

A photograph of three children standing in a lush green field with tall grass and wildflowers. In the background, there are several large, mature trees under a bright sky. The children are seen from behind, looking out over the landscape. The boy on the left is holding a clipboard. The girl in the middle has her hair in a bun. The girl on the right is wearing a baseball cap.

Johnson County Conservation FIELD TRIP GUIDE

Contact Information

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WHO WE ARE

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.

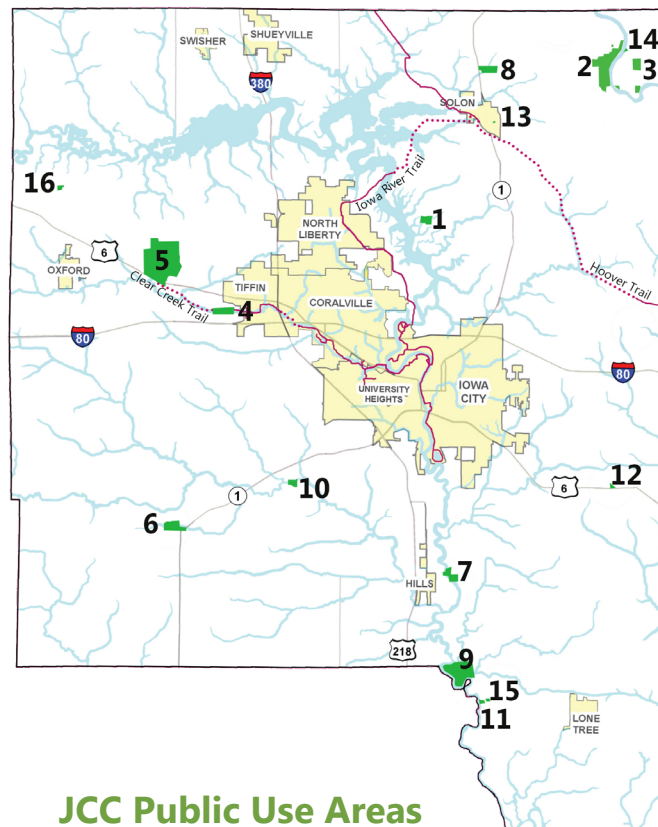
Our Mission

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.



JCC Public Use Areas

1.	Cangleska Wakan	132 acres
2.	Cedar River Crossing	560 acres
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.	Walker Park	3 acres
16.	Williams Prairie Preserve	21 acres



GUIDING PRINCIPLES

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 county 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 in August.

How to schedule

Contact a JCC naturalist by emailing jccnaturalists@gmail.com

Group Sizes

The maximum number of students/group in one day can not exceed 70 students. Groups larger than 70 must divide into smaller groups and come on multiple days. Exceptions may be made for stewardship projects and other special events.

Typical Schedules

Most school groups choose to do a 4.5 hour field trip, which includes four lessons and a 30 minute lunch break. Half-day (two lessons) and other time frames are also possible. See below for an example schedule.

Large Group Scheduling

For large groups (60-70 students), teachers and adult chaperones are often needed to lead a lesson or activity. JCC will provide any useful materials such as a lesson plan and ask that the lesson leader review any of these documents beforehand.

Scheduling a Classroom/School Visit

Instead of going into the classroom, JCC focuses on getting students outside. School visits that utilize outdoor space, for example a school prairie or garden, are welcome as well. JCC also offers a pre-field trip classroom visit to help prepare your students for their visit. If you don't have an outdoor space and can't make it to Kent Park, we may be able to find a park near you to offer programming.

Homeschool/Small Group Programming

For smaller groups and those with many adults, JCC is able to offer a more flexible schedule and lesson structure.

Time	Blue Group	Green Group
9:30-9:50	Welcome and Introduction	
9:55-10:45	Bird Watching	Meet a Prairie Plant
10:50-11:40	Meet a Prairie Plant	Bird Watching
11:45-12:15	Lunch	
12:20-1:05	Rotten Log	Hike
1:10-1:55	Hike	Rotten Log
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, please plan accordingly.
- Prepare your students, other teachers, and chaperones for the field trip experience. This means distributing schedules, assigning responsibilities, and making sure students/chaperones know the appropriate attire.
- 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. Masks may be required indoors.

