

Milk Jug Wildflower Propagation

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Many native plant seeds have built-in mechanisms to prevent immediate germination in harsh conditions such as hot, dry, summer weather and cold winters. For successful germination, these seeds require to winter through a cold, moist period, called **stratification**. An easy way to accomplish this is to sow seeds in a milk jug. Clear, plastic milk jugs with the cap off allow for rain and snow to keep the mix moist and then greenhouse-like warm, moist conditions later in the spring to help with seedling growth. Here's how to set up such a milk jug.

1. Working on a safe surface, poke a few small holes in the bottom of the jug to allow for drainage.



2. Using a box knife, cut around the jug below the handle, making sure to leave the section that includes the handle uncut.



3. Place about 3 inches of a pre-moistened seedling mix, just below the cut. Mix should be moistened just until you can form a clump with your hand.
4. Sprinkle your seed on the surface. Some seed, often very small seeds, require light for germination, so need to be pressed into and left on the surface. The rule of thumb is seeds go in as deep as the width of the seed.

5. Lightly sprinkle grit, tiny aquarium gravel, or a mix of sand and on the surface. This prevents “damping off”, a general term for fungal and bacterial infections that kill seedlings. Make sure to put a label inside. I have found that wooden popsicle stick labels will get moldy and you won’t be able to read the label in the spring. So, lately I have been cutting up white plastic milk jugs for labels. Use a pencil instead of a sharpie. It will last longer.



6. Put duct tape around the opening you cut earlier to re-seal the container.



7. Place the milk jugs in an area that receives morning sun, which is key in late spring when temperatures rise. When seedlings grow their true leaves after cotyledons, thin out the plants to give them room to grow larger and stronger. Pot on into larger pots or straight into your garden.



8. Certain seeds may require different conditions. For example, some need warm, moist conditions, then cold, then warm again to germinate. Two great resources are the book The New England Wild Flower Society Guide to Growing and Propagating Wildflowers of the United States and Canada by Bill Cullina (out of print but still available used) and the free extensive online publication Seed Germination Theory and Practice by Norman Deno, found on the USDA website: <https://naldc.nal.usda.gov/download/41278/PDF> You can also find germination codes (different letters) on Prairie Moon Nursery's or Wild Seed Project websites. Good luck and happy growing!

9. Good wild plant identification guides include Native Plant Trust's Go Botany Simple Key: <https://gobotany.nativeplanttrust.org/> and you can download photos for identification to a great app - iNaturalist: <https://www.inaturalist.org/>