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









Glimmering Enchantments

By Faith Hunt Naturalist

I have beloved memories of spending my evenings chasing fireflies, scooping up their tiny flashing bodies with my hands and placing them into a jar, just to set them next to my bed to watch the glimmering enchantments as I would doze off to sleep. Many of us who live in the midwest share fond memories of fireflies. Fireflies, or lightning bugs, have been cherished in art, culture, music, mythology, and literature and have been around for 100 million years.

We are fortunate to be able to see fireflies here in the midwest as the iconic summertime flashers do not live farther west than Kansas. Out west, they still have fireflies but only the adult females glow. They are flightless and have a very faint glow—so faint that their light is hardly detectable to the human eye, even after being fully adapted to the dark. They are known as glowworms.

Different species of fireflies have different flash codes. The time of night, height in air, flight patterns, and light patterns all play a role in courtship and identifying different species. On average, there are 50 males for every female firefly. Females are looking for males with the longest duration of flash, intensity of light and frequency of flash. When females have selected a mate, they will let out flashing

signals which will invite the selected male in for mating. Their flash is also used for self defense! It warns potential predators that they are toxic.

With the uniqueness of fireflies, they deserve some attention. So much so, that we have decided to create an entire festival around them! Benton County Conservation is hosting our first annual Firefly Festival on July 20th, 2024 from 4:30pm-9:00pm at the Nature Center. During this magical evening, there will be live music, art, food trucks, drinks, information about the unique history of fireflies in Benton County, firefly education, and of course, plenty of firefly catching. Follow our <u>Facebook page</u> for more information. We hope to see you there!

New Faces in Conservation - Integrated Roadside Management

The Roadside Department/Weed Commissioner duties have recently shifted to be under the umbrella of Benton County Conservation. Benton County is now one of 16 counties in Iowa where the roadside program is under Conservation. This switch aligns more with the department's goal of combating invasive plants while promoting native species. If you stop by the Roadside Management Department, you might see some new faces.



Figure 1: Eric Schares Roadside Manager & Weed Commissioner

Eric Schares

I am the new Roadside Manager and Weed Commissioner for Benton County. I bring over 6 years of experience as a roadside manager with another 10 years of experience on top of that managing almost any living plant from trees to golf greens to baseball fields. In 2008, I graduated from Hawkeye Community College with a degree in Horticulture. I also am a Certified Arborist. When I'm not at work, you will likely find me coaching or watching baseball and wrestling. My wife Jacki and I enjoy watching our son, Graham and daughter, Sloane compete in their many activities.

Ethan Hennings

My name is Ethan Hennings, I am 20 years old and a graduate from Waverly-Shell Rock Highschool. I graduated this spring from Hawkeye Community College from the Natural Resource Management program. I have previously worked as a seasonal for the City of Waverly's Vegetation Management department. I have also worked for Black Hawk County Conservation as a Conservation Intern. In my personal time I like to hunt and do some fishing as well.



Figure 2: Ethan Hennings Roadside Technician



Figure 3: Brock Leaders Roadside Technician

Brock Leaders

I'm Brock Leaders from Woodbine, Iowa. I graduated from the University of Iowa with a BA in Environmental Policy and Planning. I've found that I have a passion for conservation through 3 years of internships in the past with Harrison County Conservation and the Iowa Natural Heritage Foundation. I enjoy working outside, learning new skills, and helping others. I'm excited to help make a difference and I look forward to making connections here in Benton County!

Venomous Snakes in Iowa: Understanding and Appreciating Their Role By Ed Hach,

By Ed Hach, North Unit Park Ranger

As the days have grown longer and warmer, many of Iowa's creatures that ride out the colder months in one form or another of hibernation begin to emerge. You may have already seen bats flying about at dusk in search of flying insects such as the much-maligned mosquitoes. Likewise, this summer we are afforded the opportunity to witness rare broods of cicadas. With all the recent rain, we've had no trouble hearing the frogs and toads sing their tunes, or spotting turtles perched on logs. But, of course, summer also brings about the arrival of certain creatures of the legless variety, that many people find themselves repulsed by, or afraid of - SNAKES!

