



Do It Yourself Seed Pod Program

Summary

This activity combines a lesson with a hands-on activity. Students will discuss how prairie ecosystems benefit lakes, rivers, and wildlife. Instructors should customize this program for their specific region. Students should be able to list two characteristics of prairies and two ways prairies benefit rivers. In brief, the long roots of prairies stabilize soil, decrease rain runoff, and help recharge groundwater. Replacing even a small amount of turf grass with prairie improves habitat and increases water quality. The MN DNR has an on-line map of historic and existing prairies and a poster on prairie plant roots.

After learning about prairies, students will make seed bombs, small balls of soil, compost, and prairie seed for distribution on school grounds or another appropriate location.

Allow 90 minutes for this program, 30 minutes to discuss prairies and 60 minutes for making seed pods and clean-up.

Materials: *for a group of 25-30 students- each student can make 12-20 seed pods*

- 2 bags (.75 cubic foot) of top soil (do NOT use potting soil or soil with additives such as fertilizer, peat, vermiculite, etc.)
- 8 cups of mushroom compost (typically sold in .75 cubic foot bags)
- 8 cups of playground sand
- Native Minnesota prairie seeds- a mix of grasses and forbs (flowers) is nice
- 1 bowl (18-20 ounce- no smaller) per student
- 10 heavy weight plastic soup spoons
- 4 cups (9 ounce)
- Prairie root presentation- powerpoint, photos of prairies, plants and wildlife, strings to represent root length

Talking Points

This activity can begin to address processes and systems of an ecosystem, relationships between humans and the environment, and constructing a product or system that addresses a problem.

Discuss characteristics and benefits of prairies ideally using local examples. Compare prairie plant root length with that of turf grass. Discuss how prairies were managed natively in the past and how they have to be managed by humans now. Discuss how prairies use to be abundant and how present prairies must be preserved.

Instructions

In a bowl combine 1 cup of soil, 3 mounded spoonfuls of compost, 3 mounded spoonfuls of sand, 3 pinches of native seeds, and 4 spoonfuls of water. Mix. Take a small amount of mixture enough to make a 1" ball, about golf ball sized. Squeeze 15 times minimum. The mixture will begin to form a play-doh like consistency around squeeze number 12. Do not make the balls too big or they won't break apart in the rain and the seeds will be too buried. Let dry 2-3 days then store in a cool, dark, dry space. Distribute at planting site in late winter or early spring to allow for the seed pods to be outside in freezing temperatures for approximately 4 weeks. Alternatively, store the seeds in the freezer for 4 weeks, then make seed pods. The soil and compost provide a growing medium for the seeds. Sand is a binding agent. Rain will break the balls apart.