

THE NATURE OF THINGS

The Benton County Conservation Quarterly Newsletter

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Electronic versions and email
sign up are available at our
website
www.bentoncountyia.gov



Figure 2: Butterfly Weed

Native Plants in Landscaping

By Cecilia Dirks,
Conservation Technician

While cleaning up the Garrison Trailhead along the Old Creamery Nature Trail, I had a small section that could be landscaped. I wanted to showcase native plants and how little maintenance they require.



Figure 1: Native plant landscaping at the Garrison Trail Head on the Old Creamery Nature Trail

The soil was very sandy in full sun with no water source nearby. A local greenhouse had a short list of native plants available so I researched each one, choosing only plants that would do well in dry soils. I purchased small plants in pots called ‘plugs’, which we planted in early summer.

After planting, the only maintenance done to the garden was adding mulch and weeding. The plants didn’t need any additional watering. Not everything made it, but the ones that did are thriving. Species include butterfly milkweed, wild bergamot, (also known as bee balm), rattlesnake master, soapweed yucca, and Culver’s root. These plants are in their second year of growth and producing beautiful blooms and seeds. They are all perennial so they will come back year after year getting more and more robust. Blooms peaked in early summer with colors including orange, purple, and white.

If you have a troublesome area in your landscaping that you have been struggling to get something going, consider using native plants! Prairies in Iowa range from very dry to swampy areas providing us with a variety of robust and colorful plants to choose from. Plus, the local pollinators love it!

The Story of Chiroptera

By Faith Hunt
Naturalist

Chiroptera was a small bat who lived under the peeling bark of a shagbark hickory tree. Chiroptera had lived in this hickory tree her entire young life, eating little insects that crawled on its bark. While this was working well, Chiroptera had a problem. Winter was coming and Chiroptera was unable to fly. As autumn approached, it became colder and colder. The insects that she depended on were dwindling. Chiroptera felt helpless. All of her family had flown south and were probably gorging themselves on insects while she was left hungry and out in the cold. As the cold nights grew even colder, Chiroptera got even hungrier.

One night, while hanging under the bark of the hickory tree, Chiroptera heard a distant chirp. It sounded just like her mother! Chiroptera squeaked and squeaked and SQUEAKED until finally, she felt a thump land just above her. Chiroptera desperately squeaked one more time. Suddenly, a face as large as Chiroptera's entire body popped down. Large brown eyes the size of hickory nuts and ears covered in hair appeared over a piece of the tree's shaggy bark. Chiroptera let out a fearful squeak and said, "You are not my mother!" The mysterious creature responded with a cheerful voice, "Nope! I am a flying squirrel!" Chiroptera felt disappointed but was relieved she was not alone. The flying squirrel said, "My name is Sabrinus. I was looking for nuts and small insects to fill my belly before winter." In the same thought, Sabrinus paused and inquisitively said,



Figure 3: Chiroptera and Sabrinus. Illustrated by Naturalist, Aaron

"Wait... you are a bat. I haven't seen a bat in weeks! Why haven't you traveled south?" The bat responded, "I am Chiroptera. I've been in this tree since I was born. I am still here alone because I cannot fly." Sabrinus, looking puzzled, said, "You are Chiroptera. Chiroptera means winged hand. You were born to fly!" Upset and defeated, Chiroptera responded, "Well, I can't! I am broken. I can't fly." Smiling, Sabrinus said, "I can help! I can fly!... Well kind of... I glide, but I am really good at it!" Exhausted, Chiroptera wasn't sure about Sabrinus. She thought to herself that this crazy "gliding squirrel" had gone nutty and wasn't so sure about Sabrinus. Sabrinus could tell that Chiroptera was tired, hungry and cold so Sabrinus said, "Hold on. I will be right back!" Chiroptera heard a few scratches on the tree and suddenly it was quiet again. Chiroptera knew that she was alone once again. Moments later, Sabrinus came back with a juicy moth and gave it to Chiroptera. "Here! Enjoy this moth, then we will fly."

