey results, NRCS developed an initial plan requiring large equipment for placement of bioengineering of large root wads and woody material to protect the bank. This idea was presented to the Tribal Council by NRCS District Conservationist, Gary Haughn. "The Council was concerned about the impact the large equipment would have on sacred and fragile tribal lands and asked if a less invasive method could be developed," explained Gary. NRCS re-evaluated options for low impact methods the tribe would accept. The revised low impact plan required hand labor only, to eliminate the negative environmental impacts associated with heavy machinery in the fragile area. RCB Tribal Council accepted the plan during summer 2016 and work began. Protection was required at the waterline and was provided by aspen fiber 'bio-logs' rather than root wads that required machinery. Bio-logs were secured into the streambank with wooden stakes and natural fiber rope, all of which are designed to biodegrade over a 3–5 year period. "Following some minor bank shaping and site preparation, we planted approximately 12,000 plants to help stabilize the bank," said Todd.

Plants were selected based on species already existing on site or nearby with some species originating from seed collected on Spirit Island. Wetland species used for the Spirit Island restoration include Lake Sedge, Tussock Sedge, Common Rush, Softstem Bulrush and Broadfruit Bur-Reed. Upland species used for the restoration include American Marram Grass, Poverty Oatgrass and Wavy Hair-Grass. Plants were spaced at 8 inches for the upland dry section and at 12 inches for the wetland portion. Todd explains, "The uplands were planted along the entire slope and onto the upper flats where the former trail existed and vegetation was lacking. The wetlands were planted directly into the bio-log with some plants placed directly behind the bio-log where soil was wet." Partnerships were key in completing the 12,000 plug planting. TNR held a community event where Red Cliff tribal members could take part in preserving Spirit Island. Area Bayfield High School science students also provided planting assistance. "A subsequent planting event with the students occurred two weeks after our initial planting, followed by a few days of final planting by TNR staff," said Todd. The former trail was re-routed inland to help prevent future vegetation loss and slope failure, while also allowing for new plant establishment and bank stabilization. "One month post planting, the site looks excellent and the plants are thriving," explained Chad. "This project wouldn't have been possible without the technical and financial support of the Natural Resources Conservation Service (NRCS) and the U.S. Fish and Wildlife Service; their successful partnership with the Red Cliff Band was instrumental," said Todd. "The NRCS partnership with the tribal council and staff lead to strong community support for this project. With community support, the protection needed to preserve Spirit Island's sacred importance was possible and a great cultural gain for present and future generations," said Gary.



Completed streambank stabilization project.

9

### Burnett County

#### Surface and Groundwater Protection Efforts Pay Off

Glen Albee, a resident of rural Burnett County, Wisconsin, approached the Soil Conservation Service (now the Natural Resources Conservation Service (NRCS)) in 1987 to discuss on-farm manure production and winter spreading concerns. Prior to 1987, a silage storage facility was constructed to accommodate their current operation, which included the milking cows, calves and also 60 dry cows. With the help of NRCS, a (313) Waste Storage Facility was designed to accommodate 80 milking cows and 40 calves over a period of 200 days to minimize winter applications of waste on restricted fields and acres. The milking livestock were given access from the east end of the barn to an earthen feedlot located north of the barn. Livestock were also allowed access to the woodlands, north and east of the feedlot.



2010 NAIP Imagery.

As the years passed, Glen's son retained a vested interest in continuing to farm, and the operation began to expand. The number of milking cows, calves and dry cows increased. This required an additional bunker for silage, constructed adjacent to the existing structure. As livestock numbers increased further, the existing waste storage facility was being emptied numerous times throughout the year. More livestock were being retained on the earthen feedlot north of the barn where the runoff had direct access in various locations to the Clam River. Knowing the effects being placed on the environment, Glen contacted his local NRCS Service Center for recommendations and technical assistance. Glen learned of the Environmental Quality Incentive Program (EQIP), which would eventually become a major contributor to environmental and economic benefits for Glen, offering direct assistance from the NRCS staff.

In 2009, 150 heifers utilized the earthen feedlots on the farm; with the north-east feedlot having direct access to the Clam River. In 2010, a total containment feedlot utilizing a reinforced concrete floor and 2-foot-high walls with a roof structure was designed and installed. The north-east

earthen feedlot was abandoned and seeded to vegetative cover, thus eliminating contaminated surface runoff into the Clam River.

Then in 2013, the remainder of the farmstead was inventoried and evaluated for resource concerns related to the feed storage and waste storage facilities. With the feed storage facility below ground and its condition deteriorated, a new facility was constructed in 2014 and was placed above the existing surface ground and away from the newly expanded barn. This facility was constructed utilizing concrete floors with 10 foot precast walls placed above perforated tile, which was covered with drainage material over LLDPE liner. Perforated tile was graded to solid tile completing the leachate drainage system to a storage tank for transferring to the new waste storage facility.



2015 NAIP Imagery.

In 2015, the original feed storage facility and the waste storage facility, along with a hay shed were abandoned. This made room for the construction of the waste storage facility designed to handle the waste material for 300 milking cows, milkhouse wastewater and the silage leachate runoff for a period of 210 days.

The containment of agricultural waste materials and the installation of clean water runoff systems was incorporated in the facility practice. Surface and groundwater protection efforts have greatly improved to the point of very limited contaminated runoff potential.

In discussions with Glen and his son, Cory, the implementation of all practices not only improves environmental and resource concerns, but also improves management, efficiency and overall productivity.

### 🗢 Chippewa County

#### **Farmer Proves Value in Cover Crops**



Steve Siverling, Chippewa County, uses cover crops, like cereal rye shown here, after corn silage to increase soil health on his farm.

Steve Siverling, a Chippewa County farmer located in Bloomer, Wisconsin, is a serious advocate and success story for managing soil health and using cover crops to benefit his farm. He's been working with the USDA Natural Resources Conservation Service since 2003 as an early adopter of the Conservation Reserve Enhancement Program, installing riparian and filter strip buffers along McCann Creek. He's also a participant in the Conservation Stewardship Program, extending a field border for water quality and wildlife protection, leaving standing grain for wildlife, using drift reducing nozzles, establishing pollinator habitat and planting multiple cover crop mixes. Cover crops provide multiple benefits in a cropping system. They prevent erosion, improve soil's physical and biological properties, supply nutrients, suppress weeds, improve the availability of soil water and break pest cycles along with various other benefits. Steve is passionate about his work and wanted to share his successes directly with you, firsthand. NRCS is happy to help share stories, like Steve's, to aid farmers in conservation efforts.

You cannot open a farm paper or magazine without seeing an article on cover crops. The NRCS is promoting cover crops and soil health also. After attending a cover crop meeting, asking for more farmer input/discussion and watching a video discussion by Dr. Joel Gruver, Western III. University Ag Professor, and studier of cover crops and the benefits they have on the soil, one question keeps coming to mind; do cover crops pay off in dollars and cents?

I have been planting cereal rye as a cover crop for around twenty years on post-soybean and chopped corn silage ground. I've typically planted the cover crop around September 15, but as late as November 10 over the years. To describe my soil and farm, my farm is on the edge of a glacial wash. Of the 350 acres I farm, about 80 acres are in hay; the rest of the tillable land is split between corn, soybeans and a few acres of small grains, primarily oats, barley and/or cereal rye. The soil runs from 10 ft of top soil (on top of 10 ft of granite) to sandy loam, some clay loam and even the ultimate farmer's dream; hilly, rocky and/or chronically wet! McCann creek runs through my property, and both the Department of Natural Resources (DNR) and the NRCS have made me very aware about best practices in water quality. I have enacted many practices over the years to maintain or improve that water quality.

I call myself a biological farmer. To me, that means taking care of the soil and trying to improve it. I am not the best bookkeeper and sometimes I felt I might have been a little "backwards" in some of my practices over the years. But, that is the great thing about farming, you can do it your way, as long as you pay your bills and feed your family.

My soil health endeavors started 20 years ago when I purchased 80 acres across the road from my farm. After running soil tests, I found the soil contained less than 1% organic matter and the pH was around 5.5. At the time, I was a dairy farmer and my most important crop was alfalfa. Attempting to grow alfalfa on this land simply wasn't going to happen and I didn't have the money to make improvements.

My agronomy consultants at the time talked about soil health and building soil structure...and I listened. In 1996, I still did a lot of moldboard plowing; 40 acres (of the 80 I purchased) were flat sandy loam. I divided that parcel into two sections: 20 acres of soybeans and 20 acres of corn

11

### Chippewa County (continued)

When I dropped the plow into the earth, it was like plowing concrete; the ground broke and then rose up like blocks. On the soybean ground, I put a ton of high-calcium lime. The corn ground received manure. In the fall, after the corn was chopped and the beans were harvested, the entire 40 acres were planted with cereal rye. Sometimes the rye was drilled and sometimes distributed with a fertilizer spreader. I switched the 40-acre field back-and-forth between corn and beans for about 10 years. I planted rye every year after the bean crop and spread manure every winter and spring onto the incoming corn ground.

I became aware of how the ground worked during tillage; it became mellower. Through the years, some dry periods came during growing seasons. At first, the crops took a hit because of the drought. Later on, after implementing cover crops, I had another dry period, but the crops remained greener and yields didn't drop as much. Five years and another soil test later, the pH was at an even 6.0 and the organic matter was over 1%. About that time, there was an article in a farm paper explaining for every 1% more organic matter your soil has, the more water-holding capacity the soil would have.

I had agronomists tell me that cereal rye does not produce nitrogen, and they are correct. What cereal rye does accomplish well, is sucking up the nitrogen in the soil for a slow release when the primary crop is growing. In addition, the rye roots help break the soil and supply air into the ground. The most important benefit I see, is cereal rye supplies food for microorganisms, especially earthworms! Earthworms navigate the soil; their waste, or worm castings, are very high in nitrogen. A combination of rye, slowly rotting down and feeding the microorganisms in the soil, combined with the slow release of nitrogen, helps crops grow during the season. The most recent soil test done on the field showed organic matter to be 2.5% and the pH was 7.0. Needless to say, I can grow a beautiful crop of alfalfa now, when I couldn't before!

Another factor I have noticed and want to highlight is the quality of the grain that comes off my fields. The test weight of my corn is up in the 54–58 lb range, when many other farmers are getting a 50-52 lb average. This has allowed me to sell corn at a premium, at times, 15 cents over market, plus free hauling...that premium adds up fast for a small farmer! The food-grade soybeans are usually at the top of their protein scale with good test weight; which means no deductions from the food-grade premium.

Do I give all the credit to cover crops? Not all of it, but the cover crops help build the organic matter in my soils, which results in healthy, productive soils. In return, I grow better quality crops with less inputs, especially purchased fertilizer. This year, I'm working with a seed company to do an experimental cover crop plot on my farm. We planted six different cover crop mixtures into rectangle plots with a cereal rye, barley and forage peas mix around the remainder of the field. The idea is to conduct a yield check on the corn and see if there is a difference in yields using different cover crop mixes. This could potentially help quantify the benefits of certain cover crops.

I am very interested in various combinations of cover crops. For us farmers in northern Wisconsin, we are limited in what we can use because of the length of our growing season. Subsequently, I decided to fly on 80 acres of cover crops into standing corn. I used a mixture of 30 lb cereal rye, 30 lb barley and 2 lb brassicas per acre. Am I going to be able to get a dollars and cents return-on-investment for this? I don't know, only time will tell; here's hoping. The weather and growing season will also impact the results of our crops. What an adventure being a farmer for sure!

The NRCS thanks Steve for sharing his firsthand successes with cover crops. Our goal is to share ideas on how to implement soil health principles and cover crops on your farm. Steve Siverling has seen many benefits on his farm through the use of cover crops including increased soil structure and organic matter, less soil compaction and erosion, improved water holding capacity in the soil, improved quality of crop test weights and protein, less purchased fertilizer inputs needed to fuel crop, potential grazing during fall and spring, increased wildlife habitation/food plots, weed suppression and breaks in pest cycles. "Steve is an active member of our NRCS farmer network with cover crops in Chippewa County and has done a great job networking with other farmers and helping NRCS advance the soil health movement one farm at a time," said Tammy Lindsay, Chippewa County District Conservationist.

Contact your local NRCS service center or visit www.wi.nrcs. usda.gov/ to learn more about soil health, cover crops and the technical and financial assistance available through NRCS. Improving soil health is key to long-term, sustainable agricultural production.

### - Clark County

#### **No-Till Dairy Farming**

Ralph Smrecek Jr., owner of the Black River Ranch, is a second generation dairy farm near Greenwood, Wisconsin, in the heart of dairy country. Back in the early 1990s, a zone till movement was started in Clark County. Ralph and his father started by experimenting with a few fields and hiring the planting done. They bought a no-till corn planter in 1993 and since then, have been no-tilling every crop on their 380 acre dairy farm. Across the road from the 50 cow dairy is the Black River, which ultimately flows into the Mississippi River. Ralph is playing a big part in putting conservation practices on the ground to combat erosion and improve water quality.



Ralph, on his farmstead, discusses the importance of soil health in one of his hay fields.

Ralph adopted no-till and decided he wanted to implement further conservation practices. Ralph partnered with the USDA Natural Resources Conservation Service (NRCS) to receive technical and financial assistance for grassed waterways through the Environmental Quality Incentives Program (EQIP). Ralph attributes no-till and installation of grassed waterways to increased soil health. "The soil is so much better," said Ralph. He has observed improved infiltration and reduced erosion on his fields. "No-till really works for Ralph; he stuck to it because of his commitment to conservation," said Jane Reigel, District Conservationist. Ralph is a great example of how you can make no-till work on a conventional dairy farm. With the assistance of NRCS, Ralph has a nutrient management plan and spreads liquid manure two times per year. He follows a rotation of corn, soybeans-oats and hay.



Ralph checks for favorable field conditions to no-till into a corn field.

Ralph is an active participant in the central Wisconsin. No-Tillers Group, focusing on no-till and reduced tillage to promote soil health, reduce erosion and protect water quality. Ralph is an advocate both on and off the farm, using no-till on his acres and also promoting soil health and dedication to no-till farming. Ralph has taken time to attend many local field days as an advocate for the soil health movement.

He has future plans to incorporate cover crops into his no-till operation. He added wheat into his rotation recently and may also try cover crops after corn silage as well.

"There are not a lot of no-till dairy farmers in this area," said Reigel. "Ralph's success is a catalyst for others reducing tillage and improving their soil's health and infiltration."

### Dunn County

#### **Red Cedar Demo Farm Offers Hands-On Education**



(L to R) Katie Wantoch, UW-Extension; Dan Prestebak, Dunn County Land and Water; Mark Denk, Chippewa Valley Technical College; John Sippl, USDA Natural Resources Conservation Service; and Leah Nichol, Dunn County Land and Water; tour a full season cover crop plot on the demo farm.

The Red Cedar Demonstration Farm, in Menomonie, Wisconsin, is a 155-acre, three parcel farm, leased by partners to educate and demonstrate conservation of natural resources. Collaborators in the partnership include the USDA Natural Resources Conservation Service (NRCS), Dunn County Land and Water, University of Wisconsin-Extension (UW-Extension) and Chippewa Valley Technical College (CVTC). Partners attended a county board meeting, presented a demonstration and educational farm idea and showed soil health demonstrations and benefits. The city and county owners of the parcels were enthusiastic about the project and agreed to a five year lease to implement conservation practices to educate students, partners and the community. "They saw different agencies coming together to form a truly interactive partnership looking at conservation management together; this was instrumental to the committee in approving our ideas for the project," said Dan Prestebak, Dunn County Land and Water.

"In 2015, a partnership was formed; we started implementing soil health practices, nutrient management standards, no-till and cover crops," said John Sippl, Dunn County NRCS District Conservationist. CVTC Agricultural Program students perform farm work on the ground in an outdoor classroom environment. "The Demo Farm gives students a hands-on opportunity to plant, scout fields, monitor growth, harvest, write nutrient plans, take soil samples; really, it's a full farm laboratory for students," said Sippl. The land previously housed livestock for many years and was cropped and tilled in a corn-soybean rotation. Partners observed wind erosion and saw the potential for soil health quality opportunities when the project started. "The Red Cedar Watershed is an impaired watershed and one of the ways to improve water quality issues is to apply conservation practices and fix soil health issues first," said Sippl.



Sippl and Nichol assess clover cover crop establishment.

UW-Extension partners help with educational outreach for the farm. "New students arrive each year and have a chance to learn how to use farm equipment and also demo new technologies," said Katie Wantoch, UW-Extension Agent. NRCS partners take the lead in soil conservation, offering technical advice on soil health principles and helping students with soil sampling in the field. Interest in the demo farm has grown across the region; farmers and partners are discussing potential new demo farms in their areas. "Individuals and agencies want updates to stay informed on how the demo farm is progressing and if they can implement some of these practices on other county lands," said Sippl.

### - Dunn County (continued)

Students currently plant one-third corn, one-third small grains and one-third soybeans. No-till is being used on the majority of the land and cover crops are also being used after each crop harvest. "We have two designated tillage test strips for education and monitoring; they are small fields within larger fields," said Sippl. "Students learn how to use tillage equipment on the control strip, to compare to no-till areas, where conservation practices are implemented." An experimental field of nine different species of full season cover crops was also planted, including sunflower, sorghum sedan grass, cow peas, radish, winter triticale, turnip and multiple clover species. After the small grain oat harvest, cover crops were also planted on the field, a multi-species mix of a winter annual, a brassica species and clovers. "With multi-species cover crops on the ground, we've seen an abundance of wildlife, like turkey, deer and waterfowl on the property; more than we've ever seen before," said Sippl. The soybeans had winter rye cover crop drilled in and will be harvested for grain in summer 2016. Corn fields were aerial seeded with a winter cover crop when corn was still standing. Lime and urea are also being applied for nutrient management. A weather monitoring station, funded through a UW-Extension Northwest Regional Innovative Grant, is also in place to compare weather and crop yields over the next five years.

The partners hosted a successful public field day. The two day event was very well attended, with over 100 interested farmers, partners and community members. "Now that the word is out and the momentum is going, people are coming to us for information, technical assistance and demo farm updates and successes; we've also spurred the city and private industry to do additional conservation leases in the area," said Sippl. "We are seeing results! During the field day we set infiltration rate tests on our full season cover crop plot, one in the corn plot and one in the small grains plot; it rained over an inch on the already saturated ground. By incorporating crop diversity into the system, we saw better infiltration rates in just one years' time," said Sippl. "We've gone one step further by also bringing children from the community out through county programs to educate them on conservation principles," said Leah Nichol, Dunn County Land and Water.

CVTC, the lease holder and student coordinator, has a unique partnership with the local implement dealers. They have agreements worked out with suppliers so students are allowed to use equipment for educational purposes. "We are more on the production side of the partnership, bringing students to learn, promoting soil health and water quality, looking at agronomy, marketing and the financial side of harvesting; we're excited to be a hands-on member of this great partnership," said Mark Denk, CVTC Instructor. "As a farmer and an educator, I'm passionate about this work and excited to foster the next generation." Students are able to use tractors, planters and combines for planting and harvesting, as well as other needed equipment. "They are excited to have the opportunity to use first rate technology, GPS and auto-steering, while also having partner staff as mentors and gaining hands-on educational experiences," said Sippl.



Red Cedar Demo Farm partners.

The demo farms main goal is conservation education. "NRCS, Dunn County Land and Water, UW-Extension, CVTC; we've always had a good relationship, but this project has really strengthened that relationship and it's been great for the students and community also," said Prestebak. They've taken baseline data and are excited to track data over time and see how things change for the positive with soil health principles implemented. "We're demonstrating it is possible to utilize no-till and cover crops, build organic matter, change the biological diversity in the soil, infiltrate more water, decrease erosion, increase soil health and more," said Sippl. "We have an opportunity to show how conservation efforts can make an impact long term. We've pulled many tests on the property; soils, bulk density and more." The partners are excited to see the difference conservation can make in educating our next generation. "We can make a difference and educate others in the process," explained Sippl.

15

### 🗢 Ean Claire County

#### If You Build It (Habitat), They Will Come

In 2008, the NRCS Altoona Service Center had the opportunity to partner with the Farm Service Agency and West Wisconsin Land Trust in submitting a Conservation Reserve Program–State Acres for Wildlife Enhancement (CRP-SAFE) proposal. The proposal would provide 2,500 acres of enhanced habitat for the Karner blue butterfly (KBB) in Eau Claire and Jackson counties. The KBB is a federally listed endangered species present in small patches across central and northwest Wisconsin. The SAFE practice CP-38E (grass) was used for contracts 10–15 years in length. Many benefits come from the CRP-SAFE KBB program. Not only will it expand the KBB habitat and population, but it also reduces soil loss, improves water quality and enhances habitat for beneficial insects and wildlife. NRCS is the lead agency in providing technical assistance to landowners who enroll land into CRP-SAFE KBB.

Fast forward to 2016, all 2,500 acres have been contracted and Eau Claire County has 2,095 acres for a total of 91 landowner contracts. All participating landowners are within the historical range of the KBB. At least 11 are located within the range that Wisconsin Department of Natural Resources classifies as having "high potential" for KBB recovery. KBB typically disperses less than 1 mile from existing populations. The 2,095 acres of privately owned land have been planted with an approved seed mix containing 6 native grass species and 11 wildflower species. The main species in the mix is Wild Lupine (Lupinus Perennis); it is the larval host plant for the KBB.



Female Karner Blue Butterfly.