There are 27 species of snakes in Iowa, four of which are venomous, three of those being rare and nowhere near Benton County. First off, certain species of snakes use venom as a method of killing their prey and defending themselves. They are not poisonous as the common misconception goes. Poisonous plants like milkweed and animals such as monarch butterflies or South American dart frogs utilize or produce toxins that harm or kill those that dare eat them. Snakes bite and inject their venom into their target's bloodstream. The trick I use to differentiate is that poison is ingested, while venom is injected.

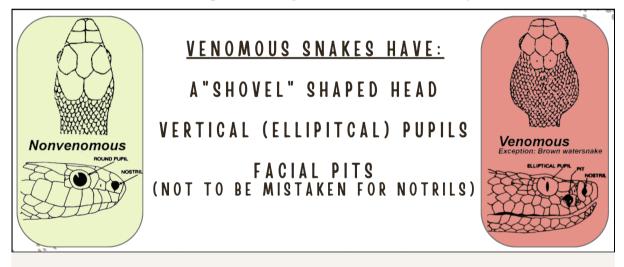


Figure 4: Infographic showing nonvenomous vs venomous snakes in Iowa. Created by Naturalist Faith Hunt

The three of Iowa's venomous species that aren't found near Benton County are; the copperhead - which is found only in the southeastern corner of Iowa, the prairie rattlesnake - only found in Plymouth County in northwestern Iowa and the western massasuga. The two venomous species that may be found near Benton County are the timber rattlesnake and the eastern massasuga. Though no confirmed reports of either have been recently recorded within Benton County, some of their preferred habitat exists here and our proximity to known populations means they could be here. If these snakes are present, you still have no need to fear them. Snakes aren't "out to get us" and bites that require hospitalization in the U.S. are rare and occur almost exclusively by people unwisely attempting to handle the animals. Snakes see humans as either threats or nuisances, so they do their best to avoid us. If you think about it, rattlesnakes even give us the courtesy of making their warning noise to not come any closer.

Venomous Snakes in Iowa: Understanding and Appreciating Their Role

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Now, notice I didn't mention the cottonmouth - also known as water moccasin - as one of Iowa's venomous species. The closest their range comes to Iowa is the St. Louis area, over 200 miles south of Benton County. Many people often mistake one of Iowa's three species of water snake as a cottonmouth. The northern water snake is very common throughout the state, and though they may appear frightening if you spot them swimming on the surface or curled up in the rocks, they are harmless and are only searching for food such as insects, amphibians, and even small fish.

While we may prefer to never encounter Iowa's serpents - venomous or not - they actually do us a great service when it comes to pest control. While young snakes eat many insects, adults prey on various rodents. Mice, rats, ground squirrels, voles, moles, etc. that often carry diseases or cause damage to our properties when their populations get too high, they are kept in check by snakes and other predators. Snakes are uniquely adapted to hunting these small mammals with their ability to seek out rodents in their burrows and other tight spaces.

Lastly, of the five species of venomous snakes in Iowa, all but the timber rattlesnake are listed as endangered, and all five are protected under law. Habitat loss and misguided fear to the point of humans killing them has left their populations quite low and fragmented. If you were to see a snake near your home that you think might be venomous, please contact the Iowa DNR or a licensed nuisance wildlife handler. Remember, snakes aren't seeking to harm you, and like many misunderstood species, do us and the ecosystem a great favor!



Figure 5: Timber rattlesnake Photo courtesy of Iowa DNR

New Faces in Conservation - Summer Seasonals



Figure 6: Gabby McDonald Conservation Aide

Gabby McDonald

My name is Gabby McDonald, I'm 32 years old and from Urbana, Iowa. I have always enjoyed the outdoors since I was a little girl; going hunting with my dad or going camping with the family. What really drew me into conservation was back in 2001 and 2002 I volunteered as a tech at Yellowstone National Park helping at the Ranger post and campground, right then and there I knew it was my passion. I was originally born in Norfolk, VA and raised in Cedar Rapids, IA. My hobbies include bow hunting, fishing, camping, kayaking and at the moment an apprentice for Blue Moose taxidermy shop. My goal as a seasonal conservation technician is to possibly go back to school for my 2 year degree to become full-time conservation technician.

New Faces in Conservation - Summer Seasonals



Figure 7: Cara Harrill Conservation Technician Aide

Cara Harrill

Hello! My name is Cara Harrill and I am the Conservation Technician Aide this summer at Benton County Conservation. As a kid, I had a passion for hunting, fishing, and the outdoors, so I always knew I wanted to find an outdoors job. I grew up in La Porte City, and now live south of Dysart on my boyfriend's family farm.

