

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.bentoncountya.gov



GIS and Benton County Conservation

By Layla Lynch
East Unit Park Ranger

You may have heard the term “GIS”, but have you wondered what it really entails? Maybe you have wondered how the maps you use at county and state parks are created. Is someone guessing where a boat ramp or shelter is and just posting a symbol on a map image, or is that person going out to the areas and documenting the exact location through satellite points? Let’s dig into GIS and see how we use it at Benton County Conservation!



Figure 1: Conservation staff collecting GPS coordinates at Minne Estema State Park

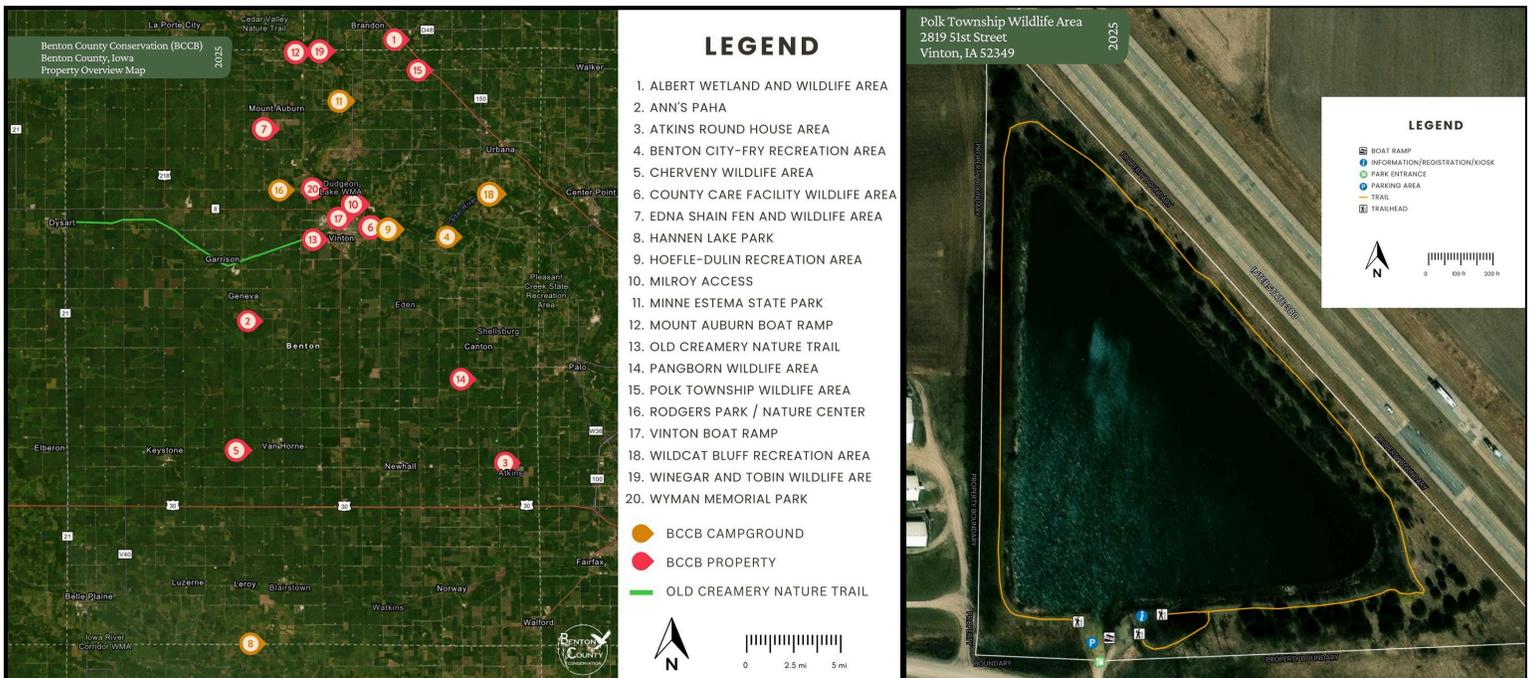
GIS, or Geographic Information Systems, is a technology that is used to create, manage, analyze, and map different types of data such as streets, buildings, vegetation, bodies of water, or any other points of interest. By using computer software that creates visual maps (think of Google Earth or your car GPS) and GIS equipment (usually a phone or tablet with bluetooth that can connect to satellites), a user can go out to different locations and mark different points of interest and add as much information as you’d like to input.

