



PRAIRIEHORIZONS

STORY COUNTY CONSERVATION | NATURE PROGRAMS AND NEWS

Aug- Oct 2024

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Photo by Linda Wendt

THE LATEST

Timely and brief updates on ongoing projects



DRAWING INSPIRATION FROM NATURE

Heart of Iowa Nature Trail (HOINT) users will notice vibrant new scenery along the trail when it re-opens next season, as the Iowa DOT is constructing a monarch-themed tunnel where the HOINT crosses underneath Interstate 35, a.k.a. the “Monarch Highway.”

The 79-yard tunnel’s monarch theme stems from a larger effort—the Monarch Highway—that was named to bring awareness to this insect whose migration central flyway happens to overlap largely with I-35 from Texas to Minnesota. Monarchs born in late summer migrate south to winter in Mexico. In the spring, they return to the southern U.S. where they lay eggs. Successive generations of monarchs continue moving north, which takes them along the I-35 corridor and finally into the northern U.S. and Canada. Iowa is among six state transportation departments devoted to improving pollinator habitat along this corridor through native plantings and education efforts.

The newly-constructed tunnel will replace the HOINT’s smaller, pre-existing under pass where the trail crossed underneath I-35. This project is in conjunction with the Iowa DOT’s ongoing interstate-widening project taking place between Ankeny and Ames.

Actions to preserve monarch butterflies are becoming more vital, as the species has declined by upward of 90 percent in recent decades, according to the National Wildlife Federation.

Simultaneously to this trail improvement, SCC is also paving the trail between Cambridge and Collins. Soon, the HOINT will be paved all the way from the HIgh Trestle Trail in Slater, to the City of Collins.

In addition to the HOINT tunnel, Iowa DOT is constructing seven bridges featuring the closeup of the monarch wing pattern in the Ankeny to Ames corridor of I-35. See illustrations below.



A snapshot of the HOINT tunnel passing underneath I-35, as of May 2024.



Artist’s Rendering, Courtesy of Iowa DOT

The HOINT tunnel is just one of eight similar Monarch-inspired projects in the works by Iowa DOT. The central supporting pier of seven additional overhead bridges from Ankeny to Ames on I-35 will soon feature the closeup view of the Monarch’s wing scales.

Partners Update & New Goal

Congratulations! *Partners* exceeded their pledge of \$45,000 in FY24 to help purchase the Deppe Family Conservation Area. The final contribution total is not known at the time this article was written, but excess funds will go towards the development phase of the project.

Partners contributions for fiscal year 2025, will go towards the restoration of five oxbows at the Wicks Wildlife Area, located just north of Story City. Read more about the significance of this project below.

Oxbow Significance at Wicks Wildlife Area

Wicks Wildlife Area, located just north of Story City, includes 55 diverse acres of prairie, riparian woodland and oxbows. Money raised by *Partners* during fiscal year 2025 will help fund restoration of up to five oxbows at this property, a key step towards continuing SCC’s greenway mission to protect essential habitat along the South Skunk River.

An oxbow is a wetland that has been cut off from the flow of a meandering stream, in this case, the South Skunk River. The name “oxbow” comes from the U-shaped collar placed around an ox’s neck, to which a plow is attached. These natural water features are valuable, as they intercept flood water and provide temporary flood storage. Water is then slowly released back into the stream. Floodwater storage will increase two- to threefold by restoring Wicks’ oxbows—something essential to downstream cities.

Oxbow restoration improves water quality

by capturing run off and increasing retention time. As water is released, significant amounts of excess nutrients from water, like nitrates, phosphates and sediment, are filtered out. According to ISU Extension & Outreach, oxbow restoration can reduce nitrate load by 56%.

“Oxbow restoration can reduce nitrate load by 56%.”

Wicks’ oxbows will hold significant water, slowing stream flow and in turn lessen bank erosion. This will allow for increased streambank vegetation diversity and structure. Habitat diversity will benefit as well, including fish and wildlife, especially migratory birds and waterfowl who use oxbows for feeding and nesting. Frogs and salamanders call oxbows home, too.

