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UPCOMING EVENTS

- Fox Demo Farms Summer Field Day, June 19—Details Inside!
- To receive text updates on field days and more, sign up for the Fox Demo Farms Network Text List! Text FoxDemoFarms to 88202

INSIDE THE BUZZ

- Fox Demo Farm Summer Field Day
- The Fox Watershed Farmer Roundtable is Growing!
- Do Diversified Cover Crops Bring Beneficial Insects to Your Field?
- Equipment Available

Basin Buzz

Summer 2018



LOWER FOX DEMONSTRATION FARMS NETWORK

YOU'RE INVITED!
CONSERVATION IN ACTION!

TUESDAY, JUNE 19TH
9:00 AM - 2:00 PM



RSVP BY JUNE 15TH

To WHITNEY PASSINT, UW EXTENSION

(920) 391-4663
whitney.passint@uwex.edu

For more information:

WWW.FOXDEMOFARMS.ORG



FOX DEMO FARMS

SUMMER FIELD DAY AGENDA

Stay Up-to-Date on Tour Stops
TEXT: **FoxDemoFarms to 88202**

- 9:00 AM: Nettekoven Farms**
N4661 County Road PP, Black Creek, WI 54106
 - “Poor man’s GPS” - Space seeding: Soybeans no-till planted into triticale
- 9:30 AM: Van Wychen Farms**
4281 Krueger Road, Appleton, WI 54913
 - Soybeans strip-till planted into corn grain
- 10:15 AM: Neighborhood Dairy**
Freedom, WI 54130
 - No-till corn planted into alfalfa
- 11:30 AM: Complimentary Lunch - Greenleaf Fireman’s Park**
1588 Fair Rd. Greenleaf, WI
- 12:30 PM: Wiese Brothers Farm**
1484 Mill Road, Greenleaf, WI 54126
 - Corn no-till planted into winter rye
 - Lessons learned with manure application
 - Frost seeding alfalfa into winter rye
- 1:30 PM: Brickstead Dairy**
1734 Wayside Road, Greenleaf, WI 54126
 - Interseeding cover crops into corn
- 2:00 PM: Daryl Woldt**
Intersection of County Road PP and Wayside Road
 - Corn no-till planted (Horsch 32-row planter) into winter rye



THE FOX WATERSHED FARMER ROUNDTABLE IS GROWING!

One hundred thirty people attended the 3rd annual Fox Watershed Farmer Roundtable this past January, nearly doubling the participation at the first Farmer Roundtable held in 2016.

The event featured keynote speakers from Pennsylvania, Jim Harbach, Farmer and Gerard Troisi, Crop Advisor. Jim and Gerard shared insights from their decades of experience farming using no-till and cover crops to build soil health and improve water quality.



This year's panel included local producers (pictured left to right): Dan Diederich, Diederich Farms, Derek VanDeHey, New Horizons Dairy, Dan Brick, Brickstead Dairy, John Jacobs, Green Valley Dairy

Local producers also shared their experiences implementing conservation practices on their farm through a panel discussion. **Farmer panelist John Jacobs described farmers as "chemists, physicists, and biologists"** and talked about how much he has learned while applying principles of soil health to his farm. "There are 8 billion microbes in 1 teaspoon of healthy soil. I know more about [soil] than probably 95% of the population and yet I still probably know very little."

Those at the roundtable appreciated hearing not only about the successes but also the about the panelists' mistakes and lessons learned.

The most common practices covered by the panel were cover crops, no-till, and low disturbance manure applications. When moderator Mike Austin, local radio and TV personality, asked the panelists why they do conservation, answers ranged from the environment, to field compaction, economics, and not wanting to waste resources.

Small group discussions gave attendees the opportunity to have conversations with other producers and agriculture professionals about a variety of conservation topics. Many discussions carried over to the happy hour and poster session that followed the main event.



Poster session during happy hour highlighted on-farm demonstrations of conservation in northeast Wisconsin.