University of Wisconsin– Eau Claire (UW–EC) Biology Dept. conducted extensive monitoring from 2009–2015 of both CRP-SAFE sites and native grassland sites where the KBB is already present. Monitoring was for vegetation, butterflies and bumble bees. UW–EC observed 39 different species of butterflies while monitoring 10 sites

2–3 times throughout the season. One of the butterflies observed in 2015 on a CRP-SAFE site was the KBB, which means NRCS's technical advice for management was successful in attracting the KBB.



(L to R) Jennifer Roetter (Altoona NRCS District Conservationist), Andy Bourget (retired FSA County Executive Director), Jeff Myers (FSA CED) and Paula Kleintjes Neff, PhD and Professor of Entomology and Conservation Biology at University of Wisconsin Eau Claire.

The Altoona NRCS Service Center received an email in July from the USDA's Office of Communications, Director, Garth Clark. He heard how successful our CRP-SAFE KBB was after reading Paula Kleintjes Neff's, UW-EC Professor of Entomology and Conservation Biology, research report. Garth Clark visited Eau Claire County to produce a video for national use to promote the CRP-SAFE program. "It was a great experience organizing the day and making a video out in the field, three landowners were interviewed along with Andy Bourget, retired Eau Claire County FSA CED and UW-EC's Paula Kleintjes Neff," said Jennifer Roetter. We interviewed one of the landowners at the CRP field with known KBB. They were also able to get good action shots of the KBB utilizing the wild lupine, its host plant. One of the landowners interviewed was also successful in finding KBB on his site as well, after seeing them in person on interview day. FSA, NRCS and Paula are ecstatic there are now two known sites with KBB colonization happening on CRP-SAFE fields.



Landowner being interviewed on-site.

### - Jackson County

#### Local Producer Talks Organic Transition and Pastures

Nathan Kling and his wife, Karen, own and operate a dairy farm and grain operation near Taylor, Wisconsin, in Jackson County. The 250 cow dairy is supported by a land base of around 700 acres. The Kling's home farm rests on 250 acres of gently rolling land currently being used to graze dry cows and young stock. The Klings are transitioning their farm to organic production and Nathan plans to graze all of his animals.

Nathan believes transitioning to organic production is the best choice for their farm to remain profitable and offer products to a growing sector of consumers. Along with transitioning the dairy to organic production, the Kling farm is also applying those principles to their cropland base. To supplement forage provided by the pasture, Nathan feeds corn silage to the dairy herd to maximize production. The overall crop rotation includes corn silage, soybeans and alfalfa. The Kling family is using several techniques to increase soil health on their farm and combat weed issues that plague many organic farmers. One example, is utilizing earlier harvest windows provided by the corn silage and soybeans. The Klings plant a cereal rye cover crop. The use of cover crops in Jackson County has become a relatively common practice. What sets Nathan apart from other local producers is that he terminates rye cover crop using a crimper. The vegetation mat created helps with weed suppression and also allows him to plant organic crops with a high probability of success.

In summer 2016, the Klings hosted a pasture walk on their farm. Nathan explained the rotational system he uses and its many benefits. During the pasture walk Nathan stated, "One of the benefits from grazing animals and allowing access to pasture is the increased health and longevity of the animals." Nathan also drew attention to some of the challenges associated with grazing, such as, providing water to animals on the pasture. During the pasture walk, Nathan also encouraged other producers to utilize the USDA Natural Resources Conservation Service (NRCS) Conservation Stewardship Program (CSP), as he does. Nathan noted CSP is an excellent fit for his farm. He is also currently working with NRCS through the Environmental Quality Incentives Program (EQIP) to address resource concerns on the farm. District Conservationist Ryan Swatek agrees with this sentiment stating, "NRCS programs help put conservation on ground and make an actual contribution to addressing resource concerns."



Nathan Kling (R) leads a pasture walk on his home farm. He explained the benefits of rotational grazing, the value of having a grazing plan and opportunities provided by NRCS-offered conservation programs.

### - Pepin County

#### **Partnering to Restore Fall Creek**

Mike Brion and his two sons Curt (wife, Lisa,) and Cory (wife, Hannah,), run Brion Dairy LLC, a 500 head dairy farm with 1,800 acres of alfalfa, corn, soybeans and rye. Brion Dairy, a century farm, received the Pepin County Conservation Farmer of the Year Award in 2014 recognizing conservation excellence in the county. Also in 2014, Brion Dairy hosted the Pepin County Dairy Breakfast and a soil health day.

In the 1990s, Mike Brion was one of the early enrollees in the Fall Creek Water Quality Project. Brion Dairy LLC has worked with the USDA Natural Resources Conservation Service (NRCS) on numerous surface and ground water quality projects such as a barnyard runoff control system, waste storage facility and wetland restoration, to name a few. The dairy currently has over 1,500 cropland acres enrolled in the Conservation Stewardship Program (CSP). Mike Brion became interested in restoring Fall Creek, a trout stream that runs through his property, 16 years ago when the Wisconsin Department of Natural Resources (DNR) purchased a public access fishing easement. In 2013, Mike asked the local NRCS office about restoring Fall Creek. Mike applied for the Environmental Quality Incentives Program (EQIP) with NRCS and the project application was funded under 2014 EQIP-Driftless Area Land Conservation Initiative, Cold Water Stream Restoration. The stream restoration was to be a partnership project with Mike, DNR and NRCS. According to Joseph Gerbyshak, Wisconsin DNR Fisheries Biologist, "Our (DNR) goal is to be able to upgrade Fall Creek to a Class I trout stream. This can be accomplished through working with partners (such as NRCS) and obtaining easements that enable habitat restoration projects to be conducted on the stream."

Before the restoration commenced Mike passed away in Fall 2014. Mike's sons, Curt and Cory, took over on the project to complete their father's wish of seeing the creek restored.

In June 2016, DNR Western District Field Operations Crew completed work on 1,200 feet of Fall Creek by installing riprap on eroded vertical banks, bank boulders, cross logs and other habitat structures. Mike's wish to restore Fall Creek by stabilizing eroding banks and improving habitat for trout have been realized. "I think Dad would be awful proud of how it turned out," said Curt. In 2015, DNR purchased over 4,000 additional feet of public access easement from Brion Dairy and will restore an additional 2,000 feet of Fall Creek in 2017. "Brion Dairy LLC strives for land stewardship and conservation ethics. They are great partners in protecting water quality in Fall Creek watershed and I look forward to working with them on future projects," said Dennis Reimers, Pepin County District Conservationist.



Brion Dairy LLC streambank restoration on Fall Creek.

### Dierce County

#### A "Honey of a Program"

Jerome Rodewald, an experienced bee keeper in rural River Falls, Wisconsin, has been selling his "Rodewald Honey" for the past 8 years. He currently raises a total of 75 hives, split into groups of 15, spread throughout his 195 acres from April to October. The hives are then shipped to California for the winter months to ensure winter survival. Jerome has had many acres of his land enrolled in the Conservation Reserve Program throughout the years, but was hoping to increase the quality and quantity of honey bee habitat on his farm.

In 2014, Jerome learned of the U.S. Department of Agriculture, Natural Resources Conservation Service's (NRCS) Honey Bee Initiative through the Environmental Quality Incentives Program (EQIP). After working with Dana Swanson, soil conservationist with the NRCS office in Ellsworth, he chose to plant a cool season mix of timothy, alfalfa and alsike\white ladino\red clover on a total of 11.4 acres between the two properties he owns. Jerome completed his site preparation in the fall of 2014 and spring of 2015 before using the Pierce County Land Conservation Department's no-till drill to seed his mix. Now that the planting is established, Jerome is diligent about spot-mowing problem areas of thistle and wild parsnip patches to maintain beneficial cover.



Jerome stands in his pollinator habitat established with the technical and financial assistance of the NRCS–EQIP program.

In addition to increasing honey bee habitat on his own land, Jerome is actively collaborating with others to increase honey bee habitat elsewhere. In 2015, he made an agreement with his cropland renter to allow him to plant a pollinator mix in 20 foot field borders along wooded cropland edges—a win-win for both him and the renter. In addition, Jerome volunteered to plant a pollinator mix in road ditches redone in his township. In exchange, the township will wait to mow the ditches until after the legumes are done flowering. Jerome also mentors neighbors and other fellow bee keepers through his involvement in the St. Croix Valley Bee Keepers Association, gives talks to school groups and works with the University of Wisconsin–River Falls to conduct research for new sources of honey bee forage.



One of Jerome's bee yards protected by solar-powered bear fence (and guard-dog truck).

Jerome appreciates the financial assistance through EQIP to expand the pollinator habitat on his property. At the end of 2015, Jerome saw the success of the added habitat as he stated, "In 2015, we harvested 3 tons of honey, our best honey harvest ever." "Jerome's participation in the EQIP Honey Bee Program is a great example of how NRCS technical and financial assistance can be a win-win for the landowner and target resource concerns," said Mark Biel, Pierce County District Conservationist.

### - Polk County

#### Pit Be Gone

Greg and Karen Peper, of Polk County, Wisconsin, are former dairy operators who decided to transition their farm to crops and a small beef herd. They own around 250 acres near Centuria, Wisconsin. Over the years, together they have raised hundreds of Holstein cows and also three children. The farm is located between three large lakes, Balsam, Loveless and Long Lake, so, water quality has always been a concern for the Peper family.

In early 2015, Greg and Karen decided to sell their Holstein milking herd and transition their operation. The Pepers approached the USDA Natural Resources Conservation Service (NRCS) office in Balsam Lake, Wisconsin to inquire about nutrient management and the possibility of abandoning their manure storage pit on the property. The pit was earthen lined, built in the mid 1970s and no longer used. Greg and Karen had no plans to transition their farm back into a dairy and they wanted to alleviate any potential animal, water, or human safety issues associated with the unused manure storage structure. "We were able to partner with the Pepers through our Environmental Quality Incentives Program to safely empty and remove the unused manure pit, clean filling it to reclaim the pit area," said Keith Zygowicz, NRCS Balsam Lake District Conservationist. Greg and Karen are happy with the results. "Working with the NRCS made it possible to reach our conservation goal of removing an unused manure pit to alleviate any potential natural resource and human safety issues; we could not have completed this project without the help of NRCS," said Greg.



Emptying the pit for the last time. This is done to remove as much manure and water as possible prior to the abandonment process.



Wall cleaning to remove all the manure/soil mix to allow for clean fill to reclaim the pit area.



Area after removal.

### - Rusk County

#### Wetland Reserve Easement Restored in Sheldon

Robert and Laura Wimer farm in Sheldon, Wisconsin. They sold their dairy cows a few years ago, allowing them to take some of their cropland out of production and restore it back to it's original wetlands. Robert and Laura partnered with the U.S. Department of Agriculture, Natural Resources Conservation Service through the Wetland Reserve Easement (WRE) program to meet their restoration goals.

Robert Wimer had shown interest in the NRCS Wetland Reserve Program, now Wetland Reserve Easements, a few years prior, but the idea was dropped because of concerns about backing water off the property. A couple years later, NRCS was contacted by the DNR regarding the site as a way to preserve the Sharp-tailed Grouse Lek on the property. Rusk County District Conservationist, Mike Koehler, contacted the Wimers to take a second look at the property to see if a potential WRP easement would work and see if they still had interest in the program. NRCS Wisconsin Engineers were able to design and develop a restoration plan that kept water on the Wimer property and created a very nice wetland complex, including an 8.3-acre shallow pond pictured to the right.

The Wimers successfully restored easement is 48.3 acres, which includes some uplands, offering waterfowl nesting cover and habitat for other wildlife. "I am very happy with the easement. I don't hunt, but like seeing the ducks and geese back," said Robert.

An NRCS wetland easement is a permanent easement in which a landowner gains technical and financial assistance from NRCS. The cost of the restoration is paid for by the NRCS–WRE program and does not cost the landowner.

"The purpose of the program is to restore wetlands and all the valuable functions they provide, such as ground water recharge, reduced flooding, filtered water runoff and increased wildlife habitat," said Koehler.

Wimer also likes that the NRCS–WRE program allows his land to stay private and does not require public access after easement restoration.



Through the NRCS Wetland Reserve Easement Program, the Wimer property, in Rusk County, was restored to its original wetland beauty, while also increasing habitat for wildlife.

### St. Croix County

#### **Students Plant Seeds to Benefit Pollinators**

The USDA Natural Resources Conservation Service (NRCS) works alongside partners in every Wisconsin county to put conservation practices on the ground at the local level. These partnerships help leverage our mission of Helping People Help the Land, so we all can enjoy conservation benefits as a result, such as cleaner air and water, improved soil and abundant wildlife habitat. Below are recent successful events St. Croix County NRCS Service Center had the opportunity to partner in.



The NRCS participated in Earth Day at the Hudson YMCA camp. NRCS and Pheasants Forever partnered, presenting a display booth to educate participants on available programs and wildlife habitat. Attendees were able to take informational program materials and created pollinator seed balls to plant in their home gardens.





NRCS, in partnership with Pheasants Forever, conducted a one acre pollinator planting with 50 students participating from the Spring Valley School, fifth grade class. During the field day, students rotated through three education stations including plant identification, pollinator free ice cream and a demonstration hive. After rotating through the stations, students helped to hand broadcast the site and plant over 400 pollinator-friendly plugs. Additional partners included Wisconsin Department of Natural Resources (WDNR), Bayer Bee Care, Cabelas Outdoor Fund and Pioneer.



NRCS, in partnership with Pheasants Forever, conducted a .75-acre pollinator planting at Willow River State Park with 75 students participating from the Willow River Elementary School, fifth grade class. Students rotated through six education stations including plant identification, pollinator-friendly plug planting, pollinator game, demonstration bee hives, the nature center and plant parts identification. Different organizations and partners ran each station. Partners included Pheasants Forever, WDNR, Parks, Friends of the Willow and Kinickinnic Park, UW-Extension and Hudson High School. In addition to completing education stations, students also had the opportunity to broadcast seed the site.

### - Taylor County

#### **Planning is Key to Grazier's Success**

Brian Bolstad, along with his wife, two sons and daughter, operate a dairy farm Northwest of Gilman, Wisconsin, in Taylor County. The Bolstad family utilizes managed grazing for feeding approximately 80 dairy cattle throughout the growing season along with a herd of replacement heifers.

The Bolstad property consists mainly of somewhat poorly draining soils. The Almena Series is a good soil for growing forage, but does not lend itself to cattle traffic without a raised and surfaced lane. With difficult soils, broken down fences, very abundant rainfall and poor drainage, the value of managed grazing had diminished on the Bolstad farm. Cattle had difficulty traveling through 12 inches of mud, causing foot and leg injuries.

In the summer of 2014, technicians from the Taylor County Local Conservation District (LCD) and NRCS office met with the Bolstad family to develop a design to improve cattle access to the pasture area. The first step was to survey the entire area and come up with a design to address the resources concerns near the farmstead. The concerns included poor access to the manure storage structure, poor drainage near the barn, very deep mud where the cows would gather near the barn and the general mud problem of 80 cows heading out to pasture twice a day during a wet summer. The mud was so prevalent, Brian stated that a disturbing number of cows went lame and could not head out to pasture to graze.

NRCS Environmental Quality Incentives Program assistance enabled Brian to add an access road with geotextile, graded rock, gravel and a culvert to aid in getting to the manure storage structure. The installation of a 130-foot concrete walkway decreased mud near the barn. The installation of approximately 800 feet of grassed waterway allowed clean water from the farmstead area to flow in an orderly and proficient manner. An additional culvert carried water under the walkway and kept cows high and dry. In addition, over 2,130 feet of raised and surfaced walkways and 6 culverts were constructed to allow dairy cows access to the entire 80 acres of pasture.

In 2015, single wire fences were installed along the lanes and at the paddock edges. Multi-strand fencing was installed around the 80-acre perimeter. All fencing was installed by the Bolstad family and met NRCS standards and specifications. Thanks to financial and technical assistance by NRCS and the Taylor County LCD, a lot of hard work by the Bolstad family and a good earthmoving contractor, the Bolstad cows can now access any part of their pasture, thereby ensuring a good distribution of grazing and more than enough forage for the cows according to the Bolstad's intensively managed grazing plan.

In a recent discussion with Brian, two of the biggest improvements he noticed with the dairy cows were cleaner udders, which translates to a lower somatic cell count and a large reduction in hoof problems. Wisconsin Department of Agriculture, Trade and Consumer Protection was also a cost-share partner.

Melissa Knipfel, District Conservationist, had this to say about the Bolstad project, "Brian Bolstad's project is an excellent example of a partnership with a landowner, NRCS and the Taylor County LCD working together to solve a resource concern and getting conservation on the land."



(L) The Bolstad lane for cattle traffic before technical assistance. (R) The lane after design and construction.

- Area 2 Office Information

# AREA 2

#### **APPLETON AREA OFFICE**

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#### **TYRONE LARSON**

Assistant State Conservationist, Field Operations



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JEFF MAROSZEK District Conservationist

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MATT RATACZAK District Conservationist

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#### BARRY BUBOLZ District Conservationist

**COUNTY:** Shawano, Menominee

#### STEVENS POINT SERVICE CENTER

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ROY DIVER District Conservationist

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#### LISA NEUENFELDT

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#### WAUSAU SERVICE CENTER 326 River Drive

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AMY NEIGUM District Conservationist

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ROY DIVER District Conservationist

COUNTY: Wood

### Brown County

#### **Rotational Grazing Affords Easy Profits, Less Work**

"I was doing a lot of work for nothing," explains Tom Krueger, landowner of 155 acres in Denmark, Wisconsin. In 1990, Tom and his family moved back to the family farm and started raising some beef cattle and a few cash crops. Both he and his wife worked off the farm for a living, but Tom had an itch to continue running the land he had grown up operating with his dad and brother.

In a fall 2016 visit with the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), Tom sat at his kitchen table overlooking a newly established pasture stretching out to the edge of his farm's wood line. "A big 11 point buck keeps coming out right at that low spot every night," Tom said grinning. More than just a deer hunter, Tom paged through his book on wild mushrooms with intent of going back out that afternoon to harvest some edibles. It's easy to understand why Tom is in love with his property. Tom's land is a mix of upland prime agriculture, lowland wetlands and ponds, cool hemlock draws with meandering creeks and an old gravel quarry restored with pine plantings. It has many seasons of memories for his family. Even though a local company looking to expand a waste digester facility has offered him a generous price for his property, he can't stomach the thought of seeing any bit of it destroyed.

Since 1990, his beef cattle were raised in a lot at his brother's place down the road. When asked if he's noticed any change in workload since converting to a rotational grazing system for his beef herd, he scoffed in bewilderment. "It's like the cattle aren't even out there," Tom said. "I've spent 15 minutes feeding them in a week!" Tom's prior routine raising cattle on a lot required a minimum of a half hour feeding time every day. Cutting costs and time on equipment maintenance, such as a silo unloader and manure spreader, is a big plus. With this change alone, Tom said he and his wife are 100% on board with grazing.

The Kruegers have roughly 55 acres in permanent pasture. Around 35 of these acres were formerly cash crop. Tom sees no sacrifice here either, saving two weeks a year picking stones, slashing costs of fertilizer and saving time by not having to fix parts on old equipment.

In fall 2015, Tom came into the NRCS office initially interested in starting to graze some of his idle ground. That conversation about rotational grazing triggered his curiosity. Tom did what not all people do, he got educated. He took it upon himself to attend multiple pasture walks and even the Wisconsin Grassworks Grazing Conference. It was here that Tom had his light bulb moment, "hearing that soils guy (Ray Archuletta) talk about how grazing was like farming with nature just made it all click for me," Tom confessed.

In summer 2016, with financial assistance from the NRCS Environmental Quality Incentives Program, Tom was able to set up the entire infrastructure of fence and water for his pasture system. Keeping things low maintenance, he already has plans for pre-placed hay bales allowing him to outfeed on pasture all winter.

Tom currently has 15 Hereford cows, with plans to expand to 20 cow/calf pairs. When asked about how he plans to market, it turns out, the market found him. A buyer looking for grass fed meat came to him and walked over his operation. For now, he plans to sell to a meat shop in Milwaukee. With no official grass fed certification, they offer 40 cents per pound more than conventional beef and he doesn't have transport costs.

A couple years into retirement, this low maintenance farming lifestyle has promising prospects for Tom, affording him time to pursue his many other hobbies. Rolling through his pastures on the four wheeler, he looked at the ripe and full apple trees sculpting the edge of the woods. "I made a great pie with the soft ones last week," Tom said.



Tom Krueger, of Denmark, Wisconsin, with his herd of Herefords enjoying their new lifestyle on pasture.

### S Kewannee County

#### For the Uncommon Love of Backyard Bats

Gary Legois of Luxemburg, Wisconsin, is a wildlife and outdoor enthusiast who enjoys his 50 acres of land. He has many hobbies, and especially likes woodworking, fishing and making maple syrup. Gary expanded his hobby of woodworking to building and selling hundreds of bird houses each year. He enjoys the care and maintenance he does on the bird houses. "I am retired; best job I ever had," said Gary. Legois cherishes the time he spends on his property with friends and family, including his children and grandchildren.

Gary first discovered the USDA Natural Resources Conservation Service (NRCS) many years ago, by talking with a friend. At this time, Gary's land was rented out and farmed. Although he did not mind renting, he wanted to do more for the land and wildlife on it. Gary met with the NRCS Luxemburg Service Center and was informed of conservation options for his land that would improve animal habitat and the soil. Joe Johnson, NRCS Kewaunee and Door County District Conservationist, explained, "I have known Gary since 2005 when we first installed a shallow wildlife scrape on his property through the Conservation Reserve Program. Since then, NRCS has continued to work with Gary on several projects, including bat houses. I enjoy meeting with Gary and appreciate his passion for his property and the wildlife he works hard to provide habitat for." Efforts like this, made by local staff and conscious land owners, contribute to NRCS program success.