Wicks Wildlife Area was purchased in 2020, through public and private partnerships including the Iowa Natural Heritage

Foundation and a grant through Iowa’s Resource Enhancement And Protection (REAP). This property boasts giant oak and hackberry trees, offers opportunities for hiking, bird watching, bow hunting, exploration of the floodplain and old river oxbows, and other passive outdoor recreation. No trails are maintained in this undeveloped wildlife area.

Interested in supporting this project? [Click here](#) or scan QR code below or return the *Partners* form on page 11 to make a donation. Your gift provides a one-year *Partners* membership, including a 10% discount on all program and facility rentals, and supports restoring historic and natural ecological functions within our watershed!



Oxbow at Jennett Heritage Area, south of Nevada.

WELCOMING A NEW FACE



Meet Ty Hamiel,
Vegetation Management Biologist

Hello! I am excited to join the team with Story County Conservation. Originally from Mason City, Iowa I spent a few years in the Marine Corps and then got my B.S degree in Forestry here from Iowa State University.

I've managed all forms of vegetation—trees, weeds, prairie, brush—for the Iowa DNR, Davey Tree Expert Company, Cerro Gordo County Conservation, and most recently, the Iowa DOT.

Having gone to school here, Story County was always a place we said we'd move back to and it just so happened! I reside in Ames with my amazing wife Lindsey and three awesome kids: Easton (8), Levi (6), Natalie (4).

We'll see you around!

NATURE BOXES ARE BACK!

WHAT IS A NATURE BOX?

Research shows environmental attitudes are often formed early in life, which shows a need for early childhood environmental education. For this reason, we have designed Nature Boxes as a reservable, educational resource with pre-planned activities on nature topics for children! Nature Boxes contain exciting activities with all needed materials and resources for various topics, including night creatures, prairie and insects, camouflage, rocks and fossils, Ice Age mammals, and more. The included Teacher Guide provides background information and many activities so early childhood educators are comfortable teaching about each topic.

WHO ARE THEY FOR?

Nature boxes are suited for children in early elementary, from Pre-K through 3rd grade, and are designed to allow around-the-room stations, as well as whole classroom activities for maximum engagement. Homeschool groups, daycares, preschools, and elementary schools are only a few of the organizations welcome to check out these boxes.

HOW CAN I GET A BOX?

Nature Boxes can be checked out for two weeks at a time. They must be picked up and returned during business hours to the Conservation Center at McFarland Park, weekdays 8:30 a.m. to 4:30 p.m.

[Click here to reserve a box](#) or for more information, scan the QR code or contact Naturalist Clair Pfantz at (515)232-2516 or cpfantz@storycountyiowa.gov.



Nature Boxes are designed to come with all program supplies, educational resources, and teaching guides that a group may need.

OUR WATER

Efforts to keep Iowa Water Clean

By Sara Carmichael, Watershed Coordinator

Four years into the 10-year Story County Water Monitoring and Interpretation Plan (2021-2030), and we have seen major accomplishments!

The need for water monitoring became apparent when the Iowa DNR's IOWATER program discontinued in 2016. Multiple partners in Story County, including Prairie Rivers of Iowa (PRI), City of Ames, Iowa State University, Izaak Walton League (Ikes), and others, came together with SCC in 2019 to create a multi-faceted approach to water monitoring. The purpose of the plan is threefold:

- Collect water samples and analyze data
- Increase public knowledge of watershed issues
- Support and improve water quality

PRI was contracted to analyze current data and establish focus areas for water monitoring to help achieve the above goals. The main focus areas for monitoring include:

- Monthly sampling at 15 sites in the county that City of Ames analyzes for bacteria, nitrate, phosphate, pH, chloride, temperature, dissolved oxygen, and turbidity.
- Bi-weekly volunteer monitoring at ~40 sites testing for nitrate, phosphate, pH, chloride, temperature, dissolved oxygen, and turbidity. All data can be found on the Clean Water Hub website.
- Summer weekly E. coli sampling at Peterson Park and Hickory Grove Park beaches; a requirement from the Iowa DNR.
- Monthly E. coli and nitrate sampling at seven sites flowing in an out of Tedesco Environmental Learning Corridor, analyzed by ISU.