Arrival

Naturalist staff will greet teachers and students as they unload. Please leave lunches on the bus. Students should sit with their color-coded groups in rows 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 chaperones help ensure student safety. This means

providing supervision and discipline of the students. There should be an adult present with the students at all times. We require at least two adults/class, and ask that teachers and chaperones 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 chaperones to guide these groups.

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. We suggest choosing a bench or picnic table to meet at in between each lesson and having students line-up after using the restroom. To help save time, teachers may consider bringing hand sanitizer for hand washing.

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

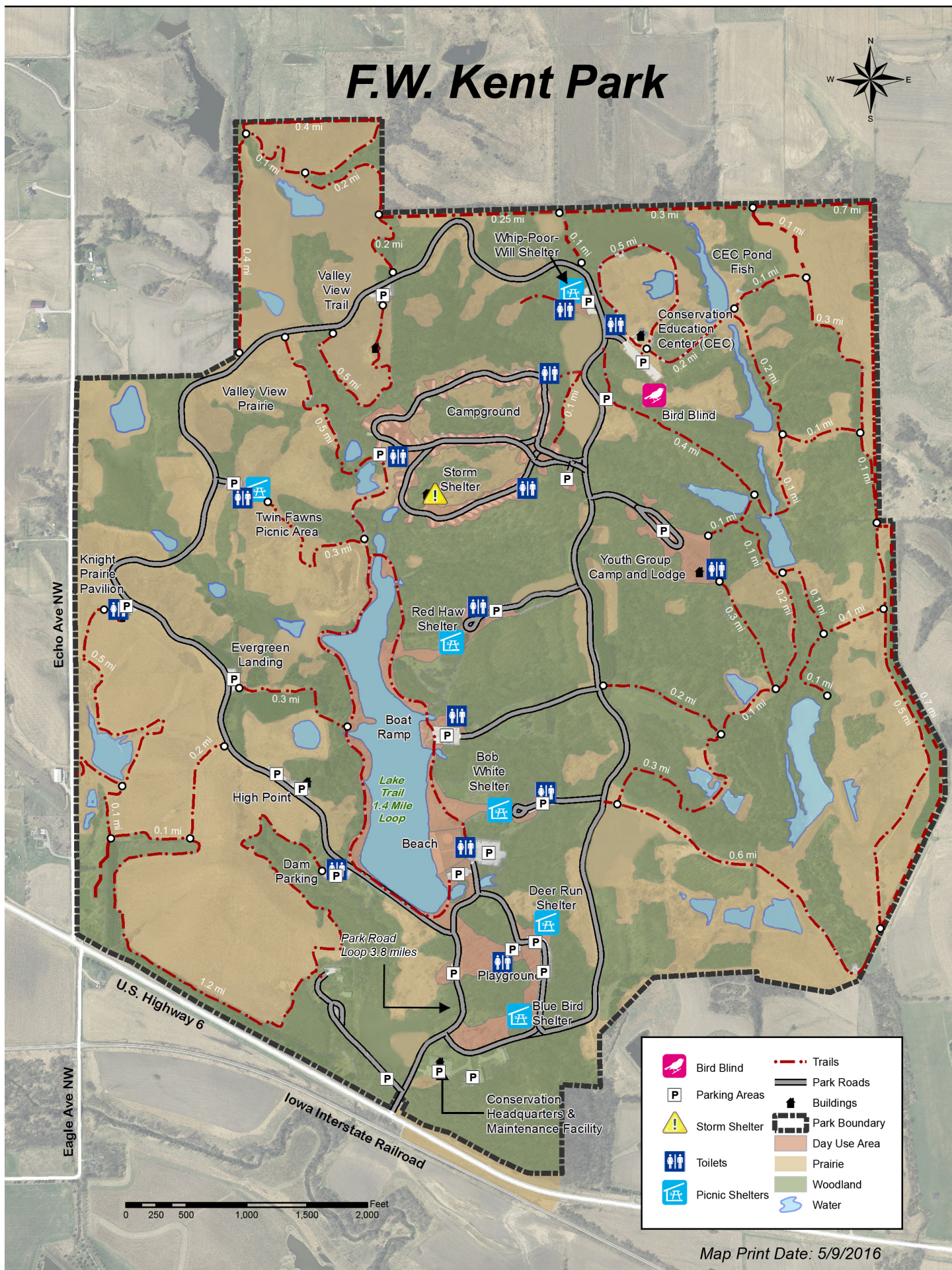
Journals: To enhance the field trip experience, we ask that all students come with a writing utensil and nature journal/notebook. This will be used in almost every lesson, although we may sometimes provide a data sheet or other handout.

