

#### **Johnson County Conservation History**

The Johnson County Conservation Board was established in 1964. The fundamental purpose of Johnson County Conservation (JCC) is the development of lands and programs for conservation, education and recreation. JCC is primarily supported by the taxpayers of Johnson County. Funding for specific projects is also provided by various grant funds and private donations.

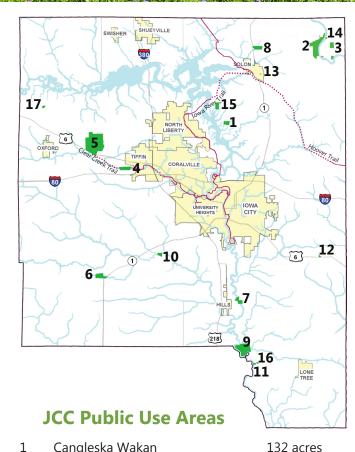
#### **Our Mission**

Chapter 350 of the Iowa Code defines the mission of the Johnson County Conservation Board.

...to acquire, develop, maintain, and make available to the inhabitants of the county, public museums, parks, preserves, parkways, playgrounds, recreational centers, county forests, wildlife and other conservation areas, and to promote and preserve the health and general welfare of the people, to encourage the orderly development and conservation of natural resources, and to cultivate good citizenship by providing adequate programs of public recreation.

#### **Our Vision**

The vision of the Johnson County Conservation Board (JCCB) is a county where all citizens have access to a healthy landscape, environmental education and recreation opportunities; where the natural resources of the county are enhanced and protected; where conservation areas are restored and maintained at the highest standard, are safe; and where this vision is accomplished through partnerships with the public and private sector.



Τ	Cangleska wakan	132 acres
2.	Cedar River Crossing 560	
3.	Ciha Fen	81 acres
4.	Clear Creek Area	87 acres
5.	F.W. Kent Park	1,062 acres
6.	Frytown Conservation Area	94 acres
7.	Hills Access	40 acres
8.	Malinda Reif Reilly Prairie	100 acres
9.	Pechman Creek Delta	380 acres
10.	Phebe Timber	26 acres
11.	River Junction Access	12 acres
12.	Scott Church Park	5 acres
13.	Solon Prairie	3 acres
14.	Sutliff Bridge & Access	1/2 acre
15.	Two Horse Farm	83 acres
16.	Walker Park	3 acres
17.	Williams Prairie Preserve	21 acres



In 2015, JCC set out to create an Interpretive Master Plan to guide the growth of environmental education within the organization. The process included interviewing and surveying community members, JCC staff and board members, and county supervisors. Those findings were used to create a set of Guiding Principles which JCC staff now use to develop new programs, partnerships, and projects. These principles are outlined below.

#### **Guiding Principles of JCC Environmental Education**

In order for environmental education to have the desired impact of forming an emotional connection between people and the natural world and influencing people to make decisions in their day to day lives that support conservation:

Outside

People must be outdoors.

Extend & Repeat

Experiences should immerse individuals or small groups in the outdoor experience for an extended period of time and/or include a series of experiences, each building on the previous experience.

Mentor

Mentors are important in engaging people in the environment; these may be parents, grandparents, teachers, naturalists, family members, or youth leaders.

**Engage** 

Experiences should be engaging/hands-on/active. Discovery or exploration can be important in the process.

# SCHEDULING AND FEES

Johnson County Conservation believes all citizens need access to the outdoors; therefore, we do not charge for our field trip experiences. We simply ask that teachers come prepared, excited, and ready for a great day spent outdoors! Below is some helpful information to get you started in scheduling a visit to one of JCC's properties.

#### When to schedule

Spring scheduling begins on January 1st; fall scheduling begins on August 1st. We provide programs in all seasons, including winter field trips. At this point, spring is regularly at full capacity while fall has more options for open days.

