



Prairie Week Curriculum
Middle-School
Teacher's Guide



Day 4
Maintaining a Prairie

Terms:

- Prescribed burning
- Adaptation
- Competition
- Woody encroachment

Concepts Covered:

- Prairies need to be managed to remain healthy and productive.
- Fire is the primary tool managers use to maintain a prairie.
- The fire is controlled and prescribed based on humidity and wind speed.
- Prairies will be lost to woody shrub encroachment in the absence of management.
- Grasses and forbs are adapted for the presence of fire. Grasses more so than forbs because of their complex underground root and stem storage system.
- Shrub encroachment into a prairie can have wide-ranging ramifications.
- Shrubs not only compete for sunlight and soil nutrients, but also for water.
- There are so many shrubs at Konza Prairie that the amount of water runoff and underground spring discharge to the creek – Kings Creek – has resulted in the creek's flow declining.

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:

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