

Saint John's Outdoor University Field Trip Overview

Seeds

Objective: Students will explore seeds' role in the survival of a plant. Students will examine the relationship between seed structure and the dispersal method used. Students will compare variations in seeds from plants in different habitats. Students will demonstrate how seeds and wildlife can influence each other's survival strategies.

Field Activities:

Prairie Seed Collection: Students will explore the seeds found in the prairie wildflowers and grasses. Students will use equipment to collect, examine, and sort seeds based on form and structure.

Squirrels and Jays: Students will act out how animals may aid in the dispersal of seeds. By mimicking the behavior of certain animals, students will attempt to hide and recover seeds without forgetting where they hid them or having them stolen by other animals.

Seed Search: Students will explore for seeds in a woodland area. Students will use drawings and descriptive words to portray the structure, movement, and abundance of seeds found in the woods.

Design a Seed: Students will use their creativity to design a new realistic or imaginary seed. Students will consider the relationship between the form and the function of their seed and ultimately how their design will ensure survival of their seed.

Nature Explorer Connections: All students have the ability to be nature explorers. Nature explorers **respect** the natural world, **observe** using their senses, and **wonder** by asking questions about their observations.

Respect – Ways we will demonstrate respect:

- What lives in nature, stays in nature. We will not take anything home with us unless it is allowed on the field trip.
- Some seeds will be collected and brought back to the classroom for further study.
- Collection will be deliberate – we won't take all the seeds and will help spread some around.

Observe – Observational activities included during field trip:

- Student observations will be recorded throughout field trip and brought back to classroom.
- Observation games will be included throughout the field trip

Wonder – Sample questions that may be discussed:

- What ways can seeds move around?
- Why do seeds move around?
- How would you describe a flyer seed? Hitchhiker seed? Dropper seed? Gardener seed?
- What would be the result be if a plant only made one seed instead of a lot of seeds?
- How are the seed's habitat and how it moves around connected?
- What is the best way for a seed to move around, in your opinion?
- How would you improve how animals help seeds move around?
- Predict what would happen if a seed could move around in more than one way.

Minnesota K-12 Academic Standards addressed and focused on during activities:

Strand	Code	Benchmark
SCIENCE		
1. The Nature of Science and Engineering	3.1.1.2.3	Maintain a record of observations, procedures and explanations, being careful to distinguish between actual observations and ideas about what was observed.
4. Life Science	3.4.1.1.1	Compare how the different structures of plants and animals serve various functions of growth, survival and reproduction.