After graduating high school, I attended Hawkeye Community College where I received my Associates of Applied Science in Natural Resources Management and a Natural Resources Aide Certificate in May of 2021. While attending college, I found great interest in woodland management and prairie restoration. My career goal is to become a Conservation Technician.

I worked for Black Hawk County Conservation at Hickory Hills Park for three summers before starting with Benton County Conservation as a Naturalist Intern in the fall of 2021. I worked as a seasonal worker last summer at Rodgers Park.

I spend my free time with family, friends, and my dog, Benny. My family owns a small cabin in southeastern Iowa where we enjoy getting away and relaxing. I am looking forward to gaining more knowledge and getting hands-on experience!

Abby Brecht

Hi, my name is Abby Brecht, and I am the summer Naturalist Intern for Benton County Conservation. I live in Williamsburg, Iowa with my husband, Phillip. For the last 13 years I have taught junior high and high school life science, including classes such as biology and environmental science. I have always had a love for the outdoors and enjoy activities such as canoeing, fishing, hiking, camping, gardening, and observing and identifying plants and wildlife. This summer I am looking forward to learning more from the Naturalists about native flora and fauna, having the opportunity to present educational programs to the public, going on the River Raiders canoe trip, and working to educate and improve conservation practices.



Figure 8: Abby Brecht Naturalist Intern

Join our mission to raise funds for the Wildcat Bluff Addition Acquisition! Be part of the change for a wilder Benton County!	E TODAY 2024
PAY TO THE BCC Foundation	\$ Tax deducitble funds
DOLLARS Protect natural resources for years to come!	
MEMO Wildcat Bluff Addition Contact us today at foundation@bentoncountyparks.com	

We Need Pollinators and Pollinators Need Us By Abby Brecht Naturalist Intern

With the arrival of summer comes the arrival of pollinators and their food sources. There are hundreds of species of pollinators in Iowa, consisting of bees, butterflies, beetles, flies, moths, birds, and bats. What exactly is a pollinator? A pollinator is an animal that helps move pollen from one flower to another (which helps the plant reproduce and produce a seed or flower). Not only do pollinators help keep our natural ecosystems healthy, they are also a critical part of providing food for us. It is estimated that 70-85% of the world's flowering plants depend on pollinators for pollination and more than 75% of crop species depend on pollinators. If you enjoy eating fruits, vegetables, seeds, nuts, or meat or drinking coffee or juice, you are consuming a crop that is dependent on pollinators. Unfortunately, pollinators are in decline due to factors such as disease and parasites, loss of habitat, and insecticide exposure. One of the most iconic pollinators, the monarch butterfly (*Danaus plexippus*), is losing an essential food source - milkweed - and is estimated to have had a population decline of around 80% in the last 20 years.

There are many simple things you can do to help pollinators, the primary one being creating safe habitat, whether you have just a few square feet or many acres to work with. When creating pollinator habitat some of the important things to think about are:

- Finding a sunny location.
- Including a diversity of flowering plants.
- Choosing native plants, which are able to tolerate drought and whose roots help reduce runoff.
- Providing both plants that are a nectar source for adults as well as plants that are a host for caterpillars.
- Ensuring that there are different types of plants that will bloom from spring, through summer, and into fall.
- Not disturbing the ground where bees and wasps nest or the grasses and leaf litter where beetles and flies overwinter.
- Avoiding the use of insecticides.
- Practicing patience it can take up to three years for native plants to establish roots before they can focus on foliage and flowers.
- Spreading the word and joining a citizen science project.

Another thing you can do to help pollinators is to build a native bee house. There are many designs online or you can follow this link. The important things to remember when building your own bee house are that the roof should have an overhang to keep the entrance dry, there should be a variety of diameters of the holes in the materials you use, the materials used should be resistant to pathogens such as mold, and it should be located 3-5 feet off the ground.