Appropriate Attire: All students, chaperones, 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.

F.W. Kent Park



Map Print Date: 5/9/2016

LESSON OFFERINGS

JCC staff will take into consideration the age and interests of each group during every lesson, thus each lesson may vary slightly. Unless otherwise indicated, lessons are available for all age groups (including high school, college, and adult groups) and are usually between 45-60 minutes long. All lessons are subject to change due to site and weather conditions. Lesson plans for most offerings are available by contacting JCC naturalists.

Environmental Science Lessons

★ Wetland Study *(not available in winter)*

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. Specimens will be collected and observed at the end of the class. Multiple tie-ins could be made: life-cycles, water quality, adaptations, natural phenomena, nature journaling. Indoor microscope use can be incorporated.

★ 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. Students will share discoveries made and the naturalist/leader will share interesting facts and qualities about the discoveries.

★ Bird Watching

This lesson focuses on making observations. Students will start by learning how to use binoculars and practicing the skill. Then we'll head into the bird blind to observe birds at feeders. Students will be encouraged to focus on making observations about the birds' traits and behaviors. The naturalist/leader will share interesting facts about birds observed. If time remains, students will learn about bird songs/calls or go on a short hike to look for birds in the field.

★ Senses Hike *(PreK-1st)*

To start, a naturalist will review the five different senses with the students. Then the naturalist will lead a hike through the prairie where students will explore with their different senses. Through several activities, students will make amazing discoveries in the prairie by using their senses.

Camouflage *(PreK-2nd; not available in winter)*

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. If time allows, a hide-and-seek type game will be played in the prairie to further illustrate an animal's ability to camouflage. The lesson will conclude by sharing observations.

In the Tall, Tall Grass *(PreK-1st; not available in winter)*

After reading the book *In the Tall, Tall Grass* by Denise Fleming, students will try to answer "What is a Prairie?" By using a simple data sheet and working in small groups, students will explore the prairie to find answers and record their observations. In the end, students will share what they discovered in the prairie to create an understanding of what a prairie is.

Meet a Prairie Plant *(K-1st; not available in winter)*

Before heading into the prairie, students will review what they already know about plants, including different plant parts. During this time, students will also formulate questions about prairie plants. Next, students will choose one question and then explore the prairie looking for a unique plant to study. Using their notebooks to draw and record observations, students will work to answer their questions about prairie plants. The lesson will conclude with students sharing their observations of different prairie plants.

If You Hold A Seed *(PreK-1st; not available in winter)*

A naturalist will read *If You Hold a Seed* by Elly MacKay and after a short discussion, the groups will head out in search of different life cycle stages of plants. Students will also be given a prairie seed and instructed to find a special spot in the prairie to plant it. To conclude, they will then come back together to share their discoveries and discuss how each season brings change to the plants.

Insect Catching *(late spring-fall)*

With bug nets and jars in tow, participants search the landscape for insects and other crawly critters. Students will also review what makes insects unique and learn clues to help separate different species of insects into groups.

What's Neat Beneath Our Feet *(not available in winter)*

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. Data sheets will be provided to guide students in a soil exploration activity. To conclude, students will share their data sheets with their classmates.

Rotten Log *(K-6th; 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.

What's for Lunch *(2nd and older)*

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

Prairie Birthdays *(6th and older; not available in winter)*

Students will be introduced to a great Iowan and conservation figure, Aldo Leopold, by listening to an excerpt called "Prairie Birthdays" from Leopold's book *A Sand County Almanac*. Afterwards, the group will head outdoors in search of new prairie plants in bloom. Individually, students will choose a plant to study up-close and create a journal entry in honor of the plant's "birthday".

