



Badger Creek Lake Watershed Project

Newsletter | Winter 2014/15

Update from the Project Coordinator

The past year has really flown by since I sent out the previous newsletter last winter. It's been a busy and productive year, and we've been gaining momentum!

The issue of water quality has drawn increasing attention over the past couple of years because the sediment and nutrients that negatively affect Iowa's water also travel downstream to contribute to hypoxia in the Gulf of Mexico. As a major agricultural state, there is a heightened focus on Iowa and what we are doing to take responsibility for our water quality; it's natural that there would be an added focus on watershed projects to demonstrate how voluntary actions can effectively reduce the amount of nutrients and sediment polluting our rivers, streams, and lakes.

There's a lot to be proud of in Badger; the history of conservation work goes back decades, and we've continued to make strides in recent years to keep soil and nutrients on the land and out of the lake (impaired by sediment and phosphorus). This year we had some special opportunities to share our story and highlight the work being done in the watershed. Last January our watershed project was invited to attend Iowa Conservation Partnership Day at the Capitol. Our poster was displayed in the rotunda, and we had a number of visitors, including our local legislators and the governor. This summer the State Soil Conservation Committee and Conservation Districts of Iowa board toured the watershed as part of their annual conservation tour, and we were able to point out conservation practices being used by landowners throughout the watershed. Badger Creek Lake is one of many watershed projects across the state, but we are on the radar screen!

We have made a lot of progress since the watershed project began in April 2013 (below), and we have been laying the groundwork for projects and practices planned for the coming year. However, it's important to remember that most conservation practices are not a silver bullet; they are most effective when used as a system of practices! As we continue to make strides toward progress, our success depends on everyone asking themselves, "What more can I do? What's the next step?"

There is always more you can do, but the next step will be different for everyone. Maybe it's establishing filter strips, committing to 100% no till, or just expanding your use of cover crops. It's going to take everyone working together (nobody sitting on the sidelines) to keep building on the progress that has been made. It's time to kick it in gear and take that next step – let me know if I can assist – that's my job! -AM

Practices completed since April 2013 (beginning of current phase of watershed project):

Above: Aerial seeding of cover crops in September
Below: Signs placed by fields to increase awareness of cover crops!



Project Coordinator **Anna MacDonald** can be reached at 515-462-2961 or Anna.MacDonald@ia.nacdnet.net

Badger Creek Lake ❤️ s:

- Terraces
- Headlands
- Filter Strips
- Cover Crops
- Crop Rotations
- Sediment Basins
- Prescribed Grazing
- Grassed Waterways
- Contour Buffer Strips
- Nutrient Management
- No Till & Reduced Tillage
- Streambank Stabilization
- Grade Stabilization Ponds
- Pasture/Hayland Plantings

Ask about cost share!



Terraces
17,347 feet



Grade Stabilization Structures
2



Cover Crops
1,055 acres
(500+ acres each year)

"Even if every acre of farmland was controlled to T (tons/acre/year allowable soil loss), with a 43:1 watershed to lake area ratio, that might not be enough to protect water quality." - adapted from **Stan Simmons**, longtime Lake Darling Watershed Project Coordinator

Big Changes Coming to Badger Creek WMA

At this time last winter, we had just begun the planning process for practices at the Badger Creek Wildlife Management Area (WMA). A group of project partners toured the WMA and identified priority sites where structures could reduce erosion and prevent sediment from entering the lake. Since then, we have also made plans to convert the existing “shrub buffer strips” (top photo) to prairie strips. Now we are getting ready to start work!

Coming Soon...

- Invasive Species Removal
- Grade Stabilization Structures
- Sediment Basins
- Prairie Strips

We have two priority sites for structures (see map below). We are planning two grade stabilization structures (ponds) to stabilize the gully (left) and prevent erosion at Site 1. At Site 2 we are planning one grade stabilization structure and two sediment basins above it for added protection.

One thing that was obvious on our groundtrutting tour last fall is how pervasive Tartarian honeysuckle is at the WMA! It stays green late into the fall and stands out like a sore thumb (right). Tartarian honeysuckle (*Lonicera tatarica*), an exotic species from eastern Asia, is now considered a noxious weed in North America. It invades a variety of habitats and spreads quickly, creating a dense understory layer that suppresses tree seedlings and crowds out other plants. It seems like good cover, but it produces so much shade that the ground is often left bare. As a monoculture with low diversity, the benefits for wildlife are limited.