With all the insects flying around, you may be wondering how to tell what you're looking at. While many pollinators share similar characteristics, the following are some features you can use to tell pollinators apart. Bees and wasps are closely related and share many features. Some distinguishing characteristics are that bees have a sturdy hairy body with a slender waist, eyes on the sides of the head, long thin antennae, and two sets of wings. Wasps have a slender body with a longer waist and less hair; like bees, they also have eyes on the sides of the head, long thin antennae, and two sets of wings. Beetles also have two pairs of wings, but unlike bees and wasps, the front pair of wings are not used for flying and are instead used to

Figure 9: Monarch butterfly on swamp milkweed

We Need Pollinators and Pollinators Need Us

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Figure 10: Hoverfly

cover their backs when they have landed; many are hard and shell-like. Flies can sometimes look like bees or wasps, but are distinguished by having only one set of wings. They can also be distinguished by having eyes located on the front of the head and antennae that are shorter and thicker. Butterflies and moths are two more groups that can be tough to distinguish. Both have patterned wings, but the way they hold their wings when at rest can be the first step in telling them apart - butterflies typically hold their wings together or in a V-shape while moths hold their wings flat. Another feature to note is that moths are typically hairier than butterflies. Finally, the antennae of butterflies have a tip with a club or bulb-like shape and moths' are feathery or a single filament.

Some examples of the beneficial pollinators around us include:

- Green lacewings (*Chrysopidae*) feed on nectar but are also predators of pests such as aphids.
- Mining bees (*Andrenidae*) nest in the ground and are important in pollinating crop plants such as apples and blueberries.
- Minute pirate bugs (*Anthrocoridae*) consume pollen and nectar, but the adults, as well as nymphs (juveniles), will consume large amounts of pests such as aphids and mites.
- Fireflies (*Lampypridae*) consume pollen and nectar and also feed on snails and slugs. They are also well-known for their beautiful evening light displays.
- Swallowtail butterflies (*Papilionidae*) have large, colorful wings and visit a wide variety of flowers, pollinating along the way.



Figure 11: Lacewing & masonry bee

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Conservation Board Members

Mike LaGrange: Vinton, Chair Dan Hill: Vinton, Member

Samantha Hunter: Mount Auburn, Member

Randy Scheel: Garrison, Member Becky VanWey: Vinton, Member

The Benton County Conservation Board meets the second Monday of every month. Check www.bentoncountyia.gov
For times and locations. Meetings are open to the public.

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

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

Find us online at: www.mycountyparks.com
Find us on Facebook: @bentoncountyparks
To donate visit https://www.bentoncountyia.gov/conservation/donate/

Calendar of Events Spring 2024

Registration for all events is required by visiting

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

Conservation Library Programs: Cicadas!

June 25th, 9:45AM at Van Horne Public Library (114 Main St, Van Horne, IA 52346) July 23rd, 2PM at Atkins Public Library (480 3rd Ave, Atkins, IA 52206)

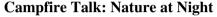
July 23rd 4PM at Newhall Public Library (109 Railroad St, Newhall, IA 52315)

August 13th, 10AM at Vinton Public Library (510 2nd Ave, Vinton, IA 52349)



June 25th, 1PM at Hannen Lake Park; Free

Learn about some of the critters that live in lakes, ponds, and streams of Iowa! Participants will have a chance to touch and learn about various water critters that are found right here in Iowa. Registration is required by visiting www.mycountyparks.com



June 28, 8:30-9:00PM at Rodgers Park - Enclosed Shelter; Free

Join the Naturalist Intern for a presentation about animals that you might have seen or heard at night. Learn about which animals are nocturnal and how they see at night, listen to animal calls, and test your own night vision. There is seating available but you are welcome to bring your own camp chair and/or blanket. If you have a headlamp/flashlight with a red light mode, feel free to bring it. No registration required.

Feeding Frenzy

July 9th, 1PM at Benton County Nature Center; Free

Have you ever been curious about how a snake eats? Or wanted to watch turtles munch down their food? Join us for the Nature Center Feeding Frenzy to view what our animal ambassadors eat and how they do it! No registration required.



Williamsburg Basket Class

July 11th, 9:30AM-3:30PM at Benton County Nature Center; \$38/basket

Make your own 12" rim Williamsburg Basket! It is encouraged to bring snacks or a bagged lunch for this program. Registration is REQUIRED by emailing <u>info@bentoncountyparks.com</u> or call 319-472-4942.