The Story of Chiroptera

Continued from previous page

Chiroptera gulped down the juicy moth and burped up its dusty wings. “Wow!” exclaimed Chiroptera. “That was the most delicious moth I’ve ever had! Thank you, Sabrinus.” The flying squirrel smiled and said, “Now we must fly. Unfurrow those wings of yours and flap, flap, flap like you are giving your mother the biggest hug!” Chiroptera, feeling more safe with Sabrinus, started to flap, flap, flap! “Great! Now you must let go of the bark. Loosen your toe grip!” yelled Sabrinus. Chiroptera squeaked “No! I can’t! I can’t! I will fall!” Sabrinus, in a calm and stern voice said, “Chiroptera - it means winged hand. Your mother always believed in you. You must let go and try.” Chiroptera yelped, “I am scared! If I fall, I will die!” Sabrinus, with a caring voice responded, “Before greatness, you must fall. I will be here to catch you” Chiroptera took a big, deep breath and shouted, “OK!” and on exhale, she released her grip on the bark and magic happened. “I’m flying! I’m flying! I can’t believe this! It’s a miracle Sabrinus!” Sabrinus, with a smile as big as the full moon said, “All you needed to do was believe in the power within yourself.” Chiroptera swished and swirled in the sky, weaving and dodging trees along the way.

Sabrinus and Chiroptera laughed and moved together through the woods until Sabrinus couldn’t go any further. “This is where we depart. The trees end here. You must fly south and find your family and I must find my friends so I can rest for the winter.” Chiroptera felt sad to depart from her newest friend, but was excited to see her family again. “Sabrinus, I can’t thank you enough for helping me. In the spring, when I make my journey back to these woods, will you meet me in that hickory tree?” Sabrinus agreed and wished Chiroptera a safe journey.

Chiroptera made it south before the harsh winter hit and found her family and Sabrinus found its flying squirrel friends. The next spring, they found each other again at that shagbark hickory tree and shared tales of the time they spent apart during winter.

SAVE THE DATE

Region 10 REAP Assembly

Wednesday, October 25th at 1:00PM

Counties of Benton, Iowa, Johnson,
Jones, Linn, Washington

Bloomsbury Farm, Party Barn #1
3260 69th Street
Atkins, Iowa 52206

<https://www.iowadnr.gov/Conservation/REAP/REAP-Public-Participation/REAP-Regional-Assemblies>

Summer Reflections

Riley Curtis
Naturalist Intern

As the summer draws to a close, I reflect back on the past few months at Benton County Conservation with nothing but good memories. As the Seasonal Naturalist Intern, I was able to experience many different facets of the field of conservation. I primarily worked with naturalists Aaron and Faith to present educational programs to the public, and gained a lot of hands-on experience in the form of public speaking. During my first month of work, we saw nearly two thousand



Figure 4: Benton County Conservation 2023 seasonal and full time staff group picture

members of the public through field trips at different parks around the county! I was able to work with the conservation technicians on several occasions to see a totally different side of the job; I traded public programs for chainsaws, loppers, and other tools used to keep Benton County's properties maintained. Over the course of the summer I created and led my own public presentation over wildlife rehabilitation, I assisted in projects around the county such as a prairie burn and trail maintenance, and was even able to participate in Project A.W.A.R.E., a river cleanup event that yielded nearly eleven tons of trash from the Iowa River. One memory I will never forget is being able to explore Benton County's new addition to Wildcat Bluff and document over one hundred species of plants, animals and insects that were found there. Working for Benton County Conservation has been an amazing experience and I will never forget my time here!

Eagle Scout Project - Outdoor Turtle Enclosure

Hello, my name is Landon Smith from Troop 47 and I have done my eagle project for Benton County Conservation. My project was an outdoor turtle enclosure to keep the Nature Center's turtles outside during the day to create a more natural environment for the turtles. In total, this project took 10 hours to build and 12 volunteers to complete the project.



Figure 5: Troop 47 installing the outdoor enclosure



Figure 6: Landon with the completed enclosure

The Wild Blue Yonder

By Aaron Askelson
Naturalist

It was the last day of August and my old dog Chester decided I needed to let him out at 3 AM so he could do his business. Normally he sleeps through the whole night and the better part of most days but I am guessing he had no interest in spending much time outside during the day because it was unbearably hot out. It was a beautiful clear night with a bright moon, only one day after the full blue moon and surprisingly bright stars. The temperature had dropped so it was warm but much more pleasant than it had been earlier. I decided to have a seat on my deck and see what the night sky had to offer. Just a week earlier, I was fortunate enough to see several brilliant streaks across the night sky from the Perseid meteor shower. I found the Big Dipper with ease, then the Little Dipper and from that the North Star. As I scanned East along the horizon I saw the three bright stars of Orion's belt. Seeing Orion in the night sky is always so bittersweet. The end of summer, the start of fall, and the coming winter.

The three bright stars of his belt were easy to make out and have been the sign of the fall hunt in the northern hemisphere for thousands of years. Sometimes referred to as the "Three Kings" or "Three Sisters". The belt is an asterism (a small portion of a constellation or pattern) in the constellation Orion. It consists of the three bright stars: Alnitak, Alnilam and Mintaka. Once you have found the belt it is easy to find the rest of the constellation. The stars in Orion's belt are more than 1,000 light-years away, yet they are some of the brightest stars in the night sky.

