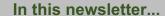




February 2022 Newsletter

Edited by Alex Bruce



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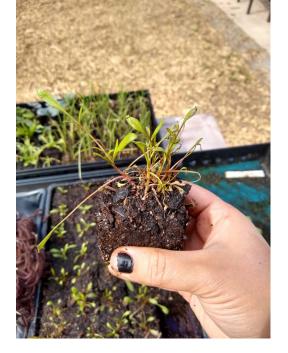
Soil Blocking - Seed Starting Without Plastic

by Alex Bruce



A variety of flower and herb seedlings grown in the small soil blocks to a plantable stage. In one 10in x 20in tray you can start 300 plants! Photo by Alex Bruce.

Looking for a new way to start seeds without having to use plastic pots that only last a few seasons? Soil blocking may be the best alternative you've never heard of. The concept is simple - using a mold, compress soil into durable blocks that are the perfect home for starting seeds.





Coreopsis tinctoria (plains coreopsis - left) and aquilegia coerulea (Rocky Mountain columbine - right) growing in soil blocks in April 2021 after being started in February and January 2021 respectively. Photo by Alex Bruce.

This past year I invested in a soil block maker to start a variety of flower, vegetable, grass, and herb seeds. The seedlings performed amazingly well, and now I am on a mission to promote this relatively unknown method of starting seeds! The main benefit is a huge reduction in plastic - no pots required, and the tray can be something as simple as a thrifted cookie sheet pan or a clean foam tray recycled from grocery store meat. Other benefits are super healthy seedlings that do not get root bound, an easy system to bump up seedlings, a small footprint, and the fastest seedling transplanting you've ever experienced.

The most common concern I get from gardeners is that they think the blocks will fall apart. After starting thousands of seeds in blocks this past year, I can confidently say that they won't! The blocks are very strong, and as long as they don't get to a "bone dry" state, they hold together. I am careful with initial watering, as a direct hit from the watering could damage the block. As the seedling grows, their roots will help hold the block's structure.



Small soil blocks growing snapdragons, columbine, blue grama grass, blanketflower, echinacea, and large blocks with onions. Many containers can be used to hold the blocks, but small sided containers that allow good air circulation are best. Photo by Alex Bruce.

The trickiest part of soil blocking is finding the right soil mix. There are many different recipes out there but I've had good luck following Elliot Coleman's recipe (slightly modified as noted below).

<u>Elliot Coleman's Soil Block Recipe from the</u> New Organic Grower

- 30 quarts brown peat (standard peat moss).
- ½ cup lime.
- 20 quarts coarse sand or perlite*
- 3 cups base fertilizer (equal parts blood meal, colloidal phosphate, and greensand).
- 10 quarts garden soil**
- 20 quarts well-decomposed compost.
- · Mix all ingredients together thoroughly.

*I use vermiculite instead of sand or perlite
**I use additional compost instead of garden
soil

The fertilizer components and lime can be sourced at many garden centers (although I could only find green sand at Harlequin's Garden) or ordered online. Another recipe that people have

found works well is one by Lisa Mason Ziegler here. Others find that ProMix potting soil or Vermont Compost also work well by themselves. I did not fertilize my seedlings besides the initial soil mix, and they were far healthier than past seedlings I started in peat plugs or solo cups.

Now is a great time to start native seeds that need a long period of cold temperatures (stratification) to germinate well. Milkweed, coneflower, sulfur flower, penstemon and many others benefit from one or two months of cold stratification, which can be easily accomplished by sowing the seeds in soil blocks, covering with something to keep the humidity high, and placing outside for a few months. You will need to check the blocks every few days to make sure they don't dry out, but as temperatures warm you will be amazed at the seedlings magically popping out of their blocks. Winter sowing of seeds is a low stress and economical way to start lots of plants, and can be accomplished through traditional seed starting methods as well.

I hope you feel inspired to try soil blocking to grow native plants for you and your neighbor's gardens! For more information, check out:

- 1. The New Organic Grower by Elliot Coleman
- 2. Elliot Coleman's article for Johnny's Seeds https://www.johnnyseeds.com/growers-library/methods-tools-supplies/seed-starting-transplanting/soil-block-makers-eliot-coleman.html
- 3. "You Can't Eat the Grass" Youtube channel https://www.youtube.com/watch?v=glJYT21WfaM
- 4. The 2" block maker I use https://www.johnnyseeds.com/tools-supplies/seed-starting-supplies/soil-blocking/hand-held-4-soil-blocker-7862.html?cgid=soil-block-makers#start=1
- 5. The 3/4" block maker I use https://www.johnnyseeds.com/tools-supplies/seed-starting-supplies/soil-blocking/hand-held-20-soil-blocker-9528.html?cgid=soil-block-makers#start=1
- 6. Winter sowing of seeds starting point: https://joegardener.com/podcast/130-winter-sowing/

Plant Spotlight: Gaillardia

Duration: Perennial (short lived)

Habit: Herb Leaf: Green Size Class: 3-6 ft.