#### How to schedule

Contact a JCC naturalist by emailing jccnaturalists@gmail.com

#### Who Can Schedule

Schools in Johnson County are our first priority. Any age of school group is able to book a field trip with JCC! This includes pre-K through high school. Grade school groups take precedent in the spring/fall field trip seasons (April/May and September/October).

#### **Group Sizes**

The maximum number of students/group in one day can not exceed 70 students. Groups over 70 must divide into smaller groups and come on multiple days.

### Typical Schedules

Most school groups choose to do a 4.5-hour field trip, which includes two half-day lessons and a 30-minute

lunch break. See below for an example schedule. This format will be new to many teachers. We are trialling the format for the spring 2023 season, and ask teachers to keep an open mind. While it reduces total number of lessons throughout the day, each lesson is more immersive, and field trips will have a less frenzied-feel without numerous lesson transitions.

The schedules for preschool and kindergarten groups may still feature shorter lessons between 45-60 minutes each to allow for more bathroom and focus breaks for young learners.

#### Back-up Schedules\*\*

A back-up schedule featuring 4 different 50-minute topics will be instituted in the case that a naturalist is out due to personal/family illness. In this case, teachers must be prepared to lead one session, featuring either a hike or a lesson/game that the teachers have prepared in advance as a back-up.

Homeschool/Small Group Programming For smaller groups and those with many adults, JCC is able to offer more flexible schedules and lesson structure.

Time	Blue Group	Green Group	Red Group	Orange Group
9:30-9:45	Welcome and Introduction			
9:50 - 11:30	Bird Watching	Bird Watching	Rotten Log	Rotten Log
11:35 - 12:05	Lunch at Whip-poor-will Shelter			
12:10 - 1:50	Rotten Log	Rotten Log	Bird Watching	Bird Watching
2:00	Farewell and Load Buses			

### TRIP LOGISTICS

#### Before You Arrive

Before you arrive for your trip, here are a few things you should know/do.

- There is a carry in/carry out trash policy.
- Prepare your students, other teachers, and chaperons for the field trip experience. This means distributing schedules, assigning responsibilities, and making sure students/ chaperons know the appropriate attire.
- Plan a back-up teacher-led activity in the case of naturalist illness, and ensure all teachers are prepared to lead that session.
- Get your students familiar with the place they'll be visiting and review your expectations for the trip with them.
- Students should be divided into color-coded groups indicated on the schedule.
- Call 319-645-1011 if you are running more than 15 minutes late or early.

#### **Inclement Weather Plans**

JCC staff is prepared to be outside in all weather types. We ask that students are also prepared, but understand that this isn't always possible. Therefore, teachers and administrators will be asked to make the decision to cancel or not. JCC will only cancel the trip in the event of dangerous/severe weather.

Naturalists may not be available to reschedule field trips during April and May. For groups of 30 students or smaller, two hours of indoor programming will be offered. Groups over 30 will be assessed individually, but indoor programming is not guaranteed.

#### Arrival

Naturalist staff will greet teachers and students as they unload. Please leave lunches on the bus. Students should sit with their groups in front of the white board. Each trip will begin with an introduction covering the expectations and schedule for the day.

#### **During Your Visit**

**General Supervision:** We ask that teachers and chaperons help ensure student safety. This means providing supervision and behavior management.

There should be an adult present with the students at all times. We require at least two adults/class, and ask that teachers and chaperons refrain from using phones except for emergencies and photos.

**Smaller working groups:** During any lesson, we are likely to break the students into smaller groups of 3-4 students. We will ask teachers and chaperons to guide these groups.

Student-led learning: We prioritize student discovery and leadership in all classes. Teachers and chaperons are encouraged to model enthusiasm for the material, but are asked to let students lead the experience. It is OK if they get messy, make mistakes, or take many tries to get it right! We believe these learning opportunities are just as important as the ecology they'll be studying.