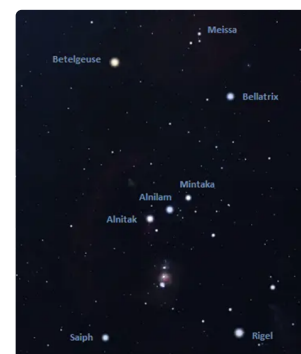


Figure 8: Orion

In Greek mythology, Orion represents the giant huntsman, who angered the goddess Gaia by stating he would hunt down every animal on Earth. Gaia did not like this one bit and sent a scorpion to foil his plan. Orion could not defeat the scorpion and died from its sting. The gods placed them both into the night sky as constellations. Orion and Scorpio are never seen in the sky at the same time. Orion is best seen during the northern hemisphere winter, while Scorpio is prominent in the summer sky, when Orion stays below the horizon.

Other cultures have watched the night sky for ages and have noticed the same patterns of stars in the night sky. The "Winter-Maker" or "One Who Causes the Winter Biboonkeonini" is the Ojibway name for the constellation Orion. Winter Maker's outstretched arms rule over the winter sky. The Lakota referred to Orion's belt as "Tayamnicankhy." They see the belt as the spine of a mighty bison. The bison's ribs are outlined by the rectangle of Orion and its head is marked by the Pleiades, while Sirius marks its tail.



Figure 9: Ojibway Winter Maker

This constellation has been known since prehistoric times. A carving of mammoth tusk with Orion depicted on it was unearthed in a cave in Western Germany in 1979. It has been dated back to

The Wild Blue Yonder *Continued from previous page*

32,000 and 38,000 years old. I wonder what they thought Orion was. What patterns do you see in the night sky? I challenge you on a clear night to find a spot away from all the city lights and take time to relax and look at the night sky. Many of our properties around the county offer spots like this, so get out and explore the wild blue yonder.

Pruning of a Girdled Root By Ed Hach North Unit Ranger

Proper tree care and maintenance is an important part of property management. Most people associate this with cutting out dead or damaged limbs to remove the hazards they pose, pruning of flowering and fruit trees for better aesthetics and crop production, or trimming low-hanging branches to avoid damage to buildings and vehicles. That all pertains to the parts of a tree above the soil, but what about below? Of course the trunk and roots of the tree are just as vital to its health and growth, but do these also require our attention to maintain? While there's not much actual care one can perform on a tree trunk, outside of protection from deer or beavers, the trunk can actually show signs of issues with the roots. With my background in forestry, I encountered something in Rodgers Park this summer that I've seen before.

In figure 10 (on page 7), you'll see what we call a "girdled root". Root girdles occur when a root grows in such a manner that it becomes too close and too tight up against the base of the trunk. While it may not be an issue when the tree is small, as both the trunk and root expand in diameter, this can end up with the tree essentially strangling itself. Since water and nutrients are transferred up and down the tree via the cambium layer just below the bark, a girdling root cuts off this flow. If untreated this will kill the affected side of the tree. It can also harm parts of the canopy that are fed by that section.

This girdling can occur for a number of reasons, but the most common are; improper planting, and/or soil compaction. While prevention of girdling roots is much easier during the planting process (a whole article worth of information itself), we'll focus on what can be done when a tree in the ground is showing signs of a girdled root. Knowing your tree species can be a good place to start, and in my experience, maple trees, specifically hard maple species such as sugar maple, red maple, and Norway maple, are more susceptible to the problem of girdling roots. Clear signs of girdling roots can be as obvious as seeing the root wrapping around the side of a trunk above the surface, or a bit trickier to detect. Most tree species have a visible collar or root flare at the base of their trunks, so this not being visible can be a sign. If no surface roots are visible, but a portion (or entirety) of the trunk base looks like a post going straight into the ground, that can point to a girdled root. If neither of these indicators are present, the simple fact that one side of a tree appears less healthy or dying can be proof enough. Whether the canopy above is thin or leafless, or there is deadwood on the trunk, these can be ways to diagnose the tree, especially if you carefully dig down on that side a few inches and are able to find the girdled root.