> NRCS is making a difference in helping landown-

ers, like Gary, through the

Upland Wildlife Habitat Bat House Program. Gary

built wildlife habit and cares for bats he removed from roosts above doorways at Luxemburg

area schools. Teachers and students were afraid to utilize doors due to the presence of bats. Gary

would graciously relocate



Gary next to one of his bat houses.

these bats to his back yard. With the support of the wildlife structure practice, Gary created a sanctuary that is a great home for bats. In the last two years, Gary has installed four hand-built bat houses. He also has multiple shallow water ponds, wooded areas and some open fields that are common ground for bat foraging habitat.



A bat house overlooking one of Gary's ponds.

Bats play a vital role in controlling populations of night-flying insects, including mosquitoes, beetles and moths. Bats do consume other food sources, such as fruit, pollen, or nectar from plants and flowers. Due to high metabolic demands, a nursing female bat can potentially consume more than her body weight in a single night. Even a single, small brown bat can consume about 600 mosquito-sized insects in one hour. Gary notices the amazing work done by bats on his property, stating that he does not have many mosquitoes. "I will do anything that comes along that deals with helping wildlife," said Gary.

The ongoing decline of bat species is contributed to loss of roosting habitat, including development, deforestation and the removal of live trees and hedgerows from agricultural fields and other rural landscapes, as well as white nose fungus. Thankfully, there are people, like Gary, that make a difference for bats and other wildlife.

### - Lincoln County

#### **Early Successional Habitat in Aspen Stands**

Jeff Anderson and his wife, Melody, dreamed of increasing habitat opportunities for not only pollinators but also Ruffed Grouse and American Woodcock (along with deer, turkeys and other wildlife) on their property "up north" in Lincoln County, Wisconsin. Jeff is a retired science teacher from Milwaukee and a beekeeper. Jeff learned of the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) through general and Honey Bee Initiative program news releases. Thus, the cooperation with NRCS began. Jeff owns an 80-acre parcel along the Prairie River. Approximately 40 acres are Aspen, 9 acres are cropland, 2 acres are forest opening and the rest is a forested riparian buffer and corridor along the river.

Conservation and habitat improvement are Jeff's passions. He enrolled 60 acres in the state Managed Forest Law Program through the Wisconsin Department of Natural Resources. In 2007, a regeneration harvest took place on the Aspen stand.



Site conditions before the Aspen shearing took place.

Jeff partnered with the NRCS, utilizing the Young Forest Initiative (YFI) and Honey Bee Initiative programs. Through the YFI, Jeff's dream became reality; 4 acres of Aspen were sheared during the winter of 2015–2016 to create more diversity, age classes and early successional habitat in the Aspen stand. "Woodcocks have already been observed this spring doing their peenting dance in the sheared Aspen area," said Peggy Winter, NRCS District Conservationist. Planned improvements on the property include converting the cropland to pollinator habitat in 2017. With the help of assistance from the Honey Bee Initiative, shrubs are planned to be planted on the 9 acres of cropland to increase diversity and promote pollinator habitat for Jeff's bees and other pollinating species.

Jeff loves every bit of the habitat work and conservation taking place on his property. He plans to continue his conservation efforts and beekeeping. "When science teachers retire, bees are enough," explains Jeff.



Aspen shearing on 4 acres to create early successional habitat for Ruffed Grouse, American Woodcock and the Golden Winged Warbler.

### Anitowoc County

#### **Small Non-Profit Proves Huge Impact in Community**



(L to R) Matt Rataczak, Jennifer Powell, Jim Knickelbine and Travis Mead viewing restored habitat on Woodland Dunes land.

Woodland Dunes Nature Center and Preserve, located between Manitowoc and Two Rivers, Wisconsin, was founded in 1974 by local people who wanted to preserve forested wetlands for wildlife, especially songbirds. Residents formed a non-profit organization, purchasing the first parcel of land in 1975. The same year, they started providing environmental education programs for school children with the help of volunteers. Today, Woodland Dunes has acquired tracts of land totaling 1,315 acres. "Much can be done to manage land for the benefit of both wildlife and people in our communities, and the results can be dramatic and very positive if the effort is applied," said Jim Knickelbine, Executive Director of Woodland Dunes.

Much of the preserve consists of old beach ridges or dunes and alternating swales, formed by previous shorelines of Lake Michigan. There are few places along the Great Lakes where these dune-swale formations still exist, and they offer very diverse habitat for wildlife. The preserve's location near the shoreline of Lake Michigan is a stopover site for many species of birds during migration. In addition to the 263 species of birds that have been found at the preserve, more than 400 species of plants have been identified, 40 species of mammals, including black bear, river otter and fisher, nine amphibians and all seven species of Wisconsin's bats have been recorded. Visitors flock to Woodland Dunes to hike their picturesque trails, birdwatch, observe other wildlife, buy local products such as honey and learn about conservation.

Year-round conservation education programs at the Center bring in more than 3,000 school children annually for educational programming. Many others visit the center for family and adult programs, events and to use seven miles of free public trails and other facilities. Woodland Dunes program opportunities include outdoor conservation, wildlife conservation, winter ecology, the nature of maple syrup, wetland education and much more. "We feel that educating youth about the nature of which they are a part is critical to their becoming good stewards of our natural resources. Our impression is, many children are increasingly unfamiliar with nature and perhaps not as frequently exposed to natural areas, as were children in the past; there is a need to teach them to understand and appreciate the natural world," said Knickelbine. "Having such a unique place to visit and explore close by, that caters to kids who've never taken walks through forests or natural areas, is so rewarding to see," said Travis Mead, NRCS Soil Conservationist for Manitowoc County.

Although the preserve is an important natural area, it has been significantly impacted by human activity. In the past, farmers allowed cattle to graze in the forest, timber was harvested, land was used for agriculture and erosion was evident. Invasive, non-native species are widespread in the preserve and need constant management. As a non-profit corporation with a small staff, managing the land for the good of both wildlife and the public is a constant challenge for Woodland Dunes. In 2006, the Center enrolled agricultural land in the Farm Service Agency's Conservation Reserve Program (CRP) and received technical assistance from NRCS. With the help of an NRCS biologist, they established a 49-acre tract of warm season native grassland. They have also enrolled 45 more acres for pollinator habitat in FY2016 through CRP. These successes resulted in a great partnership and working relationship with NRCS.

### - Manitowoc County (continued)

NRCS assisted Woodland Dunes in developing a conservation plan, enrolling 948 acres in the Conservation Stewardship Program (CSP) and 89 acres in the Environmental Quality Incentives Program (EQIP) for FY2015. Through these programs and CRP, Woodland Dunes will plant 146 acres of approved pollinator seed mix, including wildflowers, to provide pollen and nectar in early, mid and late growing seasons. The NRCS pollinator mix requires one, bunch grass species and nine forbs and/or legumes, three from each bloom period. "NRCS provided guidance for basic pollinator seed requirements; Woodland Dunes had the opportunity to choose additional seeds above and beyond the requirements to provide habitat for as many species as possible to conserve biodiversity," said Matt Rataczak, NRCS District Conservationist for Manitowoc County. From June to September, the Midwest region is the resting ground for over 65 percent of commercially managed honey bees in the country. It is a critical time when bees require abundant and diverse forage across broad landscapes to build up hive strength for the winter. To attract pollinators, an area must have adequate sources of food, shelter and nesting sites. A variety of wildflowers and grasses will provide pollinators with food. Through CSP and other partnership programs, the Center also constructed a shallow water habitat for wildlife and pollinators. Vegetative enhancements being done will benefit species such as monarch butterflies and dragonflies, as well as other pollinators. "It's fascinating to see the wildlife that moves in when you restore these habitats," said Knickelbine.

Woodland Dunes land also houses thousands of honey bees. The Center is a meeting place for the Manitowoc County Beekeeper's Association, and some local beekeepers have hives on Woodland Dunes property. Many active hives are flourishing and more beekeepers are inquiring about placing hives on the Center's acreage, due to their thriving pollinator habitat and plans for establishing more pollinator-friendly habitat. "Many of our neighbors also have hives close to the property and produce honey, so the pollinator habitat helps benefit other landowners too," said Jennifer Powell, Woodland Dunes Land Management Coordinator. The Center has additional pollinator plantings planned on other parcels for FY2016 and beyond. EQIP assistance through the Honey Bee Pollinator Effort provides guidance and support to farmers and ranchers to implement conservation practices that provide safe and diverse food sources for honey bees.

The Center is also working on forest habitat restoration to remove invasive plants and establish additional native plantings to benefit insects and migratory birds. "We're removing invasive shrubs and trees and replacing them



with natives; we're already seeing an increase in species and numbers compared to areas where non-natives have taken over," explains Powell. "These practices directly align with the mission of our organization and management plans for our land, as they benefit wildlife of many species and help maintain biological diversity within

Active hives on Woodland Dunes land.

our preserves. This, in turn, benefits our visitors and their experience here, and helps us educate more effectively about natural history and habitat management," said Knickelbine. Through the help of NRCS programs, Woodland Dunes has been able to apply conservation practices to the land, resulting in increased habitat for more diverse species. "We're even seeing some insects, like praying mantises, we haven't seen before," explains Knickelbine. Recently, the Center acquired additional acres through donation. The Center is partnering with NRCS to plan new projects available to assist in improving habitat on those and other areas within the preserve. "As a result, we are participating in programs that enhance not only our grasslands but wetlands and forested areas as well, for the benefit of wildlife, especially birds and pollinating insects, as well as managing invasive species," said Knickelbine.

Woodland Dunes is also working with nearby landowners to discuss the benefits of technical and financial assistance through NRCS programs. "We are very pleased at the positive relationship we have with neighboring landowners with whom we also work to improve habitat. In fact, two of them are also applying to enroll their lands in NRCS programs," said Knickelbine. "Many landowners are willing to implement positive land management practices on their properties, but themselves lack expertise or the resources to carry them out. Conservation plans administered by NRCS provide both of those, and they benefit the landowner, the public and wildlife."

"Woodland Dunes was formed specifically to preserve a priceless, globally important natural area and the NRCS has been incredibly helpful in that effort," said Knickelbine. "As a small non-profit, we greatly value our partnership with the NRCS and are very appreciative these programs are available and this kind of technical and financial assistance is huge in helping us meet our goals."

### 🗢 Oconto County

#### Surface and Groundwater Protection Efforts Pay Off

Jim Mahoney has been farming in Oconto County, Wisconsin, for 24 years. He has a typical rotation of corn, soybeans and winter wheat. He also crops acres of alfalfa and snap beans. The northeast Wisconsin landscape Mahoney farms offers challenges, from steep sloping sands, to poorly drained lowlands. This is why Jim likes planting cover crops.

The idea of planting cover crops is nothing new for Jim. He started using cover crops in 2008 and is considered one of the pioneer farmers in the area when it comes to trying the latest technology and conservation advances.

Jim planted a radish cover crop after his winter wheat harvest for a few years. After learning about other benefits of cover crop mixtures, he contacted NRCS District Conservationist, Jeff Maroszek. They discussed some benefits of cover crops, including increased yields and the potential to produce nitrogen for next year's corn crop.



A close-up view of cover crop pea roots. The areas highlighted show nodules of nitrogen.

"From past experience, we have already proven a 10% yield increase on corn acres after the radish cover crop. However, we decided to add in a legume, like peas, to try and produce some nitrogen," said Jim. Legumes are a unique type of plant that fix nitrogen from the atmosphere. When the plant dies and breaks down, this "free" nitrogen is slowly released into the soil profile and can be used by the



Jim Mahoney (L) and Jeff Maroszek (R) evaluate a corn field that was in a radish—winter pea cover crop the previous fall/winter.

subsequent crop. Jim and Jeff worked together to develop a custom mixture of 3 lb/ac of radishes and 40 lb/ac of peas. "Farmers are starting to see that planting a cover crop after winter wheat harvest is really a no-brainer. Rather than let their field sit idle for 2–3 months growing weeds, it can be working for you to produce nitrogen, build organic matter, and improve overall soil health," explained Maroszek.

Jim's application in the Environmental Quality Incentives Program (EQIP) was selected for funding in March of 2015. In August of 2015, he planted the cover crop mixture on 125 acres. Jim has since proclaimed, "The corn planted on these acres looks absolutely tremendous. It looks like the addition of peas put the corn in another gear." In August of 2016, he planted an additional 165 acres of this mixture on harvested winter wheat acres.

"Real-world trials by farmers like Jim will help us determine how much nitrogen is being produced by these cover crops. The goal is to learn enough, so that we may be able to credit and reduce the amount of nitrogen being applied," said Maroszek. "In addition to these benefits, having a cover crop on fields significantly reduces the sediment entering our streams and rivers during winter and spring runoff events."

### 🗢 Oneida County

#### **Fishing Fun Day Promotes Conservation Education**

Family Fishing Fun Day was a huge success at Hodag Park Boat Landing in Rhinelander, Wisconsin. Over 250 visitors were in attendance to learn about fishing and conservation. Of these individuals, 150 youth participated in the event. The Family Fishing Day was hosted by Oneida County 4-H Leaders' Association in cooperation with the USDA Natural Resources Conservation Service (NRCS), Wisconsin Department of Natural Resources (WDNR) and other partners.

The event featured multiple learning stations led by volunteers from NRCS, 4-H, civic organizations and the community. More than 45 volunteers worked the event. Volunteers used an NRCS poster to educate participants about the water cycle. Visitors were able to make bracelets with each bead representing a different part of the water cycle. Educating youth about the continuous movement of water on, above and below the surface of Earth, and that the cycle is essential for maintenance of most life and ecosystems on the planet is key to understanding the importance of conservation. "Hopefully these activities provide a take-home message that will be remembered as adults." said Tom Melnarik, NRCS Rhinelander Service Center, Soil Conservation Technician. Participants also enjoyed the activities in the NRCS Sammy Soil coloring book and were able to take a copy home. Sammy Soil promotes soil health, explains how water infiltrates the soil when it rains and educates about other conservation concepts.

Participants were also able to learn about boat safety, depth finders, leeches and live bate, fish identification, knot tying, fish cleaning, casting, reading fish maps, WDNR fish surveying, artificial bait and spinners, aquatic invasive species, water safety and life jacket demonstrations, lead safety and wildlife and fire department water rescue demonstrations. Pontoon boat rides, provided by the local Lets Go Fishing organization, were available for family fishing and demonstration.

Events and hands-on experiences, like the Family Fishing Day in Rhinelander, promote conservation education and get children interested in conservation concepts at an early age. Families become advocates of conservation and soil health by attending and participating. NRCS is the leader in helping people make sound choices for healthy land and water. Through these interactions, participants recognize the importance of clean air and water, wildlife and healthy soil. We're Helping People Help the Land, one event participant at a time!



Tom Melnarik, NRCS Rhinelander Service Center, Soil Conservation Technician displays the NRCS Sammy Soil coloring book available to children learning about the water cycle.



Youth participants at Family Fishing Fun Day gain hands-on experience learning how fyke nets can be used to sample for fish. Photo courtesy of Nick Olcikas.

### 🗢 Outagamie County

#### Hard Work Pays Off



Greg Nettekoven (R) and his wife, Karon (L), on their 800-acre farm.

Some people are born to farm. Others grow to love it. Greg Nettekoven was born into a farm family and he and his wife, Karon, have grown to love farming. Greg is a second generation farmer who grew up working on his family's 760 acres of tillable land. The Nettekoven family farm, established in the 1940s, started with milk cows, and eventually led to raising beef and hogs. Spending days in the sunshine tending to livestock and tilling fields as a child, grew into a passion for farming and conservation of the land. Greg and his wife, Karon, took over the farm in 1988, turning the beef and hog operation into working the land to grow vegetable crops, including peas, sweet corn and beans. A true family business, Greg works the land and Karon assists, while also doing the bookwork. He and his wife have changed their operation over the years, from livestock to maintaining crop diversity with a corn, bean, winter wheat and alfalfa rotation that includes cover crops.

Greg's willingness to try new crops and practices has contributed to his farming success. Greg always has conservation and soil health as a high priority. He remembers a time when plowing led to washing, gullies and erosion in his fields. In years past, driving his tractor through fields with a cloud of dust around him, watching his top soil blow away, had an impact. Greg says of the experience, "We were one of the first ones in the area to get a soil saver chisel plow to help reduce tillage and start utilizing conservation practices actively." The Nettekovens interest in soil health, and a goal of revitalizing their land sparked a connection with the Natural Resources Conservation Service in Wisconsin (NRCS–WI).

The Nettekovens first heard about the benefit of NRCS programs through articles and mailings. They have always been willing to try new conservation practices and learn along the way. Greg's forward-thinking attitude led him into a cooperative agreement with NRCS-WI to enroll his 800-acre farm in the Conservation Stewardship Program (CSP), and participate as a demonstration farm. The CSP is the largest program sign-up utilized in the state. In 2016, the program reached over one million acres of Wisconsin land enrolled in completed, or current contracts. The program gave Greg the tools, resources and incentives to try new conservation practices and reach his land management goals. "CSP and the demonstration project have taken away some of the financial risk of trying new practices due to the support I have received from NRCS," said Greg. Five years after his initial program signup in 2010, he renewed his CSP contract five more years, until 2019. CSP has given him the ability to put conservation practices on the ground, including planting and interseeding cover crops of winter rye, triticale, radish and clover. CSP also helped Greg transition to slow-release nitrogen sources, implement drift reduction strategies for pesticide applications and even recycle farm lubricants and used oil filters.

The Nettekovens have taken their program successes one step further to help share information and resources with the public and other landowners. Greg and Karon act as advocates for NRCS programs, by making their land one of four accessible Great Lakes Demonstration Farms, in the Fox River Watershed, as part of the Great Lakes Restoration Initiative for leading-edge conservation practices to reduce

33

### - Outagamie County (continued)

phosphorus entering Green Bay and Lake Michigan. Greg also developed a co-op seed formula, still successfully being used, for himself and other farmers. As a demonstration farm, Greg is assisting NRCS in considering the use of urea and gypsum applications with cover crops, and will be participating in herbicide trials, while also continuing conservation tillage/no-till practices.

Greg is a strong advocate for NRCS programs. There's many options and choices when signing up for programs, so he recommends focusing on two or three things you'd like to do to improve your land, and give them a good try, sticking with it for five years, to see a positive impact in soil health and land conservation. "Many farmers think about implementing conservation practices, but need help with resources and advice, that's where NRCS comes in. CSP is a great planning tool to help farmers think through applying conservation enhancements on the ground. They have great people with expertise on staff to direct questions and needs in the right place, examples of what has worked well before and having a local service center connection in almost every Wisconsin county is priceless," said Greg. NRCS-WI has given Greg a direct path to success in his goal of producing healthy, nutrient-rich food and preserving and bettering his land for future generations. It has also given him the flexibility to see what will and won't work for his land.

"Greg is a progressive farmer and is an excellent partner to collaborate with to promote conservation on the land. He sets an example for others, applying conservation for the good of his farm, and making his farm a model with productivity and sustainability being the goal," said Lynn Szulczewski, District Conservationist, NRCS Appleton Service Center. NRCS is committed to helping farmers, like Greg, care for their land, use it productively and excel as stewards for the future. NRCS–WI works one-on-one with you to provide the technical expertise and financial assistance to make conservation work on the ground. Greg says of the experience, "It's amazing in the spring to walk my healthy land and see crops sprouting, thinking wow, I did that. It's very rewarding."



Greg Nettekoven farm.



(L) Greg Nettekoven and Lynn Szulczewski (R), District Conservationist, NRCS Appleton Service Center, assess growing triticale cover crop on the Nettekoven's 800-acre farm.
### Shawano County

#### **Preserving Wetlands**

In 2009, Jeff Roloff, of Shawano County, Wisconsin, visited the NRCS Shawano Service Center to find out more about participating in the NRCS Wetland Reserve Program, now known as Wetland Reserve Easements. Jeff had recently purchased land north of Shawano, Wisconsin, and was hoping he would qualify to receive financial assistance and technical advice to restore a wetland on his property.



Restored wetland on property.

"Jeff had successfully restored an alternate site on his property through the program, was familiar with the process and ready to put further conservation to work on the ground," said Sherrie Zenk-Reed, NRCS Shawano Service Center Acting District Conservationist.

After timing around weather conditions and thorough conservation planning, the project was successfully completed in 2016. Through partnership efforts between NRCS Shawano and Appleton Service Centers and Jeff, a dedicated and easy to work with landowner, the restoration was a huge success.

The restored easement is regularly visited by various wildlife due to increased habitat. A visit to the site in early June 2016 found multiple broods of goslings, bachelor mallards galore, high plant diversity and a variety of wetland songbirds. Vegetation is established and prairie grasses are growing in strong. Within a few short years, the site will be a premier example of how NRCS Wetland Reserve Easements can help farmers and landowners restore degraded wetlands. The site originally included a combination of restorable hydric soil, upland acres, remnant sedge meadow, cropland and wetland forest. The site had been ditched and turned into cropland and pasture, leaving only a portion of the existing wetland functional. After restoration, the new 46-acre easement includes a series of scrapes, embankments, native prairie plantings and existing forestland. The site now has 5.5 acres of shallow water marsh, 14 acres of restored wet meadow, 5 acres of remnant sedge meadow, 16.4 acres of native prairie and 5.1 acres of forested wetlands.