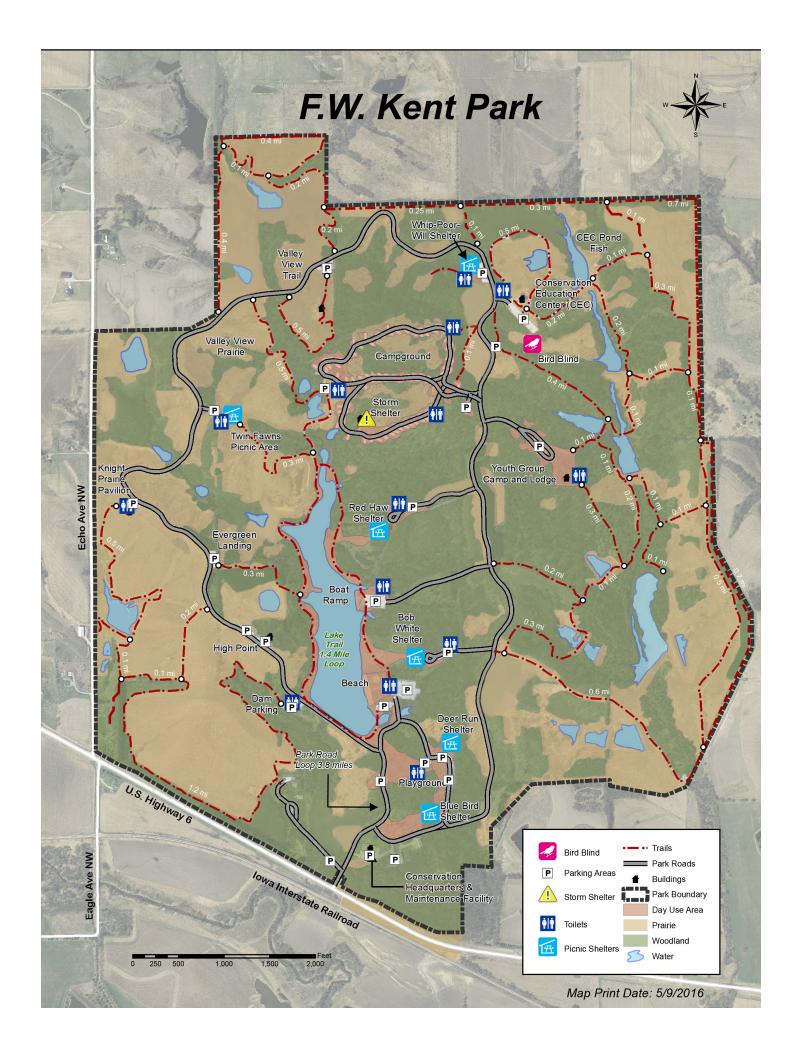
Bathroom Breaks: There is a five minute bathroom/drink break in between each lesson. These transitions often eat up valuable time. Please supervise your students at this time. Color groups will have assigned "club houses" (picnic tables/benches) to report to between classes and breaks to make transitions more efficient.

**Lunch:** If at Kent Park, lunch will be at a covered picnic shelter near the Conservation Education Center. There are no trash cans; and groups are expected to carry out their trash. There are outhouse style bathrooms near the shelter. Indoor lunch space is only available for groups of 50 or fewer during severe weather.

**Appropriate Attire:** All students, chaperons, and teachers should wear closed toed shoes and long pants. Rain and/or cold weather attire are a must when appropriate. Apply sunscreen before arriving.

#### Site Map

Most groups will visit F.W. Kent Park and meet at the Conservation Education Center before starting. See the map of Kent Park on the following page for reference before arriving. We are happy to do programming at our other locations as well.



