

Guide to Winter Sowing

Materials:

Plastic containers, for example, gallon milk containers or salad clam shells
Potting soil
Clear duct tape
Something to put holes in the plastic containers, a drill, knife, heated screwdriver, or scissors
Seeds
Marking pen
Labels

What is Winter Sowing?

Winter sowing is an easy germination method that allows you to grow many seedlings at a low cost and with little effort. You sow the seeds in recyclable (milk jugs, liter soda bottles, etc.) during the winter. After sowing, the mini-greenhouse is placed outside to wait for the end of winter. Seeds can be started January – March and will be happy with whatever the weather throws at it, snow coverage or rainstorms. The seeds will begin to germinate in their own time as the weather warms.

Winter sowing supplies the 4 things that the seeds need to germinate: oxygen, water, light, and certain temperatures while conserving your resources. This method frees up the indoor space you would use for seed starting, reduces electricity for grow lights and heating mats, and you do not have to water frequently.

Winter sowing is most successful with seeds from perennials and hardy annuals, but experiment, less hardy plants have been grown this way with great success.

Step by Step

1. Clean recycled containers in soapy water. Make sure that your container can hold at least three inches of dirt and has enough headroom above the soil for the seedlings to grow. The tops should be clear to let light in.
2. Create drainage holes in the bottom of containers. It is important that there is plenty of drainage so the seeds don't rot.
3. Make holes in the lid of the container to allow rain and moisture to enter. If you are using milk jugs or soda bottles, simply leave the lids off to allow for moisture and air to enter.
4. If you are using a container that does not open, for example, a milk jug, cut the container in the middle a little over $\frac{3}{4}$ of the way around leaving a 'hinge' for opening the entire top portion.
5. Moisten your potting mix (not garden soil, this will compact and not allow air for the roots), and then put the mix in your container. Put in 3" of soil.


6. Sow seeds on top of soil, and cover with potting mix according to packed directions.
7. Label your container, use tape, and put it on the bottom of your container, write it on your container, also leave a label in the container.
8. Now close your container. 3M clear duct tape works well.
9. Place your winter sown containers outside. Make sure they are in a spot where they will receive moisture and sun. You can start out south-facing, but as the winter turns to spring you may want to move them to east or west-facing, so the seedlings will not bake on a warm afternoon.

When to winter sow? Start when you have time in January, but you can continue sowing as long as nights are still chilly. It is best to start with perennials that need cold stratification first, and then move on to hardy annuals.

Not a lot of care is required for your containers once they're outside. Check them periodically and make sure there is condensation inside the containers. If there is none, you will need to add some and tweak your greenhouse by adding more holes to the lid of the container so more water can enter or tape up some so it does not escape.

Once the weather begins to warm you will need to watch your containers more closely. In order to harden off plants, you can add more holes or even take the lids off.

For more information on winter sowing try:

Starting Seeds in Winter - Penn State Extension	
Winter Seed Sowing - University of Illinois	
Winter Sowing Seeds - University of Missouri	
Native Plant Seed Propagation - Rutgers University	