

Letter to Teachers - Winter sowing helpful hints

Congratulations on being selected to participate in the Seed Starter Activity of the Pollinator Habitat Education Program! I've compiled some helpful hints for you, based on several years of working with teachers on this project.

Each seed packet should be enough for 4 milk jugs (so with 10 packets, you have enough seed for at least 40 jugs). When collecting jugs and waiting for the activity, **rinse them and leave the cap off**. Unless you want big reactions from sour milk smell! If you're working with younger students, I would recommend **preparing the jugs before** starting the planting activity with students (it can be dangerous to wrangle the plastic with box cutters/sharp scissors, and creates a bottleneck).

Make sure you start the activity with **pre-moistened soil**. A *high-quality* "germination mix" works best; about 1 cubic foot fills roughly 10 jugs. Place a tarp (or tablecloth, old sheet, etc.) down in an open part of the classroom, and put a large bin (rubbermaid totes or empty coolers work well) in the center. Have students **add soil, then water into the bin** and mix thoroughly. Instruct students to **remain over the tarp** when filling their jugs. Students love to have **ownership over their own jug**. **Grease pencils** last longer than sharpies for labeling, which saves you from heartbreak from lost student and lost species names. If you don't have enough jugs for each student, break them into groups.

Seeds are precious, difficult to harvest, and expensive. **I tap out just a few into my palm, and have students pinch them from my palm**, usually 1-2 pinches is enough per jug. Personally, I do not let students handle the packets. I use the cue 'sprinkle fingers' for students to get a good distribution of seeds across the soil, and 'tuck them into bed' to cue them to be very gentle when pressing the seeds lightly into the soil. One of the biggest factors in failure to germinate is TOO MUCH SOIL on top of the seeds! As a general rule of thumb, the seed only needs to be covered with the equivalent of *its own width* of soil. So for the smaller/tiny dusty varieties, they just need a tiny little dusting.

IMMEDIATELY after the jugs are planted with seeds, find a safe place outdoors - protected from high winds and vandalism. If you place them in a communal space (such as a recess area) be sure to communicate to the administration and grounds workers that they are a school project - otherwise they may think they are litter and toss them! One teacher **suggests collecting milk crates to make them easier to move, and less likely to blow away**. They will stay in this spot through the winter and spring.

Activity extensions could include: drawing their wildflower, labeling the parts of the plant (stem, root, flower, leaf) or presenting on their wildflower to the class. For a math extension, they could take measurements as they grow, or do a 'garden mapping' activity using grid paper to learn about scale and spacing requirements of plants. Contact me for more ideas, or how to adapt them to a standard!

If you would like to plant outside, collect cardboard and lay it down as a ground cover as soon as you can to start to 'smother' weeds, and weigh it down with rocks or a thick layer of mulch (some cities can deliver wood chips for free). Plant directly through the cardboard and wood chips at 1' spacing, (I recommend using a cordless drill with an auger bit) planting species in groups of 3-5 so pollinators can 'see' them. Kids also LOVE to take home plants, if there's extra.

Happy growing!

Haley