## FIELD TRIP LOCATIONS

Field trips are available at any of Johnson County Conservation's properties, however many are not developed and do not have bathrooms or shelter areas. The following locations are the primary education properties:



#### F.W. KENT PARK

Kent Park, located five miles west of Tiffin, serves as the primary location for environmental education. The Conservation Education Center serves as the base for field trips. The hundreds of acres of high quality relic and restored prairies at Kent Park are a unique highlight, and prairie-focused lessons fit perfectly here. Wetlands and forest areas (limited) are also available, and Kent Park Lake provides water recreation in summer months.

This location serves as the default, and is the only option for groups over 50 students. It is also the only park with adequate resources for students with physical disabilities.

#### CANGLESKA WAKAN

Cangleska Wakan (chan-gle'ska-wakan'), is the second-most utilized JCC park for environmental education. This park is six miles southwest of Solon. The highlight of this property, aside from the unique architecture, are the many acres of healthy forest to explore. Lessons focused on forest ecology, mushrooms, bird watching, and spring wildflowers are a perfect fit here, and the wetland and stream on-site allow for aquatic ecology and fossil classes.

This location is only utilized in the spring and only for groups under 50 students. The site will be developed in coming years with environmental education in mind. At present, we do not recommend this site for students with physical disabilities.



#### TWO HORSE FARM

Two Horse Farm is located six miles northeast of North Liberty. The park features both high quality forest and restored prairie. The site is also home to RARE (Raptor Advocacy Rehabilitation and Education). RARE is separate from JCC; they provide live raptor programs for a fee. Interested groups can find out more at: https://www.theraregroup.org/. Communicate with JCC naturalists about fitting this in to a field trip experience.

This location is available year-round to groups under 30 students. The entry lane and parking area is currently inaccessible via long bus. School vans and short buses can utilize the road. This site is not recommended for students with physical disabilities.

## **LESSON OFFERINGS**

Unless otherwise indicated, lessons are available for all age groups and are usually between 1 and 1.75 hours long. All lessons are subject to change due to site and weather conditions.

#### **ECOLOGY CLASSES**

#### Discovery Hike

Students will explore a variety of habitats in a loosely structured hands-on lesson. The emphasis will be on exploration, observation, and question asking. Examples include taking note of animal signs, senses, plant traits, insect life, and more.

#### Wetland Study (spring only)

Students will explore biological communities of the wetlands in a hands-on lesson. Students will spend the majority of the lesson using nets to pull out wetland insects, frogs, and tadpoles, followed by time for close observation and journaling. Indoor microscope use can be incorporated, with limitations.

#### **Bird Watching**

This lesson focuses on making observations. Students will start by thinking about bird traits and learning how to use binoculars. Then we'll head out on a bird hike and visit the bird blind. If time remains, students will learn about bird songs/calls and bird nests.

#### Forest Floor (spring only)

Students will discuss the life cycle of a tree and learn that trees are recycled into soil. Students will then work in groups to investigate rotting logs on the forest floor. Following exploration time, students will be able to describe what decomposition is and some of the creatures that utilize rotten logs for habitat.

#### Senses Hike

This sensory-focused hike is great for all ages. For youngsters, it provides a good review of our five senses. For older participants, the hike provides a practice in mindfulness.

#### Camouflage

Using the book How to Hide a Butterfly, students will learn about camouflaged animals. They will then visit the outdoor classroom to search for animals hiding

in the prairie. A hide-and-seek type game is the highlight, and will be played in the prairie or forest to further illustrate an animals ability to camouflage.

#### Prairie Study

Students will get to know this important Iowa ecosystem through hands-on exploration. For younger students, a story book may be used to introduce the ecosystem before heading into the prairie jungle. Naturalists will guide the students in journaling about the discoveries they make. Teachers can select from the following focus areas:

- Intro to Prairie Ecosystems This most basic class is best for little learners and will include simple investigation of who/what lives in prairies.
- Life Cycles Students will review plant life cycles and look for examples of different stages in the prairie.
- Wildflower Study Students will choose a particular plant to study and journal about.
- Gall Survey Students learn about galls, then will conduct a simple biological survey to estimate gall presence throughout the prairie. This more advanced class provides great exposure to wildlife biology/ecology career work





#### **Fungus Foray**

Foray into the woods with JCC naturalists on a search for fungi! Students will gain a basic understanding for fungi biology before hands-on exploration. While exploring, students will use field guides for identification, and may journal or take measurements depending on age. For longer classes, activities will conclude with a chance to look at lichen and other fungi under the microscope.