Creek Stomp

July 12th, 10AM-11AM at Wildcat Bluff Recreation Area (3139 57th Street Trail, Center Point, Iowa 52213); Free

Come explore the creek at Wildcat Bluff Recreation Area! This program is suitable for all ages so bring the whole family! Participants must wear shoes and be prepared to get wet and dirty. Meet at the pavilion. Registration is required by visiting www.mycountyparks.com

Campfire Talk: Iowa Adaptations

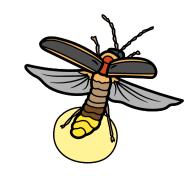
July 12, 8:00-9:00PM @ Hannen Lake - East shelter; Free

Join the Naturalist Intern for a presentation about animals and plants that are native to Iowa and meet an animal ambassador. Learn about the special adaptations they have to help them survive in their environment. There is seating available but you are welcome to bring your own camp chair and/or blanket. No Registration required.

Firefly Festival

July 20th, 4:30PM-9:00PM at Benton County Nature Center; Free

Bring your family & friends out for a magical evening filled with fireflies, laughs, delicious food and beverages, games, art, firefly education, & live music from local artists! Local organizations attending this event include Tanager Place, Benton County Historical Society, 42 North Winery, Craivin' Shavin's Shaved Ice, Beast & Bird, Antonio's Mexican Grill and the Vinton Guild of Fine Arts. Follow our <u>Facebook page</u> for updates! Bring your own lawn chair and jar with a lid. No registration is required.



Wildlife of Irvine Prairie

August 7th, 10AM at Irvine Prairie (1174 55th Street, Dysart, IA); Free

Join a Naturalist and explore Irvine Prairie! We will be looking for animals, signs of animals and learning about plants! Dress to walk through tall grasses. No registration required. The driveway on the north is a private drive; please do not use it. Park on the south side of the road in the grass, near the stone marker. No registration required.

Toddler Time: Colors in Nature

August 9th, 10AM at Benton County Nature Center; Free

Our smallest nature explorers will observe their environment to search for as many colors as they can find. Participants will search outside the Nature Center to match colors to items in nature and then use crayons to make drawings or rubbings. This program is best suited for children ages 2-6. Registration is required by visiting www.mycountyparks.com

Natural Inks & Dyes

August 10th, 10:00AM-11:30AM at Benton County Nature Center; \$5/person

Come learn about and use natural inks and dyes. Participants will take a brief walk around the nature center to collect plants that can be used to make inks and dyes, learn about the process of making inks and dyes, and then have a chance to dye a canvas tote bag and paint with the inks. Registration is required by visiting www.mycountyparks.com

Taste of the Wild Camp

August 15th, 9AM-2PM at Benton County Nature Center; \$30/camper

Ever eaten cricket cookies or sipped sumac-ade? This camp is a day for "wild" snacks and a foraged lunch. This creative foods camp is for kids going into 3rd-5th grade. Registration is required by visiting www.mycountyparks.com

Campfire Talk: Remarkable Reptiles

Aug 16, 7:30-8:00PM at Rodgers Park - Enclosed Shelter; Free

Join the Naturalist Intern for a presentation about reptiles native to Iowa and have the opportunity to meet a few of the animal ambassadors. There is seating available but you are welcome to bring your own camp chair and/or blanket.

DISCOVER: WOLVES & BEARS OF THE UPPER MIDWEST BUS TOUR

Ely, Minnesota September 26th-29th, 2024







Contact us for more information! Michael Maas: 563-581-3553 Faith Hunt: 319-560-9809



This is a joint trip with Buchanan County Conservation and Benton County Conservation Get ready for a 4-day adventure packed with howling excitement as you journey to the International Wolf Center and the North American Bear Center! Join other wildlife enthusiasts in special programming to learn more about these incredible creatures. This trip will also include siteseeing along the scenic highway to Twin Harbors, additional visitor centers, time for shopping in Ely, and more!

Cost Per Person:

Single Occupancy Fee: \$870
Double Occupancy Fee: \$640
Triple Occupancy Fee: \$560
Ouad Occupancy Fee: \$530

Trip fee includes motorcoach transportation, lodging, entrance fees, tours, breakfast, & tips.

Participants will be responsible for lunches & dinners.

\$200 deposit required at registration

Register online at www.buchanancountyparks.com under the events tah

Deadline To Register is August 23rd, 2024