These points of interest are integrated into a visual map which allows people to more easily see, analyze, and understand patterns and relationships. For example: there is a unique plant species that we find growing at one of our properties. If we go out with our GIS equipment and add points to our online map to show where this plant was found, we may be able to see that this plant species tends to grow on north facing slopes. We can analyze a pattern and understand more about this plant species.

Since 1963, GIS has grown into a very useful tool among agriculture, real estate, government, and many more agencies, and we use it here, right in Benton County! Currently we are working on creating area maps for our properties and campgrounds.

We could map out every tree and bench that each property has, but to make it simpler for a user to take in, we have created a list of key features we would like our maps to show, including camp sites, public restrooms, information kiosks, and playgrounds.

We are thrilled to share that all of our campground maps for 2025 are up to date on our county website at: <https://www.bentoncountyia.gov/conservation/maps/> and we have several other BCCB property maps uploaded with more coming soon! These maps are available to be viewed while online, but you can also download them before you head out if you expect to lose phone service. Click on the link to see what each area offers and enjoy our Benton County natural areas!



From Extirpation to Restoration: The Return of Wild Turkeys

By Cara Harrill
Conservation Technician

Spring turkey season is right around the corner! Let's take a look back at the history of wild turkey in Iowa, and how the once extirpated, or locally extinct, population has recovered. When the first settlers crossed the Mississippi into what would later become Iowa, they found an abundance of wild turkeys, which soon became a main food source. Quickly populations depleted due to unrestricted hunting, overharvesting, and habitat loss due to agriculture.

By 1910, the eastern subspecies of wild turkey was extirpated from Iowa, with the last confirmed sighting being in Lucas county. There were estimated to be millions of wild turkeys across the United States prior to the 1900s, but those numbers dwindled to just over 250,000 by 1920.

A few years prior, in May of 1900, the Lacey Act was introduced by Iowa congressman John Lacey, which made it a federal crime to "import, export, transport, sell, receive, acquire, or purchase in interstate or foreign commerce any wildlife that was taken, possessed, transported, or sold in violation of any law or regulation of any state or in violation of any foreign law." Since then, the Lacey Act has been amended five separate times between 1969 and 2022.

From Extirpation to Restoration: The Return of Wild Turkeys

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Starting in the early 1920s, many states began forming conservation agencies that created protection for various species of wildlife. Early restoration programs were unsuccessful for decades due to pen-raised birds losing natural instincts and domestic poultry diseases; later projects proved to be successful due to the development of the rocket net.



*Figure 3: Hen turkey caught in rocket net set up by IDNR for research
Photo from IDNR*

With the development of the rocket net, it allowed agencies to control large, wild populations for relocation. Soon, populations of turkeys were being transplanted to uninhabited areas across the state. In the 1960s, other subspecies of turkey were brought to Allamakee, Lucas, and Monroe counties with little to no success. From 1965 to 2001, over 3,500 turkeys were transplanted at 260 different locations. Much of this was paid for by Iowa sportsmen and women through revenue generated by the sale of hunting and fishing licenses, and the tax on sale of firearms and ammunition. The National Wild Turkey Federation, founded in 1973, also played a large role in restoration efforts.



Figure 4: Hen and Tom

By 1974, the wild turkey population had increased so much, it allowed for the first modern day hunting season to be opened. Between 1980 and 2001, Iowa traded other states over 7,500 turkey in exchange for 356 prairie chickens, 596 ruffed grouse, over 180 river otters, over 80 sharp-tailed grouse to be transplanted around the state, and over \$3.2 million to purchase Iowa land for habitat. A three-way trade was created between Iowa, Kentucky and Louisiana; for every otter purchased from Louisiana, Iowa would give Kentucky two wild turkeys in exchange for each otter. Sixteen otters were purchased and later introduced to the backwaters of Red Rock Reservoir south of Des Moines in 1985.