We have had major accomplishments since the start of the plan in 2021, largely thanks to supporting partner organizations. Bi-annual clean ups with the City of Ames, Skunk River Paddlers, and PRI have removed literal tons of trash from the Ioway Creek and South Skunk River. Through a new partnership, Hach Company (Ames) has provided volunteers for monitoring two testing sites, and they now provide testing supplies for all volunteers.

We have also launched biological monitoring to test and count aquatic insects to determine water health. We have worked to train and educate volunteers on topics like aquatic invasive species, Ikes' Salt Watch program, and Story County efforts to curb excess nutrients from entering waterways.



"This partnership allows us to continue our mission of "Ensuring water quality around the world," but this time, closer to home. Twice a month, Hach volunteers have been contributing their time to help protect our community's environment. This program has received fantastic feedback from our associates, as it gives them the opportunity to use Hach Products, made here in Ames, allows time for everyone involved to connect and understand nature better, and contribute towards its protection."

~ Hach Company

Together with the City of Ames and Iowa Department of Agriculture and Land Stewardship (IDALS), SCC is working with landowners to install edge of field nutrient reduction practices. These practices lower the amount of nitrates flowing from farm fields into waterways. In the first year, we installed 10 practices treating over 1,000 acres of drainage. Year two installs will treat 23 tiles, with construction beginning this summer and running through next spring.

SCC has also partnered with IDALS and the City of Ames to construct a nutrient removal wetland at Prairie Valley Preserve, near Gilbert. The wetland will remove water from a drainage district tile, pumping it into the wetland where nutrients will be removed before flowing into a private wetland, then eventually Ioway Creek. This is the first example in Story County of routing district tile water into a wetland. **Read more about Praire Valley Preserve on Page 10.**



For more info about the plan, annual reports, or site locations, scan the QR code or visit the link below:
www.storycountyiowa.gov/1533/Water-Quality.

PROGRAMS AND EVENTS

AUG., SEPT., OCT.

FOR REGISTRATION, VISIT:

Scan QR code or visit

www.storycountyconservation.org



Painting in the Park

Friday, Aug. 9, 5:30 – 7:00 p.m.

Tedesco Environmental Learning Corridor

Join Amber's series of step-by-step watercolor painting in our parks! She'll also discuss some of the park's unique features. Family-friendly, for ages 8 and up. Register online by August 7.

Picnic in the Park

Saturday, Aug. 17, 11:30 a.m. – 1:00 p.m.

West Peterson Park

Connect with community while enjoying the outdoors at this summer picnic celebration! **Crackers, cheese, and meat to make DIY lunchables provided.** Register online by August 14.

River Walk

Saturday, Aug. 17, 2024, 2:00 – 3:30 p.m.

West Peterson Park

Flip rocks, explore riffles, and scoop waterbugs during a river walk. Who knows what else we may discover! Plan on getting wet and muddy. Register online by August 14.

Cartography Challenge

Tuesday, Aug. 20, 4:30 – 6:30 p.m.

Tedesco Environmental Learning Corridor

Put your map-creating skills to the test! Groups will hide an object along the trail and create a map to where X marks the spot. Then, switch maps with other groups to see if you can find their hidden treasure. Register online by August 18.

Evening Walk on the Prairie

Tuesday, Aug. 20, 7:00 - 8:30 p.m.

Doolittle Prairie

Join Dr. Tom Rosburg to discover the wonders of Iowa's prairies. No registration required.

Being in Nature

Co-Sponsor Brooks Witter, MA, LMHC

Saturday, Aug. 24, 9:00 a.m. – 12:00 p.m.

Christiansen Forest Preserve

Leave the busy-ness of the world behind and rekindle a more personal relationship with the natural world. Program guide Brooks Witter is a psychotherapist and teaches mindfulness and appreciation for this wondrous world. Register online by August 18.

Wild Tots: Colorful Nature

Sunday, Aug. 25, 10:00 – 11:30 a.m.

McFarland Park

Nature is bursting with colors! Enjoy time outdoors with your tot exploring colors and shapes. We will have a story, hands-on activities, crafts, and short hike. Intended for tot 18 months to not yet in Kindergarten. Register online by August 20.

Strollin' in the Park

Sunday, Aug. 25, 12:30 – 1:30 p.m.