REDUCED TILL AND NO TILL EQUIPMENT



6-row No-till Corn Planter equipped with Dawn Biologic ZRX Rollers - Outagamie County. Equipped with Dawn's ZRX rollers that give the planter the ability to roll down standing grain crops (rye, triticale) and plant in the same pass. The rolled down grain crops creates a thick mat of residue that protect the soil surface, mitigates erosion and guilds soil health. Purchased with GLRI funds through a Fox-Wolf Watershed Alliance grant.
 Cost: Planter: \$9,700; Dawn ZRX rollers: \$9,500; Additional parts and modifications: \$4,700
 Availability: priority to producers in the Plum & Konkapot Creek watersheds due to grant requirements through 2020
 Andy Kiefer, andy.kiefer@outagamie.org, 920.574.7539

Closing Wheels Opportunity #1

Pro-Stitch, Furrow Cruisers, Finger-till closing wheels available—Outagamie County. A variety of closing wheels available for growers to use to find what type of closing wheel works with their soils and their crops. Purchased with GLRI funds through a Fox-Wolf Watershed Alliance grant.
 Cost: \$2,400 for 12 sets
 Availability: priority to producers in the Plum & Konkapot Creek watersheds due to grant requirements through 2020
 Andy Kiefer, andy.kiefer@outagamie.org, 920.574.7539



Closing Wheels Opportunity #2 - Dawn Curvitines
 Four sets of curvitines available - Brown County
 Curvitine wheels available for producers to try to compare these units to current closers. Purchased with GLRI funds through a Fox-Wolf Watershed Alliance grant.
 Cost: 4 sets—\$1000
 Availability: producers in the Lower Fox River Basin
 Brent Petersen, Petersen_ba@co.brown.wi.us 920.606.3068



MANURE MANAGEMENT EQUIPMENT



28' Low Disturbance Manure Injector
Bazoooka Farmstar Vertical Manure Injector
 Purchased with GLRI funds through a Fox-Wolf Watershed Alliance grant.
 Cost: \$95,000 with cart; \$60,000 without cart (as seen in picture)
 Availability: priority to producers in the Plum & Konkapot Creek watersheds due to grant requirements through 2020
 Andy Kiefer, andy.kiefer@outagamie.org, 920.574.7539

Manure Sidedress Tanker- (6 or 8 row)
 Purchased with GLRI funds through a Fox-Wolf Watershed Alliance grant.
 Cost: \$18,000 for tires/rims. Manure applicator supplied tanker and toolbar
 Availability: priority to producers in the Plum & Konkapot Creek watersheds due to grant requirements through 2020
 Andy Kiefer, andy.kiefer@outagamie.org, 920.574.7539



Under Construction: Manure Injector- (photo not available).

A new 3-point mounted manure injector has been designed to both side dress into growing corn and/or be used as a minimum disturbance full width tool bar. The side dress application will utilize low disturbance Dietrich Shank style injector units spaced on 30" rows. To achieve full width application, an aerator style toolbar that lifts out of the way for sidedressing has been added as well. It is anticipated this unit will be complete and ready for side-dress demonstrations in June.
 Purchased with GLRI funds through a Fox-Wolf Watershed Alliance grant.
 Availability: priority to producers in the Plum & Konkapot Creek watersheds due to grant requirements through 2020
 If you are interested in seeing this unit when complete, contact Andy Kiefer, andy.kiefer@outagamie.org, 920.574.7539

SHARED EQUIPMENT

This equipment is currently available to producers in the Lower Fox River Watershed to borrow at no cost!

EQUIPMENT FOR PLANTING COVER CROPS



6-row Interseeder/No-till Drill#1 - Outagamie County
6-row interseeder / No-till Drill (Interseeder Technologies)
Purchased with GLRI funds through a Fox-Wolf Watershed Alliance grant. Cost: \$47,000
Availability: priority to producers in the Plum & Konkapot Creek watersheds due to grant requirements through 2020
Andy Kiefer, andy.kiefer@outagamie.org, 920.574.7539



6-row Interseeder/No-till Drill #2 - Brown County
6-row interseeder / No-till Drill (Interseeder Technologies)
Purchased with Fund for Lake Michigan funds through a NEW Water grant. Cost: \$47,000
Availability: priority to producers in the Silver Creek Project but available throughout the Lower Fox River basin
Brent Petersen, Petersen_ba@co.brown.wi.us, 920.606.3068



Airseeder 3-pt Mount with Hitch
(same airseeder from above with different set up)
Outagamie County - Valmar 3225 Airseeder 3 pt Mount with Hitch. Purchased with donation from TNC & Outagamie County funds. Cost: 12R cultivator - 3pt Airseeder mount with hitch: \$2,000; Airseeder (same one used on cultivator): \$16,000
Availability: Lower Fox River Watershed
Andy Kiefer, andy.kiefer@outagamie.org, 920.574.7539