Today, turkey numbers are once again in decline; not just in Iowa but across the midwest and eastern portions of the United States. According to the Iowa Department of Natural Resources (Iowa DNR), nests are failing and fewer poults are surviving each season. In 2022, the Iowa DNR began a 10-year study of the turkey population in the southeast portion of the state. Surrounding states such as Nebraska, Wisconsin, Ohio and Tennessee are in early stages of research as well. With many questions still unanswered, biologists are hoping to find long-term data trends within the 10-year study, whether it be disease, predators, environmental factors, or weather patterns.

From Extirpation to Restoration: The Return of Wild Turkeys

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It is remarkable that a once extirpated species made a comeback as successful as the wild turkey did, but the work is not done. Through new research over time, biologists are looking to fully understand what is causing this current population decline.

You can help become part of the research by reporting sightings to the Iowa DNR on their website; search for the “Wild Turkey Survey.” I’ve also attached a link to a video showing the DNR’s research project that is currently ongoing. Good luck and happy hunting!

Wild Turkey Survey: <https://www.iowadnr.gov/news-release/2024-06-25/iowans-encouraged-report-wild-turkey-sightings-july-and-august>

Iowa DNR Turkey Research Project Video: https://www.youtube.com/watch?v=J5hqBNp87_Y

The **NONRESIDENT** spring turkey application period is Jan. 1 to the last Sunday in January. The application is available in December at www.iowadnr.gov/Hunting/Nonresident-Hunting

2025 SPRING TURKEY HUNTING COMBINATION GUN/BOW LICENSES

Youth Season (Residents Only)

Season 1

Season 2

Season 3

Season 4

RESIDENT ARCHERY-ONLY LICENSES:

SEASON DATES

April 11-13

April 14-17

April 18-22

April 23-29

April 30-May 18

April 14-May 18

BAG LIMIT: Daily bag and season possession limit is one bearded or male wild turkey for each valid license and transportation tag issued to the hunter.

SHOOTING HOURS: Half-hour before sunrise to sunset.



Figure 5: Five Toms showing off their impressive fans

WINTER'S END BY AARON ASKELSON, NATURALIST

THE DAYS GROW LONGER AND THE NIGHTS GROW WARMER
THE ICE BEGINS TO RECEDE AND THE SMALL STREAM FLOWS FREELY
DRIP, DRIP, DRIP
THE MELTING EDGE OF THE ICE SUSPENDED JUST ABOVE THE WATER LINE KEEPS
TIME
UNDER THE WATER'S SURFACE LIFE BEGINS TO STIR, WHAT LAID DORMANT DURING
THE COLD WINTER HAS BEGUN TO AWAKEN
THE WIND BLOWS THE STUBBORN DRIED LEAVES OF AN OAK STILL CLINGING TO ITS
BRANCH
THE RUSTLING SOUND ADDING TO THE RHYTHMIC
DRIP, DRIP, DRIP
FURTHER DOWNSTREAM EVIDENCE THAT A BEAVER ENJOYED SOME WILLOW
BRANCHES LAST NIGHT
THE DAYS GROW LONGER AND THE NIGHTS GROW WARMER
THE SAP FROM A BROKEN MAPLE BRANCH HAS FORMED A SMALL SWEET ICICLE
DRIP, DRIP, DRIP

A community scientist is someone who contributes to scientific research. Community scientists are people who have a little bit of time and interest in contributing to local and national data about the world around them! You don't need advanced degrees or years of experience, just a passion for science, a willingness to help with research, and an eagerness to volunteer your time. We participate in a few community science projects every year - Monarch Watch (catching and tagging migrating monarchs), Monarch Health (testing monarchs for parasites) and Iowa DNR Frog and Toad surveys (gathering data on amphibian populations). Not only are these activities enjoyable and informative, but by continually collecting data from similar locations year after year, we can start comparing and finding trends in our area that can help contribute to the bigger picture.



Figure 6: Program participant holding a tagged monarch butterfly at Hannen Lake Park

Due to limited resources and staff to gather data, community scientists play an important role in helping better understand our world. They help collect and monitor data on various topics such as water quality, frogs and toads, weather, insects, plants, and so much more by allowing scientists to work with more diverse information for their studies. Researchers can't be everywhere all the time and don't know your community as well as you!

