

URBANA PARK DISTRICT
Anita Purves Nature Center

SCHOOL TOUR: NATURE'S HITCHHIKERS

TEACHER'S GUIDE

Grades: **1st & 2nd**

Program Length: **1.5 Hours**

Focus Concept: *Plants produce seeds, which travel to new locations in a variety of ways. Seeds are also a source of food for wildlife.*

OBJECTIVES: Students will

1. Observe autumn changes in Busey Woods
2. Understand that plants make seeds
3. Describe different ways that seeds travel to new locations
4. Understand the importance of seeds in providing food for animals

INTRODUCTION

Most children have a basic knowledge of seeds, but do they know that some seeds travel for miles and miles before they find a place to grow? Do they know that different seeds have different ways of traveling to new locations? In this program, students will observe the different methods of seed dispersal. They will be introduced to the variety of seeds found on the trees, shrubs, and other plants in Busey Woods, and through hands-on activities they will discover the ways that these seeds travel.

Common Core Standards Correlated

Area	Strand	Standard	Standard Numbers
English Language Arts	Speaking/Listening	Comprehension & Collaboration	1.SL.1,3,6 2.SL.1,3,6
English Language Arts	Language	Conventions of Standard English	1.L.1 2.L.2

Next Generation Science Standards Correlated

Physical Science	Life Science	Earth & Space Science
	1-LS1-1 2-LS2-2	1-ESS1-2

Illinois Learning Standards Correlated

Learning Area	Goal	Standard	Benchmark
Science	11	A	1b
		B	1b

The activities listed below are intended to provide ideas to be used before and after the field trip. Feel free to adapt activities to match your students' ability level.

SUPPLEMENTAL ACTIVITIES

Seed Books: Have the students collect seeds from home (birdseed, seeds from fruits or vegetables, garden seeds) or bring pictures of seeds to class. (Gardening catalogs and magazines are good sources of pictures.) Use the seeds or pictures of seeds to make seed books, using construction paper for covers. Have the students match the seeds to pictures of the parent plants and glue these into their seed books.

They can then record how each seed travels to a new place to grow. Ask them why the seeds might benefit by growing in a new area. (Less competition for resources)

Seed Hike: Have each child bring a large, fuzzy sock to school (large enough to fit over their shoe), or use masking tape wrapped around a shoe with the sticky side out. Then go for a walk in a grassy area or field, one that looks like it has lots of seed-bearing plants. After walking, look carefully to see what is attached to the socks. The students may want to record the different kinds of things on the socks, and tally the numbers of seeds they found, or use them in their seed books. Remind students that people and animals can help seeds travel to new homes.

Seed Art: Have the students use seeds and beans (they are also seeds!) to make mosaics or to add texture to a collage.

Edible Seeds: Have the children brainstorm a list of edible seeds. Don't forget seeds that we grind, such as wheat or corn. What about pizza or tortillas? What kinds of seeds do people eat? What other animals eat a diet of seeds? What are some ways that people and animals help seeds travel when they eat them?

Seed Journey: Once the students are experts on the ways seeds travel, have them pretend to be seeds. They can tell or write a story to describe their travels from the mother plant to the place where they might land and start to grow. Why did they leave the mother plant? What is their new location like?

Planting Seeds: The students may want to try planting some seeds they have collected from different places – perhaps seeds that they find in their lunches, or bird seeds or flower seeds. (Some birdseed is chemically treated and may not sprout.)

Plants & Seeds Educational Loan Box: For more information and lots of activities, borrow this kit from the Nature Center. The kit contains an activity guide, books, picture file, and tools and props for a variety of activities and observations. Call 384-4062 for more information.

VOCABULARY: These are words the educator will be using during the program.

Air/Wind	Plants
Autumn	Roll
Burr	Roots
Competition	Seeds
Dispersal	Shrubs
Float/Water	Trees

RESOURCES

Project Learning Tree (To obtain a copy of this curriculum guide, attend a Project Learning Tree workshop or borrow a guide from a colleague who has.)

Anthony, Joseph. *In a Nutshell*. Dawn Publications. 1999

Burns, Diane L. *Berries, Nuts, and Seeds*. NorthWord Press. 1996

Carle, Eric. *The Tiny Seed*. Simon & Schuster. 1991

Cole, Henry. *Jack's Garden*. William Morrow & Co. 1997

Cole, Joanna. *The Magic School Bus Plants Seeds*. Scholastic, Inc. 1995

Ehlert, Lois. *Planting a Rainbow*

Gibbons, Gale. *From Seed to Plant*. Holiday House, Inc. 1993

Hogan, Paula Z. *The Oak Tree*. Milwaukee: Raintree, 1978

Jordan, Aelene J. *Seeds by Wind and Water*. New York: Thomas Y. Cromwell, 1961. Holiday House, 1970

Jordan, Helene J. *How a Seed Grows*. HarperCollins Children's Books. 1992

Kuchalla, Susan. *All About Seeds*. New Jersey: Troll Associates, 1982

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