

Winter Sowing is a method of germinating seeds outdoors, during the winter in an enclosed container.

Materials

- Clean, translucent or clear plastic container, such as a half-gallon or gallon milk container. You'll need at least 4-inch depth for soil and space for the seedlings to grow until planted.
- Ruler
- Awl, power drill, glue gun, wood burning tool or knife to cut several holes in the bottom of the container.
- Tool to cut the container in half (box cutter, knife, scissors)
- Pre-moistened potting soil or container mix
- Seeds – Research the germination needs for your seeds!
- Plant labels for inside AND outside the container.
- Duct tape or similar to secure the lid to the bottom of the container after planting.
- Marker
- Spray bottle filled with water

Process

- 1) Add several holes to the bottom of the container. Optional: Secure containers in a milk crate or box to hold them steady during drilling/poking.
- 2) Using a ruler, measure 4 inches or more from the bottom of the container and draw a horizontal line. Use this mark as a guide to cut horizontally across the container. Note in the PickleWix graphic that you will not cut across the entire circumference of the container, but will leave enough material to form a hinge so the container can be opened and closed without tearing. Consider cutting in a way that leaves the handle (if present) as part of the hinge as it adds to the stability of the container when moving it as needed throughout the seasons.
- 3) Add **moistened** potting soil almost to the top of the bottom section of the container. Pat the soil down just a bit. If you are concerned about slugs, place a single layer of coffee filter material on the bottom of the container before adding the soil.
- 4) Plant your seeds. Generally, small native seeds can be planted on the surface of the soil. Larger seeds should be covered with soil depth equal to the size of the seed. If planting on the surface, press the seeds into the soil so the seeds make contact with the soil.
- 5) Do not over sow, especially if your plant is sensitive to root disturbance or is a larger plant.
- 6) Spray water over the top of the soil.
- 7) Add a plant label inside the container.
- 8) Close the container and tape it shut covering the cut edges securely. You want the moisture to stay in the container. Keep the top of the container open, no cap/lid. You can add a few more holes in the top of the container, if you prefer, to increase ventilation.
- 9) Add a label to the outside of the container. Consider a *Lumocolor* permanent garden marker or other with ink that will not fade. Metal embossed utility tags work well. Sharpie markers and the like will fade.
- 10) Consider numbering your containers to help with record keeping. Note the planting date in your garden record.
- 11) Place your container outdoors on the ground (not on concrete/patios) where it will be subject to precipitation. Shield it from the wind using bricks or wood. Do not cover the sides above the level of the soil in the container.
- 12) There is a difference of opinion about where to place containers after planting. I place my containers in full sun until seeds germinate. I then move them where they will receive only morning sun. Left in the full sun after germination, seedlings may get too warm. Some gardeners place their containers in the shade. Many seeds need direct light to germinate, so consider your seed requirements.
- 13) The most important thing is to keep the soil moist, but not soggy. Pile snow on top of your containers. When temps are above freezing, you'll see condensation form inside the top of the container. If you do not

see condensation, use a spray bottle to add water to the soil or place the container in a tray of water to absorb moisture from below. As you do this, notice the weight of similar containers. You'll get a feel for soil moisture based on the weight of the container.

- 14) In mid-March, begin checking for germination by looking in the top of each container. Seedlings may be tiny. Record the first date of germination in your garden records.
- 15) If you have concern for the heat of the sun on your seedlings, move the container to a morning sun location. This is especially a concern with clear containers. Be sure to keep it out in the open to receive precipitation and shore up the sides to keep the containers from blowing over in the wind. It's OK to add more holes for ventilation if you think it's needed.
- 16) When day time temperatures are above 65 degrees AND your seeds have germinated, loosen the tape and open the containers. Be sure to close them up in the afternoon as the temperatures drop. Open containers will need to be watered more frequently.
- 17) When night time temperatures are consistently above 40 degrees, consider leaving the tops open through the night. Do not detach the lid as you may need to recover the container to protect from hail or in the event of a late dip in temperature.
- 18) Learn about your plant and move the containers around if you feel it is needed.
- 19) Resist bringing the containers indoors. I have brought mine into the garage when we have had a late spring storm and the plants were too tall for me to close the lids, but they went right back outside. I never bring them inside the house.
- 20) Wait to pot up seedlings until they have at least one set of true leaves or more. Keep the potted plants outdoors. It is OK to plant seedlings that have grown without the container lid on, directly into the garden as they are already "hardened off". My experience is that plants do best being repotted or planted when they are ready and not much later.

Benefits of winter sowing in containers - Easy, inexpensive, moves plants to the outdoors, seeds are protected, minimal care needed until germination, control over transplant location, definitive plant identification and, most of all, yields healthier, hardened off plants.

Which seeds to winter sow - Most plants native to our region will germinate when winter sown because they are sown in their native climate. Natives that require cold stratification may need up to 90 days, so read up on your plant so you allow for enough time and to learn about other needs for the species. Most will do fine planted in late December through February. Most Colorado winter sowers seem to have their containers planted by the end of January.

Some vegetables and herbs are good winter sowing candidates: Onion, chives, cabbage, broccoli, kale, collard greens, thyme, dill and sage. Consider when you would start the seeds indoors and then plant a little earlier in the winter sown container to extend growing time. Vegetables must be planted as soon as they have 2-3 true leaves, otherwise they will get leggy and not be as strong. Transplant shock is also more of an issue the longer you wait.

Soil - This is an area of experimentation for many of us. Beginners should use potting or container mix for their containers. WO members have experimented with using coir (ground coconut fiber) instead of mixes which contain sphagnum peat moss. Others have added sifted native soil and/or breeze/pebbles to the containers. When planting very small seeds, coarseness of the mix may be a concern. RG uses Ferti-lome Seed & Cutting Mix for small seeds to lessen the chance they will be buried too deep to germinate. There is much to learn!

Resources

- **Winter Sowers Facebook Group** affiliated with Trudy Davidoff <https://www.facebook.com/groups/102675420505>
- How to Winter Sow video: Growit Buildit <https://www.youtube.com/watch?v=SKXY6dl-5Tk&t=8s>
- **WO Germination Guide for Native Seeds** by Jan Midgley <https://fronrange.wildones.org/wp-content/images/sites/105/2023/10/Jan-Midgley-Germination-Guide-10-24-2023.pdf>