

## Sleepy Seeds

### Prep

In this activity, students will be creating their own mini greenhouses for winter sowing of native plant seeds. Seeds will be sown in potting soil, go through the natural process of cold stratification over the winter. Stratification is required for most wild seeds to germinate successfully and sprout in the spring. Before beginning this activity, make sure you have a place to overwinter your mini greenhouses outdoors that gets morning sun, and that you have a place to transplant your seedlings in late spring. If you don't have flowerbeds or a school garden space, that's okay! Native plants can be grown in pots or raised beds. Just make sure your potting containers are at least a foot deep. Many native plants are deep-rooted, one of the amazing features that allow them to be drought tolerant. This is a great activity to wrap up learning with the pollinator kit, or to extend learning about pollinators into the winter months. Winter sowing is easy, fun, and an inexpensive science experiment!

### Materials

- Potting soil
- Plastic milk jugs
- Duct tape
- Sharpie marker
- Scissors
- Nail or other small, sharp tool to poke drainage holes in the bottom of the milk jugs
- Watering can or mist bottle filled with water
- Native plant seeds

### Make sure seeds are safe for pollinators!

Before you purchase seed packs for your classroom, check that the company has not treated the seeds or source plants with neonicotinoids. These are harmful pesticides that are often sprayed on plants started in large scale garden centers. Neonicotinoids are very bad for pollinators, so as wildlife gardeners, we want to make sure we don't add them to our garden. Most pollinator-friendly seed websites will have this information on their FAQs page, or proudly displayed on their homepage.

### Easy-to-Grow Native Plants

Native plants have many different (and fun) common names, so we've also included their scientific names in italics for clarification.

- Butterfly milkweed (*Asclepias tuberosa*)
- Common milkweed (*Asclepias syriaca*)
- Wild bergamot (*Monarda fistulosa*)
- White beardtongue (*Penstemon digitalis*)
- Purple coneflower (*Echinacea purpurea*)
- Black-eyed Susan (*Rudbeckia hirta*)
- Big bluestem grass (*Andropogon gerardii*)
- Blazing star (*Liatris spicata*)
- Lance-leaved coreopsis (*Coreopsis lanceolata*)
- New England aster (*Symphotrichum novae-angliae*)
- New York ironweed (*Vernonia noveboracensis*)
- Eastern columbine (*Aquilegia canadensis*)
- Rough-stemmed goldenrod (*Solidago rugosa*)\*
- Joe Pye weed (*Eupatorium maculatum*)

\*We've listed just one goldenrod species here, but there are quite a few native goldenrods. All of them are great for pollinators!

## How to

1. Gently poke a few holes in the bottom of the milk jug to provide drainage for your seedlings. You can use a nail or other small, sharp tool to do this. Very little ones will need some help with this step.
2. Carefully cut the jug in half, with the handle of the milk jug on the top half. Make sure you don't cut the handle in half!
3. Pre-moisten your potting soil just until it clumps together in your hand. You don't want it too soggy!
4. Add the moist soil to the bottom half of your milk jug.
5. Sprinkle your seeds on the surface. Wild seeds come in all shapes and sizes, and some are very small. Each student won't need an entire seed packet for their mini greenhouse. You can stretch a pack of seeds between a few students to be economical.
6. Gently press the seeds into the soil surface. You don't want them to be buried deeply. When wild seeds fall from a plant in nature, they pretty much just drop to the ground. Easy peasy!
7. Put the top back on your milk jug and use duct tape to attach the two halves together.
8. Leave the lid off the milk jug. This will allow rain and snow to add water to your seeds all winter.
9. Label your milk jug with your name and the type of plant you are growing.
10. Place the milk jug greenhouses in an area that gets good morning sun. This will be very helpful later in the spring so the delicate seedlings don't get fried to a crisp in the hotter afternoon sun!
11. After seedlings have grown their second set of leaves, weed out a few seedlings to make more room. The remaining seedlings will need this space to grow bigger and stronger.
12. When your remaining seedlings look sturdy, they can be transplanted into larger pots or planted in the ground. Make sure to water your transplants well in the days to follow. Transplanting can be tough on young plants, and they'll need some extra TLC!
13. Enjoy your beautiful native plants and the wildlife that visit them!

Check out our winter sowing instructions video in the Pollinator Pals playlist on our YouTube channel! <https://www.youtube.com/@rhodeislanddem>