Plan for the restored wetland.

### - Shawano and Waupaca County

### **Promoting NRCS as a Career**

Since 2004, NRCS has had a presence at the annual Clintonville Eighth Grade Career Fair, held at the Clintonville Middle School in Waupaca County, Wisconsin. Lisa Neuenfeldt, Waupaca Service Center NRCS District Conservationist and Sherrie Zenk-Reed, Shawano Service Center Acting District Conservationist, have teamed up to share NRCS career and Earth Team volunteer opportunities with hundreds of eighth graders from the surrounding communities.

The event is typically attended by 800 to 1,100 students from Shawano, Waupaca and Outagamie County school districts. Students have an opportunity to meet NRCS staff, chat with them about working for the agency and learn about careers ranging from agriculture, food and natural resources, to finance, manufacturing and more. In the early years, the event was much smaller, having 15 to 20 exhibitors participating. In 2016, the event had 44 exhibitors and also many more student participants.

"Not only has the event grown, we also observed overall student interest in professional level agriculture jobs has grown. Many students now explain they are college bound, which was something not readily expressed in the early years of the career fair," said Zenk-Reed. With pencils, brochures full of NRCS information and a sweet treat enticing students to stop at the NRCS booth, many participants are interested in finding out about what NRCS has to offer and how rewarding a career can be with the agency. They are specifically interested in tips on how they can become qualified for a career with NRCS and what classes to take to set them up to succeed.

"Occasionally we even run into the children of NRCS program participants who are quick to share their positive family experiences with NRCS to their fellow students," said Neuenfeldt. "The career day is always exciting; having an opportunity to impact our youth and educate them about natural resources opportunities is something we look forward to every year."



Lisa Neuenfeldt speaking with a student at the 2016 Clintonville Eighth Grade Career Fair.



Clintonville Career Fair sponsors include Fox Valley Technical College-Clintonville Regional Center, Clintonville Area Chamber of Commerce and Shawano County Chamber of Commerce.

### - Vilas County

### A Place of Solitude

The Epperson property was purchased by Keith Epperson in the 1950's as a retreat from his busy life in Milwaukee, Wisconsin. It includes 200 acres of forestland surrounding 120-acre Erickson Lake in Arbor Vitae.

Keith's son, Peter, is now majority owner of the recreation property and says the ultimate goal is to keep the land in the family. Reflecting on his childhood at the cabin, he stated "...biking through the forest, learning about the land and all the nooks and crannies, everything you can imagine about this property I have pretty much traveled it, learned it and developed an incredible passion for it."

Peter first heard about the USDA Natural Resources Conservation Service (NRCS) from a local Technical Service Provider. The taxes had increased significantly so the family decided to enroll the land in the Wisconsin Department of Natural Resources Managed Forest Law. This prompted working with NRCS to develop a forest management plan, trails and landings for the upcoming timber harvest and create wildlife habitat through the Environmental Quality Incentive Program and the Conservation Stewardship Program.

The Epperson family built bird houses, loon nesting boxes and osprey platforms together, which increased their conservation ethic and, in turn, love of the northern Wisconsin wildlife. They haven't seen an osprey yet, but there are now multiple loons nesting around the lake.

The most recent project taken on by the Epperson's was one of the first Fish and Wildlife Habitat Management Plans in Wisconsin. The plan was recently completed and Peter is excited to create more habitat on their property including openings for forage and creation of young forest habitat.

For more information about NRCS Forestry opportunities, visit www.wi.nrcs.usda.gov or contact your local NRCS Service Center.



A beautiful view of Erickson Lake.



Healthy forest stands on the Epperson property.

### 🗢 Winnebago County

#### Beginning, Veteran Farmer Grazes His Way to Success



Merrie Schamberger, NRCS Winnebago County District Conservationist, and Justin Duell, The G Farm owner, view cattle by the barn.

Entering Justin Duell's farmhouse, you'll see his passion for farming stands out quickly. A shelf of homemade maple syrup graces the entry, calling to all visitors who stop at The G Farm in Larsen, Wisconsin. Justin is a beginning, veteran farmer who joined to serve in the Army after 9/11, then came home to finish school, get a job and ultimately, start a farm. He doesn't have your traditional farmer's background. He did tax preparation for 10 years and still does it today, only doing so to keep his newly found farm passion alive.

"It really was an initial concept of preparedness. I kept looking at my cupboards and found nothing in there, so I decided to start with a little bit of canning and gardening," said Duell. "While living in the city, I scaled up and got a few chickens, to have some continuous production. I was allowed 5 pets, so I had 4 chickens and my dog, Jack." Justin enjoyed canning, gardening and raising chickens; he wanted to expand. His father and grandfather had a property with many maple hardwoods. He decided to start making maple syrup. "I only made \$90 from the syrup the first year, but I realized I loved the work and wanted to continue making syrup, so I decided to rent land from my grandpa to use the trees on his property." Duell developed a preliminary business plan, estimating the trees in the woods and the potential income. "I thought, I can really do this; I wanted to replace the tax preparation with farming; eventually with the goal of being a full time farmer," said Duell.

The G Farm was founded in August of 2014, before Justin acquired any farmland. He started the infrastructure and then purchased farmland to ramp up production. "I wasn't fulfilled completely at the end of the day with my current tax work, so I asked myself what am I going to do, then it was right in front of me; do what I really enjoyed, so I decided to actively farm," said Duell. Talk about a modern farmer, Duell listens to podcasts to learn about sustainable agriculture. He also keeps an active Instagram, Facebook, blog and website for The G Farm. Through social media, podcasts and books, he efficiently learned how to set up the business aspect of his farm, how to make an entity and more. Income through chicken production was Justin's main entry point; he purchased a 27-acre farm in Winnebago County. Duell gained a USDA Farm Service Agency loan, purchasing six pregnant cows and one cow/calf pair. He currently grazes 11 cattle. "I am trying to move to a comfortable capacity for my barn and farmland," said Justin.

### - Winnebago County (continued)

When Justin acquired the property, heifers had previously been kept in the barn over winter and 2 fields were being cropped in alfalfa. Corn was tried in another field and plowed ruts were left because the corn didn't work due to poor soil quality. Justin knew he had some work to do to improve his land and was ready to get started.



Justin utilizes his smart phone to monitor his business.

He attended a permaculture design course and heard about the USDA Natural Resources Conservation Service (NRCS) through Peter Allen, grazier and teacher of the course. "I learned about sustainable agriculture and learned so much about successful farm strategies. That's where I learned how to work with the NRCS. I am so thankful I've had the opportunity to work with local District Conservationist, Merrie Schamberger. She has a great background in permaculture; she's progressive, offering ideas and solutions; she goes the extra mile sharing articles and materials that can help me on my farm," said Justin. "He is the first farmer I've had that really is actively into silvopasture, agroforestry and shelterbelts; so I share pertinent materials with him. Justin has really done a lot of legwork for his farm to be successful and the beginning farmer program with NRCS helped him achieve his goals," said Merrie.

Through the Environmental Quality Incentives Program (EQIP), a conservation activity plan for grazing was developed. "Justin was able to start by developing a plan for his farm, to effectively manage and plan out the installation of grazing practices with the help of NRCS," said Merrie. Starting with a conservation plan gave Justin the opportunity to put his goals down on paper and see what was realistic as a beginning farmer. "It helps you plan what you can do directly with the space you have," said Justin. "Justin recently received another EQIP contract for pipeline, fencing, watering tanks and re-seeding pasture for 2017." The plan is to restore the old corn field and re-plant it with hay and other pasture plants that will benefit Justin's entire grazing system. "I have been rotationally grazing from day one. I started with 2 acres and 2 paddocks to move them around a little bit and it's evolved from there," said Justin. Merrie explains further, "The goal is to get the interior fencing and paddock fencing in this year, once the pasture is seeded, and start following a more definitive plan for moving the cattle." Justin has also applied for a high tunnel to be able to start his garden growing season earlier.



Justin's freezer that supplies his on-site store.

- Winnebago County (continued)



The G Farm barn.



Justin shows where his chickens are kept.

Merrie constantly works to establish a grazing network in Winnebago County, connecting Justin with others who are doing similar work. "We've had 10 new grazers in the last couple years, and networking with one another is very beneficial. Through these connections, Justin was able to build a relationship with another grazer to have his cattle graze on their property to breed. It also provided time for his pasture to re-establish," explained Merrie. Justin is also an active participant in the Conservation Stewardship Program through pasture planning and planting trees and shrubs that produce flowers and berries for wildlife in his pastures. "He is hosting a pasture walk on the farm this year to teach others how to effectively implement managed grazing," said Merrie. Justin is proactive and willing to help educate others where their food comes from and how to effectively graze animals. "I want to be able to advocate for someone else to farm in a manner that is sustainable," said Justin. Justin's interest in silvopasture also sparked the need to plant more trees on the property.

In 2016, he planted 750 trees and shrubs including cherry, apple, raspberry, lilac, hazelnut, black walnut, maple and more. "I created a silvopasture, planting 8 rows of trees and some around the 3-acre pond, to provide a buffer along the field edge border," said Justin. The new EQIP contract will provide assistance to add rows of trees in a different pasture area as part of a shelterbelt. "Cattle can graze in between and it adds a windbreak for them, plus shelter for winter," adds Merrie.

Justin's ultimate goal is to provide great, locally sourced produce, pastured poultry and other seasonally accessible items to his customers. He practices a holistic approach with principles rooted in creating a sustainable, diverse and well managed system. Cattle, pigs, chicken and turkeys are raised in rotating pastures that will be increased with EQIP assistance. "I also have a farm partner, Emily Heeg, I do a yearly garden with; we do vegetable stands and Community

### - Winnebago County (continued)

Supported Agriculture (CSAs)," said Duell. The garden is free from herbicides and pesticides. He and Heeg also utilize alternative techniques to increase soil fertility, avoid pest issues and increase nutrient content. "You can't have cows and manure, all this garden waste and compost; all the things you create, and not be able to use it, so I want to make my farm a full circle and use all the nutrients and products that I make," said Duell. Justin needs his conservation plan to work together with his farm goals. "In my conversations with Merrie, I was able to make my goals achievable. Once we had a conservation plan, she shared lists of practices I could implement, so I had many options," said Justin.



Justin and Merrie in front of the barn store hours sign at The G Farm.

When asked about the importance of conservation, he thinks there's no other way to farm. "I send out a weekly email and recently it was about the importance of providing high quality food and taking care of the land in the process," said Justin. Duell works two jobs and keeps the farm going because it's his passion. He knows the farm is the environment that makes him happy. "I live a pretty minimalist life, and I want to work to build a healthy, vibrant future at The G Farm," said Justin. "The toughest thing to do is to get started, and the beginning farmer program with NRCS helped me achieve my goals." He feels most proud when he gets an email from a customer he has had a direct impact on. Whether it be through the food he produces, or through a farm visit, he realizes he's making a difference. "That positive feedback keeps me going," said Justin. His goals for the future are to keep the farm successfully running, while also continuing to do more on the farm with the help of NRCS. "Justin is a great example of a beginning farmer who's partnering with NRCS, using the programs to his advantage to get his farm up and running," said Merrie. "Justin has had to learn to be flexible; it's good to have plans, but he realizes the timeline and what he can really accomplish in a year. He is realistic about goals; we can do everything he wants to do; and we are looking at the years and spacing of practices to accomplish this." Justin continues to push himself forward; in the next year he plans to build a fully diversified farm encompassing all the ecological benefits that a full eco-system brings. He truly wants to be your farmer, to bring high quality meat and produce to your dinner table.

### - Winnebago County

### Farmers See Benefit of No-Till and Cover Crops

Albright Brothers and Sons, LLC has been farming in Omro, Wisconsin, since 1948. Several years ago, brothers, James and David, passed the farm on to their two sons, Jamie and Casey, respectively. Together, they own and operate about 550 acres in Winnebago County.

Up until 2012, Jamie worked in construction, but decided to go back to farming. When he came back to the farm, he wanted to make some conservation-minded changes. The brothers implemented no-till and still practice it today. They are also committed to planting cover crops after wheat. One more improvement Jamie initiated was to keep and utilize wheat straw instead of selling it off the farm. The brothers use it for steer bedding, then, spread it back onto the fields afterwards. "Its value in nutrients is worth far more than the selling price," said Jamie.

"Jamie first came into the local U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) office in 2014, to apply for the Conservation Stewardship Program," said Merrie Schamberger, Winnebago County District Conservationist. Since then, he was awarded an Environmental Quality Incentives Program contract to plant cover crops for five years. Jamie is committed to soil health. "It's refreshing to see a farmer so passionate about it," said Schamberger.

Jamie keeps track of his soil health and has noticed a difference since adopting soil health practices, including no-till and cover crops. "In 2012, soil tests were coming back low in organic matter, phosphorus and potassium. Implementing no-till, planting cover crops and using moderate fertilizer, we have seen our numbers steadily increase. Organic matter, phosphorus and potassium have all increased. You can definitely see an increase in water infiltration as a result; less ponding and less runoff," said Albright.

In the future, Jamie plans to partner with NRCS to install grassed waterways on some of his cropland. He wants to continue his soil health efforts and keep topsoil from washing off the land.



(L to R) Jamie, Casey and Jim Albright on their farm.



No-till soybeans are shown planted into corn stubble on Albright Brothers and Sons, LLC Farm.

### - Wood County

#### **Central Wisconsin Family Farms Diverse and Sustainable**

Denise and John Hilgart own and operate 269 acres of farmland in Wood County, Wisconsin, just north of the city of Auburndale. The main focus of the farm is almost 57 acres of rotational grazing pastures for their black angus beef livestock, with another 60 acres of cropland planted in permanent forage to supply the herd with food during the non-grazing and winter months. The farm also has 72 acres of cropland enrolled in 2002 in the U.S. Department of Agriculture, Farm Service Agency's (FSA) Conservation Reserve Enhancement Program (CREP) and Continuous Conservation Reserve Program (CCRP) for 15 years, and a small area of cropland under a high tunnel devoted to vegetable production.



Denise (L) and John Hilgart (R), in their seasonal high tunnel installed in 2012.

Resource conservation has always been a main priority of the Hilgarts, along with diversity of farm products and having an operation that is sustainable for the land. The 15-year CREP/CCRP contract enabled planting of cool season grasses and legumes on some of the wetter farm fields to be set aside. Other areas were enrolled as filter strips, and almost 4 acres of field windbreaks were established to improve wildlife habitat. The CREP/CCRP contract expires on September 30, 2017, thus, the question for the operation is whether to re-enroll in CREP/CCRP, or convert these fields over to grazing acres. In 2009, the beef rotational grazing operation started with assistance from the NRCS Environmental Quality Incentives Program (EQIP). A Prescribed Grazing Plan was developed, along with installing a stream crossing and fencing, and planting forage and biomass. In 2012, a second EQIP contract added livestock pipeline, seasonal water facilities to the pasture and a yearround water facility with a concrete pad



The Hilgarts host a pasture walk in August 2013.

installed near the former dairy barn that remains on the livestock HQ. Other conservation practices developed at this time included a Comprehensive Nutrient Management Plant and nutrient management on all cropland and pasture acres. A third EQIP contract added a 30 ft by 72 ft high tunnel to the farm and shifted some focus to vegetable production. Denise and John are actively involved with the Auburndale Food Cooperative and CSA, and are always willing to help other farmers that have questions on rotational grazing or high tunnel vegetable production. All cropland acres are also enrolled in the NRCS Conservation Stewardship Program (CSP). A re-enrollment in CSP for 2017 includes 1.4 acres of native pollinator habitat planting as an enhancement to the farm. To add to their busy farm operation, Denise and John have a welding, metal fabrication and in-floor heating business located in the machine shop on the farm. Local farmers keep them busy with equipment repair and other projects also. NRCS District Conservationist Roy Diver has been serving Wood County since 2003, "I always enjoy a visit out at the Hilgart's farm; they have been great stewards of the land they own and always have more thoughts on what is next for the farm," said Diver. The most recent project is transitioning to organic beef production, and partnering with another farm in this process.

### - Wood County

#### **Cranberries at the Heart of Cranmoor**



(L to R) Roy Diver, NRCS District Conservationist; Mary Brazeau Brown, Glacial Lake Cranberries (GLC) President; and Stephen Brown, GLC Vice President, oversee cranberry harvesting at GLC.

Glacial Lake Cranberries, located in Cranmoor, Wisconsin, was established in 1873 by the Arpin family. The property was originally purchased for a lumber business, but the owners found wild cranberries growing and decided to raise cranberries instead. "They built dikes and ditches around the native stands of vines and started cultivating the fruit," said Mary Brazeau Brown, current owner and President of Glacial Lake Cranberries. Cranmoor is unique, housing 14 cranberry marshes in the township. Most of those started by cultivating native vines from the area. Wood County marshes greatly contribute to making Wisconsin the number one state in the country for cranberry production. Brown's Grandfather was the Arpin's attorney and purchased the property with a group of investors in 1923. Mary returned to the property in 1980 and currently owns 6,000 acres. The land includes 330 acres of cranberries, 2,600 acres of forest and around 3,000 acres in reservoirs that support the cranberry acres. The operation has 96 fruit beds and produces 10 million pounds of fruit yearly. "That's more than you'll eat in your lifetime," explained Mary. She runs the operation with the help of her son, Stephen, currently Vice President of Operations, four employees that live on the property year-round, seasonal staff and help from family.

Mary partnered with the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) in 2003, when programs and practices were more applicable and available to cranberry growers. "We needed renovations because it's an old marsh; some beds were planted in 1939 and needed updating. Those are my heirloom varieties," said Mary. As Mary's older producing beds age, they become more uneven because they were built before laser levelers or modern equipment were available. "To be efficient you need to square out beds, so they are level both horizontally and vertically; that's been my mission to bring everything up to the best it can be where it's most efficient to manage," explained Mary. "We reconfigured some beds and replaced the main pipeline, took out ditches, made beds longer, added new sprinklers and reconfigured the area to be managed much more efficiently." Through the NRCS Environmental Quality Incentives Program (EQIP), Mary was able to install irrigation pipeline, irrigation system sprinklers and complete irrigation water management. A heavy frost fell in the spring of 2016 and the beds with original sprinkler systems obtained frost damage. "There was no frost damage to the cranberry beds renovated through NRCS EQIP; cost-sharing made Mary's goals achievable and successful," said Roy Diver, Wood County NRCS District Conservationist.

Glacial Lake Cranberries was the first marsh to complete a forest management plan and also a nutrient management plan. Mary participates in the NRCS Conservation Stewardship Program (CSP) to manage her forested acres. "I was so glad Roy explained the benefits of the CSP program," said Mary. For forestry management through CSP, they practice conifer crop tree release to enhance the growth and health of trees, while improving wildlife habitat. "We're not managing our forests for income, we're managing our forests for natural succession, wildlife diversity and the best management practices that will support both of those missions," explained Brown. "Mary is also progressive in keeping soil healthy on her property, by participating in forest stand improvement," said Roy. "We watch the timing of our

- Wood County



A cranberry bed at Glacial Lake Cranberries before harvest.

harvest so we are not compacting the soil. The harvesters can't go in when it's really wet; we only allow travel in certain areas when the ground is frozen to further protect the soils," explained Mary. Glacial Lake Cranberries also applies split nitrogen to reduce the risk of leaching and runoff, and to make nitrogen available during critical growth stages. "You do what you know you need to do for sustainability, being proactive about what you can do and what else is out there that's available for conservation measures," said Mary.



(L) Glacial Lake Cranberries employees work to harvest cranberries from a ripe bed. (R) An employee uses a mechanical rake to loosen the cranberries from the vine. Each berry has a tiny pocket of air that allows it to float to the surface of the water.

The importance of conservation and sustainability at Glacial Lake Cranberries speaks for itself. "When you look at a property that's been commercially producing the same crop for 143 years, you have to be mindful of conservation and sustainability," said Mary. Brown has a large amount of cranberry support land and she realizes her marsh is part of a bigger conservation picture. "I feel responsible for the land. I'm not just a cranberry grower, I realize I'm responsible as a wetland manager, a forestry manager, for hiking and hunting areas, all this needs to work together; when we conserve it's about moderating everything you do and it all comes together to define conservation," said Mary. Brown realizes the value of her efforts in terms of wildlife habitat and diversity also. "Wildlife is abundant on my four miles of land. Every time I see a trumpeter swan or an eagle on the property, all the migrating birds stopping, it's really inspirational for me to take care of the land we all need and use," said Mary. Brown's son, Stephen, sees the bigger conservation picture to keep the property thriving also. "I see this marsh as a duty and I really enjoy it; it's what I want to do. We have a really unique operation out here and it takes active management and stewardship to keep it thriving," said Stephen.

Stephen and Mary realize the value of implementing a conservation plan for their property. "Conservation plans are very helpful; there's always another way of looking at something and it's really important to have those conversations. It gives you time to step back and reflect. It's important to plan your work and work your plan," said Stephen. "Roy, our local District Conservationist, what a great guy, talk about having a great conversation; he's always saying, have you thought about this or that? He sees the bigger picture and potential opportunities. NRCS is a team effort, you guys are here to help, it's voluntary and we're working together through a public-private partnership to make a good change for our natural resources; federal resources are really working with farmers," explained Stephen.