The task of root pruning is far less common than pruning branches, but sometimes can be just as important in saving the tree as a whole. Opposite of the typical recommendation of trimming tree branches in the winter, pruning roots is best done in the summer months. Both have scientific reasoning behind them,

Pruning of a Girdled Root

Continued from previous page

involving the seasonal fluctuations of nutrients in a tree. In the spring and summer, trees are in full photosynthesis production, so much of the nutrients and energy are located and spent in the branches and leaves. In the fall and winter, the trees draw their nutrients back into the trunk and roots for safer storage during the cold. So, by trimming branches in the winter, and roots in the summer, you risk the least amount of nutrient loss and damage. Also, trimming in these respective seasons allows for more time for the cuts to heal properly.

The series of photos at the bottom of this page show the process of a root pruning that I completed this past summer. This one was easy to spot - a girdled root above the surface at the base of a sugar maple in Rodgers Park. This is ideal for identification, as it is much easier to address at an earlier stage than when it starts to show the other signs that I listed above. Below, you'll see that I excavated away some of the soil around this so it's easier to see and work around. You can use a shovel for some of it, but I ended up using my hands to gently brush away some of the dirt up close to avoid damaging the tree with the shovel. After that, I assessed the size and location of the root and determined that it wasn't large enough or vital for the tree's survival and I could indeed prune it. Next, I took a small chainsaw with a very sharp chain and cut into the section of the root I wanted to remove on both ends (see figure 11). I cut as deeply into the root as I could without going into the trunk or into the dirt. I then followed up with a sharp ax and was able to chip away at the two cut ends until it broke loose and I could remove it (figure 12). I did return with the saw to make a cleaner cut on the tree side of the removed root, then replaced the dirt to the previous level.

Now with this girdling root out of the way, the tree has room to grow unhindered. You may have noticed how the trunk was being restricted. While the process of this root prune was fairly straightforward, most of this work should be done by a professional in arboriculture. When thinking about tree care, you have to remember that it sometimes encompasses all of the tree, rather than just the branches above.



Figure 10: Girdled root



Figure 11: A chainsaw was used to make a couple of cuts into the girdled root



Figure 12: An axe was used to chip away at the girdled root until it was broken free



Figure 13: After the girdled root was removed

Conservation Board Members

Dan Hill: Vinton, Chair

Mike LaGrange: Vinton, Member

Denni Randall: Belle Plaine, Member

Randy Scheel: Garrison, Member

Becky VanWey: Vinton, Member

The Benton County Conservation Board meets the second Monday of every month.

Check www.bentoncountyiowa.org for times and locations. Meetings are open to the public. **We have an opening!**

Contact us if interested in being on the Board!

Conservation Staff

Shelby Williams, Director

Aaron Askelson, Interpretive Naturalist

Faith Hunt, Interpretive Naturalist

Ed Hach, North Unit Ranger

Layla Hagen, East Unit Ranger

Camryn Grubic, South Unit Ranger

Zach Parmater, Conservation Tech/Ranger

Cecilia Dirks, Conservation Tech

Email anyone on staff by using their first initial combined with their last name
@bentoncountyparks.com

Find us online at: www.bentoncountya.gov
or www.mycountyparks.com

Find us on **Facebook**: [@bentoncountyparks](https://www.facebook.com/bentoncountyparks)

To donate visit <https://www.bentoncountya.gov/conservation/donate/>

Calendar of Events Fall 2023

Registration for all events is required by visiting

<https://www.mycountyparks.com/County/Benton.aspx> unless otherwise stated.

Find Your Voice: Frog Band

September 27th, 4pm-5pm, at Newhall Public Library

Hop into the Newhall Public Library for a "ribbiting" program to learn about Iowa's amphibian friends. Participants will learn about frogs and their calls and create their own frog chorus! No registration required. Free event.

Rodgers Fall Family Fest

September 29th & 30th, 5pm-8pm at Rodgers Park - Enclosed Shelter

Don't miss out on Rodgers Park 2nd Annual Fall Family Fest! On Friday, Good Morrow Pizza will be selling delicious food from 5-8pm. BCC will have campfire dessert ingredients for those with a sweet tooth. There will be yard games set up for all ages and a warm campfire to enjoy. A self-led moonlight scavenger hunt on the trail starts at 7:15pm. On Saturday, Beast & Bird will be serving food from 5pm-8pm. During Trick-or-Treating, from 6pm-7:45pm, traffic will be restricted to lower drive only, while park goers can take note of their favorite decorated site and vote for them at the host site! The winner will be announced at 8pm. Prizes are the following: 1st place: 3-night camping certificate, 2nd place: 2-night camping certificate, 3rd place: 1-night camping certificate. Traffic at the campground will be reopened once trick-or-treating has ceased. Call Ranger Hach at 319-560-9803 with questions about this event.