Honeysuckle dominating the understory



Seeds are dispersed by animals eating the red berries

“Wall” of honeysuckle at WMA



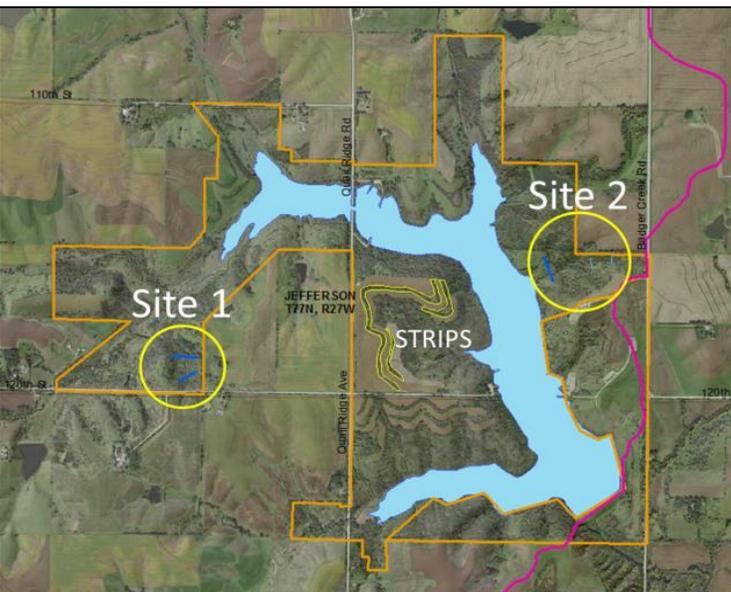
Site 1 gully erosion

Tartarian honeysuckle occurs throughout Badger Creek WMA, but is especially concentrated in the “shrub buffer strips” (shelterbelts) within crop fields, as seen in the top photo. One of our projects at the WMA will be to remove the shelterbelts that are dominated by honeysuckle, and establish contour buffer strips seeded with diverse, native prairie. Not only will we be tackling an invasive species problem, but the prairie will provide better soil protection, and greatly improve wildlife habitat.

Work on these projects will begin this winter when we will start clearing areas for the dams of planned structures, removing potential bat habitat trees, and clearing the shelterbelts in one of the crop fields. The next step will be to seed the prairie strips, and then begin construction on dams for the grade stabilization structures and sediment basins that will prevent gully erosion and trap sediment that would otherwise go into Badger Creek Lake.

These areas at Badger Creek WMA will be starting to look different this year (and now you know why!), but there is one more project planned for this winter that won’t be quite as noticeable; DNR Fisheries will be doing work to create and improve fish habitat near fishing jetties in Badger Creek Lake.

It’s an exciting time; after months of planning, we’re getting ready to start these projects! If you have questions or concerns, and if I can’t answer it, I can put you in touch with someone who can! -AM



Projects starting this winter at Badger Creek WMA:
Site 1: clearing dam areas for 2 grade stabilization structures
Site 2: clearing dam areas for 1 grade stab. structure and 2 sediment basins
STRIPS: removing invasive shrub buffer strips and planting diverse prairie

Example of a prairie buffer strip at the STRIPS research sites at Neal Smith National Wildlife Refuge in Prairie City:
 Learn more about the STRIPS Project and the benefits of prairie strips at www.prairiestrips.org





Meet the Private Lands Habitat Specialist!



Hello! I'm Kaly Adkins, the new Private Lands Habitat Specialist for Madison and Union Counties. I'm here to serve as a resource for private landowners to promote conservation and increase awareness of financial assistance programs available. With the recent decline in commodity prices, now is a great time to tackle problem areas on your farm and consider putting that wet area, steep side slope or other unproductive land into CRP or another cost-share program. There are a variety of state and federal programs available as possible options to address erodible areas, foster wildlife habitat, and promote conservation while also increasing average yields.

Specifically, continuous CRP practices such as filter strips, wetland restoration, and state acres for wildlife enhancement (SAFE) offer annual rental payments based on the agriculture rental value of the land (determined by soil types).

The average soil rental rate for Madison County is \$201 per acre.

Contact **Kaly Adkins**
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There is opportunity for an additional 20% annual rental rate incentive payment depending on the specific continuous CRP practice. There may also be an additional one time signing incentive payment of up to \$250 per acre depending on the practice.

Continuous CRP programs also provide cost-share assistance for 50% of the participant's costs in establishing conservation practices on private land. These practices will improve soil retention and water quality, a benefit for both the Badger Creek Lake Watershed and your farm. For many practices, there may be up to an additional 40% added to the standard 50% cost share for a total of 90% cost-share assistance for establishment of approved conservation practices.

Badger Creek Lake Watershed is a major priority for the efforts of my position, and I would love to discuss any questions you may have about different options for your land. -KA

Calendar of Events for 2015

January 23-24 **Practical Farmers of Iowa Annual Conference**
"Mapping Our Future"
Scheman Building, Iowa State Center, Ames
More info at www.practicalfarmers.org

January 31 **Madison County SWCD Annual Conservation Awards Banquet**
Call our office for more information

February 17-18 **Iowa Cover Crops Conference**
Sheraton Hotel, West Des Moines
More info at www.swcs.org

March 2-3 **Iowa Water Conference**
"Currents & Currencies: Trends and Motivators for Better Water Management"
Scheman Building, Iowa State Center, Ames, IA
More info at www.water.iastate.edu

April 26 – May 3 **Soil & Water Conservation Week**
"Local Heroes: Your Hardworking Pollinators"
More info/events will be posted here: www.iowaagriculture.gov/conservationweek.asp

Stay Tuned...
We're planning a local
Cover Crop Workshop
for later this winter!



**BADGER
CREEK
LAKE**
WATERSHED
PROJECT

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Like us on Facebook! Follow us on Twitter!

We use Facebook and Twitter to share news and updates about what’s happening in the watershed, upcoming events, photos, and information related to water quality, soil conservation, and other topics relevant to the watershed and the lake.

 www.facebook.com/BadgerCreekLakeWatershedProject
 www.twitter.com/BadgerCreekLake



Iowa Dept. of Natural Resources
Watershed Improvement,
Lake Restoration,
Fisheries, Wildlife



Section 319

of the Clean Water Act, administered by the EPA

Watershed Project Partners

equal opportunity providers and employers

U.S. Department of Agriculture –
Natural Resources Conservation Service



Madison & Dallas

Soil & Water Conservation Districts



IDALS
Division of Soil Conservation