Bloom Color: Red, Yellow **Bloom Time:** Jul, Aug, Sep

Water Use: Medium Light Requirement: Sun Soil Moisture: Dry Soil pH: Acidic (pH<6.8) CaCO3 Tolerance: Medium

Soil Description: Well-drained, infertile

soil.



We will publish a much longer article on Gaillardia by Suzanne Wuerthele next month. This native plant is worth a longer review.



In addition to Alex's plastic-free seedstarting method, I wanted to write about how we can garden with less waste in general. Since Wild Ones' goal is not just encouraging native plant gardening, but also sustainable gardening, it only seems right.

First, a word about why we should be reducing our plastics use. Plastics are made primarily of fossil fuels. As we electrify our lives, big oil has been turning its attention to making more and more plastics, which of course just contributes to climate change.*

We all make garbage. If you peek in our alleys, we make lots and lots of it. And we recycle. But Denver's recycling is nothing to brag about. We're close to last place in our rate of recycling for large cities. Our recycling bins are overflowing, often with things that are NOT recyclable (we call that aspirational recycling), like plastic bags. Rumor has it that most of what we put in our recycling bins is not recyclable anymore as it is contaminated by the non-recyclables in the bin. And, of course, China no longer takes our recyclables.

Reducing our waste stream — dramatically — will have the greatest environmental impact. We can think of the order of priorities as: refuse, reduce, reuse, repair, rot (e.g., compost) and recycle. The goal is *nothing* in the trash can and very little in the recycling bin.

The following is an updated version of the <u>zero waste gardening</u> article that I wrote a few years ago. I am not including everything from that article here.

Here are some *fairly easy, low-or no-cost* ways to reduce your landscape trash and recycling, and thus your carbon footprint. A bonus of many of these actions is not only do they contribute to the wellbeing of the planet, they can save you money, labor, and be beneficial to *your* health. If each of us take these steps, collectively we can make a difference, and perhaps these practices will become the norm one day. This list is only a beginning.

Leave the Leaves: Rather than place leaves in plastic or paper bags, leave them. What could be simpler? Leaves are the best mulch you can have. So, either leave them where they are, or rake them into your flower beds. I myself have a leaf bin, and use the leaves as mulch year-round. I like to crunch them up, by hand – no energy tools required.

None of us is perfect. We are not going to get to zero waste overnight, and believe me, I slip up a lot. I forget my to-go coffee



cup often, and buy a coke in an aluminum can every now and then. But we can have getting to zero waste as a goal. The purpose of this is not to make you feel bad when you do fill up your trash can, but to be thoughtful about what we buy and what we waste.

Leaf and garden detritus for future mulch

Create a Brush Pile: I know, many of you have a city compost bin, which is great, but much of that yard waste can truly stay in our yard. A brush pile in a little-seen corner of your yard is great for wildlife, and breaks down over time to be some beautiful mulch or compost. In fact, my brush pile yields more, and seemingly better, no-work compost than my compost bin.

Create a Natural Raised Bed (Hugelkuter): So, this one might be a bit of work, but if you look up hugelkulter, you will find that this is a better option in Denver than a raised bed built out of bought (or salvaged) wood because of the lack of moisture here. You simply bury some large tree branches, other wood debris, and compostable plant material (or leave a stump of a tree and work around that) and eventually the soil in that area will be rich, teaming with life. Instead of a raised bed, which requires more water than a mound of buried wood debris (which actually will retain water), you'll have a place you can grow vegetables without much effort, no additional fertilizer or soil imported in plastic bags.

Buy mulch or compost in bulk: It is much more sustainable (and usually cheaper) to get a load of compost or mulch delivered in bulk, rather than buying individual plastic bags. Yes, you have to take into account the energy cost of trucking it to you, but I am guessing there was an energy cost in getting those plastic bags to you, as well. So, that's most likely a wash. Better yet, make your own mulch and compost. I find it a great winter activity to mulch larger pieces of yard debris. Granted, it's not as manicured a look as prepared mulch, but I like the look.

Skip buying plants at big box stores: Those plants are usually (I guess I can't say always now that some of the stores are vowing not to use chemicals, etc.) grown with pesticides and non-organic fertilizer, trucked in from far away, and are rarely plants native to our region. Need I say more...

Create a pet waste hole: This one isn't technically a garden tip, but since it involves a hole in the ground, I'm including it. it goes here. Plastic bags and pet waste are a significant portion of our waste stream. If you train your dog to relieve herself in your back yard, you

can just dig a hole near a tree, put her waste in that hole, and let it compost and feed that tree. No danger there. Just don't dig your hole near your vegetable garden. If your dog likes to relieve herself on a walk, I do know people who use a piece of paper or newspaper to pick it up, and then put the newspaper and the waste in the hole in their back yard. That seems like a stretch, perhaps, but yes, people do it. No plastic bags needed!

