

DESIGN A MN NATIVE SEED PACKET

What are the characteristics of MN native plants?



Approximate time needed:

90-120 minutes

Grade level:

High school (9-12)

Educator prep:

- Review [Plant Cards](#) and [Answer Key](#)
- Prepare to assign plant cards to students
- Review [Seed Packet Activity example and instructions](#)
- Print and cut out all necessary materials, if in-person

Materials needed:

- [Seed packet example and template](#)
- Native plant cards - [virtual](#) or [print](#) version
- [Native plant cards answer key](#)
- Field guide that includes native plants of Minnesota - [virtual](#) or [print](#)

Essential student background information or skills needed:

- Basic plant anatomy

Objective:

- Students will learn to use a field guide and be able to discuss the planting needs, bloom time, pollinators, and competitive invasive species of 1-2 Minnesota native plants.

Background Info for Educator:

- Familiarize yourself with the [Minnesota Wildflower Guide](#) and the [Prairie Moon Nursery](#) site. This site will be useful in providing information about the relevant native plants the students will be assigned.
 - Students are encouraged to use the advanced plant search in the upper right hand corner of the [Minnesota Wildflowers](#) website.
 - Students can input the information shown on their plant card in the advanced plant search to deduce their plant identity.
- Familiarize yourself with the instructions of the Seed Packet activity.
 - Refer to the example for help if needed; students are encouraged to be creative and original when designing their seed packet.
- Student designs will be printed and displayed in the Holland Basin, next to the plants that they represent!

Activity Plan:

Introduction:

10 minutes

- Discuss the activity instructions and review the [example provided](#).
- Inform students that their work will be printed and displayed in the Holland Basin! Encourage them to be creative and thorough.
- Allow time for questions.

Research:

40 minutes

- Assign each student 1-2 plants from the [native plant cards](#).
- Instruct students to identify their plant using the [Minnesota Wildflowers](#) website, or printed field guides, if available. Tips for the Minnesota Wildflowers website:
 - There are “grass search” and “carex search” buttons near the top of the page for finding grasses and sedges.
 - Click on the question marks next to dropdown menus to see examples of flower shape, leaf attachment, etc.
 - It may be easier to start the search with only a couple of characteristics filled in (for example, flower color: purple, leaf attachment: alternate). Then, deduce from the results that show up.
- Once students have identified their plant, instruct students to research and record the needed information for their assigned plant(s) to complete the seed packet:
 - General description
 - USDA Plant Hardiness zones
 - Germination instructions
 - Bloom time
 - Attracted pollinators
 - Competitive invasive species

Note: Most of this information can be found in the “About” and “Details” sections of the respective plant pages on the [Prairie Moon Nursery](#) website, or by searching the plant on the [Minnesota Wildflowers](#) website.

Learn by Making:

30-60 minutes

- Review the seed packet example and instructions if needed.
- Hand out seed packet template.
- Instruct students to design a seed packet using the information they gathered about their plant. Remind them that their work will be displayed; encourage them to produce their best work.

Closing:

10 minutes

- Ask students to share some information about their plant(s).
 - What did they learn about their plant?
 - Why are they important to the environment?
- Reiterate the importance of native plants in Minnesota and their imperative roles to the environment.
- Thank students for hard work.

Potential Challenges

- There is a chance that plant identification will prove to be more difficult for some students. In this case, it is recommended that students are highly encouraged to thoroughly explore all facets of the [Minnesota Wildflower Guide](#). Plants thought to be grass may in fact be a sedge or vice versa; it is to the students' advantage that they explore all options.
 - Encourage students to use the advanced plant search option to find their plant identity.
 - The tabs on the left side of the [Minnesota Wildflower Guide](#) will be helpful to find their native plants.
 - Students may also use other resources such as the [Prairie Moon Nursery](#) site to acquire information about their native plant.
- An answer key is provided should any difficulties arise in identifying native plants.