

seed starting

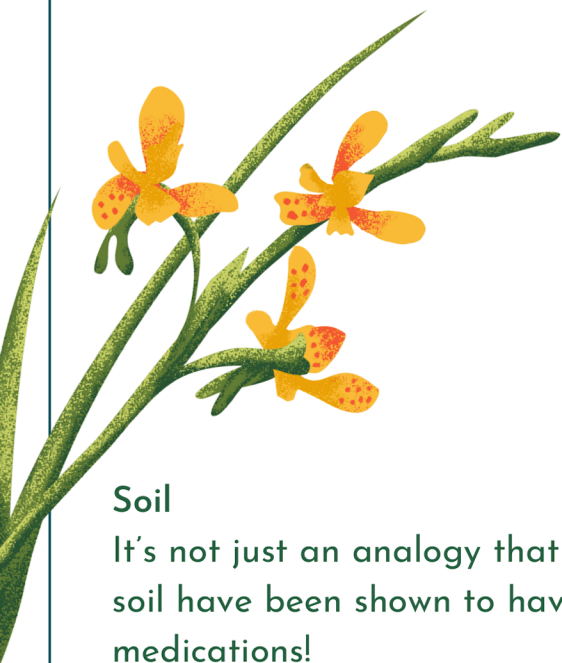
Emergence Gardens, South Dartmouth

www.emergencegardens.com



NOTES





Congratulations on your decision to start your own seeds! This is probably my favorite thing to do. It's like magic every time a seed sprouts.

Soil

It's not just an analogy that planting seeds makes you happy. Microbes in soil have been shown to have the same result as anti-depressant medications!

There's a saying in the growing world: Don't treat your soil like dirt! Good soil health is the basis for a healthy garden and it starts when you start your seeds. Dirt is the residue that flies up and covers you from the earth. There was a saying back in my trainhopping days that if you were riding on the side of the train car that was moving forward you were "riding dirtface". Dirt is the "dusty old dust" of Woody Guthrie's songs.

Soil is made up of elements that have been decomposing since the earth was created. Soil is composed of bedrock and mountain stones broken down over eons by wind and rain. When you garden you are engaging with the beginning of our planet and beyond. This is why I say that gardening is infinite, sacred work. We are co-creating with the universe every time we interact with the soil.

Soil is best to obtain locally, shipping costs can be hefty because of the weight. Most larger farmstands will sell a potting soil. If you trust your farmer or local hardware store, what they are stocking is probably a good mix. For best results you want to make sure you are getting a seed starting mix, not a straight compost or raised bed mix. It is also a good idea to look for an organic compatible mix.

I use: [Vermont Compost Company](#) (VT)

The gold standard in the northeast. I mostly use Fort Vee for my soil blocks and Fort Light if I am potting up or seeding small celled flats. Available locally in 20 qt and 60 qt bags at Progressive Grower in Wareham. It's good to call ahead to make sure it's in stock.



Other options:

Ideal Compost (NH)

We used this on the farm because we could drive and get the truck loaded with a few yards. Also sold by the bag. Not sold locally, but if you come across it, it is a good option.

Coast of Maine (ME)

This is the most widely available organic option in our area. It is stocked at the Ace Hardware stores, Kenny's Garden Center in Fairhaven and others. I've also seen it at Langwater Farm in Easton.

Container

So now you have your soil. Your next step is to figure out what you're going to put it in.

DIY

This is one place where you can definitely use household items like yogurt cups, take-out containers (and even lids!) and egg cartons to start your seeds. Really any plastic container will do. You will want to put some small drainage holes in the bottom and find another larger flat container to house the smaller containers.

Soil Blocks

I am a soil block enthusiast. I've been seeding almost exclusively with soil blocks since 2012. Soil blocking is a method that uses a metal tool to make condensed blocks of soil you can plant right into. You can use plastic trays as a base or reuse household items or build your own. This makes for less waste, but the real benefit is the health of the plants. Plants start out healthy, don't get root-bound, have minimal "transplant shock" when you plant them in the garden, and have a generally awesome life. There are a variety of different sizes of soil block makers, with both handheld and standup options. Downsides are that this is a more labor intensive method and the upfront cost is higher. You can browse soil block makers at [Johnny's](#).

Reusable Winstrip Trays

These trays are heavier duty than traditional seed flats and can be reused for many years. They also don't have a bottom so have the same benefit to soil blocks of not becoming root bound. Growers who use these say they make soil blocks obsolete, which I don't completely agree with, but they are a less labor intensive option with some of the same benefits. Downside is the upfront cost is higher than traditional flats. You can find these at [Never Sink Tools](#).