"This property is self-motivating; when you live here, work here and own it, you feel very responsible for taking care of the land. Whether it's the sunsets, sunrises, northern lights, the birds migrating through, or the harvest that's coming in, there's so many rewarding and motivating things we've been blessed with and the partnership with NRCS has been a great part of that," said Mary.

- Area 3 Office Information

# AREA 3

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#### MARK KULIG

Assistant State Conservationist, Field Operations



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### - Area 3 Service Center Information

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CHRIS MILLER District Conservationist

COUNTY: Sauk

#### DARLINGTON SERVICE CENTER 1900 Ervin Johnson Dr. Darlington, WI 53530 608) 776-4028

MELISSA BARTZ District Conservationist

**COUNTY:** Lafayette

#### DODGEVILLE SERVICE CENTER 1124 Professional Dr., Suite 100 Dodgeville, WI 53533 (608) 935-2791

ANDY WALSH District Conservationist

COUNTY: Iowa

#### LANCASTER SERVICE CENTER 150 W Alona Ln Lancaster, WI 53813 (608) 723-6377

JOE SCHMELZ District Conservationist

COUNTY: Grant

#### MAUSTON SERVICE CENTER

220 La Crosse St. Mauston, WI 53948 (608) 847-7221

JON FIELD District Conservationist

COUNTY: Juneau

#### MONROE SERVICE CENTER 1627 4th Ave West Monroe, WI 53566 (608) 325-4195

JASON THOMAS District Conservationist

COUNTY: Green

#### **ONALASKA SERVICE CENTER** 1107 Riders Club Road

1107 Riders Club Road Onalaska, WI 54650 (608) 782-0180

MICHELLE KOMISKEY District Conservationist

COUNTY: La Crosse

#### PRAIRIE DU CHIEN SERVICE CENTER

37500 US Hwy. 18, Ste 2 Prairie du Chien, WI 53821 (608) 326-7179

KARYL FRITSCHE District Conservationist

COUNTY: Crawford

#### **RICHLAND CENTER SERVICE CENTER**

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CARLTON PETERSON District Conservationist

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#### SPARTA SERVICE CENTER

820 Industrial Drive, Ste 3 Sparta, WI 54656 (608) 269-8136

MICHELLE KOMISKEY District Conservationist

**COUNTY:** Monroe

#### VIROQUA SERVICE CENTER

220 Airport Road Viroqua, WI 54665 (608) 637-2183

SAM SKEMP District Conservationist

**COUNTY:** Vernon

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### - Crawford County

### **Beginning Farmer Revives Legendary Land**



Farmer Reed Fitton and some of his grazing heifers.

Reed Fitton, of Gays Mills, Wisconsin, is a beginning farmer who has the opportunity to rent and farm a legendary piece of property known as the Ben Logan Farm. Reed strives to work the land by adhering to Logan's principles in the 1975 book, The Land Remembers. "Once you have lived on the land, been a partner with its moods, secrets and seasons, you cannot leave. The living land remembers," from The Land Remembers. Reed didn't grow up as a farmer, but became interested, after working on a few vegetable farms and a goat dairy. He had dreams to set up his own grazing and dairy operation one day. He gained experience by participating in the Wisconsin School for Beginning Dairy Farmers and is currently in his second year as a Dairy Grazing Apprentice. He's working with veteran grazer Don Boland, a close neighbor, to graze his own herd and some of Boland's heifers. During the 2014 season, Reed raised and custom grazed 30 young dairy heifers of his own and 60 of his mentor's. These animals were rotationally grazed and moved to a new paddock every day by Reed. "As a beginning farmer, having the opportunity to work with a veteran on his farming operation is great," said Fitton. Reed assists with milking 170 dairy cattle on Boland's property.

Fitton rents 105 acres, 55 tillable and 50 woodland. The owners have protected the southwest Wisconsin farm by granting conservation easement to the Mississippi Valley Conservancy, to ensure the tillable land will remain as farmland forever. Because of that, new buildings are limited, contour strips must stay on tillable acres, waterways must stay and the wooded area must be fenced and free of livestock. The owners specifically wanted a renter to graze the land, so Reed jumped on the opportunity. That's where the USDA Natural Resource Conservation Service (NRCS) offered its assistance. To abide by these special rules, Reed contacted the NRCS because he had heard about its technical assistance services and successful cost-share programs. Fitton applied and was accepted to utilize the NRCS Environmental Quality Incentives Program (EQIP) to implement conservation practices to help the land. Conservation practices Reed implemented include fencing, forage and biomass planting, livestock pipeline, watering facilities, prescribed grazing and conservation cover. "We're encouraging beginning farmers to partner with us to learn about the best conservation practices available to help their land and to encourage them by offering technical and financial assistance to aid in their success," said Angela Biggs, State Conservationist in Wisconsin.

When Reed arrived, 40 acres were in hay and 15 acres were previously in corn. The land had been farmed conventionally. The land and waterways needed some work to be revived. Through conservation efforts and assistance from NRCS, Fitton seeded six kinds of forages into 15 acres of corn stubble to create paddocks. On the existing tillable acres not previously in corn, he interseeded a forage mix using no-till, to help thicken and strengthen the pastureland. The mix included meadow fescue, orchard grass, perennial ryegrass, ladino clover, alsike clover and alfalfa. Reed specifically included clover species in his seed mix to aid honeybees as part of the NRCS Honey Bee Pollinator Effort through EQIP.

### Crawford County (continued)

From June to September, the region is the resting ground for over 65 percent of the commercially managed honey bees in the country. It is a critical time when bees require abundant and diverse forage across broad landscapes to build up hive strength for the winter. Fitton received funding through EQIP and seeded in FY14, the first year the special initiative was available. To protect the clover blossoms and aid in pollinator habitat, the livestock are not allowed to graze the plants below four inches. "Leaving the plants growing higher than the minimum required really seemed to help in reference to the number of pollinators I see around. Winter is always rough on bees, but I've seen more pollinators this year than I ever have before due to my conservation efforts," said Reed. Also, during the first year of seed establishment, he halted from having the acres until after August 1. "I let eight of the hayed acres go to seed so it can reseed itself. I've found letting the pasture go a little longer has been helpful for the pollinators and minimizes bloat in my herd because the lush clover has time to ripen up," said Reed. To attract pollinators, an area must have adequate sources of food, shelter and nesting sites. A variety of wildflowers and grasses will provide pollinators with food (nectar, pollen and/or larval host plants).

Fitton and his partner, Amanda Rubasch, are beekeepers themselves. They have six active hives and have seen great success with Reed's prairie pollinator efforts. Not only has he increased value of the feed for his grazing cattle by including clovers, he has also seen an increase in bee activity at his hives, and an increase in honey production, which he says is sweet! "Through technical and financial assistance provided by the NRCS Honey Bee Pollinator Effort, I am seeing more bee and butterfly activity this summer than I ever have. The six bee hives on our land look healthy, I've got more bees and pollinators around, and honey production is up! There's bee's all over the place now, which is rewarding to see."

"Karyl Fritsche, District Conservationist in Crawford County, walked me through the whole application process, helped me set up a conservation plan, recommended seed mixes, assisted with questions, planting and more. She's been great to work with and NRCS has always been available if I have a question or stop into my local service center office," explains Fitton. EQIP assistance through the Honey Bee Pollinator Effort provided to landowners, like Fitton, provide guidance and support to farmers and ranchers to implement conservation practices that provide safe and diverse food sources for honey bees. "Reed has been great to work with through this whole process. He has been very proactive both in communicating his long term goals, while taking into consideration the effects on ecosystem around him, which made integrating the prescribed grazing an easy fit into the pollinator program," said Karyl Fritsche, District Conservationist, Prairie du Chien Service Center.



Reed Fitton's heifers grazing the land.

Appropriate cover crops or pasture management may provide quality forage and habitat for honey bees and other pollinators, as well as reduce erosion, increase soil health and inhibit invasive species. Setting a conservation plan for Fitton helped him realize his goals and passion for farming. "Always tilling the land and letting it wash out, and then the soil is gone; you don't have to look hard to see that. There's only so much soil there. We need to give back and not keep taking, taking and taking. I'm doing my best to restore soil health in this area through conservation practices with NRCS."

Reed plans to continue his farming success as a grazer and owner of dairy heifers, while also implementing conservation practices that help the land, and pollinator habitat. "Starting as a young, beginning farmer with a dream of having my own operation, to being a successful grazer and farmer, with a herd of 60 dairy heifers of my own, I'd say I've reached my dream," explains Reed. "I wouldn't be where I am today without the technical and financial assistance of NRCS to help me reach my goals."

### - Grant County

### **Restoring the Sixmile Branch**

David and Maria Drews are producers from the Muscoda area in northeast Grant County. The Drews run crops along with beef cattle, spanning many acres and have a strong interest in conservation, particularly streambank and stream habitat work. The Drews have partnered with NRCS for many years utilizing programs such as the Environmental Quality Incentives Program (EQIP) and the Wildlife Habitat Incentives Program (WHIP). Previous streambank and stream habitat projects stretch across miles of stream in northeast Grant County on the Blue River, Big Spring and Sixmile Branch.

David and Maria utilized EQIP on a 4,500 foot stretch of the Sixmile Branch in Castle Rock Township. In addition to NRCS, Trout Unlimited Nohr Chapter partnered on the project. "Expertise provided by NRCS and Trout Unlimited is a great benefit of the partnership on the project," said David.

This stretch of Sixmile was riddled with exposed, highly eroded, vertical banks. It was a wide, slow moving stretch of stream with a high sediment load. These conditions are not conducive of thriving trout populations and many other critical species that depend on cold, fast moving water.

The nearly mile long section of Sixmile Branch that winds through the Drews pasture features 2,570 feet of riprap, 2 stream crossings, 2 vortex weirs, 8 half weirs, 17 rock deflectors, 5 log deflectors, 1 root wad and a few backwater refuge areas. The objective was to reshape and stabilize the vertical banks to prevent further erosion and to narrow the stream to create deeper, faster moving water, which was the natural state of this system many years ago.



Rock and log deflectors make the water scour the streambed, uncovering rocks and cobble that are recruitment areas for aquatic invertebrates and areas where fish spawn. Deflectors also bounce current from one side to another giving the stream a more natural winding state on straight stretches. Vortex weirs and half weirs allow the stream to create deep pockets or holes that hold fish. Root wads and log deflectors provide overhead cover for fish and sun basking spots for reptiles and amphibians. When asked about the stand-out success with this project Drew said, "The streambanks are stabilized, no bare streambanks are exposed anymore and the stream crossings are very helpful for getting cattle and equipment across the stream."

David also has a funded EQIP application that commenced in the summer of 2016. This project is planned to span about 2,000 feet on the Blue River just upstream from the 2015 Sixmile Project.

"It's great to work with a landowner as passionate about the resource as David and Maria are, and partners like Trout Unlimited, to implement projects that otherwise might not have been possible," said NRCS District Conservationist, Joe Schmelz.



After Construction. Banks were shaped, riprap put into place, then top soil was spread on the banks and they were seeded down. Also, you can see where a backwater refuge was constructed.

Before construction.

### - Green County

#### Mimicking Nature to Create a Pasture of the Future



(L to R) Jacob Marty, Green Fire Farm; and Tony Strenz, Green County NRCS Soil Conservation Technician, view cattle on the farm.

In 2015, Jacob Marty, of Green Fire Farm in Monticello, Wisconsin, established a regenerative, managed grazing operation as a beginning farmer. Jim and Jacob Marty, a father-son team, farm 400 acres in Green County. Jacob is a sixth generation farmer, with his families farm roots dating back to the 1850s. The farm was an active dairy until 2012. "After 37 years of milking, it was time for a change," said Jim. Jacob runs the new 90-acre grazing operation. His focus is grass-fed beef, pastured heritage pork, pastured poultry and eggs and sheep. His father runs the cropping operation, actively cropping corn and alfalfa, and also producing grain and hay for animal feed. "My dad is the best at making great quality hay to feed my beef cattle; we work as a team and challenge one another to benefit this farm," said Jacob. The Marty family has served as stewards of their land each generation by working hard and adopting conservation-minded agriculture technologies to continue to provide a restorative future for Green Fire Farm. The farm was even named after Aldo Leopold's famous conservation writings in A Sand County Almanac. Jacob's great uncle was a friend of Aldo and a successful forester, so conservation runs deep in the Marty family.

With a background and degree in Wildlife Ecology, Jacob was interested in conservation and endangered species. He wanted to help animals, but never thought of taking over the family farm himself. "I needed to figure out what I could apply my passion to, and realized I might be able to manage a farm to provide habitat, since I have a passion for animals. I started looking into the ways of permaculture and grassfed grazing operations, and how they can mimic grasslands and provide nesting bird habitat. That was my gateway into grazing on the farm," said Jacob. "If you do this on a broad scale, the birds are going to come back, you're going to provide habitat for many beneficial species." By going back to the family farm and transitioning some of the acres to a grazing operation, Jacob knew he could make a difference, and at the same time, enjoy his passion for animals.



(L to R) Jacob Marty; his father, Jim; Tony Strenz and Brian Pillsbury, NRCS; discuss a new managed grazing expansion.

Jacob learned about the USDA Natural Resources Conservation Service (NRCS) in school and through networking with other graziers. Jacob's first exposure to grazing was a six week field course. His interest was piqued. "That was the first time I had an opportunity to go on a farm and see rotational grazing work," said Jacob. "From there, I started reading and researching on providing habitat for wildlife in a grazing environment."

### - Green County (continued)

"When Jacob first visited his local NRCS Service Center, he came prepared with plans and goals; he had everything laid out and was more than ready to work with us; he had really done his research," said Tony Strenz, Green County Soil Conservation Technician. "I made plans to explain to my father why I wanted to do this," said Jacob. He visited many grazing operations. "I wanted to know what worked well, what I should be doing and how to finish high quality beef; I did my research," said Jacob. His goal is to regenerate and build soil, sequester carbon and enhance the health of the local water, air and nutrient cycles by observing and mimicking patterns that occur in nature through his grazing operation. "My livestock are managed in ways that mimic their natural history and behavior. This results in healthy and happy animals that produce incredible quality meat in the process," said Jacob.



Jacob's cattle graze on the farm.

Technical and financial assistance, provided by NRCS through the Environmental Quality Incentives Program (EQIP), enabled Jacob to set up a 90-acre rotational grazing operation. In 2015, he enrolled 48 acres in prescribed grazing, did 1,000 plantings for tree and shrub establishment, installed perimeter fencing, livestock pipeline, watering facilities and did forage and biomass plantings of cool season grasses on all 48 acres. Through a second EQIP contract in 2016, he enrolled 39 more acres in prescribed grazing, installed more perimeter fencing, livestock pipeline, watering facilities and did forage and biomass plantings of cool season grasses on the additional 39 acres.

Jacob seeded down over 80 acres of crop ground previously in corn, into pasture using an 18 species mix of native grasses, legumes and some medicinal herbs. "The diverse mix came in really well with clover, alfalfa, meadow fescue, radishes and turnips." said Jacob. Many of the species were chosen to provide increased habitat for wildlife and pollinators, while also providing a diverse mix of forage for the cattle. The new grazing acres are divided into 6 large paddocks, that are then separated into smaller grazing sections by portable fencing. In 2015, he additionally planted 8 acres of silvopasture to increase wildlife habitat on his own, including chestnut and apple trees. "As a beginning farmer, the NRCS cost share assistance really helped me get my grazing operation going. The initial biomass seeding was really important; seed is expensive and I wanted to plant a diverse multi-species mix. The cost sharing made my goal achievable," said Jacob.



Jacob's sheep.

Once the grazing system was planned, Jacob purchased a starter herd of 17 Black Angus cow/calf pairs from a retiring grass-fed beef producer. Since then, Jacob has added many new cattle, including 2 bulls to grow the herd. His breeds of choice are Black Angus, Red Devon and Galloway. Currently, they have 98 cattle and are due to calve around 40 to increase their herd further. "We needed to be aggressive in expanding the managed grazing aspect of our farm so we could compete and be economically profitable within a couple years," said Jacob. This year, he will be using a leader-follower grazing system where his animals, with different forage needs, pass through each pasture in succession, using the land more efficiently without destroying its ability to support livestock. "I'll be moving them twice a day; we are really trying to get our grazing system churning at full capacity," said Jacob.

Jacob partnered with a farm in Peoria, Illinois, to keep St. Croix sheep and heritage pigs on his property to graze also. Jacob takes care of over 30 pigs and 25 sheep. For the work he does, he keeps the lambs and piglets that are birthed.

### - Green County (continued)

Jacob also manages 12 different heritage chicken breeds on pasture, which offer a lot of diversity and variety in the flock. "I love being around my animals. I'm so used to being around and caring for them; when I went to a conference for a few days recently, I couldn't wait to get home and see my lambs," said Jacob.

Jacob wants others to see how his system works. He held a pasture walk on his farm to help others learn about the benefits of managed grazing. Jacob has also worked to build relationships with other grazers in the community to share ideas and knowledge. "He's always looking to do better and make conservation-minded decisions for his grazing operation and animals," said Tony. "If I do it right and share with others, hopefully others will want to do the same; I'm working towards being an influence in the grazing community. I feel like it's my opportunity to be a spokesperson for wildlife. I feel obligated to take advantage of the privilege I have with the family land and farming history," said Jacob.

Jacob took his conservation efforts further by enrolling 89 acres in the Conservation Stewardship Program for five years. He retrofit watering facilities for wildlife to escape and enhanced access for bats and bird species. He also hosted a grazing related field day. He manages livestock calving season to coincide with forage availability and he uses nitrogen provided by legumes to supply over 90% of the nitrogen needs in his pasture. "The more you do for conservation, the more it gives back to your business and farm. Our farm not only aims to weather the ups and downs of Wisconsin seasons, but grow and regenerate while doing it. The local environment including the soil, water, air and wildlife all benefit," explained Jacob. He works to make his farm more than sustainable. Jacob wants it to be regenerative, not only maintaining current production, but also increasing it, while not diminishing the resource base he relies on. "To truly be regenerative, it requires protecting and building the soil by preventing erosion, making management decisions to promote microbial life and cycling nutrients," explained Jacob. "Restoration agriculture to me, is the intentional restoration of healthy, functioning communities for our farm to be viable. All the communities, such as our pasture, crops, livestock and wildlife are integrated."

Conservation is really important to Jacob. He feels proud to provide healthy food for his family and his customers, while also providing increased habitat for wildlife. Jacob explains further, "I really care about nature, and conservation is my way to do that. Nature provides everything we need. I do everything to increase the quality of the land base through



Jacob with his pigs.



Jacob's cattle at Green Fire Farm.

conservation." Due to Jacob's passion, others are gravitating to Green Fire Farm. "It's almost like the field of dreams; build it and they will come. I have people who want to help me, and I can help them; many want to start grazing on their own. It's so neat to see the farm stimulating minds and getting others to think about and see multiple benefits of a managed grazing system," said Jacob.

Jacob is happy with his results and has put in a new application with NRCS to further continue his conservation efforts through EQIP. "I have nothing but praise for NRCS. I've told many people that EQIP worked for me. I came prepared and ready to make things work. We've built a level of trust. Every farmer is different and their situations are unique, but NRCS is ready and willing to work with everyone," said Jacob. "The conservation decisions I've made with NRCS assistance have been smart for my business and the environment."

### - Green County

### Waste Separation and Soil Health Benefits

The Truttmann Family has been dairy farming in rural Blanchardville, Wisconsin, since 1899 and they continue to be driven towards improving and growing their operation today. The Truttmanns are currently milking 400 cows and operating 700 acres of land. For the family, conserving natural resources has been a cornerstone to build upon, knowing that in using resources wisely, there will always be opportunity in family farming.

The family's conservation practices include 20 years of rotational grazing to improve animal health, productivity and effectively utilized pastureland. Cropland practices include reduced and no-tillage, contour strips and nutrient management to reduce soil erosion. Barnyard runoff has been reduced and eliminated using clean water diverting practices in the animal feeding areas.

It was apparent after a recent expansion, innovation and improvement was needed in waste handling processes on the farm. Many options were explored with the help of NRCS; the family found that a waste separation system with an expanded manure storage system would reduce manure runoff and improve soil health.

"I didn't like spreading manure on the snow in the winter," said Dan Truttmann. "We knew we were losing manure and those associated nutrients in snow melt. Those nutrients are needed for growing our crops and not good in our streams."



A manure separator removes the manure solids for use as animal bedding or compost.

With an interest in improving soil health, Dan considered the benefits of a manure separation system and the use of separated manure as bedding in the freestalls. Separated manure solids are applied to cropland fields to fertilize crops. Hauling only solids is cheaper to transport farther from the farm and the liquid can then be applied to fields near the farm site. "We are really interested in using manure solids to improve the soil health and biological actions in our soils. Research has indicated improved soil processes will improve our yields," said Dan.

The Truttmann's applied for the Environmental Quality Incentives Program (EQIP) to assist with installation costs of the system. "This is the first waste separation facility NRCS has assisted with in Green County," said Jason Thomas, District Conservationist. "We expect more interest in these practices as the technology advances. This is a great system to avoid manure runoff associated with snow melt in Green County. Our local workgroup has determined these systems as a top priority to reduce manure runoff in our streams."

This is not the first partnership forged between the Truttmann farm and NRCS using EQIP funds. The family utilizes cover crops on tillable acreage as a means to keep soils anchored where they can best be utilized, rather than ending up in streams and waterways. With an interest in alternative crops, the Truttmann's attended a cover crop field day put on by NRCS in order to learn more about different cover crop mixes. Attendance at the field day resulted in a decision to use turnips, peas and barley as an innovative cover crop after alfalfa.

