



PRAIRIE PATTERNS

Teacher's Pre-Trip Information

The purpose of the following pre-trip information is to help the teacher prepare and motivate their class for their field trip to the forest preserve and to familiarize the students with vocabulary used during the program.

THEME: The prairie ecosystem supports a variety of life

GRADE LEVEL: Grades K - 8

OBJECTIVES

- Students will be able to name at least three reasons why prairies are important
- Students will be able to identify at least three common Illinois prairie plants
- Students will discuss the history of prairies in Illinois, and prairie today

LEARNING PLAN

Topics: history of the Central Illinois prairies, prairie plant morphology, prairie animals, habitat loss, extirpation, and prairie preservation and restoration

Student activities: introduction to prairies with visual aids, hiking through prairie habitat, identifying prairie plants, observing prairie animal signs, investigating galls, extirpation game, and reading excerpts from prairie journals

Learning Area	Goal #	Standard	Level and Benchmark
Science	12	B	1a-b, 2a-b, 3a-b
Language Arts	4	A	1a-d, 2a-c
	4	B	1a-b, 2a-b
Social Science	16	E	1, 2a, 3a-c (US)
	17	A	2a
	17	B	1b, 2a-b, 3a-b
	17	C	1a-b, 2a, 2c, 3c
Physical Education	21	A	1a-c, 2a-b

VOCABULARY

(Specific vocabulary covered may vary depending on grade level)

- **Respect** – to honor, to show concern for
- **Preserve** – to keep safe, to save or protect
- **Habitat**: The part of the physical environment in which a plant or animal lives; must include food, water, shelter and adequate space
- **Prairie** – a grassland habitat, characterized by periodic fires (tallgrass, mixed and shortgrass prairies exist in the U.S.)
- **Tallgrass Prairie**: Prairie characterized by an abundance of grasses that grow three or more feet tall. Prairies in Illinois are tallgrass prairies.
- **Prairie Restoration**: The effort to convert land that used to be prairie back to prairie habitat
- **Prescribed Burn**: A fire set by humans in a prairie area, with the purpose of restoring or maintaining prairie habitat
- **Extirpated**: An animal that is missing from part of its native range, but not extinct (for instance, the bison no longer lives in the wild in Illinois, but is not extinct)
- **Forb**: A broad leaf herbaceous plant (such as a prairie wildflower)
- **Adaptation**: a behavior, physical feature or other characteristic that helps an animal or plant survive

Supplemental Activities:

The following activities are suggestions for use in the classroom before and/or after the school program. Not all are appropriate for all age groups. Feel free to adapt them for your students' abilities.

Writing activities:

- **Alphabet Vocabulary**

Pass out posters and markers or crayons to every student. Each student should draw three lines from top to bottom and six lines from side to side, making a grid of 28 boxes on the poster. Show them an example. Begin assigning each letter of the alphabet its own box. Have the student come up with a prairie related word to match the alphabet boxes. They may use prairie words that they are familiar with from the story, or you may have pre-made flash cards with definitions to assist them. Have students illustrate the posters. (<http://www.openlands.org/midewin/grade3arts.html>)

- **Vacancy: Habitats Available**

In this activity, students will each pick a native Illinois animal and write a classified housing ad to match the animal's habitat requirements. Have them think about what kind of shelter the animal needs, what kind of habitat they need, and where they get their food. For example, a student doing an ad for an eagle might write, "Tree needed, plenty of solitude required." Have students write out their ad or type it neatly. Paste all the ads, in the style of a classified ad page, onto a large piece of poster board and write the Activity title at the top of the poster board. Have students try to match each habitat ad with the animal it represents. You can have the students work in groups. (<http://www.openlands.org/midewin/grade6arts.html>)

Research Activities:

- Have students choose a prairie animal and create a "Prairie Animal Report" describing what their animal needs in its habitat, what components of that habitat are available in their schoolyard, the connections the animal has to other organisms (plants or animals) in its habitat, and what they would need to add to provide a suitable habitat for their animal. Did they notice any similarities between the habitat needs of many of the animals their classmates presented? You may want to group students and have them create and present their reports by type of animal (e.g. birds,

mammals, reptiles).

(<http://www.nationalgeographic.com/education/xpeditions/lessons/08/gk2/prairiek2.html>)

- Have groups work together to create Same/Different charts, comparing prairie life in the 1800s with prairie life today. (<http://www.teachervision.fen.com/us-history/lesson-plan/5324.html>)

Suggested Readings:

- **Bluestem Horizon: A Story of a Tallgrass Prairie**

By Evelyn Lee

While growing up on the tallgrass prairie, Young Bison and his three companions experience a tornado which separates them from the herd and a prairie fire brought on by lightning.

- **The Prairie Builders: Reconstructing America's Lost Grasslands**

By Sneed B. Collard III

Collard chronicles the prairie restoration project at the Neal Smith National Wildlife Refuge in Iowa. His explanation of the complexities of returning farmland to tallgrass prairie incorporates information about the prairie ecosystem and accounts of the work of scientists and volunteers. Among the projects he describes are the locating and collecting of seeds of surviving native plants, managing controlled burns, reintroducing bison, and building a population of Regal Fritillary butterflies.

- **A Tallgrass Prairie Alphabet***

By Claudia McGehee

Illustrator Claudia McGehee brings the glory of the prairie back to life in *A Tallgrass Prairie Alphabet*. From the yellow stargrass that welcomes springtime to the butterfly weed that attracts summer's favorite winged visitors, from the horned lark that soars in the fall to the little bluestem that fights its way above the snow—each season unfolds in the vibrant color and vivid details of McGehee's scratchboard illustrations.

Additional Resources:

Web sites

- <http://www.museum.state.il.us/muslink/prairie/index.html>
- www.prairiepages.com

DNR Education Website: <http://dnr.state.il.us/lands/education/index.htm>

- Educational supplements (CD-ROMs for students and teachers, educational trunks, posters, books, etc.)
- ENTICE workshop schedule
- Project WET, Project WILD, and Project Learning Tree
- Contests and grants

Audubon Illinois Wildlife Series Display Boards*

- Butterflies and Moths
- Amazing Bats
- Illinois Owls

See www.champaigncountyaudubon.org for a list of resources for loan housed at the Education Center at the Homer Lake Forest Preserve.

**Available for loan from the Education Center at Homer Lake Forest Preserve. We have many more items in addition to those listed – please call 896-2455 for more information.*