

Winter Sowing

What is Winter Sowing?

Winter sowing is a fun, easy and inexpensive way to start seeds outside for the gardening season. Many types of seeds require Wet Cold Stratification – meaning they need cold temperatures and moist conditions to aid in breaking dormancy and beginning germination, which Winter Sowing provides. Using recycled plastic containers, you can start these seeds out-of-doors in winter, in a somewhat controlled environment, and allow natural conditions to grow them.

Why Winter Sow?

- **Inexpensive** – most supplies are readily at hand
- **Environmentally Friendly** – recycle used plastic containers, milk jugs, liter bottles, takeout containers
- **Safety** – the enclosed environment of the container will protect seeds from wind, washing away in rains, and critters disturbing your seeds
- **Space Saving** – no grow lights, heat mats, or indoor seed starting set-up needed
- **Easy** – set your Winter Sown container outside and let nature take its course
- **Fun** – try a new technique or some new seeds

When to Sow?

Start perennials and cold-hardy vegetables in December through February, and hardy annuals in March-April.

What to Sow?

Most perennials (plants that live two or more years), cold-hardy vegetables, some herbs, and cold-hardy annuals (plants that complete their life cycle in one growing season) can be winter sown. In seed catalogs and on seed packets, look for terms such as ‘cold hardy’, ‘sow in early spring’, ‘self-seeding’, or ‘needs stratification’.

Hardy Annuals

Alyssum
Baby's Breath (*Gypsophila*)
Calendula
Candytuft (*Iberis*)
Cornflowers (*Centaurea*)
Larkspur (*Delphinium*)
Nicotiana (*Flowering tobacco*)
Petunias
Snapdragons (*Antirrhinum*)
Sweet peas

Vegetables

Arugula
Broccoli
Cabbage
Cauliflower
Kale
Lettuce
Onions
Spinach
Swiss Chard

Perennials

Bee Balm (*Monarda*)
Black-eyed Susan (*Rudbeckia*)
Butterfly Weed (*Asclepias*)
Coneflowers (*Echinacea*)
Coreopsis
False Indigo (*Baptisia*)
Foxglove (*Digitalis*)
Penstemon
Poppy
Salvia
Verbena
Yarrow

Herbs

Borage
Chives
Lavender
Mint
Oregano
Rosemary
Thyme



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Winter Sowing Quick Start Guide



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Supply List

- Tray or newspaper to contain any spills or moisture
- Clean, rinsed and dried containers, such as milk and water jugs, orange juice containers, two liter bottles (remove lids), clear plastic salad and takeout containers. If you would like to sanitize your container, fill with water and add 1 tsp/gallon of water and allow to sit for two minutes before rinsing.
- Scissors, box cutter, or Exacto knife – for cutting your container
- Awl, screwdriver, knife, or drill
- Indelible marker – a *Garden Marker* or *Sharpie*
- Plant Label – store bought or made from strips cut from large yogurt or cheese containers
- Potting Mix – good quality general purpose, for example: *Miracle-Gro* or *Espoma*
- Seeds – perennials, hardy annuals, herbs, hardy vegetables
- Water
- Duct tape – for sealing the container halve together
- Bricks or rocks, optional – for anchoring container in heavy wind

Step by Step

- **Gather your supplies above**
- **Make your label** – Make your label while your hands are clean. Add the seed name and date sown on a plastic label for inside the container AND label the outside top half of the container with the same information. You can also write the information on the duct tape used for sealing the container later.
- **Create drainage and ventilation holes** – using an awl or knife or whatever works best for you, punch holes in the bottom of your container for drainage; Punch holes in the top for ventilation. NOTE: use care so that you do not injure yourself!
- **Create a lid** – cut around your container, usually just below the handle of a milk jug, about 3”-4” from the bottom, leaving the area near the handle uncut, to form a hinged lid. Use a marker to draw the cutting line first if you are unsure where to cut.
- **Work over a tray or newspaper to contain any mess.**
- **Add container mix** – fill the container bottom portion with container mix, a little below the cut line.
- **Add some water**, just enough to dampen the soil, mix well with your hands or a utensil
- **Plant your seeds** – If you have tiny seeds and some to spare, broadcast them evenly over the surface of the soil (you will seldom have 100% germination but you will guarantee enough germination by over-sowing and thinning later) OR, mark out a grid on the soil surface (3x3, 4x4, etc.) and plant 2-3 seeds in each space; this can make it easier to transplant later. Read your seed packet! It will explain if your seeds need to be covered or need light to germinate.
- **Add your label** to the inside of your container; this way if the lid label wears off or you lose the lid, you will still have an inner label to identify your seedlings.
- **Water** – gently water in your seeds, wetting the soil until you see water starting to drain from the bottom
- **Tape lid shut with duct tape.**
- **Set your container outside** where it will get full sun but be protected from wind. Add bricks or rocks around it if necessary to keep it from being blown away. Winter snow and rain will water your container and the lid will act as a greenhouse to insulate and protect

When to transplant

Start checking your containers when the weather begins to warm in early spring. Once your seedlings have germinated, you can open the lids on warm days to allow sunlight and air to circulate and add water if the soil is dry.

Read your seed packet to determine when your seedlings are ready for transplanting. Usually, once the seedlings have grown to the height of the container and the soil in your garden can be worked, you plants are ready to be moved to the new homes.

Native Plant and Seed Saving Resources



Carroll County Master Gardeners
<https://www.facebook.com/umeccmg/>



Native Plants for Wildlife Habitat and Conservation Landscaping Chesapeake Bay Watershed
<https://www.fws.gov/chesapeakebay/resources/native-plants.html>



Pleasant Valley Conservancy Seed Collection Chart
<https://pleasantvalleyconservancy.org/phenology.html>



University of Maryland Extension
<https://extension.umd.edu/programs/environment-natural-resources/program-areas/home-and-garden-information-center>



Xerces Society
<https://www.xerces.org/publications/guidelines/collecting-and-using-your-own-wildflower-seed>