



Prairie Week Curriculum
Middle-School
Teacher's Guide



Day 2
Precipitation on the Prairie

NOTE: Students will need access to calculators and Data Sets #1, #2, and #3

Concepts Covered:

- Role of water in an ecosystem.
- The importance of water for plant growth and survival.
- How variable precipitation is on a prairie and how prairie plants cope.
- The connection between precipitation and the growth of grasses.
- The connection between the timing of precipitation events and the height of the tallgrasses.
- Mathematical concepts: determining averages, reading a graph, visualizing variability in data and how it is manifested in a living system.

Questions Answered:

- What is precipitation?
- What are the types of precipitation?
- Why do plants need water?
- What happens if the prairie plants don't get water?
- What are the main kinds of plants found on a prairie?
- Why are grasses so great at quickly absorbing rain?

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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