McFarland Park

Join us for a stroll at McFarland Park! We'll explore blooms and colors as we take a walk around the pond. Our walk will take place on a concrete trail, so feel free to bring your strollers, wheelchairs, and/or walkers. Register online by August 23.

Welcome Walk

Friday, Sept. 6, 4:30 – 5:30 p.m.

Tedesco Environmental Learning Corridor

Whether new to Story County, new to exploring county parks, or a long-time park visitor eager to share your fave places, welcome! Join Naturalist Bekah for a stroll aimed at getting to know our natural community while building our human community, too! No registration required.

Trailgate - Picnic in the Park

Friday, Sept. 6, 5:30 – 6:30 p.m.

Tedesco Environmental Learning Corridor

Grab a picnic blanket and enjoy dinner outdoors! Cold deli sandwiches/wrap ingredients provided. You'll be able to connect with the natural and human community both. It's a big weekend, as ISU and the University of Iowa meet for the annual CyHawk game. All football fans (wear your colors!) and non-football fans welcome as we gear up for an exciting weekend and school year! Register online by September 2.

Monarch Mania

Thursday, Sept. 12, 4:30 – 6:00 p.m.

Tedesco Environmental Learning Corridor

Witness one of the world's greatest migrations, while helping catch, tag, and release monarchs. This community science project is fun for all ages! Register online by September 11.

Evening Walk on the Prairie

Tuesday, Sept. 17, 6:00 - 7:30 p.m.

Doolittle Prairie

Join Dr. Tom Rosburg to discover the wonders of Iowa's prairies. No registration required.



Location: McFarland Park, Conservation Center
Doors open at 10:00 a.m. for coffee/tea & chatting.

O.W.L.S.: Pollinator Friendly Ames!

Thursday, Sept. 5, 10:30 – 11:30 a.m.

Conservation Center at McFarland Park

Did you know that Ames is the first city in the U.S. to create an official 10-year plan to become a more pollinator-friendly community? Guests Penny Huber Brown and Laura Beskow, Ames Pollinator Planning Committee members, to learn more about the Plan and how you can help!

Painting in the Park

Friday, Sept. 20, 5:30 – 7:00 p.m.

Oriole Ridge Lodge, Hickory Grove Park

Join Naturalist Amber for step-by-step watercolor painting! She will also discuss the park's unique features. Family friendly program, for ages 8 and up. Register online September 18.

Strollin' in the Park

Friday, Oct. 25, 12:30 – 1:30 p.m.

Dakins Lake

Join Naturalist Bobbi Donovan for a stroll around Dakins Lake. We will explore the fall colors as we take a leisurely walk around the pond. Register online by October 24.

Sometimes it's hard to have wheels during nature walks, but not this time! Our walk will take place on a crushed limestone trail, so feel free to bring your strollers, wheelchairs, and/or walkers for this afternoon exploration.

Halloween Hides & Creepy Caches

Friday, Oct. 25, 6:30 – 8:30 p.m.

McFarland Park

Experience McFarland after dark and enjoy finding hidden jack-o-lanterns throughout the park using a GPS. Space is limited so be sure to register your group early! Register online by October 23.

Fall Foliage Walks

Sponsored by Outdoor Alliance of Story County

Fall Foliage Walks will take place on Thursday Sept. 26, Oct. 3 and Oct. 10 at 1:30 - 3:30 p.m. View more details online at www.oasco.org.



Story County Conservation Plans for Future Thursday, Oct. 10, 10:30 – 11:30 a.m.

Story County Conservation has a long history of protecting natural resources, providing opportunities for people to engage with nature, and educating people about the environment. Story County Conservation Director Mike Cox will discuss these ongoing efforts and exciting plans for the future.

STEWARDS OF THE BEAUTIFUL LAND:

Trees Forever and the University of Northern Iowa's Tallgrass Prairie Center have teamed up with Story County Conservation and invite you become a Steward of the Beautiful Land! Explore the native ecosystems near you! Stewards of the Beautiful Land is an educational series that covers the importance of native plants and trees. All programs will be led by SCC.

Thursday, Aug. 22, 6:00 – 7:30 p.m.