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Traditional seed flats

You can get plastic seed flats in a wide variety of sizes at almost any hardware store or garden center. Benefits are they are widely available and inexpensive. Downsides are that even if you're careful you usually only get 2 or 3 uses at best before at least part of the tray becomes unusable and plant health is less vigorous than the other methods mentioned above. This creates a lot of waste over the years

Compostable pots

Benefits to these is that they are also widely available and inexpensive, if you do put them in the compost there is no post-consumer waste. They have similar downsides to traditional seed flats in that you can only get one use out of them and plants get root-bound just like in traditional flats. Although you technically can plant them in their pots, you usually have to remove them to ensure that your plants can develop a healthy root system once in the soil. It's also important to remember that even though there is no post-consumer waste if you compost them, there is still a manufacturing process that creates industrial waste.

Seeds!

Now comes the fun part. You have everything you need to start seeds, now you just need some seeds.

Important things to keep in mind when selecting seeds and pairing them with containers are size and time. The smaller the seed, the smaller the container or cell size. If you plant a large seed in a small container it may stunt its growth or not germinate all together. If you plant a small seed in a large container you may get algae growth after prolonged watering or the seed may have a hard time finding its way to the surface.

Where to get seeds:

[Fruition seeds](#) (NY)

[Fedco Seeds](#) (ME) a worker-owned cooperative

[High Mowing Seeds](#) (VT)

[Johnny's Selected Seeds](#) (ME) employee owned

[Hudson Valley Seeds](#) (NY)

[Alliance of Native Seed Keepers](#) (NC)

[Freed Seed Resource Page](#)



How to plant seeds:

A common rule of thumb is that you should plant a seed to a depth 2x the size of the seed itself.

If you are using soil blocks, the block maker comes with a dibble that makes a hole for you to put the seed into. All you have to do is either cover it with additional soil, or just squeeze it shut. Simple!

When seeding with flats or pots, it's a good trick to seed at least two at a time. Fill them both fully but don't pack in the soil. Put one on top of the other (or all of them in a pile if more than two) and press down evenly, you may even want to use your body weight a little. Switch the top tray to the bottom and repeat. There should now be a little indentation in each cell. This is enough to plant your seed directly into.

Usually you want to seed 1 or 2 seeds per cell, but there can be some exceptions and with smaller seeds this can be nearly impossible so the best advice I have is don't worry about it!

After each cell has been seeded you can cover the tray gently with more potting mix or vermiculite. You want to be careful not to drag seeds from their cells while doing this.

With winstrips you will want to make small holes with your fingers for the seeds and follow the same method as above.

Be sure to consider germination rates, you will want to seed more than you hope to plant in your garden.


Watering

Right after seeding your plants you want to water the plants in. If you used soil blocks and the pinch method you don't technically have to water in, but it can give the seed a jumpstart, just be sure not to overdo it since the soil will already be wet.

For all methods, it's important to use a mist or light shower setting before the roots set in, otherwise the seed could wash away.

Watering is probably the trickiest part of seed starting. Too much water and your seed could rot, too little and it dries up. Ideally you want to water as seldom as possible while still keeping your starts wet. For soil blocks this can be once every several days, with flats and winstrips it is usually once a day.





Seeds need light. The more light, the better your seedlings will do. A south facing bay window is your best indoor option if you have one. The brightest place in your house is the next best indoor option.


Grow lights are also an option.

My advice if you are serious about seed starting is to build yourself a small outdoor shelter. It doesn't have to be anything fancy, just something off the ground covered with glass or plastic. It can be just big enough to fit a few trays or a walk-in if you feel inspired. For the first few years in Dartmouth we used a pallet, some pvc pipe and some greenhouse plastic. If you add in a seedling mat and some humidity domes you can start just about anything you might want to grow in our 7a agricultural zone.

Timing

It's never too late! Even in the dead of winter you can grow something on your windowsill, but there are definitely better times and windows for certain crops. It's important to look at the information on your seed packet. It should tell you how many days to maturity for your selected plant. From there you can do the math on when that will be, and if it will still be warm enough for that plant to thrive outside.

March and April are the best times to start most seeds for the summer garden in our climate. Too far into April will be too late to get full productivity from summer crops like tomatoes and eggplant, but you can still seed them and likely get a late harvest. Crops like lettuce don't like it hot, so may be better for an earlier spring and/or fall planting.



You don't have to do it all at once. If you plant something like salad greens a little every week you'll have a succession of harvests instead of enough mesclun to feed the whole soccer team.

What not to start

There are certain crops that can't be started and others that just don't benefit from being started and are better directly seeded into your garden. Among these are carrots, radishes and most root crops as well as peas and even cucumbers depending on when you plant them and what method you use.