#### What's for Lunch

By taking a close look at animal skulls, students will learn about the three main eating behaviors of animals and then head outside to search for animal signs. In the end students will discuss what discoveries they've made and review clues to finding out what animals eat.

#### Animal Tracks and Signs (winter only)

Walk in someone else's footsteps by searching for animal tracks! Naturalists will provide an overview of the clues animals leave, from tracks and scat to more subtle evidence. Then students will head out to the prairie and woods looking for wildlife stories left behind.

#### Nature Mapping (2nd and older)

To start the class, students will review map-making basics such as keys, compass roses, titles, landmarks etc. Then, we'll head out on a guided hike, the students drawing their own nature map along the way. Students will practice their observation, writing, and drawing skills as they record details of the landscape around them.

#### **Fossil Finding**

Students will explore Iowa's ancient history, time traveling back hundreds of millions of years to a time when Iowa was at the bottom of the sea. We'll talk about some of the fossil evidence, then explore for fossils of coral and other sea creatures. This class will include wading through a stream. Students can expect to get wet and muddy. This class is only available only at Cangleska Wakan (a JCC property).

#### Forts and Fires (3rd and older; fall-early spring)

In this hands-on lesson, students will learn basic survival skills including shelter and/or fire building. Students will learn about the 5 Basic Needs, shelter structures, fire structures, and flint and steel use before embarking on a mock survival scenario. At the end of the class, students will have built a primitive shelter and fire while working in a team.

#### Water Quality Testing (7th and older)

Students will receive basic instructions and background information about water quality in Iowa. Using a data sheet, they will then work in groups to test water quality parameters and share their findings.

#### **Nature Journaling**

"I notice, I wonder, it reminds me of..." These prompts shape the nature journaling experience as students practice close observation of natural phenomena. Nature journaling is a tool and exercise for critical thinking, as well as a mindful way to connect with nature. In this class, naturalists, will provide structured activities to guide the observation and journaling practice.

#### Nature Art

Students will learn about the basics and ethics of ephemeral nature art and see examples from famous artists. Then, they will gather materials and create nature art of their own.

#### Amphibian and Reptile Program

Students will learn what distinguishes reptiles from amphibians. They'll head outside to search for amphibians in the wetlands, then finish indoors again with a live reptile meet-n-greet.

#### **Exploring Biodiversity** (5th grade and older)

Our prairies and woodlands are teeming with a diversity of life! In this activity, students conduct comparative quadrants of lawn versus prairie or woodland floor. They will learn scientific sampling techniques and practice nature journaling and field identification skills.

#### Creekstomp (Spring only)

Groups utilizing Cangleska Wakan (a JCC property) can fit in this wet creek-exploring activity. We'll stop for discoveries of fossils, rocks, crayfish, insects, and tadpoles along the way. Students will need shoes or boots and can expect to walk through the stream and get wet and muddy!

#### What's Neat Beneath Our Feet (fall only)

In this hands-on lesson, students will learn that soil is more than dirt by digging in the ground and working in small groups to investigate what's neat beneath our feet. Students will conduct tests and gather data to determine the soil's temperature, texture, color, compaction, and drainage.

#### Tree-tectives (fall only)

In this fall-favorite, students will make close observations of common lowa leaves, and learn how to use dichotomous keys to identify them. Then, we'll head out on a tree scavenger hunt, looking for the leaves of the trees we just identified. This class is great to pair with Nature Art - the gathered leaves are used for nature mosaics to round out the class.