IRVM Shop, 60550 210th Street, Nevada, IA 50201

Join Vegetation Management Specialist Tyler Kelly and learn how the IRVM program provides a cost-effective, environmentally safe management alternative to conventional chemical and mechanical management practices.

Tuesday, Sept. 10, 6:00 - 7:30 p.m.

Christensen Forest Preserve

Join Natural Resource Specialist Brandon Clough to learn about the county's efforts to control several invasive woodland species and restore the park's oak/hickory savanna.

Tuesday, Oct. 15, 5:00 - 6:00 p.m.

Hickory Grove Park

Help Story County Conservation staff plant trees in the Hickory Grove Park Primitive Campground to replace ash trees recently lost to emerald ash borer.

PRAIRIE ON FIRE



Each year, SCC's staff spend the fall and spring seasons heavily focusing on performing prescribed burns at a number of properties, as this is one of the crew's most useful management practices.

Photo by Richard Bartosh, Photo Contest Winner

WHY WE BURN

Prescribed burns are the best tool we have in our management toolbox to successfully steward our natural areas. Iowa's native ecosystems evolved with both wild and human caused fire, which gives our native fire-tolerant species a competitive advantage over introduced species. Depending on when and how the fire is conducted, we can drastically affect the plant community and wildlife habitat structure.

The Fall 2023 - Spring 2024 burn season was successful considering the challenging wet and windy weather.

Last fall (November 2 - December 14), SCC staff conducted 13 controlled burns for a total of 35 acres. In the spring (March 21st - May 16th), staff conducted 15 controlled burns, totaling 253 acres. All of these burns were conducted on SCC-owned or managed properties. Continue reading to learn about key benefits fire provides.

FIRE BRINGS BENEFITS:

CONTROL INVASIVE SPECIES - Fire will top kill most fire-intolerant brush species, so it is a great tool for controlling trees and shrubs that are invasive or undesired in a given location. Fire also sets back invasive cool season grasses. Late spring burns stress out the green grasses, leaving space for native prairie species that green up later into the growing season.

DECREASE DUFF LAYER - Many insects and wildlife depend on having space to move around undeterred in the understory of the prairie. They are better able to do this once the duff layer, or previous years' dormant growth, is burned to allow space for new plants to grow.

INCREASE ANIMAL DIVERSITY - Wildlife have different needs and desires for their habitat. Burning part of the landscape in different years creates different types of habitat within the same area. SCC generally burns 25-33% of a given area per year to leave refuge for wildlife during the burn, but while doing so, we also create this heterogeneity.

INCREASE PLANT DIVERSITY - Different species respond differently to fire. Most flourish after a burn year. Some need fire to break their seed coat to allow them to germinate.

INCREASE SUN TO SOIL CONTACT - Removing leaf litter within a woodland gives shade-intolerant species, like oak and hickory, a better opportunity to grow.

ENHANCE SEED PRODUCTION - Burns increase a plant's vigor, making them flower and therefore produce more seed.

Read more on Page 10.



Aerial photos taken during the Skunk River Flats prescribed burn show how large and intense these burns can get.



BEFORE - A late spring controlled fire burns at Jennett Heritage Area on May 16, with the goal of setting back invasive cool season grasses and to control encroaching trees.



AFTER - One week later, it is evident the growing season fire at Jennett Heritage Area put stress on the non-native cool season grasses, therefore creating space for native plants to thrive.



Photo by Kallie Judson

Beginning in 2022, SCC has hosted an annual Public Prairie Burn at Tedesco Environmental Learning Corridor in Ames, where the public is invited to watch a live burn and learn about prescribed fire. This burn is held in the evening to minimize smoke effects to nearby businesses.

PLANNING BURNS

Planning for a given season's controlled burns can start up to a year in advance. A prioritized list is created which includes variables like the desired wind direction and the number of wildland fighters needed. All SCC field staff are trained wildland firefighters following National Wildfire Coordinating Group standards. Burn plans and burn maps are created to account for all the variables the crew may face the day of. Firebreaks are created up to a few months in advance to assist in controlling the burn using as few resources as possible. Being thoroughly prepared allows staff to act quickly and decisively during short-weather burn windows.