12-row Interseeder #3 - Outagamie County
12 row cultivator with a Valmar airseeder mount
Purchased with donation from TNC & Outagamie County funds. Cost: 12R cultivator: \$2,000; Fabrication:\$1,700; Airseeder: \$16,000; Interseeder Technology units: \$11,200
Availability: Lower Fox River Watershed
Andy Kiefer, andy.kiefer@outagamie.org, 920.574.7539



Pentrometer
Outagamie County
Helps assess compaction and soil health
Cost: \$200
Availability: Lower Fox Basin
Andy Kiefer, andy.kiefer@outagamie.org, 920.574.7539

TRY SOMETHING NEW THIS YEAR

RESERVE EQUIPMENT TODAY

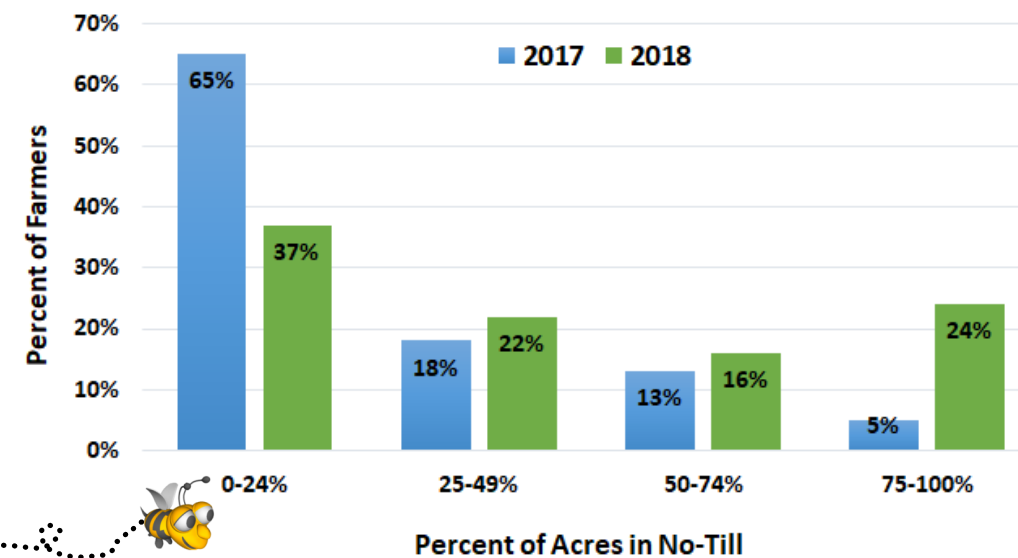


Photo credit: Aaron Thompson

"The farmer round-table provides an excellent opportunity to listen, learn and interact with other farmers in the area trying to do their part to reduce erosion, and runoff from our fields. It is great to hear firsthand from like minded farmers about their farming activities."

Daniel Diederich

Farmer Roundtable Attendees Report the Percent of their Acres in No-Till



Farmers and crop consultants in attendance reported seeing "a lot more cover out there in the fall" than in previous years. A survey taken of event participants, supports that statement. In 2017, 5% of farmers who attended the roundtable said the majority of their acres were in no-till. In 2018, that number jumped up to 24%, an impressive increase in one year. A similar trend was reported for cover crop acres, 11% of farms reporting a majority of their acres in cover crops in 2017 increasing to 31% percent of farms in 2018.

The Farmer Roundtable Planning Team, led by the Alliance for the Great Lakes, includes crop consultants, agency staff, farmers, and non-governmental organizations. The team strives to ensure the Roundtable is farmer focused and farmer driven. The goal is to create an event for farmers to collectively learn from each other about conservation topics relevant to their individual farm and the watershed.

Planning for the 2019 Fox Watershed Farmer Roundtable will begin in July. The Alliance is looking for additional farmers to join the planning team. **If you are interested in joining the team or have suggestions for speakers, please call Molly Meyers at 920.465.2393 or email meyersm@uwgb.edu.**

Thank you to the 2018 Farmer Roundtable Partners,





Do *Diversified Cover Crops* BRING BENEFICIAL INSECTS TO YOUR FIELDS?

