**Why Try Winter Sowing?**

Winter sowing makes seed starting easy—plus you don't need special equipment or space inside your house for starting seeds. Here's how it works—basically you're taking a recycled container and turning it into a mini greenhouse. Any time after freezing temps are here to stay for the winter, you place the container outside in the snow—no worries about the cold. Once the weather starts to warm in the spring, the seeds you planted in the container will germinate at their own pace! Added benefits: winter sown seedlings don’t need to be hardened off since they were already growing outside and the seedlings are hardier, which means they have a higher survival rate.

**Tips and Tricks**

- Use fresh, high-quality all purpose potting soil, seed starter won’t have enough nutrition to carry your seedling through to transplant. Spend the money here for organic if at all possible. Your seeds take up whatever is in that soil and that becomes your food. You can fill many containers from one bag so the extra couple of bucks is well spent.
- Container choice: Things like milk jugs, two liter bottles, vinegar jugs all work well. Translucent is best in our intense sun, you may need to shade clear containers if it is a very warm spring. It should also be deep enough to hold 3–4 inches of soil in the bottom, and tall enough to allow several inches of room for the seedlings to grow.
- Seed type: All types of seeds work for seed sowing! Cold season, warm season, flowers, herbs have all been successfully done right here by other Garden Club members. You can ignore the seed packet instructions, the seeds will sprout when conditions are right for them.

**Supplies Needed**

- Container
- Drill or utility knife
- Potting soil
- Seeds
- Heavy duty tape or duct tape
- Plant tags for inside the jug
- Paint pen (Sharpies and other permanent markers won’t last, trust us.)
Step-by-Step Instructions

1. Clean your container, this is optional since they will be outside in the snow.

2. Prepare the mini greenhouses – Poke 5-6 holes for drainage in the bottom of the container, you can just stab it with a utility knife and give it a twist or you can use a drill. If using a drill, either drill before cutting the jug or cut as in step 3 and then fold back the top and drill thru the inside (place it on a board).

3. Cut ¾ of the way around the container so the top half can fold back but stay attached, this will make it easier to tape back together. Discard the cap or lid of the container.

4. Add very wet soil – Fill the bottom of your mini greenhouse with 3-4 inches of soil. You want your soil to be very wet so this can be messy as it drips out the bottom.

5. Plant the seeds – Five well space seeds of larger plants such as tomato or cucumber will make it easier to transplant. For things such as lettuce you can broadcast and then just plant clumps if you prefer. Ignore package directions and plant very shallow, just barely covering the seeds with soil.

6. Label your winter sowing using a paint pen – Put a plant marker in the container with your seeds and it will be ready for you to put in your garden. Also label the outside by writing on the tape or directly on the container. You can also just number your jugs and keep a journal detailing what plant corresponds to each number.

7. Water the soil again using a hand spray bottle, this may be enough to wash soil over the seeds and you shouldn’t need to water too much if your soil is already good and wet.

8. Make sure that the lid or cap is off, then rock the top of the container back into place and seal well with duct tape. Painter’s tape won’t hold up.

9. Move them outside – keep your winter sown containers in a spot where they are protected from heavy wind but will still get moisture and full sun. You want them to be sitting on the ground as it will stay cold and they won’t warm up too soon.

10. Wait! – Once they’re moved outside, you can pretty much forget about them until spring. Don’t worry, it’s okay if they’re completely covered by snow for a few months. Just leave them be!
How long does germination take?
The seeds will start growing at their own pace, and the timing can be different for each one. Some may even start germinating before the snow melts off of the containers, but others won’t start growing until the weather gets warmer in the spring. Just keep checking regularly for any signs of sprouts as soon as the weather begins to warm up. The hardier the seed is, the earlier it will germinate. If you have sprouts and it is going to be very cold, just throw a blanket over the sprouted jugs to protect them a bit for the night.

While you wait...
The only maintenance you have to do in the spring is to make sure your seedlings don’t dry out. Pick up the containers and if they feel light place them in a tray of water and let it wick up until they feel heavy again and then put them back on the ground. Once the seedlings are the size that you want to transplant take off the tape but don’t open the top for a day or so. This gives the plants time to adjust to the drop in humidity. After a couple of days you can rock the top back and transplant or just marvel at how amazing they look until you’re ready! The soil can dry out pretty quickly once you open them up so check them at least once a day, and water if necessary. At this point, watch the weather- cover the seedlings overnight with a sheet or blanket if there is a chance of freezing temps.

Planting your seedlings in the garden
Once the seedlings are tall enough and have grown their first few sets of true leaves, it’s time to plant them into the garden. Hardy winter sown seedlings (spinach/kale/greens) can be transplanted as soon as the soil is workable in the spring. Since they’re already growing outside, there’s no need to harden them off either- just plant them directly into the garden!

Thanks Pine River Garden Club members Kami Larson for the instructions and Debbie Holder for the seeds and inspiration for the kit!

Resources
- Winter Gardening for Beginners by Lindsey Pylarinos
- The Winter Harvest Handbook by Eliot Coleman
- The Year-Round Vegetable Gardener by Niki Jabbour
- "Winter Sowing with Sheryl Mann" on Facebook, you can also find her at www.juicinggardener.com or on YouTube at www.youtube.com/watch?v=tCAkX4dr5iM

A note about Orach
Orach is a cool season plant that is a great alternative to spinach because it doesn’t bolt. It is also known as Garden Orache, Mountain Spinach, French Spinach, and Sea Purslane. Native to Europe and Siberia, it is likely one of the more ancient cultivated plants. Like spinach you can eat it raw or cooked and the flavor is also similar. In Zones 4-8 it is grown much like spinach. Learn more at www.gardeningknowhow.com/edible/vegetables/orach/how-to-grow-orach-plants.htm.