To become a community scientist, start by deciding what interests you most, then find a project that matches! A quick online search will reveal numerous opportunities. Scientists are looking for help on a wide range of topics, from monitoring birds, bees and trees! Find one that best suits your interest and run with it!

Once you find a project that peaks your interest, check the guidelines to see how to get started. Some may require registration or specific training, while others let you jump right into collecting and submitting data. Make sure you pick a project that is achievable for you - both for time and abilities. You may be surprised at all the new things you will learn! While performing your community science research, always double-check your data to ensure it's correct, as false information won't be helpful. Accuracy is key!



Figure 7: Supplies for frog and toad survey

Most importantly, enjoy the experience! You'll not only help with valuable research but also learn along the way. There are so many exciting community science projects to be a part of. In Iowa you can volunteer with the Iowa DNR to participate in frog and toad surveys, monitor bird nests, or help with bat acoustic surveys and more. To learn more and get involved, visit <https://www.iowadnr.gov/Conservation/Iowas-Wildlife/Volunteer-Wildlife-Monitoring>. If you are interested in insects, check out Xerces Society and their programs: <https://www.xerces.org/community-science>. There are endless community science opportunities and there is a project out there for everyone!

Set It and Forget It!!!

By Eric Schares
Roadside Manager



Figure 8: Eric and his son Gram getting ready to plant a maple tree

So you've planted your tree and now all you have to do is sit back and wait 30 years to enjoy the shade, right? Wrong, there are still many things you can do to maximize the quality and longevity of your tree.

"But Eric, you are the Roadside Manager, why are you talking about trees?" Although that is true and usually in the roadside setting you are removing trees instead of planting them, I still have a passion for trees and tree care. I am also a Certified Arborist, and my coworkers will tell you I try to fit that title into any conversation I am having about trees as a badge of honor.

It's true that more than 80% of Iowa used to be Tallgrass Prairie with almost no trees in open areas. I think it is important to note that trees can be very useful now that the landscape has changed so much. Native grasses and forbs have their place and I'd love to see more planted, but let's face it, a native tree can be a great asset to your yard.

I'd like to talk to you about how to care for those trees once you've planted them. The first five years of that tree's life post planting can set that tree up for 100's of years. If not cared for properly, those five years can be the beginning of the end.

Let's start with the basics, water. I'm pretty sure your average kindergartener could tell you that all plants need water, but not everyone knows just how much water. Your average tree needs 0.2 tenths of rain a week for optimal growth. The last few summers in Iowa the rainfall total has been zero for many weeks in a row, so many times it's important to hand water your tree. A handy tool to help with this process is a tree watering bag. They wrap around the trunk and zip up like a coat. These watering bags can hold up to 20 gallons of water and drip it out slowly over the course of hours. A well watered tree will put on an extra foot or two of growth a year.

"I need to stake my tree right?" Are you afraid it is going to walk away? Everyone thinks you need to stake a tree right after planting, but I disagree. Most smaller trees can handle themselves if they are put in a good base and moderately packed in the soil. Watering a few times should help that soil fill in the gaps and solidify that root base. When a tree moves in the wind it helps establish root growth. I do like to leave the bamboo stick on the stem that most trees come with. As that tree grows I like to keep reattaching it a few feet higher off the ground year over year to help that central leader grow straight. If you are doing this be sure to keep an eye on any ties you've used to attach the stake so that they don't choke out and girdle that stem as it expands.



Figure 9: When tree staking goes wrong: tree is growing over metal tie

It is ok to stake a tree that doesn't want to stand up straight. In my experience though staking is more a tool to straighten out a bent tree than keeping them from falling over. If that root ball was prepped correctly when planting then those fibrous roots will start to take hold rather quickly.

Set It and Forget It!!!