And, I couldn't help myself. I'm sharing some additional practices I have adopted to lessen my carbon footprint that go beyond the outdoor landscape:

Consider the packaging: You can buy your lettuce in a plastic tub, or a head of romaine with no packaging. You can buy tea in a tea bag, or wrapper, in a box, or buy loose-leaf tea. Opting for the less packaged versions almost always saves money along with lightening the carbon cost.

Buy in bulk: There are now several zero waste stores that sell laundry detergent, shampoo, olive oil, all kinds of things without packaging. You bring your reusable container, they fill it. Of course the store is using bulk packaging, but that is less than if that product is put into many smaller packages.

Make Your own flavored drinks: You can flavor water to your liking by adding mint, orange, lemon peels, or fruit - and cut out all those bottled or canned flavored waters! And, a word about bottled water: aside from the havoc that plastic bottles are wreaking on life in our oceans, or the mountains of them in landfills, bottled water it is not regulated. Your tap water is highly regulated. ** Better to keep your reusable water bottle handy, and fill it often!

Shop less frequently for food: Instead of running out for that missing recipe ingredient, can you make do with what you have in the cupboard? I recently substituted cabbage for spinach in a recipe as that was what I had, and it was better! Better yet, make a recipe around foods that will go bad soon and what's in the cupboard. Food waste is a huge part of our waste stream.

Bring your own grocery bags, including bags for fruit and vegetables: Yes, finally, Denver is charging for paper and plastic bags, but I still see many people using plastic bags. It is truly simple to have your own bags. Leave the bags in your car so that you never forget them. And bagging those apples or peppers with a plastic bag – not necessary. You are going to wash them before you eat them, anyway.

Take a clothes shopping vacation, like, for a year: And, while Macy's will not be happy, I am doing this right now. From November 2021 through November 2022, I am not buying any new clothes or shoes. I find this is making me be more creative with what I have. I put half my wardrobe down in the basement. If I find I want something new, I shop my basement. It is incredibly freeing — having fewer choices in your closet. If you do this, you are saving the packaging these new things come in, Amazon boxes (just saying...), as well as time and money shopping. You are also making your morning less hectic, with fewer choices.

Our consumption habits are fueling many an environmental issue. And a big part of that is our wardrobe. Many of us feel going to the thrift store (that's me, or was), buying second-hand. That is better, but it still fuels our consumption habits. Take a break.

Take your to-go container to a restaurant

Saving one single-use container really isn't much, but if we all did this, we could keep thousands of single-use containers a day, just in Denver, from the landfill. Thousands A Day! I leave mine in my backpack, so it is always available.

Dry Your Laundry Outside: Okay, this doesn't save much trash, unless you use disposable dryer sheets, but I couldn't help myself as this is a huge energy savings. Your dryer, even an energy-star new one, is one of the largest energy hogs in your house. In Colorado, your clothes dry awfully fast on a drying rack, indoors or outside. And they smell better!

If this is a topic that truly interests you, I recommend three books. The first, *Wasted*, by Byron Reese and Scott Hoffman is chock full of interesting stories on what we waste, and explains just how complex waste issues are. The second, *Zero Waste Home*, by Bea Johnson, is full of ideas on how to truly get to zero waste at home. And, the third, a bit harder to come by and more on climate change, is *Living the 1.5 Degree Lifestyle*, by Lloyd Alter. Have fun with it. I truly find the challenge of trying to get to zero waste an inspiring exercise in living intentionally.

*Beyond Plastics: According to a <u>recent report</u> by Beyond Plastics, emissions generated from producing plastics will exceed emissions from coal-fired power plants by 2030.

**According to a <u>Food and Water Watch report</u>, 64% of bottled water is merely filtered municipal tap water. And, that bottled water may contain up to twice as many microplastics as tap water.

Upcoming Events

Tending Nature Speaker Series

Feb. 4 and Feb. 11
8 am
Virtual
See our website for more details

Native Plant Gardening with Soil Biology

How to Foster Optimum Soil Health
Feb. 22
6:30 to 8 pm
Virtual
Registration and information

Landscaping with Colorado Native PlantsTitle

Feb. 26
Virtual
Link to register
See our website for more details

Creating Pollinator Friendly Landscapes

March 9, 2022 6:30 to 8 pm Virtual

A talk by George Miller, author of "Native Plant Gardening for Birds, Bees & Butterflies."

More information will be posted next week with registration information

If you would like to comment on anything in this newsletter please send your comments to $\underline{FrontRangeWildOnes@gmail.com}.$

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