The real benefactor of this partnership is the land, with which proper nutrients and cleaner waters will serve many. With healthy soil being a key component in keeping this family business viable and growing, the payback for the Truttmann Family is a sustainable future that they can proudly boast is on the leading edge of innovation in Green County.

### - lowa County

### Beef Producers Use EQIP and a "Razor" to Improve Pastures

Ken Ruppert and Karin Condon, of Dodgeville, Wisconsin, run 50 cow/calf pairs on about 150 acres of managed pasture and oak savanna. They also farm 125 acres of row crops. Local Natural Resources Conservation Service field office staff began working with Karin and Ken in 2013. They were interested in improving pasture production through managed grazing and brush management. Honeysuckle, prickly ash and multiflora rose were invading the oak savanna portions of the pasture. In addition to brush, they removed weed trees, such as cedars and box elders.

Ken and Karin were awarded an EQIP contract in 2014 for managed grazing, fencing and brush management. Months earlier Karin had noticed an advertisement in the Iowa Farm News Paper for a Razor implement that could be used on the front of a skid steer to clean out fence lines. It looked like a great tool not just for fence lines, but hard to access pastures on the property. They drove to Iowa and picked up the Razor. "The use of the Razor for clearing the larger brush meant we could cut it at ground level or remove the brush and root system for a clean result without leaving debris behind," observed Karin. The results were clear; the Razor was an excellent tool for removing brush. The application of appropriate herbicide on re-sprouts were close to 100% effective. Ken and Karin completed 11.2 acres of brush management in a couple months. "It was much easier to find new calves in the Spring without all the brush," said Karin.

After the project was completed, Karin noted, "The EQIP program gave us the incentive to clear pastures by providing financial compensation and a deadline for completion." Karin and Ken were inspired and motivated to continue to work to improve the health of their pastures. They completed an additional 19.3 acres of brush management in 2015 and were awarded a third contract to continue the work on more farm acres in 2016.



Ken working hard at brush removal in an oak savanna.



"The Razor" up close.



(L to R) Before and after photos.

### - Junean County

#### **Farmer Revitalizes Stream Habitat**



(L to R) Jon Field, USDA–NRCS Juneau County District Conservationist; Nate Bell, Juneau County Farmer; and Lucy Bell, Nate's daughter; by the restored stream on the Bell farm.

Nate Bell, of Juneau County, Wisconsin, is a third generation crop farmer who's been riding in a combine since he was three years old. Bell's grandpa bought the farm in the 1940s, and Nate always knew he wanted to continue the family tradition. "I've always wanted to be a farmer; I've got the farming bug; I'm a soil nut too; I like fixing it and making it better, balancing it, building water retention; I love it," said Bell. While attending college, Nate bought his first farm in 2003. After graduating in 2004, he started farming full time. In 2007, he took over his family's farm, renting the property from his parents, and in 2008, purchased it.

"I started realizing the importance of conservation as a teenager, and once I had kids, it clicked even more; I want to leave this land better than I received it," said Bell. Nate's first endeavor as a conservation farmer was practicing no-till. "When I was a kid, we chisel plowed everything and worked the ground a lot, then in the mid-1990s, we started no-tilling," explained Bell. The Bell family saw a neighboring farmer's success in no-tilling soybeans. "My dad liked the idea, so we tried it ourselves, by no-tilling 10 acres. We planted into some 200 bushels of cornstalk and we were thinking, oh yeah right, we're going to get beans out of here?" said Bell. The soybeans ended up doing great and they started using no-till on many more acres from there. Nate farms and manages 3,000 acres in partnership with his father, Sam and neighbor, Vern. His wife, Lisa, helps by maintaining the farm books, while also caring for their children, Lily (age 8), Lucy (age 7) and Lucas (age 3), who always want to help dad in the shop.

"Erosion was our biggest concern; we weren't building any organic matter; much of our soil is highly variable around here, some good and some sandy knolls," said Bell. "In 2011, we took one 35-acre parcel and planted a radish cover crop in the sandy soil. We thought we could try and get some tap roots down and do something to help the sandy soil there," said Bell. The landlord called Nate in the hottest part of summer and said, "I don't know what you guys did up here, but you've got to come and see this." "Everyone's corn in the area was done and this 35-acre parcel of sandy soil corn was still going strong; the cover crop bought that corn over two weeks extra time to get it ready due to increased water retention; we saw the benefits first-hand and are still seeing them with cover crops on that field," explains Bell. Nate has seen better soil health and water retention after implementing no-till and cover crops.

Nate worked with the USDA Natural Resources Conservation Service (NRCS) through the Environmental Quality Incentives Program and the Conservation Stewardship Program to put conservation to work on his farm through drainage water management, cover crops and more. He recently partnered with NRCS to complete a streambank restoration project.

Bell's property has a prominent stream running through it, where he witnessed erosion on the streambanks. "Erosion was the biggest problem on the banks; beavers also complicated the problem by plugging up the stream and subsequently flooding out my fields, which was very frustrating,"

### 🗢 Juneau County (continued)

said Bell. Streambanks were covered in overgrown woody biomass and invasive species like box elder and honeysuckle. "In the 1980s, the stream used to be beautiful and fishing was immaculate. I remember fishing the streams when I was a kid; over the years it was much harder to get around all the invasives. In 2012, it was impossible to navigate, so people stopped fishing there. It was really disappointing to see what was happening to the stream," said Nate.



Lucy Bell, Nate Bell and Jon Field assess the restored streambank plant establishment.

"When Jon Field, my local NRCS District Conservationist, contacted me with a plan to restore the stream, I was all over it," said Bell. "Having local NRCS staff in each county gives us an opportunity to evaluate land, and enables farmers, like Nate, to receive direct technical assistance on the farm," said Jon Field, NRCS Juneau County District Conservationist. Tony Pillow, NRCS Soil Conservation Technician, spearheaded the project by surveying, designing and helping install the restoration. The local Juneau County Land and Water Resources Department also provided financial assistance to make this project possible.

The streambank restoration consisted of installing 24 lunkers or artificial overhanging banks that give trout a place to hide, grading streambanks, installing 150 quad-axle loads of riprap, adding cross logs and placing boulders to move water current. Over 1,700 feet of stream were repaired through the streambank restoration project. In partnership with the U.S. Fish and Wildlife Service, large trees were left for wildlife habitat, and invasive species were shredded and cut back. "Before, there were several spots where the water was ten inches deep; it wasn't cool or running, now,

there's cool, deep, running water," said Bell. The restoration includes a pool, riffle, run system. Water pools in an area of the stream characterized by deep depths and slow current, then riffles to shallow depths with fast current, then runs with moderate current and depths greater than riffles. The mixture of flows and depths provide habitat variety to support fish and invertebrate life. "The day we visited the successful restoration, the Wisconsin Department of Natural Resources was stocking the successfully restored stream with brown trout; Bell and his family can't wait to fish the restored stream this year," said Field.

Nate also smoothed the surrounding banks and seeded down the areas with winter wheat, clover, perennial rye and other species. The plantings act as a buffer between the stream and the adjacent cropland to reduce non-point pollution into the stream. "In December, the restoration was tested; water levels were the highest I've ever seen and all the banks held up great; I was amazed there was no washing," said Bell.



(L) Jon Field displays brown trout being stocked in the stream by DNR partners. (R) Brown trout close-up.

Nate is enthusiastic about the repaired stream and habitat for fish. "I am so proud of the streambank restoration; it's really nice to have the streambank next to a major highway so people can see their tax dollars at work; everyone can see the benefits first-hand and subsequently, be supportive of future projects downstream," explains Bell.

### - Lafayette County

#### **Beginning Farmer Revitalizes Former Mining Land**



Farmer Dan Shelliam, with his cattle, on his 475-acre Lafayette County farm.

Dan Shelliam, of Lafayette County, Wisconsin, grew up on a farm and started milking cows when he was 15. In 2000, he started farming full time and subsequently signed up for the Natural Resources Conservation Service (NRCS) Beginning Farmer Program through the Environmental Quality Incentives Program (EQIP). Dan runs a cattle and cash crop farm. As a beginning farmer, he started with 25 acres of pasture and 6 acres of work ground. Today he farms around 475 acres and has 70 cattle. He farms the large area himself, with the help of his two children and wife, Kristie, who's a pro at driving the skid loader to pick up bales. His son Casey, age 12, is an avid farm helper already. Dan says he wants to milk cows. His daughter Alyssa, age 8, loves to pick apples from the trees and feed them to the cattle. "As soon as the cattle see Alyssa, they come running," said Dan.

Shelliam's father and grandfather had a milking parlor setup for a while, and that, along with many neighboring farm family and friends, sparked his interest in farming full time. He's been around farms all his life. "I remember riding the tractor, choppers and combines with my dad, venturing around the farm" said Dan. He learned about the agency in watching projects on neighboring farms that had received financial and technical assistance from NRCS. "Seeing some of the practices applied, like forestry and cover crops through EQIP, and seeing what its done for soil health and bringing wildlife back in, has been very gratifying," said Dan.



(L) Early 1900's mining ground Dan currently farms sustainably. (R) Revitalized land with radish cover crop interseeded between corn rows.

"A lot of the land I acquired was what no one else wanted," explained Shelliam. Much of the land was run down, and the ground was previously disturbed by heavy mining. "Truly a bad thing for any farmer out there, there's so many heavy metals on top of the ground around here; in a dry year, those heavy metals contribute to drying up all the soils nutrients," said Dan. "Zinc is normally measured in parts per million and the zinc I had on the land could be measured in grams." The mining ground also had major erosion issues. Dan knew it would take years to fix the soil health issues on his land, but he was up for the challenge with the help of NRCS.

### 🗢 Lafayette County (continued)



During (top) and after (bottom) streambank repair and the installation of rip rap and a ford stream crossing and seeding.

Through technical and financial assistance provided by NRCS, Dan has enrolled 325 acres in EQIP and 200 acres in the Conservation Stewardship Program (CSP). Dan applied conservation practices on much of his farm to combat erosion, improve water quality, wildlife habitat and air quality. He installed grassed waterways, rip rap, stream crossings, back water scrapes, cover crops and uses no-till and low drift nozzles on his sprayer. "After a few years of applying conservation practices and enhancements to the watershed, areas that used to flood and cause erosion don't flood anymore," said Dan. The application of over 4,000 feet of riprap and streambank repair in the watershed, installation of a ford stream crossing and seeding the ford crossing have made a huge difference in grazing his cattle. The installed ford stream crossing helps combat streambank erosion because the cattle now drink down at the gravel crossing. Shelliam now rotationally grazes his cattle through 6 different paddocks. With rotational grazing and practicing conservation, he sees grass a month longer than most if there's a drought. Dan agrees with Aldo Leopold and recited his famous quote, "Conservation is a state of harmony between men and land – when you see the cattle working the various landscapes through rotational grazing, see the cover crops sprouting after a good rain, when things are managed with conservation in mind, you witness how much better things can be."

Dan has also practiced no-till for 9 years and he utilizes and interseeds multi-species cover crops including radish, Italian rye grass, turnips and clover. Dan says he's letting his cover crop do the till work from now on. Shelliam is planning to do larger varieties of cover crops in the future. "Little implementations with the help of NRCS programs; each one helps benefit one another to get conservation done," said Dan. Melissa Bartz, District Conservationist in Darlington explains further, "He is always thinking of ways to improve his land and his operation. He wants to work with the land to improve the health of the soil and its productivity. He seeks out information and does the research needed to be successful with new management techniques such as cover crops, no till and rotational grazing."

When asked about the importance of conservation practices implemented and how they fit into the overall plan of his farm, he has a one word answer, "Sustainability." Dan's taken sustainability in conservation one step further through education. In working on over 360 acres of rented land it's important for him to keep in good spirits with the landowners and teach them how conservation can be applied on their lands.



Dan Shelliam and Matt Miller, NRCS Soil Conservation Technician, discuss herd health.

Farming is where Dan's heart is. "If you go to work and it doesn't feel like work, you're doing what you love, you get to see your production and success every year, taking pride in your work. Farming is a hard job, but to be around nature all day, it couldn't get any better."

Dan says the more he's implemented with NRCS, the better off he's been. He enjoys watching the progress. "The turtles and endangered frog populations in our ponds are even more prevalent due to the installed conservation practices aiding in increased prime habitat. All the conservation practices we've done, we've really seen a kick back towards something else, whether it's increased wildlife or combating erosion," said Dan. "Our sustainability is going to be even better in a couple more years."

### - Monroe County

### **A Groundwater Protection Practice**

Amid the scenic backdrop of contour strip-cropped hills outside of Cashton, Wisconsin, the Peterson family operates Mapltwin Farms. This 500 cow family-operated dairy has origins dating back to the mid 1900's and is located in the Driftless region of southwest Wisconsin.

While the area is well-known for its scenic coulees, trout streams and historical contour strips, it is less known for its karst geology. As the area's bedrock dissolves away over time, naturally-occurring bedrock fractures can give way to the formation of small underground tunnels and caves. In some cases, when the overlying soil begins to subside into these channels, a sinkhole forms, creating a direct conduit to groundwater from the surface.

Mapltwin Farms has a strong history of involvement with the local conservation office, including participation in conservation programs including the Environmental Quality Incentives Program (EQIP) and the Conservation Stewardship Program (CSP). When a sinkhole located near the farm's property line began to grow in size and threaten relations with the neighbors, Chris Peterson came into the local USDA Natural Resources Conservation Service (NRCS) office to apply for a Sinkhole Treatment project though EQIP.



The sinkhole posed safety concerns to the dairy operation's cattle, due to its location amid active pastureland.



One of several underground flow paths that served as direct conduits to groundwater supplies, until the sinkhole was sealed through the EQIP program.

The environmental benefits of a sinkhole closure include the elimination of a direct conduit for potentially contaminated surface water to enter groundwater supplies. Chris explains another benefit, "The project was a win/win for Mapltwin Farms, as well as the neighbors. Closure of the sinkhole improved the safety of farming operations for our pastured cattle as well as for the neighbor's [farming] equipment."

Through EQIP, the sinkhole was successfully sealed, and surface water was diverted around the closure site through the installation of a grassed waterway. The dairy's cattle are no longer in harm's way, and groundwater quality and soil resources are protected. NRCS District Conservationist (Ret.) Greg Wheeler explains: "Results like these illustrate how environmental concerns can be alleviated through projects which also serve a very real benefit to the farming operation. This effort was a success for the producer and the environment."

### - Monroe County

### **Pioneers of No-Till**



Michelle Komiskey (left), NRCS District Conservationist, and Jack Herricks, Herricks Dairy Farm, on Jack's property.

Jack Herricks, a pioneer of no-till farming in Monroe County, Wisconsin, no-tilled before it was popular or regularly accepted. In 1971, at the age of 19, Jack came home to run the family farm. "I came home with a suitcase of clothes and ten dollars' worth of change in my pockets, to ten siblings younger than me," said Jack. Jack started with 34 cows and 120 acres. He now owns 1,080 acres and 600 cows. "We farm about 1,300 acres currently," explains Jack. A century farm in 2012, Jack is a third generation farmer. He farms with his wife, Pat, and his son and daughter, who are part owners. His son-in-law and three nephews also work on the farm full time, as well as eight other employees.

Jack's dad and grandpa laid out their first contours on the property in the early 1940s, to gain greater productivity from the soil and reduce erosion. "We've practiced manure management and soil fertility practices for years to help with erosion," said Jack. In 1985, Herricks made his first effort at no-till corn. "At the time, the dealers didn't know how to set up a planter for it yet, and everyone wondered what on earth I was doing with my fields," explained Herricks. Jack and his family have always tried to make good, conservation-minded decisions with their land. Jack guoted Winston Churchill in saying "success is going from one mistake to the next, without any lessening of enthusiasm." He resolved, through the challenges, he was going to make no-till work, and his farm has been no-till for many years now. Jack is such an advocate of no-till, he promotes it and helps others in the area. "We used to go to several neighboring farms and plant a few acres here and there, with our no-till planter to help out, since no one else had the

equipment," said Jack. The Herricks have played a major role in no-till being widely accepted in their area.



Herricks Dairy Farm landscape.

Jack learned about the NRCS from his father. He has a hand written conservation plan his dad worked on with the Soil Conservation Service, now NRCS, in the early 1950s. "I remember as a boy, helping my dad put in waterways and contour strips. He was always concerned about keeping soil in place and he tried to do the best conservation practices he could in that era, so it was a natural follow through for me to continue those efforts," said Jack. With assistance from NRCS through the Environmental Quality Incentives Program, the Herricks installed cover crops, contour strips,

### - Monroe County (continued)

water retention structures and grassed waterways. They also practice no-till, forest management, timber stand improvement and manure management. Through the NRCS Conservation Stewardship Program, they increase wildlife habitat by leaving standing grain, and use a nitrification inhibitor. "The inhibitor helps retain the nitrogen for the plants to use," said Herricks. Jack also has 1,200 taps for maple syrup, another step to diversify and make his land more productive, while cleaning up and improving his wood lots.



Herrick's Dairy cows eat feed produced on the farm.

As the Herricks expand their dairy, they have started harvesting more corn for silage and there is less residue left on the fields. He protects the soil and builds organic matter by planting cover crops. "We've been using cover crops, like winter rye, for the past eight years to get cover on the ground; we make an effort to have the least amount of brown ground time we can, keeping something planted in the soil to keep it protected," explains Jack.

"It's very humbling when I walk across the farm and think my family has made a living here for over 100 years," said Jack. This is a great example of sustainability. The conservation practices Jack has implemented also help enhance his farms profitability, "The economics have to work out, over time, using no-till and cover crops, have worked and been economically profitable," said Jack. He's seen organic matter go up from 2.6 percent to current soil test levels over 4.3 percent. "Due to our healthy soil and the use of cover crops, we are able to feed all our livestock and are selfsufficient in forage and grain," said Jack. In the early 1990s, the middle Kickapoo River Watershed, where Herrick's farm is located, was targeted for improvement. Through the targeted efforts, Herricks was able to install many water retention structures. During the initial assessment, a biologist walked Brush Creek in the watershed and deemed it a dead trout stream; it was not good fish habitat. The same biologist walked brush creek 20 years later. From the efforts put forth by the area farmers and partners, the creek was deemed an active fishery, had deeper water and other improvements noted. "We have double the livestock than the rest of the watershed has; I feel the report is a direct reflection on us and how we manage our land and our manure," said Jack. "The quality shows up in the water, and that's when you know your conservation decisions are making a true difference," explained Michelle Komiskey, NRCS Monroe County District Conservationist.



Michelle Komiskey, NRCS District Conservationist and Jack Herricks, Herricks Dairy Farm, discuss conservation planning.

Jack knows farming is his calling. He enjoys being a responsible steward and it motivates him to make the best decisions he can. "The working relationship with NRCS has been a true partnership. I see them as a resource for advice and design assistance. I might have ideas, but I can go to them and say, we'd like to do this, and they can help. It makes a huge difference to have staff I can call on and know I will get qualified answers and information," said Jack. "Were partnering together to make conservation work in this community," said Komiskey.

### - Richland County

### The Ridge and Valleys of Richland County

The landowners in Richland County are as diverse as its landscape. Knowing ones passions can aid a great deal in finding happiness with your selection of property here.

For Mathew and Stephanie Kirkham, finding property in the Driftless area that fit their budget came first, then, finding a way to manage it that fit their lifestyle came second. "We had to find the acreage we wanted in the price range we wanted, after that, we looked at our options and decided grazing was the route we wanted to go," said Matt Kirkham.

The Kirkhams looked to the USDA Natural Resources Conservation Service (NRCS) for technical and financial assistance to convert their 50 acres of cropland to a rotational grazing system. Through the NRCS Environmental Quality Incentives Program (EQIP), they were able to complete a forage and biomass planting in 2015, and completed fencing in 2016. Mathew and Stephanie are excited to see their plan come together and are working towards stocking their new grazing system.

For Greg and Nina Harmes the search for property took on a slightly different meaning. "When we began looking for property, we had several goals in mind. First, our family continues to uphold the hunting traditions so important to the history of Wisconsin. Second, we wanted a variety of land types, from tillable, to prairie, to woods. Third, the land had to have water on it. The property the Harmes found in Richland County had all of the raw ingredients they were looking for. In teaming up with the NRCS, they have taken major steps toward making their future dream a reality.



A wetland scrape on the Harmes property.

"We worked closely with NRCS who helped us through the paperwork and all the steps necessary to receive our EQIP funding. When it was approved we were overjoyed and quickly engaged the help of a local contractor to begin the work," said Greg. Their deeply cut and meandering stream with steep overhanging banks and intrusive boxelder trees was transformed into a perfect habitat for spawning trout with fast moving areas and deep pools created like artwork by the perfect placement of flat stones and boulders. A small wetland scrape was also designed with curving sides and a couple of raised islands for waterfowl habitat, and it is already teaming with life. The Harmes can hear the frogs and toads singing late into the night. Through EQIP, they also planted pollinator habitat to help struggling pollinators and butterflies in Wisconsin. "We couldn't be happier with the results and hope to continue the restoration of our beautiful land so we can enjoy it for generations to come," said Nina.



Kirkham's grazing system ready for animals.