PRAIRIE VALLEY PRESERVE: BURNING NEW PRAIRIE

SCC's staff performed a prescribed burn at Prairie Valley Preserve on the xeric (dry soil) remnant prairie for the first time since SCC took ownership. This prairie, located just outside Gilbert, has a plant community unique to Story County due to the soil type. SCC cooperatively developed a plan with Friedrich Iowa Reality (who donated the property) to protect the remnant prairie and the floodplain, while still providing a place for homes. This new property will feature mowed walking trails and a constructed pumped wetland. Stay tuned for more information about Prairie Valley Preserve in the upcoming months!



An Eastern bumble bee (*Bombus impatiens*) exploring the bare dirt at a recently burned area of Prairie Valley Preserve.



A prairie violet (*Viola pedatifida*) emerged soon after the controlled burn. Plants like this could easily be smothered by excessive duff, if not for fire. This plant is incredibly rare and has a low tolerance for habitat degradation. It is the host plant of the Regal fritillary (*Speyeria idalia*) butterfly, a species of Special Concern in Iowa.

BOARD & STAFF

The Story County Conservation Board typically meets the second Monday of each month at the Story County Conservation Center at McFarland Park (56461 180th St.). Meetings are open to the public.

Conservation Board

Christine Laumer, Chair
 Dr. Nancy Franz, Vice Chair
 Dr. Jim Pease, Secretary
 Craig Meyers, Member
 Erica Place, Member
 Linda Murken, Ex Officio Member

Conservation Center Staff, Ames

Michael Cox, Director
 Ryan Wiemold, Parks Superintendent
 Pat Shehan, Special Projects Ranger
 Marianne Harrelson, Financial Data Mgr.
 Jess Paulin, Administrative Assistant
 Jerry Keys, Environmental Education Coord.
 Rebekah Beall, Naturalist
 Bobbi Donovan, Naturalist
 Amber Piatt, Naturalist
 Clair Pfantz, Naturalist
 Madi Nolte, Community Engagement Coord.

McFarland Park Shop, Ames

Russ DeWall, Operations Supervisor
 Logan Heissel, Park Ranger
 Dillon Schmidt, Conservation Technician II
 Kallie Judson, Conservation Technician I
 Derek Seward, Trails/Natural Resources Tech.

Hickory Grove Park Shop, Colo

Jake Smith, Operations Supervisor
 Olivia VanderHart, Park Ranger
 Hunter Simmons, Conservation Technician II
 Maxwell McCarty, Conservation Technician I
 Brandon Clough, Natural Resources Specialist

IRVM Office & Shop, Nevada

Ty Hamiel, Vegetation Mgmt. Biologist
 Tyler Kelley, Vegetation Mgmt. Specialist

Administration Bldg., Nevada

Sara Carmichael, Watershed Coordinator

HELP RESTORE OXBOWS AT WICKS WILDLIFE AREA

[Help us reach our pledge of \\$45,000](#)

Your Story County Conservation *Partners* membership will help restore oxbows at the Wicks Wildlife Area along the South Skunk River, north of Story City. You will receive a nature-themed magnet and a 10% discount on all programs, facility rentals, and merchandise. The Red fox membership level and above will be recognized in the Conservation Center for their support.

Red-tailed Hawk - \$1,000 or more	Goldfinch - \$70 to \$124
Great Blue Heron - \$275 to \$999	Otter (Family) - \$35 to \$69
Red Fox - \$125 to \$274	Great Horned Owl (Individual) - \$30
Eagle Business Level - \$1,000 or more	Monarch Business Level - \$250 - \$999

Name _____
 Address _____
 City _____ State _____ Zip _____
 Phone _____
 E-mail _____
 Enclosed is my check for \$ _____
 My membership level is _____

**Make checks payable to: Story County Conservation *Partners*
 56461 180th Street, Ames, IA 50010-9451; Phone (515) 232-2516**

Thank You!

We are grateful to all those who support Story County Conservation with donations of time, funding, and materials.

THANK YOU TO THE FOLLOWING FOR THEIR GENEROSITY:

All <i>Partners</i> & Volunteers	Big Bluestem Audubon Society
Michelle Ward	David and Marsha Hegland
Nancy Franz	Tammi Reyes
Pheasants Forever	



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WILD WOMEN OF THE WOODS



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October 4-5