

## **Your Super Productive Secret Greenhouse**

By Mary Tran UCCE Master Gardeners of El Dorado County

Do you want an early start on next year's garden? What is the secret? Set up a greenhouse inside your house!

The key to success with an indoor greenhouse is to set plant heating mats under the seedling trays and to hang grow-lights about one foot above the trays. Pick a place for your greenhouse that can tolerate the occasional spill, like a bathroom, since you will be watering. I have mine set up in the basement. Also, you need access to electricity. It's convenient to plug the heating mats into a power strip. Add a garden timer to the power strip for your lighting. Plug all the lights into the timer. This allows you to provide light on a more or less natural schedule.

If space is at a premium, you can set up a small vertical framework with a small purchased greenhouse kit or wire storage shelves. Shelves should each measure 1.5 feet deep and 2 feet wide. You should add hooks to suspend a grow-light about one foot above each shelf. Alternatively, you can build your own frame box using PVC pipe lengths plus the push-on elbow connectors available at the hardware store.

Seed starting kits are available at garden centers. They should include a flat tray large enough to seat planting cups and often a transparent cover to retain moisture around new seedlings. You can create your own seedling trays using open "clamshells" (the plastic boxes used for selling croissants and muffins). How about the clear tops of bakery cake containers?

Leftover pony packs (the 6- or 8-cup containers you bought your marigolds in last summer) can be used for seedling cups. Mango clamshells are nice because they are large and have holes in the bottom of each cup. I convert smallish plastic water bottles into planting cups by making holes in the bottoms and cutting off the tops at the "shoulder". The top can be pushed back into the cup to retain moisture.

When ready for planting, fill each cup about three-quarters deep with potting soil. Check the seed package for outdoor transplanting dates relative to the last frost so that you can estimate when you can successfully move your seedlings to garden beds. Seed packages also will differentiate between plant seeds that are best sown outdoors and plants that can be successful started indoors. Don't start your seeds too early. Place two to four seeds of one kind in each cup. Sprinkle a tiny amount of extra soil on each and mist to settle soil and seeds.

How many plants? Let's say, for instance, that you want a vegetable garden with six zucchini plants, five cherry tomatoes and four large tomatoes, two watermelons, four cucumbers, three butternut squash, one pumpkin, three (either bell or spicy) peppers, three eggplants, and five culinary herbs. You will want a total of 36 successful individual seedlings. With a possible loss rate of 50 percent, you need to start 72 seedlings. This plan requires at least 72 planting cups and enough trays to seat them all.

Check your seedlings daily. Use a sprayer, watering can or bottle to keep the soil moist. Excess smiling at newly wakened seedlings can make them shy, so be careful. Seedlings are ready to be transplanted to garden beds when they have four or more adult leaves.

Saturday, January 25<sup>th</sup>, join us for a free class: Spring and Summer Vegetables with Master Gardener Zack Dowell. It's time to prepare the garden for warm season vegetables. Master Gardener Zack Dowell will discuss garden plant selection, planting times, site selection, soil preparation, proper seed planting techniques, and pest management. Don't miss this popular class! 9am-noon. Bethel-Delfino Agriculture Building. 311 Fair Lane, Placerville. Space is limited to 40 participants.

For more information on the UCCE Master Gardeners of El Dorado County, see our website at <a href="http://mgeldorado.ucanr.edu">http://mgeldorado.ucanr.edu</a>. Master Gardeners are available to answer home gardening questions <a href="Tuesday through Friday">Tuesday through Friday</a>, 9:00 a.m. to noon, by calling (530) 621-5512, or send us an email using the Ask a Master Gardener option on our website. Walk-ins are welcome at our office, located at 311 Fair Lane in Placerville. We also encourage you to visit us at the Sherwood Demonstration Garden, located at 6699 Campus Drive in Placerville, behind Folsom Lake College, El Dorado Center. See <a href="http://mgeldorado.ucanr.edu/Demonstration\_Garden">http://mgeldorado.ucanr.edu/Demonstration\_Garden</a> for more information and days and hours of operation, or call us to schedule a tour. To sign up for notices and newsletters, see <a href="http://ucanr.edu/master gardener e-news">http://ucanr.edu/master gardener e-news</a>. Master Gardeners are also on Facebook and Instagram; we hope you enjoy our postings and will share them with your friends.