### - Sank County

#### **RCPP Reduces Erosion in the Baraboo River Watershed**

Joe and Jon Meyer are brothers who farm 1,200 acres and milk 400 Holstein cows together in the Baraboo River Watershed. The brothers are fourth generation farmers who produce a variety of crops including corn grain, corn silage, soybeans, alfalfa, red clover, wheat, oats and cover crops. Joe and Jon started no-till on portions of their operation in 2000 and have been increasing no-till acres since then. With the implementation of new manure handling equipment, their farm will be 100% no-till in 2016.



Amanda Schultz, Sauk CPZ, talks with Joe and Jon Meyer about improvements they have seen with the addition of cover crops.

In 2015, the Sauk County Conservation, Planning and Zoning (CPZ) Department was the recipient of a NRCS Regional Conservation Partnership Program (RCPP) grant to work with farmers in the Baraboo River Watershed to reduce sediment and nutrients delivered to the Baraboo River. Due to the grant program, CPZ has seen a large increase in implementation of cover crops.

The Meyer brothers started experimenting with cover crops on their already no-till operation two years ago. After talking to staff from the Sauk CPZ about the new cost share program through the RCPP, they decided to commit to planting 120 acres of winter rye following corn silage. Joe and Jon also utilized the program to fix a large waterway on their operation.

The Meyers have seen multiple benefits from cover crops. The biggest improvement noticed is greatly reduced erosion. In comparing ground with a rye cover crop to ground with no cover, Joe noted the bare ground was prone to erosion and the covered ground was erosion free.

In addition to reduced erosion, the Meyer brothers also noticed reduced weed pressure and better field conditions in the spring. These important benefits convinced the pair they will continue to plant cover crops on their operation, even without cost share assistance. They plan on working with the Sauk CPZ on newly acquired ground to experiment with different cover crop mixes to add variety to their cropping system and to repair damaged grassed waterways.

"Joe and Jon are great guys you want to work with. They keep an open mind and are willing to try new practices," explains Chris Miller, Sauk County NRCS District Conservationist. "The RCPP program has really helped us encourage farmers in the watershed to try cover crops. Once they see the benefits, they continue planting covers on their own," said Serge Koenig, Sauk County CPZ.



Cereal rye cover crops growing on a corn silage field at the Meyer's property. The redone waterway meanders through the field.

### - Vernon County

### **EQIP Assists in Restoring Stream Function**

In 2007 and 2008, Vernon County, Wisconsin, suffered from severe flooding. Dave Jacobson was one of the many landowners impacted by this event. Dave is an agricultural producer along Spring Coulee Creek near Coon Valley, Wisconsin. The '07 and '08 floods exacerbated streambank erosion, threatening adjoining cropland and impairing stream function due to increased sediment loading.

Before the floods, Dave's land was actively cropped, being used for corn, hay and tobacco. With flood waters inundating all of his cropland and almost reaching his residence, the landscape was drastically changed with rock and sand deposited on his crop fields and eroding his streambanks to 12-foot sheer drops.

Dave learned of the possibilities of EQIP funding to address his rapidly eroding streambanks after he saw other projects being done in the area. Dave had conversations with a DNR construction crew and an NRCS Soil Conservation Technician on site. After discussions, they decided the Streambank Protection practice would address Jacobson's resource concerns.

The streambank work on Dave's farm was partially funded through the Driftless Area Land Conservation Initiative (DALCI). DALCI focuses on restoring cold water stream corridors. This special funding pool helped many landowners address their stream resource concerns in Vernon County.

The work was also supported by the Wisconsin DNR through a fisheries easement. NRCS initiatives often involve partners at every level of government, from municipalities to states.

"Vernon County is home to one of the premier trout fisheries in the United States," said Sam Skemp, NRCS District Conservationist in Vernon County. "Work like this not only provides conservation benefits, but contributes to a robust local economy. Fishermen come from far and wide to enjoy our crystal clear streams."

Dave Is hopeful the streambank work will prevent future flooding because the removal of trees in the area will prevent backup. He looks forward to addressing other resource concerns on his land through the EQIP program. He plans on converting cropland back to natural cover and is particularly interested in pollinator plantings.





Spring Coulee Creek after streambank protection and fish habitat installation. Lunker structures, instream wood placement and instream rock placement provide habitat for trout.

- Area 4 Office Information

# AREA 4

#### JUNEAU AREA OFFICE

451 W. North Street Juneau, WI 53039 (920) 709-3028

#### JOHN WHITE

Assistant State Conservationist, Field Operations



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### - Area 4 Service Center Information

#### ELKHORN SERVICE CENTER 225 O'Connor Drive

Elkhorn, WI 53121 (262) 723-3216

BRANDI RICHTER District Conservationist

COUNTY: Walworth

#### FOND DU LAC SERVICE CENTER W6529 Forest Avenue Fond du Lac, WI 54937 (920) 923-3033

CORY DRUMMOND District Conservationist

COUNTY: Fond du Lac

#### **GREEN LAKE SERVICE CENTER** W1740 North Street, Suite 100

Green Lake, WI 54941 (920) 294-6474

CALEB ZAHN District Conservationist

COUNTY: Green Lake

### JANESVILLE SERVICE CENTER

440 North US Hwy 14 Janesville, WI 53546 (608) 754-6617

DAVID GUNDLACH District Conservationist

COUNTY: Rock

(920) 674-2020

#### JEFFERSON SERVICE CENTER 134 W Rockwell St, Room 120 Jefferson, WI 53549

KATHY TURNER District Conservationist

COUNTY: Jefferson

#### JUNEAU SERVICE CENTER

451 W. North Street Juneau, WI 53039 (920) 709-3030

KATHY TURNER District Conservationist

COUNTY: Dodge

#### MADISON SERVICE CENTER 5201 Fen Oak Dr, Room 208 Madison, WI 54650 (608) 224-3750

ADAM DOWLING District Conservationist

COUNTY: Dane

#### PORTAGE SERVICE CENTER

2912 Red Fox Run Road Portage, WI 53901 (608) 745-7358

TWYLA KITE District Conservationist

COUNTY: Columbia

#### SHEBOYGAN FALLS SERVICE CENTER

650 Forest Avenue Sheboygan Falls, WI 53085 (920) 467-9917

MICHAEL PATIN District Conservationist

**COUNTY:** Sheboygan

#### UNION GROVE SERVICE CENTER

1012 Vine Street Union Grove, WI 53182 (262) 747-3010

**BRANDI RICHTER** 

District Conservationist

COUNTY: Kenosha, Milwaukee, Racine

WAUKESHA SERVICE CENTER

220 Airport Road Viroqua, WI 54665 (608) 637-2183

BRANDI RICHTER District Conservationist

COUNTY: Waukesha

#### WEST BEND SERVICE CENTER

333 E Washington St. Ste 3200 West Bend, WI 53095 (262) 335-4860

MICHAEL PATIN District Conservationist

COUNTY: Ozaukee, Washington

#### WESTFIELD SERVICE CENTER

438 Industrial Drive, Suite 1 Westfield, WI 53964 (608) 296-2815

CALEB ZAHN District Conservationist

COUNTY: Adams, Marquette, Waushara

### 🗢 Columbia County

### **EQIP Helps Yorkshire Rose Farm Grazing Sheep**

Carole Pine, of Columbia County, Wisconsin, enjoys taking care of her flock of sheep as well as caring for the pastures they graze on. Carole and her husband, Dave, have a sheep grazing operation on their 35-acre farm in south central Wisconsin. Carole and Dave are originally from England. When the Pines moved to Wisconsin, they struggled to find quality lamb on the market. In 2007, when they bought their farm, they got a few animals to raise for themselves and have since expanded into a grass-fed lamb operation where they sell their product at farmers markets and direct sales. Carole and Dave seeded almost 18 acres of row crops down to pasture and inter-seeded another 8 acres with a pasture mix. They rotationally graze approximately 100–160 sheep, 150 chickens and 20 goats. The sheep are rotated between different paddocks every 1–3 days. Normally, the hen chickens are rotated through the pastures following the sheep. Carole takes the eggs to the farmer's market.



(L to R) Carole Pine, Columbia County Farmer; and Janice Kelley, USDA–NRCS Columbia County Soil Conservationist.

Dave works off the farm and Carole needs to be able to manage the farm by herself. "It really does work for one person to manage it," Carole says. "The practices and technical assistance provided by the local NRCS office and the cost sharing provided by the Environmental Quality Incentives Program (EQIP) have helped us set up our grazing operation so that I can easily manage rotating the different groups of sheep all by myself." Carole is convinced rotational grazing is important for both the health of the animals and the land. "The faster I move the animals through the paddocks, the better the grass grows. If you let them graze it too short, it sets the grass back. I'd highly recommend to anyone to make the transition to rotational grazing," said Carole. "Carole and Dave have addressed several resource concerns on their farm with the help of EQIP; the Pines have implemented prescribed grazing, livestock pipeline, a watering facility, forage and biomass planting, and permanent fence," said Janice Kelley, NRCS Soil Conservationist. "It has been exciting watching the Pines operation make the transition from row crop production and continuously grazed pasture into lush green rotationally grazed pastures," said Kelley. "It's rewarding to see the Pines so happy with their grazing system."



Yorkshire Rose Farm sheep herd.



(L to R) Janice and Carole inspect pastured acres.

### 🗢 Columbia County

#### **Natural Resources Education and Restoration**



(L to R) Twyla Kite, NRCS District Conservationist; Nichol and Craig Swenson, WRP landowners and Directors of Flyways Waterfowl Experience; and Tally Hamilton, Farm Bill Biologist, NRCS and Pheasants Forever Partnership, view the restored WRP easement.

In 1999, Craig and Nichol Swenson, of Columbia County, Wisconsin, bought property in Baraboo. They are also Directors of the Flyways Waterfowl Experience open to the public on Highway 136 south of Baraboo. The Swenson property was enrolled in the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) Wetland Reserve Program (WRP) in 1998, but restoration work had yet to start when they acquired the property. The Swensons were excited to restore their acres and actively manage their land through WRP. Craig and Nichol own 23 acres of the WRP and three other neighbors own the rest of the 80-acre easement.

The importance of conservation is something Craig learned really early in life. "I grew up in McFarland, Wisconsin, and we farmed a bit; you learn what conservation is all about. We've hunted, fished and trapped our whole lives too. If you don't consider conservation, you won't have clean water, animals and our other important natural resources," said Craig. Nichol has a different background story concerning what conservation means to her. She grew up on a barrier island in South Jersey, which fueled her interest in soil conservation. Nichol explains, "I see conservation from a different perspective, an ecological perspective. That's why we started the Flyways Waterfowl Experience, to bring kids in to talk about the importance of these things. We strive to teach why we need to respect the land so it's around for future generations." Nichol and Craig can teach first-hand, the importance of active conservation and land management at their Experience, because they are stewards of the land they own.

WRP, now known as Wetland Reserve Easements, is a voluntary opportunity to restore and protect wetlands on private property with the help of NRCS. Landowners, like the Swensons, receive technical and financial assistance to restore wetlands that have been drained for agriculture. The Swenson land was previously conventionally farmed and corn was always grown. The erosion was vast, flooding was a constant concern and something needed to be done. Craig and Nichol worked with NRCS and other partners to fill two drainage ditches and install an overflow structure on their easement property. "In 2001, the overflow structure was completed and wetland water could be let out efficiently, as needed," explained Craig.



(L to R) Nichol and Craig next to a waterfowl exhibit inside the Flyways Waterfowl Experience.

### - Columbia County (continued)

Since the successful restoration, the landowners are able to view many diverse species every day. "We see so many great blue herons and egrets walking around the wetland; we've seen a huge increase in wildlife species since the restoration," added Craig. "We've seen a lot of monarchs all over the prairie acres and we encourage milkweed too." Tally Hamilton, Farm Bill Biologist in partnership with NRCS and Pheasants Forever adds, "The Swensons have many pollinator friendly plants in their prairie, which helps bring in many beneficial insects and provides nesting cover for wildlife." The Swensons utilized state resources to initially seed the grasslands surrounding the wetland restoration with native, pollinator-friendly, grasses and forbs. "At the WRP easement outlet, now going into the Baraboo River, the water clarity is very clear and without sediment due to all the plantings," explained Craig. The Swensons get many duck species on the property that roost there, including wood ducks in the fall. They especially love seeing the ducks because of their interest from the Waterfowl Experience. "It's also an oasis for geese, pelicans, otters, beavers and more," said Craig. "Last year, in the fall, we had 500 pelicans roosting in our area. We see so many eagles and ospreys out there also," added Nichol. The Swensons noted the abundance of wildlife has really improved in the grasslands acres also. "My brother Richard and I have 45 acres combined in prairie; we see deer, turkeys, rabbits, snakes and a tremendous amount of frogs too," said Craig. The Swensons also complete active burning and mowing practices; maintenance done by themselves. These management practices restore the prairie and help rid it of invasive species. Active weed management and mowing on the property has been crucial in battling the wild parsnip, which is spreading rapidly across Wisconsin. Since the WRP restoration, the Swensons have burned the property five times and have plans to continue the practice in the future. They are also taking measures to control invasive carp in



White pelicans stop for a swim and feed on fish at the restored WRP easement on the Swenson property.

the marsh. "When the marsh fills up two days after a 3-inch or more rainfall, the largest issue we currently deal with is controlling the carp that come in from the river and root up all the vegetation. With the overflow structure in place, we can draw the water down in the winter to deal with some of the carp," said Craig.

In 2012, with interest in education and conservation of lands, the couple opened the Experience. "I wanted to do something that was going to be meaningful. Natural resources education is so important," said Nichol. The Experience houses world class exhibits and interactive displays, a duck blind theatre, waterfowl art and galleries, decoys, duck calls, a virtual laser arcade and much more. "I wanted to teach about the importance of natural resources history and the duck stamp. It's a story that needs to be told, many people don't know about. Ninety eight cents of every dollar that is used to buy duck stamps at the post office goes back into habitat conservation. That's what is used to pay for the resources to develop things like waterfowl production areas and national wildlife refuges," said Nichol. "We need to have educational places, like the Experience, where the general



(L to R) Tally, Nichol and Twyla view the restored prairie acres on the Swenson property.
### - Columbia County (continued)

public can learn the importance of our natural resources." The Flyways Waterfowl Experience gets many visitors of all ages and welcomes schools and groups. "We also have an upstairs classroom for meetings, school groups and events," said Nichol. The Swensons are ready to teach students from pre-K, up to college level, and even host international students, accommodating the needs of different individual groups. "These youth are the policy makers of the future and they need to be taught the importance of conservation and managing our natural resources in a way that is sustainable."

Nichol is proud of her educational work at the Experience and she feels it's a success if she is able to impact even one child's life through it. "We bring in the National Duck Stamp Art Exhibit and encourage area teachers to bring their students in to learn about the program. In fact, the U.S. Fish and Wildlife National Junior Duck Stamp Art Exhibit was at the Flyways Waterfowl Experience for all to see the first place winners of every state, and 15 of the adult entries from various states," added Nichol. Plan your visit and find out more information about hours by visiting www.duckmuseum.com. "We're so excited to house this wonderful natural resources exhibit; we love getting people enthusiastic about it," added Nichol.

The Swensons look forward to enjoying their land and doing active management to keep it thriving. They also look forward to continue to educate the public that visit the Flyways Waterfowl Experience. "Our goal is to bring in more classes through building partnerships with local schools and organizations," said Nichol. Twyla Kite NRCS Columbia County District Conservationist, adds "It's been a pleasure partnering with the Swensons; they have an excellent conservation land ethic, are doing active management and promoting natural resources and habitats through their Flyways Waterfowl Experience. We look forward to continuing our partnership through their WRP."



(L to R) Nichol, Craig and Tally inspect land maps while viewing the restored WRP easement.

Jerome has worked actively to restore his farms woodlands back to open oak woodlands and oak savanna communities over the past ten years. He partnered with the U.S. Department of Agriculture (USDA), Natural **Resources Conservation** Service (NRCS) through a Wildlife Habitat Incen-

### - Dane County

#### **Century Farm Restores Woodlands, Savanna and Trout Stream**

Helmenstine Hillside Vue Farm, located in the Driftless area of western Dane County, has been in the Helmenstine family for over 100 years. Jerome Helmenstine grew up on the farm and has worked on the land for many years. He and his wife, Jackie, raised their family on the farm and hope to, one day, turn the farm over to their sons.



Bat houses installed through NRCS EQIP funds.

tives Program contract to combat invasive species on a 30-acre unit including an oak savanna. At the same time, Jerome also began restoring the stream running through his farm utilizing Streambank and Shoreline Protection and Stream Habitat Improvement and Management. Trout Unlimited holds a streambank easement, allowing public access for fishing in the restored trout stream. Further projects were funded through the NRCS Environmental Quality Incentives Program on other units, expanding the restored savanna and open oak woods. Jerome received additional funding through the Wisconsin Department of Natural Resources Landowner Incentive Program for sensitive areas where rare plants, including state-listed purple milkweed, were identified following restoration efforts. Annual bird surveys and university studies show a highly diverse avian population returning to the restored areas. Species, such as Redheaded Woodpecker, Pileated Woodpeckers, Common Nighthawks and American Kestrels have returned and use additional nest boxes erected by Jerome. Jerome also

enrolled low farmland along the stream in the Farm Service Agency's Conservation Reserve Enhancement Program and planted native prairie habitat. "I have really enjoyed the hard work and fruits of our labors watching the change in the landscape and wildlife since we started this project," said Jerome.

"Over many years, Jerome has proven to be a tremendous steward of his land and a great friend to the wildlife in the Dane County area," said Adam Dowling, NRCS District Conservationist in Dane County.



(L to R) Jerome and Jackie Helmenstine on their property.



Spring at Helmenstine Hillside Vue Farm restored with funds from NRCS programs, including the Wildlife Habitat Incentives Program and the Environmental Quality Incentives Program.

### Dodge County

#### A Leader in Conservation

Conservation leader, Dale Macheel, of Dodge County, Wisconsin, operates Macheel Enterprises and Werld Farms. Dale is one of the foremost conservation-minded producers in Dodge County. With over 1,000 cropland acres in production, he knows taking care of his most vital money-maker, his soil, is important.

Dale has a long history with United States Department of Agriculture programs. He began working with the Natural Resources Conservation Service (NRCS) when he enrolled his first acres in the Farm Service Agency's Conservation Reserve Program (CRP). Working with NRCS planners and technicians, Dale also installed soil conservation practices such as grassed waterways, through the Environmental Quality Incentives Program (EQIP). Building on that experience, Dale now includes the Conservation Stewardship Program (CSP) in his land management plans.

Of all the programs Dale has worked with he says, "CSP is one of the best." He first enrolled in the CSP in 2010. When it came time to re-enroll his CSP contract, he was looking for a way to incorporate new technology into his operation that offered better economical and environmental benefits. Using the CSP planning process he chose enhancements AIR 04 and WQL 11, which utilize sprayer and variable rate technology to address air and water quality resource concerns. Two years into the contract, Dale says "the best part of CSP is getting paid to do new practices. Some of the practices are expensive and I don't know if I would have taken the chance." Incentives offered through CSP made Dales conservation implementation a reality.

Dale also used CSP to introduce cover crops into his cropping system. He followed NRCS planning guidance to establish clover and radish as a cover crop into his winter wheat as a way to protect and enhance soil health and produce nitrogen for the next crop. Did it work? Pictures don't lie. Dale explains, "after my cover crop success, I drive by wheat fields and wonder why aren't others doing this?"



Close up of a forage radish.



Forage radish and red clover seeded into winter wheat stubble.

### - Fond du Lac County

#### Frost Seeding Clover? It Works!

Neil Drummy, a Wisconsin row crop farmer, owns and operates land in Dodge, Fond du Lac and Columbia Counties. Neil is consciously a good steward of the land in the conservation decisions he makes, while also looking for ways to increase yields without causing undo harm to the land he operates.



*Close-up look of plants per square foot. Picture taken on August 11, 2016.* 

In fall 2015, Neil attended a cover crop meeting hosted by local seed dealers. They promoted seeding of cover crops, specifically recommending crimson clover in conjunction with wheat. Neil was convinced and took this idea to heart, making a decision to give cover crops a good try on some of his wheat ground. In winter 2015, while visiting with his tractor dealer, Neil was informed the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) provides cost share assistance for practices, like cover crops, through the Environmental Quality Incentives Program (EQIP). In late winter 2016, Neil visited the NRCS Fond du Lac Service Center. He discussed conservation planning and cover crop options with local NRCS staff. He also received technical assistance in feasibility to frost seed clover with urea in spring. "In conservation planning with Neil, I thought it would be possible to frost seed clover with urea; this would help Neil specifically by growing his own nitrogen; it's a great concept worth trying," said Cory Drummond, NRCS Fond du Lac District Conservationist. Neil submitted an EQIP application and with Cory's assistance, planned frost seeding 24 acres of crimson clover into existing wheat planted in the fall of 2015.

"The timing of doing a frost seeding like this is key. You want to be able to hit it just right, and Mother Nature has to be in your favor," explained Neil. "We requested a variance with NRCS to be plant clover in mid March. We had warm days and a snow storm in March, so our planting window was narrow."

"Neil's stand of clover took well and looks excellent," said Drummond. "If you plan properly and are willing to try something different, success can happen." Neil will terminate the clover in the fall and plant corn next spring. The savings he will have gained by growing his own nitrogen, instead of buying fertilizer, should be quite noticeable.



Frost seeded of Crimson clover into winter wheat on March 21, 2016. The wheat has been harvested and the clover is established.