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Figure 10: Participants planting a maple tree

Eric, I need to prune my lower branches up to make that tree start growing tall, right? NOOOOO, keep those lower branches for as long as possible. They help build a strong and thick taper on that tree's base. I would recommend pruning for a central leader on the stem and nipping back or completely removing any stems that are trying to overtake the leader. A good general rule for lower branches is to leave them until they are 1 inch in diameter but take them off before they reach 2 inches. It is a common myth that a tree needs to be pruned at planting to account for any roots that were trimmed off during planting. I would not recommend that. Think of a young tree's branches and leaves as its food source. Why would you reduce that tree's ability to consume energy from the sun?

Tree Trivia: How far out from the trunk do a tree's roots extend? Answer: Up to 2-3 times the distance equal to the height of the tree.

I could probably write a book on my experiences with post planting tree care and another on tree planting, but Faith says I'm only allowed a page and a half for this newsletter so this will have to do. Just remember if you aren't taking the proper steps post planting, that plant might make like a tree and leave.



UNDER CONSTRUCTION

Atkins Roundhouse Update

Atkins Roundhouse was severely impacted by the 2020 Derecho, leading to its closure due to tree hazards. We received a Community Development Block Grant for a timber stand project which began in January 2025. While progress is being made, the **property remains closed** for safety due to heavy equipment use.

Future plans for the Roundhouse include new trails, prairie and tree replanting after the project. Updates will be shared on BCC social media. **Access will stay restricted until clearing is complete, with a timeline dependent on weather conditions.**

Thank you for your patience and support!



Conservation Board Members

Becky VanWey: Vinton, Chair

Dan Hill: Vinton, Member

Samantha Hunter: Mount Auburn, Member

Mike LaGrange: Vinton, Member

Randy Scheel: Garrison, Member

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

Check www.bentoncountya.gov

For times and locations. Meetings are open to the public.

Conservation Staff

Aaron Askelson, Interpretive Naturalist

Cecilia Dirks, Office Coordinator

Camryn Grubic, South Unit Ranger

Ed Hach, North Unit Ranger

Cara Harrill, Conservation Tech

Ethan Hennings, Conservation Tech

Faith Hunt, Interpretive Naturalist

Zach Parmater, Conservation Tech/Ranger

Shelby Williams, Director

Integrated Roadside Management

Eric Schares, Roadside Manager & Weed Commissioner

Sam Jacobs, Roadside Tech

Drew Weisskopf-DeSmet, Roadside Tech

Find us online at: www.bentoncountya.gov/conservation/

or www.mycountyparks.com

Find us on **Facebook**: @bentoncountyparks

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

Calendar of Events Spring 2025

Registration for all events is required by visiting

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



Explore the Expansion: Wildcat Bluff Grand Opening March 29th, 1pm-3pm at Wildcat Bluff Recreation Area (3150 57th St Trail, Center Point, IA 52213)

Join us on Saturday, March 29, 2025, as we celebrate the expansion of Wildcat Bluff Recreation Area! From 1-3pm we will be gathering, celebrating, and have the opportunity to view The Den Cabin, our newest reservable cabin. At 2pm there will be introductions and a guided hike on the expansion. Please dress for mud and off-road hiking. Refreshments and snacks will be provided. Please park along 57th Street Trail. Benton County Conservation Foundation will have Wildcat Bluff clothing for sale (cash or check only!)

A huge thank you to our event donors, Shelly's Sweets in Newhall, Hendryx Electric and Cedar Valley Bank. This incredible addition was made possible by individual donors, organizations, grants, partnership with Iowa Natural Heritage Foundation and the Resource Enhancement and Protection (REAP) program. We couldn't be more thankful for the support of our amazing community! We hope to see you there! No registration required.



Aquaponics

April 5th, 10am at Benton County Nature Center; \$30 per system

Aquaponics is a combination of aquaculture (raising aquatic animals) and hydroponics (growing plants in water). Participants will learn about this sustainability practice and then make their very own aquaponics setup! This program includes aquaponics setup (a voucher for a fish, a few house plants, and a 1 gallon tank). Space is limited. Participants must register online at www.mycountyparks.com.

Patterns in Nature

April 18th, 10:00am-11:30am at Rodgers Park - Enclosed Shelter

Swirls, dashes, squiggles, circles, ovals and more! Nature's art gallery, bursting with vibrant colors, whimsical shapes, and unique patterns can be found all around us. During this program we will read a book and venture outdoors to uncover the hidden treasures of nature's stunning designs. This program is for youth in PreK-1st grade. Participants must register in advance at www.mycountyparks.com. Participants do not have to be in a homeschool group to participate.



