Prairie Week Curriculum
Middle-School
Teacher's Guide

Day 5
Restoring the Prairie

Concept: The heart and soul of the prairie is found in the first 12" of soil; the sod. If a prairie is plowed, then the sod is broken, and the prairie is killed. That's what happened to about 95% of the original tallgrass prairie.

But prairie can be restored, brought back. It takes a lot of hard work and time, but it can be done. This day is spent working through the steps of how to bring back a prairie with the purpose of illustrating just how hard it is to bring it back and why it is so challenging. We hope to instill in the students a deeper appreciation for what is present in a healthy prairie.

Terms:

- Perennial
- Annual
- Sod
- Germination
- Trophic levels
- Producers
- Consumers
    - Herbivores
    - Carnivores
    - Decomposers

Concepts Covered:

- Can prairies be brought back – restored?
- What does it take to destroy a prairie?
- What does it take to restore a prairie?
- Is a restored prairie the same thing as a native prairie that has never been plowed? How are they different? How are they similar? Does it matter?
- A reminder of the components of a healthy prairie.
- What is a perennial? What is an annual?
- Do plants compete with each other? If so, how do they compete and what resources are they competing for?
- What is a food chain? What is a food web?
- The role of bison on the prairie.
- How a single species can affect many parts of an ecosystem.
- The combination of several different aspects (drivers) that affect life on the prairie: animals, fire, and precipitation.

Next Generation Science Standards Covered:

- Small changes in one part of a system might cause large changes in another part = MS-LS2-4
- Cause and effect relationships may be used to predict phenomena in natural systems – MS-LS1-8, MS-LS3-2
- Systems may interact with other systems; they may have sub-systems and be a part of larger complex systems – MS-LS1-3
- Cause and effect relationships may be used to predict phenomena in natural or designed systems – MS-LS2-1
- Science assumes that objects and events in natural systems occur in consistent patterns that are understandable through measurement and observation – MS-LS2-3
- Patterns can be used to identify cause and effect relationships – MS-LS2-2

Credit:

Jill Haukos, Director of Education
Konza Environmental Education Program
Konza Prairie Biological Station
Manhattan, KS