### - Fond du Lac County

#### **Produce With a Purpose**

Richard Slager, of the Empire Township in Fond du Lac County, Wisconsin, is an advocate for producing healthy fruits and vegetables while teaching people about sustainable agriculture. He and his wife, Dawn, are passionate about few things.

One, they realize the effects of what poor food has done to their local communities. "Most kids don't realize where their food comes from," explained Slager. Two, is their love for Africa. Since 2000, Richard and Dawn have been actively involved in the continent close to their hearts. Since 2001, Rick has spent a considerable amount of time in West Africa working in agriculture. With that, Produce With Purpose Farm was born.



The Fresh Market Bus delivers fresh vegetables throughout Fond du Lac County.

Rick and Dawn realize the importance of protecting the environment and creating sustainable agriculture methods. Increasing quality and sustainable production on their farm in the U.S. spills over in other parts of the world, as they partner with small and medium size farms in Africa to provide assistance and agriculture education. This passion inspired the Slagers to name their farm Produce with Purpose.

"We love diversity. We believe that not all carrots are orange and potatoes, brown. We love to educate people on the value of eating healthy and encouraging youth (and adults) to find out more about where there food comes from," said Richard.

In 2012, Richard applied for the U.S. Department of Agriculture, Natural Resources Conservation Service, Environmental Quality Incentives Program and received cost share assistance to install a seasonal high tunnel on land he and Dawn own in Fond du Lac County, Wisconsin. The high tunnel has enabled the Slagers to grow many crops, from arugula and Asian greens, to beets and broccoli. In January 2014, the Slagers started a fundraising campaign and raised more than \$6,000 to purchase a bus to be used to deliver fresh vegetables. Last summer, Rick's cousin pitched in with her artistic talents and painted the bus, now known throughout the county as The Fresh Market Bus.

Once the bus was ready for deliveries, Rick reached out to several YMCAs and institutions to ask to park the bus in public locations. Almost immediately, word about the bus spread. Local businesses ask the Slagers to stop at their workplace so employees can buy fresh produce. "It helps businesses boost their wellness efforts," said Richard. The bus makes eight stops throughout the week in the Fond du Lac area and also stops in Oshkosh on Tuesdays, Milwaukee on Wednesday nights and at the Oshkosh, Appleton, Fond du Lac and West Bend farmers markets on rotating Saturdays. Stop by and visit for some fresh veggies near you!



(L to R) Dawn and Richard Slager, founders of Produce With Purpose.

### - Green Lake County

#### **Decades of Conservation**

Conservation has been a part of Richard Dukelow's farm since the very beginning. Duke can remember when he was 6 years old "getting in the way" while his grandpa fixed stone walls with a stone boat and horses. These walls were at the edge of two gullies, dropping off the Markesan Prairie into Roy Creek and the Big Green Watershed. The ravines looked similar to rock formations you may see today in Wisconsin Dells. These stone walls, fixed by his grandpa in 1937, held back 30-foot head cuts.



Grassed waterway construction after winter wheat harvest.

Duke began his solo farming adventure in 1959 with a Case 900 tractor and 250 acres. He continued to be a conservation leader in the community, implementing ridge till practices in 1967, which progressed into running a 600 acre no-till farming system today.

With assistance from the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) National Water Quality Incentive (NWQI) - Big Green Lake Watershed, Richard continues to maintain and improve his farming operation. He installed grade stabilization embankment dams and grassed waterways in front of the old stone walls he watched his grandpa maintain. Looking into the future, Dukelow Farms plans to continue to adopt and implement new conservation enhancements through the NRCS Conservation Stewardship Program. The program enrollment will add to the existing conservation practices already implemented as part of Richard's corn, soybean and winter wheat no-till rotation. "This year, I'm planning a clover and rye cover crop after the winter wheat, which will be terminated in the spring prior to planting corn. I needed to do some tillage a couple years ago, but hopefully that is the last time I will need to till. I've made some mistakes over the years, but I think I've also done a lot of things right," said Richard, discussing his decisions regarding

reduced tillage, his conservation legacy and the cooperation between him and his neighbors to help with custom operations, including harvest. "You probably won't meet too many farmers born in the 1930s, actively studying university research on cropping systems. Richard is a leader in adopting new conservation activities to improve soil health, productivity and profitability. NWQI assistance enabled the install of various conservation practices in the Big Green Lake Watershed over the last five years to improve water quality. Conservation minded farmers, like Richard, are an important reason why this program has been successful," said Caleb Zahn, NRCS Green Lake County District Conservationist. The Green Lake NRCS has also worked closely with their local conservation partners including the Green Lake Land Conservation Department and the Green Lake Sanitary District to help with design, installation and additional funding for specific practices. Today, Dukelow Farms is better off because of Richard's decades of conservation-minded choices.



(L to R) Caleb Zahn, NRCS; Richard Dukelow, Dukelow Farms, Inc.; and Paul Gunderson, Green Lake Land Conservation; stand on top of a berm constructed for one of the grade stabilization structures installed on Richard's farm.

### - Jefferson County

#### **Restoration Leads to Flourishing Wetlands**



(L to R) Ohne Raasch, of Lake Mills, Wisconsin, and Mark Steinfest, Elkhorn Area Civil Engineering Technician, U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), view the restored easement on the Raasch property.

When land floods more often than it grows crops, why not let it go back as nature intended, to a flourishing wetland. Ohne and Karen Raasch, of Lake Mills, Wisconsin, had goals to do just that with a property they purchased. Since the age of 12, Ohne grew up hunting on the land they acquired from a farmer friend in 2010. Karen also got her first buck 40 years ago on the 155-acre farm. The Raaschs had always loved the land and wanted to own the property. They had many goals and aspirations for the land. "When Ohne and Karen were able to acquire the farm, they really wanted to restore the property to its original beauty as a wetland," said Mark Steinfest, Elkhorn Area Civil Engineering Technician, U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS).

Ohne had built a working relationship with NRCS through the Farm Service Agency's Conservation Reserve Program and through NRCS cost share assistance, providing for installing tree and shrub plantings in the past. Most recently, NRCS partnered with Ohne to acquire a permanent easement through the former Wetland Reserve Program (WRP), now known as Wetland Reserve Easements (WRE), and then completed the restoration through a long-term agreement. With WRE, NRCS offers 30-year or permanent easements to landowners who want to maintain or enhance their land in a way beneficial to agriculture and the environment. "The land was previously being cropped; part of the farmland was showing signs of erosion; some conservation needed to be done," explained Ohne. "I didn't know much about the logistics of WRP when I started, but working with NRCS, I was excited about the opportunity to restore my land." Ohne has always had an interest in conservation and restoring land to bring wildlife back. "I started by putting out duck houses with my neighbor and it grew from there. At first I had 15, and now I have 350 on multiple properties! I've been involved in conservation organizations over the years and realize the importance of making good decisions for our natural resources," said Ohne.



A pond is dug in a lowland area of the Raasch property during easement restoration construction.

### - Jefferson County (continued)

The local Elkhorn NRCS Service Center worked with Ohne to develop a restoration plan for their property. A plan is completed so owners know what to expect throughout the easement process. "We even worked together to figure out different soil types and what I could plant where, that would work best," said Ohne. "There are some changes along the way as needed, but we work together to come up with a preliminary easement management plan that is best for the land and landowner," said Mark.



A newly created shallow scrape is thriving and filled with water after construction in a lowland area on the property.

The restoration started by Ohne seeding highly eroded fields with native, local seed. Then, excavators dug and scraped 13 shallow ponds to remove sediment deposited from the upland crop fields. "This is really wet soil, so trucks had tracks instead of wheels on them. They moved the soil from the scrape ponds to the ditches that needed filling in. The soil was placed in the ditches in layers so it would push the water out and seal well; the ditches were also built up for settlement. The specialty equipment kept the disturbed areas minimal," said Mark. They filled in 4 ditches and a small diversion; holding that water on the cropland and halting runoff. "Wetland restoration also helps to eliminate invasive species, like reed canary grass, by putting water on it. Something unique about the property, there are lowland and upland areas on the easement," said Mark. Lowland areas are now restored wetlands with open water areas that will soon revegetate with wetland plants. Upland areas were seeded, oak and cherry hardwood trees were planted and two small food plots for wildlife, including corn and soybeans, were also planted. Those crops are left over winter to provide food and shelter for wildlife. "The hardwoods planted, give great habitat for roosting birds like songbirds and doves and hold up to future management tools, like the use of fire," explained Mark. Ohne comments further, "The restored wetlands filled in really quick with water; they have never been close to drying out. I've seen a lot of increased wildlife recently; I've seen many more geese, Sandhill cranes, ducks and turtles." The Raaschs love seeing the results of what their efforts can do. They've seen an abundance of pollinators and beneficial insects also. "When I walk around the restored prairie, I've seen an increase in bees and many other bugs I've never seen before," said Ohne. Since the restoration, NRCS Farm Bill Biologists visited and are excited about seeing many native species establishing on the easement.

Ohne took ownership during the construction process and worked to keep every step as conservation minded as possible. "Ohne has really gone the extra mile; he was out there dragging the land and seeding it to add a temporary cover; he also planted trees, and worked to plant seeds on any disturbed areas as the contractor worked on wetland restoration," said Mark. There were no disturbed soils during the project for more than a week because of his proactive seeding of areas. Ohne worked with local neighbors, family, friends and Madison Audubon volunteers to collect and plant native seed in the area. Some of the Raasch fields have over 60 native varieties of seed, including prairie grasses and forbs. "This project was really a team effort and Karen and I are so thankful for the financial and technical assistance we received from NRCS, family and friends, neighbors and partners," said Ohne.



Blooming prairie after restoration.

### Sefferson County (continued)

Although the easement restoration was completed in the fall of 2015, Ohne still proactively works on the property, fighting invasive species like reed canary grass, buckthorn and box elder. "After spraying, we collect and spread out native seed over the invasive areas, working on the areas one by one," explains Raasch. "Ohne's been proactive, and I recognize his efforts for taking care of the land and working to combat invasive species," said Mark.

Easement restorations through WRP/WRE take time, so landowners need patience and commitment to the process. Mark explains, "The Raaschs were just that, the perfect, proactive landowners to be involved in the process." "The superman, Mark from NRCS, flew in and really helped me through the whole process. I knew the results would far outweigh the time commitment," said Ohne. Ohne and Karen are happy with the results and excited to continue managing their land in the future. "You open up a wood duck house and see it's occupied and eggs have hatched, it makes you feel really good, like you are making a difference. Any habitat work done to make an improvement is our thing. We are so glad we were able to get the farm and really restore the wetlands on it. The NRCS office is exceptional considering the small amount of staff they have and how much workload they complete, including my restoration," said Ohne.

For more information about Wetland Reserve Easements, contact your local USDA Service Center or visit www.wi.nrcs.usda.gov.



(L to R) Ohne and Mark view the completed easement restoration.



Ohne's grandson, Jace, approves of the newly restored wetland.

### - Rock County

#### **Volunteer Efforts Restore Habitat for Rare Species**

The Green-Rock Audubon Society, Inc. (GRAS) was incorporated in 1991 as a non-profit organization and operates as a local chapter of the National Audubon Society in Green and Rock counties, as the name implies. The mission of the Society is to restore, preserve and protect the environment for everyone, including future generations through education, activism and conservancy. In the early 2000s, they acquired 250 acres of land and a conservation easement, becoming a land trust. Not long after acquiring the land, they began making concerted efforts to restore the natural communities present at each of the publicly-accessible properties they manage (aka "GRASlands") which include: Androne Woods, Cleophas Reserve, Gabower-Reilly Reserve and Spring Creek Reserve.



Victor Illichmann, Land Manager for Green-Rock Audubon Society, at Androne Woods, one of several sites he is helping to restore.

GRAS began working with USDA Natural Resources Conservation Service (NRCS) in 2004, soon after the land acquisition. Brush management was completed at Androne Woods and Spring Creek with technical and financial assistance through the NRCS Environmental Quality Incentives Program (EQIP). Prescribed burning at Gabower-Reilly and Spring Creek were completed in subsequent NRCS Wildlife Habitat Incentives Program contracts.

In 2010, Victor Illichmann, Land Management Chairman and Volunteer Coordinator for GRAS, worked with NRCS staff through a Conservation Stewardship Program (CSP) Nonindustrial Private Forestland (NIPF) contract to enhance the habitat at Androne Woods and Gabower-Reilly.

In 2013, they received an EQIP contract to develop a Forest Management Plan to identify further resource needs at Androne Woods. The Plan identified the need for herbaceous weed control, brush management, forest stand improvement and tree/shrub establishment. The goal is to restore the oak woodland plant community at this site, which is a rare gem, as it is part of the original homestead never grazed by livestock.

A subsequent EQIP contract has provided financial assistance for the implementation of practices completed by a small, core group of volunteers working to bring back the native plant community. They concentrated on removing shade tolerant trees, battling garlic mustard and buckthorn and under-planting oak saplings. In 2016, the progress is evident, according to Illichmann. "This spring we had 16 acres of wild geranium in bloom. The woodland anemone, joe-pye weed and starry soloman's plume have spread throughout the woods. We have white hyssop spreading. In the last 2 years, we've had the tall meadow rue appearing. We have yellow lady slippers in 3 locations now. We have so much showy orchis that we lost count. Every year we discover something we didn't know we had. This year, it was columbine and poke milkweed," said Victor. The birds have benefited as well. Scarlet tanagers, indigo buntings, baltimore orioles and others frequent Androne Woods. Victor emphasizes, "None of this work would get done without volunteers. It's all about the people volunteering to make it happen."

At the Cleophas Reserve, an EQIP contract through the Driftless Area Landscape Conservation Initiative is providing funds to complete prescribed burning, oak savanna restoration, and bluebird house installation on 36 acres.

The Society received a 2016 CSP NIPF contract to further improve wildlife habitat at Androne Woods and is in the process of acquiring another 75 acres of cropland, woods and the Conservation Reserve Program. "There's lots to do there to restore the land," says Victor.

### - Walworth County

#### **16th Annual Prairie Walk Returns to Its Roots**

Sixteen years ago, Ray and Sharon Rippel, of Burlington, Wisconsin, hosted the very first Prairie Walk in Walworth County. On September 28, 2016, the Rippels again, hosted the Prairie Walk. Ray and Sharon own approximately 35 acres of cropland originally enrolled in 1999 in the U.S. Department of Agriculture (USDA), Farm Service Agency's (FSA) Conservation Reserve Program. "We started simple, with the four big grasses; Big Bluestem, Little Bluestem, Switchgrass and Indian Grass," said Ray. Over the years, the Rippels have worked very hard to maintain a high quality prairie on their property.

In 2012, with the help of USDA's Natural Resources Conservation Service (NRCS) and FSA, the Rippels converted some areas of their prairie into pollinator habitat. Herbicides and mowings were used to suppress the grassed areas. Then, 20 different forb species were planted. Prescribed burnings were also used to aid in forb establishment and for maintenance purposes.

Ray has several areas in the prairie that are his favorite (see pictures). These areas are typically very diverse or areas where unique species are thriving. Ray also notices areas that need extra work and attention. Those areas are almost a monoculture of switch or indian grass that have taken over the forbs. Ray and Sharon will continue to work on grass suppression while re-establishing the forbs in those areas needing extra attention.

The 16th Annual Prairie walk at the Rippels, attended by 60 farmers, partners and general public, was a great success on a cool fall day. Participants enjoyed guest speaker PJ Liesch, UW-Extension (UW-EX) Entomologist, presenting on bee identification and biology. Attendees also viewed a demonstration of bee handling gear by Ray and Sharon's granddaughter, Emma. Following the speaker's presentations and a beautiful walk through the prairie, attendees also enjoyed a warm, locally sourced and donated lunch.

Walworth County's Annual Prairie Walk is organized by NRCS, FSA and UW-EX. It is held annually in different seasons to facilitate the discussion of different topics and points of interest. Looking to the future, locations have already been confirmed for 2018.



Participants get an up-close look at bee hives on the Rippel property. Their Granddaughter, Emma, is using the hives as part of an agriculture project for her senior year in high school.



Ray points out Rattlesnake Master to participants on the 2016 Prairie Walk in Walworth County.

### - Washington County

#### **Grazing for Soil Health**

On a small 20-acre parcel of land just outside of West Bend, Wisconsin, Val Jansen was ready to start improving soil health on her 8.5 acres of cropland. The land had been in permanent hay ground for years and she was concerned nutrients were being mined from the soil on her property.

Val knows conventional farming practices are not sustainable long term because they focus on monocultures and a variety of tillage practices. She was determined to improve her soil and soon began attending pasture walks looking for the key to keeping resources on the farm and improving soil health. In 2011, Kirsten Jurcek, a grazing educator with Glacierland RC&D, introduced Val to the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS).

Early in the planning process, Val worked with NRCS and RC&D on a grazing plan that helped her determine paddock sizes, configuration and residence periods, as well as seeding mixes to maximize pasture productivity. Her goal has been to raise sheep for meat and wool, while ultimately improving soil on her property.

Val purchased her first flock of 15 ewes and in 2013, was awarded her first Environmental Quality Incentives Program (EQIP) contract as a beginning farmer for fence, livestock pipeline, forage and biomass planting, and prescribed grazing. This enabled her to transform 5.3 acres of cropland into quality pastureland.

Once she was ready to expand her operation to 22 ewes and 4 rams, in 2014, Val was awarded her second EQIP contract for 2.8 acres of additional pastureland.

The practices NRCS helped Val to install are the heart of the operation. "Without NRCS's help it's not likely that I would have been able to make my dream a reality. They have been wonderful to work with," Val explained. "The guidance and planning I have done with NRCS was essential to my startup." She is very proud that she has been able to turn mediocre hay fields into a good feed source for her sheep.

Val is taking the next step in improving soil on her land. She has been awarded her first Conservation Stewardship Program (CSP) contract and will be collecting her first soil samples to send in to be analyzed to measure soil health. Soil health tests, such as the Haney test, measure the biological activity in the soil to better assess the nutrient cycle to help avoid over-fertilizing that could potentially impact both soil and water quality. "The best part of my job is to watch someone like Val be able to better manage her operation with the help of NRCS technical assistance and funding," Nikki Jacob, NRCS Soil Conservationist for Washington and Ozaukee County.

Val is eager to continue learning more about grazing and soil health and plans to continue producing useful products and improving her soil for many years into the future.



Val Jansen stands among her sheep in one of her pastures.

## WISCONSIN LEADERSHIP

### 🗢 Leadership Team



(From L to R) Tivoli Gough, Tom Krapf, Jason Nemecek, Judy Derricks (retired), Angela Biggs, Mark Kulig, Ty Larson, Eric Allness, Deb White, Josh Sherman, John White, Greg Kidd and John Ramsden.

Angela Biggs, State Conservationist
Eric Allness, Assistant State Conservationist, Partnerships
Vacant, State Resource Conservationist
Tivoli Gough, State Public Affairs Specialist
Greg Kidd, Assistant State Conservationist, Easements
Tom Krapf, Assistant State Conservationist, Financial Programs
Mark Kulig, Assistant State Conservationist, Field Operations, Southwest Area
Ty Larson, Assistant State Conservation Engineer
John Ramsden, State Conservationist, Field Operations, Northwest Area
Deb White, Assistant State Conservationist, Field Operations, Northwest Area

## WISCONSIN LEADERSHIP

- District Conservationists by Area



NRCS-WI Line Officers and Leadership Team.

#### **Northwest Area**

Mark Biel, Ellsworth Service Center Gary Haughn, Ashland Service Center Melissa Knipfel, Medford Service Center Tammy Lindsay, Chippewa Falls Service Center Jane Reigel, Neillsville Service Center Dennis Reimers, Alma and Durand Service Centers Patrick Richter, Barron and Ladysmith Service Centers Jennifer Roetter, Altoona Area Office John Sippl, Menomonie Service Center Ron Spiering, Spooner Service Center Ryan Swatek, Black River Falls and Whitehall Service Centers Keith Zygowicz, Baldwin and Balsam Lake Service Centers

#### **Northeast Area**

Barry Bubolz, Shawano Service Center Roy Diver, Wisconsin Rapids and Stevens Point Service Centers Joe Johnson, Luxemburg Service Center John Malvitz, Green Bay Service Center Jeff Maroszek, Lena Service Center Amy Neigum, Wausau Service Center Lisa Neuenfeldt, Waupaca Service Center Matt Rataczak, Manitowoc Service Center Merrie Schamberger, Oshkosh Service Center Joe Smedberg, Chilton Service Center Michael Stinebrink, Rhinelander Service Center Lynn Szulczewski, Appleton Service Center Peggy Winter, Antigo Service Center

#### **Southwest Area**

Melissa Bartz, Darlington Service Center Jon Field, Mauston Service Center Karyl Fritsche, Prairie du Chien Service Center Michelle Komiskey, Sparta and Onalaska Service Centers Chris Miller, Baraboo Service Center Carlton Peterson, Richland Center Service Center Joe Schmelz, Lancaster Service Center Sam Skemp, Viroqua Service Center Jason Thomas, Monroe Service Center Andy Walsh, Dodgeville Service Center

#### Southeast Area

Adam Dowling, Madison Service Center Cory Drummond, Fond du Lac Service Center David Gundlach, Janesville Service Center Twyla Kite, Portage Service Center Michael Patin, Sheboygan Falls and West Bend Service Centers Brandi Richter, Elkhorn, Union Grove and Waukesha Service Centers Kathy Turner, Jefferson and Juneau Service Centers Caleb Zahn, Green Lake and Westfield Service Centers



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