★ **Animal Tracks and Signs** *(K-12; fall&winter only; 1-2 hours)*

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.

★ = Field trip favorites

Nature Photography *(4th and older)*

Naturalists will give some tips on nature photography and then students get creative while taking a hike through nature, practicing photography. To conclude, students will share their favorite shot. Digital tablets are available for use as cameras.

Fossil Finding *(3rd & older; late spring-fall; 1-1.5 hrs)*

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).

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. They will practice their observation, writing, and drawing skills as they record details of the landscape around them.

Forts and Fires *(3rd and older; fall-early spring; 2-4 hours)*

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; not available in winter)*

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.

Prairies for Clean Water *(7th and older; summer-fall)*

Prairies play a huge role in keeping our water clean! In this lesson, students will choose several prairie plants to identify and profile, gaining an understanding of the complex root systems prairie's have. Students will roleplay as 'Storm Water Managers' for their community, and will brainstorm ways to incorporate native vegetation to help improve water quality.

Fungus Foray *(2nd grade and older; fall only; 2-2.5 hr)*

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.

★ Nature Journaling *(K-12; year round)*

"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.

★ Reptile Program *(indoors)*

Students will learn what makes reptiles unique during this indoor program that is a hit for all ages! A naturalist will present with live animals.

Herptiles in the Field *(4th grade and older; 2-2.5 hr)*

Help us in a herp survey! This class starts by learning what a herptile is (reptiles and amphibians), and distinguishing differences them. Then, all will head out with nets to survey for herptiles found in the park. Frogs and toads are most often collected, but snakes and turtles may be found too!

Exploring Biodiversity *(6th 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 *(K-8th; late spring through fall)*

Groups utilizing Cangleska Wakan (a JCC property) can fit in this wet creek-exploring activity. We'll stop for discoveries of fossils, rocks, crawfish, 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!



★ = Field trip favorites

Outdoor Recreation Lessons

Canoeing/Kayaking *(5th and older; fall only; 1.5-2 hrs)*

JCC staff will provide an introduction to paddling and then let participants practice on Kent Lake. All participants are required to wear a personal flotation device (PFD). Adult-to-student requirements vary by student age.

★ Fishing *(3rd and older; summer and fall only; 1.5-2 hrs)*

After learning about some of the fish found in Iowa, students will learn fishing basics then spend the remaining time casting. Fishing poles and gear provided. This activity is limited to group sizes of 50 students or less, and is also dependent on the naturalists' schedule and availability to repair fishing poles between field trip groups.

Fly Fishing *(3rd and older; summer and fall only; 1.5-3 hrs)*

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 *(4th and older; winter only)*

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.



Stewardship Lessons

★ 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. This activity is great to pair with the Migration Mishap game!

Weed out the Weeds! *(3rd grade and older; spring only)*

Students will learn about non-native invasive plants and the damage they can cause to ecosystem balance. Students will also help JCC staff remove invasive plants. JCC staff will select a plant suitable to the age group; 6th grade and older can focus their restoration efforts on different species that require tools such as loppers, and shovels for removal. This program is limited to Cangleska Wakan, a JCC property.



★ = Field trip favorites

Wild Crafting Lessons

Wild crafting lessons explore the human relationships with the natural world through the use of natural materials. They can help form connections with the landscape through the creation of useful goods and materials. These lessons typically involve extended preparation, and as such, they are available only to smaller groups and only during off-peak program season.

Paper Making *(3rd grade and older; year round; 3 hrs)*

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; year round; 5 hrs)*

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/bandana 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 (instructions provided).

Basket Weaving *(6th grade and older; year round; 3 hrs)*

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; year round; 1-3 hrs)*

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 year.

Art in Nature

Students will learn about the temporal nature art (ex: Andy Goldsworthy). After looking at examples and talking about the pros and cons of such art, we'll head out to gather materials and make nature mosaics and mandalas outdoors.

★ = Field trip favorites

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 Iowa 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!

