

# Prairie Week Curriculum Middle-School Teacher's Guide



# Day 3 A Healthy Prairie

#### Terms:

- Nitrogen
- Biodiversity
- Precipitation
- Chlorophyll
- Protein
- Aboveground Net Primary Production (ANPP)

## Concepts Covered:

- Role of precipitation in plant growth.
- How levels of precipitation affect ANPP.
- What grazing animals get from eating grass.
- Limitations to plant growth.
- How the prairie gets nitrogen.
- How to measure the health of the prairie (or any ecosystem).
- Importance of native species in an ecosystem.
- Definition of ecological "producers" and "consumers".

## 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