Celebrate Trails Day

April 26th, 10am-12pm at Old Creamery Nature Trail - Garrison Trailhead

Help us celebrate the Old Creamery Nature Trail by helping clean up litter and a tree planting! Light drinks and refreshments will be provided. Bring your own gloves if you have them, otherwise we will have some provided. The Garrison Public Library will be hosting a craft during this event. Please wear long pants and dress to get dirty! No registration required.



Canoe with BCC

June 3rd, 5:30pm-7pm at Rodgers Park Beach

June 5th, 5:30pm-7pm at Hannen Lake Park Boat Ramp

Try out canoeing at one of our lakes! During these programs, we will cover canoe and water safety including paddling basics for flatwater canoeing. Participants should bring their own water and wear shoes that can get wet. BCC will provide canoes, paddles and life jackets. For youth 5 and under please call 319-472-4942. Registration is required by visiting www.mycountyparks.com



WILDcat Adventures

June 12th, 10am-1pm at Wildcat Bluff Recreation Area (3150 57th St Trail, Center Point, IA 52213)

Young adventurers in 1st to 4th grade are invited to discover the thrilling natural wonders of Wildcat! Activities will include creek stomping, fossil hunting, and hiking through the woods. Explorers should come prepared to get dirty and wet. Campers should bring a sack lunch, water, bug spray, sunscreen and a hat. Space is limited. Registration is required by visiting www.mycountyparks.com.

CHECK OUT OUR PARK PACKS!

ENHANCE YOUR OUTDOOR ADVENTURE WITH OUR FREE PARK PACKS, FILLED WITH NATURE-THEMED ACTIVITIES AND EDUCATIONAL RESOURCES. THEMES INCLUDE MAMMALS, INSECTS, WETLAND WONDERS, TERRIFIC TREES AND PLANTS, & BIRDS.

TO RESERVE A PACK, CONTACT US AT (319) 472-4942 (OPT 3) OR EMAIL INFO@BENTONCOUNTYPARKS.COM.

PARK PACK PICKUP CAN BE DONE FROM 8:30 A.M.-4:00 P.M. MONDAY - FRIDAY.



Conservation Library Programs - Leveling Up: Monarch Metamorphosis

June 24th 9:45am @ Van Horne Public Library (114 Main St, Van Horne, IA 52346)

June 24th 1:00pm @ Blairstown Public Library (305 Locust St NE, Blairstown, IA 52209)

June 27th 10am @ Belle Plaine Community Library (904 Main St, Belle Plaine, IA 52208)

June 27th, 3:30pm @ Newhall Public Library (109 Railroad St E, Newhall, IA 52315)

July 23rd 10:00am @ Vinton Public Library (510 2nd Avenue Vinton, IA 52349)

Level up with monarchs at one of these fun and interactive library programs! Programs are free and suitable for all ages.

Archery Camp

July 2nd, 9am-1:30pm at Benton County Nature Center; \$20/kid

Ready, set, aim! Join us for Archery Camp! During this camp, students will learn how to shoot archery, bow fish, and create their own bow using PVC. Archery camp is for youth going into 5th-8th grade. Campers should bring a sack lunch, water, bug spray, sunscreen and a hat.

Registration is required by visiting www.mycountyparks.com.



Ice Cream Science

July 11th, 2:30-4:00pm at Benton County Nature Center

Explore the chemistry that goes on behind making ice cream. During this tasty open-house style program, you will make your own ice cream in a bag and explore the Nature Center! This program is free and suitable for all ages. No registration required.

BENTON COUNTY CONSERVATION PRESENTS SECOND ANNUAL

FIREFLY FESTIVAL

JULY 19TH, 5PM-9:00PM

AT THE BENTON COUNTY NATURE CENTER



LIVE MUSIC, LOCAL FOOD, BEVERAGES,
CRAFTS, FIREFLY EDUCATION & FIREFLY CATCHING