

Winter Sowing Basics

Bev Wagar, 1000 Islands Master Gardener

What is winter sowing?

Winter sowing (WS) is a way to germinate seeds outdoors in mini “greenhouses” made from recycled containers and bottles. It mimics, in a controlled way, what happens when seeds fall and germinate naturally in the garden. Freeze-thaw cycles and gradually increasing sunlight bring seeds out of dormancy and produce healthy, robust seedlings that are generally ready for planting out by mid-summer. Winter sowing allows gardeners to grow lots of plants without the expense of indoor racks, heat, and artificial lighting.

Which seeds to winter sow?

Any perennial plant species that is hardy in your climate zone can usually be winter sown. Annuals that self-seed or “volunteer” in gardens can be winter sown. Native plants are especially good candidates for winter sowing. In fact, some of them actually *require* the cold-moist stratification process (fluctuating temperatures including freezing) that winter sowing provides. Species that do not require stratification can still be winter sowed.

Seeds require:

soil (seeding mix). For tiny seeds use fine-screened seeding mix. For larger seeds use pro-mix or triple mix. The depth of soil in the container should be about 4 inches.

moisture. The soil mix must not be allowed to dry out. So you'll need to check your containers regularly once they thaw. A spray bottle is handy to moisten the soil surface but be careful not to dislodge tiny seeds. You can bottom-water but don't keep the soil sopping wet. Plant roots need air and saturated soil lacks pore spaces for air.

air / venting / room to grow. Air must be allowed to escape from the “greenhouse” or else the heat buildup, even after a few minutes of sunshine, will cause the soil and seeds to cook. Remember that hot air rises. If you're using clear plastic as a greenhouse cover, cut several slits in the top. If you're using a pop bottle or similar, leave the cap off and cut or drill a few more holes in the top. If you're using a grow-dome, cut holes in the clear plastic lid. The seedlings will need room to grow, so ensure there are several inches of “head space” between the soil surface and the greenhouse “roof”.

drainage. Containers must have holes or slits cut in the bottom so excess rain / water can drain out.

light. The soil surface must receive sunlight—but not too much. Diffused light, morning sun, or dappled shade are good. To prevent overheating you may want to put your containers in the shade until the soil mix is thawed and germination is possible. Then move the containers to a sunnier place where the gradually increasing light levels in the spring will promote germination.

Winter-Sowing at-a-Glance

1. prepare containers (drainage, vents, labels)
2. prepare soil mix (moisten, remove clumps)
3. fill container, tamping gently as you add mix. Fill to the very top, tamp, top up with mix and level with a straightedge.
4. Spray / mist with water
5. plant seeds according to the seed packet and/or your book / Internet resource. Mist again, press gently into soil if “surface sown”
6. label the container in two spots-- one on the bottom. Use a sun- and water-resistant marking method (industrial Sharpie, paint pen, china/grease marker)
7. Place container in vented “greenhouse”. Tape down the top using sheathing tape, greenhouse tape or other waterproof tape.
8. Place containers outside in a place sheltered from winds and strong sunlight. Snow is okay if your container roofs can take the weight and the containers don't end up in standing water.
9. Watch and wait for germination. Water and spritz if the soil surface starts to dry out. After germination, open the top to allow more air circulation and cooler temperature for growing on.
10. When seedlings are large enough to handle (at least four leaves) carefully prick them out into larger pots (into potting mix or triple mix) and grow on until large enough to go into the garden. Remember to label the pots. Densely planted, tiny seedlings may be removed (gently!) in “hunks” and thinned later if necessary.