Article written by: Whitney Prestby, UW-Extension

Over the past several years, farmers throughout the Lower Fox River Watershed have been working hard to implement practices on their land that reduce soil erosion and phosphorus runoff, increase soil organic matter, and improve soil health. These practices have included no-till planting, where they leave “the tillage work” to the plants and soil biology. Additionally, farmers have introduced cover crops into their rotation. By planting a cover crop immediately after harvest, farmers are working to have continuous ground cover. Some farmers have even agreed to participate in the US Geological Survey’s edge-of-field monitoring, which measures sediment and nutrient loss in surface and subsurface runoff. This helps us understand how these practices impact soil health and water quality. But how do cover crops and no-till planting impact beneficial insects, spiders, and pollinator? Perhaps more importantly, why should we care?

This time of year, pests, in particular slugs, are on everyone’s mind. Wet springs often create conditions that allow these pesky critters to wreak havoc on agricultural fields, leaving farmers seeking solutions. While some may claim cover crops and no-till systems are the reason slugs are so prevalent, others suggest that a diversified crop rotation, combined with limited disturbance is exactly what we need to combat these pests. John Tooker from Penn State University suggests that cover crop residue is the preferred food source for slugs; therefore, the slugs are attracted to the cover crops and allow the corn seedlings to establish. In addition, cover crop residue creates habitat for beneficial insects, such as ground beetles, which are a natural enemy of slugs (Tooker, 2018). Researchers in Wisconsin say that on a daily basis, ground beetles are thought to con-

sume their body weight in food, making them extremely efficient predators (Mahr, 2013).

Creating an environment that is favorable for beetles and other beneficial insects can be an effective method for managing pests. One reliable approach to decrease pest populations is to plant diversified crop rotations (Tooker, 2018). Planting cover crops is a good way to introduce crop diversification in a three or four crop rotation. Cover crops increase ground cover, which helps create suitable habitat for beneficial insects and ultimately enhances their numbers (Shearin et al. 2008). Additionally, beetles, along with other insects and spiders, are vulnerable to deep tillage and therefore, benefit from reduced tillage systems (Kromp 1999). “We are hoping to look at conventional cropping practices versus conservation cropping practices. Research suggests that in conventional fields we are seeing 5-10 visual species, including the main crop (i.e., corn or soybean), while in diversified systems studies have found more than 150 visual species,” says Brent Petersen, Fox Demo Farms project manager.

Fox Demo Farms is excited to partner with the US Fish & Wildlife Service and UW-Green Bay to conduct a pilot study to evaluate whether in northeast Wisconsin, diversified cover crop mixes result in higher populations of diversified beneficial insects, spiders, and pollinators. New Horizons Dairy, Den Mar Acres, and Zirbel Dairy Farms are the three farms that have agreed to participate in the project. Each farm will dedicate a twenty-acre winter wheat field, which will have two no-till plots planted after final harvest in August. One plot will have a three-way mix, which is the Natural Resources Conservation Service (NRCS) recommended standard for diversification. The second plot will be a 12-way mix and will represent a highly diversified planting. Additionally, there will be a control site, where we will monitor for insect, spider, and pollinator diversity in a conventional system. This field will incorporate manure in August and will not plant cover crops after incorporation.

The partners will begin monitoring for insects, spiders, and pollinators in September and will continue through the first frost. During the spring of 2019, monitoring will resume and will likely continue through June. If you are interested in learning more about this project, join us for field tours next fall. Project fields will be included in the Fox Demo Farms fall field day and they will likely host a Field Day on the Fly (Text: **FoxDemoFarms to 88202** to join the list and receive field day alerts). “US Fish & Wildlife Service is excited to be part of this important pilot project,” states Reena Bowman, a local biologist in the Green Bay Field Office. “We believe diversified cover crops can be a win-win for both farmers and beneficial insects and pollinators in northeast Wisconsin. This project will help us demonstrate that.”

If you’re interested in learning more about the project, please contact:


Whitney Prestby, UW-Extension

whitney.passint@uwex.edu or (920) 391-4663

Reena Bowman, US Fish & Wildlife Service

reena_bowman@fws.gov or (920) 866-1720

This pollinator is a Hoverfly.
Adult hoverflies are excellent pollinators, while the larvae are effective predators. They prey on aphids, which can cause millions of dollars worth of crop damage



Leiobunum vittatum - common name is Harvestman and its an agroecosystem predator.