#### Seed Collecting (fall only)

This activity combines exploration time, guided learning, and stewardship! Students will discuss the five fundamental methods of seed dispersal before being divided into smaller groups. Naturalists will also provide helpful identification and collection tips. The groups will then roam the prairie to collect seeds while making discoveries along the way. Collected seeds will be used in future prairie restorations.

#### Monarch Tagging (September only)

In this hands-on stewardship activity, students will learn about the amazing migration of monarch butterflies. Then they'll head outside to help collect and tag monarchs, a practice used to track migration information across North America.



#### **OUTDOOR RECREATION LESSONS**

Canoeing/Kayaking (5th and older; summer and fall only)
JCC staff will provide an introduction to PFDs and
paddling basics, then let participants practice on Kent
Lake. Chaperone requirements vary by student age.

#### **Fishing** (summer and fall only)

Students will learn casting basics then spend the remaining time casting at Kent Lake. Fishing poles and gear provided. This activity is limited to group sizes of 30 students or less, and is also dependent on the naturalists' schedule and availability to repair fishing poles between field trip groups.

#### Fly Fishing (summer and fall only)

In this class, students will learn the methods of fly fishing and when/where fly fishing is best used. Students will practice casting through a game, then try out their new skills on the water. Longer programs will cover fly-tying basics. This lesson is limited to groups of ten students or less.

#### Snowshoeing

Strap on some snowshoes and go on a winter hike with JCC naturalists. Along the way, we'll learn about how snowshoes are similar to adaptations, and discuss other adaptations that Iowa's native wildlife use to survive the winter. This class is limited to ten individuals or fewer. There must be 6 inches of snow on the ground for the class to take place.

#### WILDCRAFTING LESSONS

Paper Making (3rd grade and older; 2+ hours)

Students will gather and process their own plant materials for use in paper-making. This involved process includes breaking down the plant material, boiling (naturalist led), blending, and filtering/pressing the material. Students will be able to take home a finished product of homemade wildflower seed paper.

Ecoprinting (3rd grade and older; fall only; 2+ hours)
Did you know colors and patterns can be extracted from leaves and flowers? Learn a little about this relaxing process and make your own naturally printed fabric. Groups must bring white fabric/shirt/bandanna for each student. This class requires a full day (5 hour) field trip to boil and process the fabrics. Alternatively, additional processing is required by group leaders

Basket Weaving (6th grade and older; 2+ hours)
Willow, cattail, roses and more can be harvested for basic basket weaving. Students will gather and process their own materials, then learn a basic weave to form a small basket. Students will be able to take their creations home.

#### Foraging Basics (3rd grade and older)

Safety and ethics are the first topics covered in this foraging overview. After covering these primary rules, students will learn about some local wild edible foods to match the season, then harvest and prepare. This class can be adapted throughout most of the ye



#### **Nature Games**

Migration Mishap (2nd grade and older)

Monarch butterflies face many hazards on their 2,000 mile journey to Mexico. Pretend to be a migrating monarch butterfly and learn about some of the ways you can help them!

Predator/Prey (4th and older; 2-3 hour lessons)

Through a fun and interactive game, students will explore the intricate relationships between predator and prey species. Each student will role play a native lowa animal, herbivore, omnivore, or carnivore, and run about the playing field trying to secure food resources. This game involves running.

#### Oh Deer! (3rd grade and older)

In this ecosystem simulation students will gain an understanding for how animal populations fluctuate from year to year, and how they are driven by limiting factors such as food/habitat resources, predation, and disease. This game includes running.



### **Interested in Other Topics?**

If you have ideas for new lesson topics or activities, let us know! Please call 319-645-1011 to speak with a naturalist or email jccnaturalists@gmail.com. When possible and with adequate time to plan, we may be able to create lessons that are relevant to your curriculum!

### Hands-On | Discovery-Based | Outdoor Learning

Email jccnaturalists@gmail.com to schedule your visit to the outdoor classroom!

