## #24 March 2021

# Green Thoughts

## Conversations and ideas about growing at The Spring Gardens

Each year in early March I dig up soil from my compost pile and spread it around my plot. Always very satisfying. This year I dug up 18 buckets of soil, each bucket with a volume of 1.8

# Harvesting compost

gallons which comes to a total of about 4 cubic ft of soil. It is free of charge and I know where the raw materials, including the resident micro-organisms that do the composting, come from. All we had to do

Old vs new seeds

is add water once in a while. There is still enough remaining soil in the pile to continue the composting process this year and harvesting will begin again in March 2022. The microorganisms, too many to count, too diverse to make a complete list, diligently break down the raw materials I feed into the pile. Russ Troyer wrote about a variant on the composting process in Green Thoughts # 4 where he learned about Korean Natural Farming which led to his search for a proper "microbial zoo". He made the analogy to the starter for sour dough bread. Sour dough has micro-organisms that can reproduce themselves in warm, wet conditions. So the starter is mixed with new flour and other necessities like salt and water, and the dough rises in warm conditions and the process continues. The trick is to always put aside some of the dough for future use. And the loaves keep coming. Similarly, the earth renews itself by building new soil.

#### Weather & Winter Crops

In the last issue of Green Thoughts, in January, we had nice pictures of plants growing away in the relatively mild, snowless winter we were having. On the right is a snap shot from then. Next, we had an early February snowstorm followed by sustained cold weather. Our not so fearless photographer decided to not trek out to TSG to photograph the snow. Instead, on the next page is a photo of a snow-covered backyard 3 blocks away.

Now the snow is gone and there isn't likely to be any more snow until next November. And spring is here. All the hearty plants – kale, Swiss chard, broccoli, beets lettuce, and



Swiss chard Jan 2021

spinach made it through that February cold snap. With slightly warmer weather, and no residual layer of frost underground, we have sowed new seeds– radishes, spinach, beets,



Early Feb 2021 near TSG

lettuce and peas. And now we wait. Radish seedlings, always in a rush to be first, are peeking up from the ground as we speak. I see the first lettuce coming up too.



Last year I planted two types of peas -English peas, where you harvest the pods, shell them, and eat the delicious seeds; and snow peas where you grow them for the pods that are great in stir-fries. Peas are usually reliable but I pretty much failed with my English peas. I wasn't sure what happened since peas are a reliable crop. Once you put seeds in the ground you can't tell what is happening. Then I remembered that three years before I bought extra pea seeds so I was planting seeds that had been sitting around on the shelf for a while. This year I decided to be scienterrific - Green Thoughts loves experiments. I placed seeds inside damp paper towels and wrapped the towels with plastic wrap. I could then check on the progress of the germination.



new Avalanche seeds old Karina seeds

To start with, I used two varieties of pea pod seeds: recently purchased Avalanche seeds and several years-old Karina seeds that had been sitting on a shelf. Most pea varieties germinate at about the same time. In this experiment (see above) the new Avalanche seeds were germinating much faster than the old Karina seeds and there seemed to be a much higher germination rate, i.e., the percent of seeds that actually germinated. You might object that I was making a fallacious comparison. Comparing apples to oranges, so to speak.

So I next compared 4 year old Green Arrow pea seeds with recently purchased Green Arrow seeds:



new Green Arrow seeds old Green Arrow seeds

The seeds were in the same damp paper towel with the new seeds on the left and old seeds on the right. They started off looking the same. They were the same size and same color and were purchased from the same supplier (Jung). So we are comparing apples to apples. What a difference a few years make. Notice how much more the new seeds had swollen and all of the new seeds germinated and were putting out long root processes. The old seeds were much slower to really get going and just a few had the beginnings of root processes. The old seeds were much squishier too. As if they were much more fragile. So lesson learned: in the future I'll stick to planting new pea seeds.

Not wanting to waste anything I took the germinated seeds and grew them in flats until they started producing leaves (see below). They have now been transplanted to my plot and they are doing fine.



Avalanche

Green Arrow

#### Seed banks

There are places that preserve seeds indefinitely. So we should be able to do that also. They keep their seeds at  $-18^{\circ}$ C (around  $0^{\circ}$ F). The seeds are in sealed packets so there is no moisture getting in. There is a famous seed bank in a tunnel on the Norwegian arctic island of Spitsbergen, between the mainland and the north pole, the Svalbard Global Seed Vault. It currently contains about one million samples from around the world. Its aim is to preserve diversity of food crops.

The take-home lesson is that if you are going to save seeds from year to year you

should freeze them and seal them in plastic packets and put them in a freezer that doesn't have automatic defrosting cycles.

#### What is coming this year?

Change is always part of TSG

- That walk-in storage shed/container at the south end of the Gardens just west of the sour cherry trees is slated to be removed. It is not the most esthetically pleasing structure but it is useful for storing gardening tools and materials. It is hoped it will be replaced by a structure on the northside of TSG where the graveled area is. More details will follow once the plans are firmed up.

- We have also heard that water will be available from hydrants at the periphery so that Doris Stahl and the Horticulture Committee will have an easier time keeping the periphery beautiful.

- We will be on the lookout for the survival of our resident bee population. They took occupancy last year at the hive in the northeast corner. We hope they found the accommodations suitable and cozy enough.

- Will that Wright artichoke plant make it into a third growing season? We know that artichokes are perennials but grow in hardiness zone 8 or higher and we are merely in zone 7. We will know soon enough if hope triumphs over experience.

#### An editorial (rare for us)

We at the Spring Gardens consider ourselves responsible custodians of our community garden and of the environment. And rightly so. We don't permit the use of insecticides or pesticides or herbicides. We have a colony of honey bees to pollinate not only the flowers in our Gardens but also neighboring space. We produce healthy vegetables and beautiful flowers in low lead soil. But we fall down in one regard. Large amounts of organic waste from our individual plots – leaves and old plants - are placed into large 40 gallon paper bags, usually from Lowes or Home Depot, and are taken home and discarded. Much of that stuff is left on the sidewalks next to the gardeners' houses. Our municipal sanitation trucks take away the bags and ultimately the stuff ends up in landfill dumps. It's not free and costs the city unnecessary money.

We suggest that everything we grow on our plots, except food and flowers, stay in the Gardens and be composted. It is really is not that hard to compost - where needed, you chop up the plants with hand pruners, pile the stuff up and put some soil on top of that. Then and sun and rain and aerobic air microorganisms do most of the work. The end result is turned magically (or not so magically) into very good organic soil. A counter-argument is that composting takes up a lot of space. A 2 feet by 2 feet compost area for a 10' x 20' plot is all you need. That 4 sq feet sounds like a lot but that is only 2% of the space of 10 x 20 plot. So let's take the pledge and be mindful caretakers of our little part of the earth.

Please send your ideas, thoughts, suggestions and observations to: <u>e.gruberg@temple.edu</u> that address can also be used for getting on the mailing list for Green Thoughts, or getting off.

Prepared by Ed Gruberg

Back issues and an index of Green Thoughts can be found on The Spring Gardens Website under Resources