Chili Cook-Off & Bake Sale

October 7th, 12pm-3pm Hannen Lake Park - White Oak Shelter (East);

Chili entry fee \$20/recipe, Free to enjoy samples!

Bring your best chili to enter into the contest, or come and enjoy all the delicious chili presented!

Competition entrance fee is \$20/recipe (limit 1 per person). Judging categories are: smoked chili, white chili, and classic chili.



Don't want to compete from 1-3pm? Enjoy some chili, bake sale, live music by Scott, Annette & George, and free samples from Benton County Brewing Company featuring a fresh batch of Hannen Lake Scottish Ale, all for a free will donation. Win a Blackstone Griddle! \$10 raffle tickets will be sold at this event for cash only. Raffle winner must be present to win. Chili judging will be held at 2pm with a grand prize of one week of camping for 1st place in each category. 2nd & 3rd places will be entered into a drawing for a weekend in the Hannen Lake Cabin. Call Ranger Grubic at 319-560-9804 with questions about this event.

Artistry with Aaron: Autumn Eve

October 18th, 6:30pm at Benton County Nature Center; \$35 for adult \$20 for kid

This painting class led by Naturalist Aaron will include step-by-step instruction, one 12x16" canvas, and painting supplies to make an Autumn Eve painting. No refunds. Registration is required by October 12th by visiting www.mycountyparks.com



Nature at Night

October 18th, 8:00pm at Benton County Nature Center

Learn about nocturnal animals and take a short hike to observe wildlife, including owl calling. This night program requires quiet participation to not scare away the wildlife and will be outdoors so please dress and plan accordingly. Registration is limited and required by visiting www.mycountyparks.com



Beast & Bird Fall - Beef Fest

October 20th, 5pm-8pm at Celebration Park (105 W 2nd St, Vinton, IA 52349)

Benton County Conservation will be at Beef Fest 2023 at Celebration Park! Beast & Bird and Antonio's Mexican Grill will be serving food. McBrides Mobil Taps will have drinks. BCC offering campfire desserts, and other activities for kids. Questions? Contact Logan at logan@thebeastandbird.com



Grapevine Wreath

November 8th, 6:30pm at Benton County Nature Center; \$10/wreath

Come out to the Nature Center and enjoy the art of wreath making. We will be making grapevine wreaths and decorating them for the holidays. No skills necessary, just a little imagination. If you have anything you would like to use to personalize your wreath feel free to bring it. No refunds. Register by November 3rd by visiting www.mycountyparks.com



Flora, Fauna & Females: Candles and Cookies

November 18th, 10am-12pm at Benton County Nature Center; \$10/person

Learn candle making basics while creating new friendships! We will be making jar candles with a fun twist. Participants must be 10 years of age or older to participate. Anyone under the age of 18 must be accompanied by an adult. BCC will provide warm beverages. Participants are encouraged to bring cookies to share. While this program is geared towards women, everyone is welcome to join. No refunds. Registration is limited and required before November 10th by visiting www.mycountyparks.com

Upcycle Gift Bags, Bows & Tags

November 30th, 6:30pm at Benton County Nature Center

Reduce, reuse, recycle, gift! We will be making gift bags, creating unique bows and custom gift tags during this program. Bring in old calendars, wrapping paper and cards to give them new life! BCC will have some items to create a gift bag. Feel free to bring snacks and beverages. This program is free but cash donation is appreciated. Registration is required for this program by visiting www.mycountyparks.com

Corner Basket Class

December 2nd, 9am at Benton County Nature Center; \$40

Come weave with us at the Nature Center! We will be weaving corner baskets with a wooden, triangle base (8.5x8.5x12). Space is limited so registration is required before November 26th. Register by visiting www.mycountyparks.com. Registration fee to be paid on the day of the program by cash or check.



Woodburning: Coasters & Ornaments

December 7th, 6:30pm at Benton County Nature Center; \$5/item

Join us at the Nature Center to wood burn drink coasters and ornaments with a nature theme. This beautifully simple project is designed for all abilities. Some of the patterns might be animal tracks, mushrooms, or feathers — you decide! Cost is \$5 per person (Includes one coaster or one ornament, paid at the time of registration). If you would like, and time allows, additional items can be made for \$5 each. This program is suitable for participants 10 years of age and older. Anyone under the age of 18 must be accompanied by an adult. No refunds. Please register for the class by November 30th by visiting www.mycountyparks.com

SAVE THE DATE

**JANUARY 20TH, 2024
AT HANNEN LAKE PARK**

**2024 BENTON COUNTY CONSERVATION
ICE FISHING TOURNAMENT**