Green Thoughts

Conversations and ideas about growing at The Spring Gardens

The old questions, the old answers, there's nothing like them! Samuel Beckett, Endgame

Ah yes, the old TSG questions do beckon us. But we hope we don't have to rely on the old answers. Like, when should we really put in our tomato plants? The conservatives among us will

Strawberries, bees, artichokes, & hugelcultur say "Mother's Day" end of story, can't go wrong. But the more adventurous say let's start earlier. Take a gamble, especially if you can read the 10 day

Design for new shed

forecast and it tells of mild conditions. This year the earliest we saw anybody plant tomatoes was the first week of April.

That did not work out well. In mid-April we got hit by a cold snap that saw the overnight temperatures get into the 30s. Not freezing perhaps, but cold enough to dishearten all the tomato plants. They went limp and irreversibly curled up. The conservative gardeners had little sympathy for the more adventurous ones. The last day in April, 10 days before Mother's Day, turned out to be fine for planting tomatoes. By Mother's Day the cherry tomato varieties had set actual clusters of tomatoes. By early June, or perhaps by Fathers' Day, there should likely be the first ripe cherry tomatoes.

Strawberries

Those who have strawberries growing in their plots don't have to make decisions. The perennial strawberry plants do it all on their own. By mid-May the plants decide to flower and set fruit. The fruit is ripening like crazy. The harvesting of strawberries is hitting its peak as we write this in the last days of May. The only annoyance has been that some plots had a few of their strawberries chewed on by non-humans. Birds? Squirrels? It has been hit or miss. Where there are dense clusters of plants there seems to be a sparing effect. And everywhere the fruit is mostly intact. Our 10x20 plot has yielded about a quart of berries/per day. Also, it has been very dry so slugs haven't shown up eating away as uninvited guests at the strawberry party.



One dav's harvest

We'll do a follow-up in a later issue. Most strawberries grown in TSG produce fruit only when the days are long. Up north these plants are called "June bearing". So, there is a short season for setting fruit and harvesting. There is another type of strawberry called "ever bearing." These plants flower over a wider range of days. They are not so sensitive to the length of the day. You end up with a nicely spaced harvest. Just like when you grow indeterminate varieties of tomatoes that fruit over several produce months. Determinate varieties of tomato plants produce all their fruit at one time. That's great for commercial growers but not so for most of us. If you grow ever-bearing varieties please let Green strawberry Thoughts know and tell us how well you have done.

When will honey bees at TSG successfully winter over?

That's another question that keeps popping up. We haven't seen a colony at TSG survive the winter for several years. To get some perspective, we went to the website for the Pennsylvania State Beekeepers Association. They recently e-published *Results from PA State Beekeepers Winter Loss Survey 2021*. They write "7445 colonies went into November [2020] and 3677 were alive this Spring [2021], about 50.6% loss." The survey was across the whole state so there were a variety of conditions and pests that the colonies possibly faced. Mites, viruses, bacteria, fungi, other insects, etc.

The survey shows the challenge of maintaining honey bee colonies. All things being equal, there is only about a one in two chance for a colony to survive winter. Conditions are far from ideal in PA.

Individuals of insect species that are mostly solitary, like mosquitoes and beetles and grasshoppers don't live very long - less than a year. But social insects such as ants and termites and honey bees have reproductive individuals, the queens, that can live long times. There are termite queens that can live 20 years and an ant queen of the species, Lasius niger, can live 28 years. Honey bee queens can live 6 years. Fecundity abets longevity. So you would think that honeybee colonies should also last multiple years. But so far, very little luck at TSG.

If you follow the right bank of the Delaware River upstream from Center City Philadelphia, the furthest area you can get to and still be in Philly is a lovely park called Glen Foerd. Both it and The Spring Gardens are part of Philadelphia Parks and Recreation. Glen Foerd is on a bluff about 25 feet above the River. There is a mansion on the property built by 19th century rich people as a summer home. On the north side of Glen Foerd is Poquessing Creek which empties into the Delaware River. On the far side of the creek is Bucks County. Glen Foerd is open daily year-round. Admission is free. You can get there by taking the SEPTA Trenton Regional Rail Line, about a 30 minute train ride from Center City, to the Torresdale Station. Glenn Foerd is 4 blocks from the train station. Someone maintains a honeybee colony at Glen Foerd that successfully wintered over. We saw it in early April 2021. Honey bees were energetically exploring outside and returning home to a boxy structure called a Langstroth hive. So, a honeybee colony can flourish in Philly, at least at its edge.

Composting – a letter from a gardener

In the last issue of Green Thoughts we suggested that everything that you grow in your plot except for food and flowers should stay in the plot and be composted. We received a note from fellow gardener David Berch:

April 3

You appealed to my embarrassment gene.....don't particularly agree with your thought on gardeners taking compostable items home as I do, but then into a composter.....but.... you are absolutely correct for composting in ones garden.....one day Luke will be able to take all compostable material...... Just ordered a small composter for my garden....18.5 gallons...... Excellent Green Thoughts...... Stay safe..... David

And then a follow-up note from David:

Finally got it [the composter]..,, Pain in ass to put together..,, Already put stuff in I have been saving....



David's new composter (yellow arrow)

You Don't Need a Weatherman....

Thanks to gardener Joe Trout, a physics professor at Stockton State University, we have our own weather station located in the southwest part of TSG. Russ Troyer fills us in on how to get data from the station:

The station reports its data to WeatherLink.com. I think that's a site run by the station's manufacturer for online access. The name of our station is

"Spring_Gardens_Stockton_University_ Trout" but I've never had to type in more than the first part. More power to you if you can navigate to the data without creating an account. I gave up and am using their basic account that's free but maddingly limited to just the current readings. Still handy and useful.

The web site's name page you want is Bulletin (WeatherLink.com/Bulletin). You can also get to the Map screen and see all the other stations hooked up - there's one at the prison, for example. Those two and some others are menu names in the upper left. The other choices there pretty much tell you to sign up to pay money if you want to see history, etc.

Russ

Bad Top Soil

One way I grow plants from seeds is dampen a paper towel, put seeds on top of the towel, fold the paper towel so the seeds are inside, then cover the towel in plastic wrap. Once the seeds have germinated I put them in flats filled with soil or compost and wait until the seedlings have several pairs of leaves. This year we had a 40 pound bag of "top soil" that someone had given us and we used the soil to fill the flats. Something went very wrong. The seedlings just wouldn't grow. The soil was very compacted. It looks like the soil was so dense that roots were inhibited from growing. The most dramatic difference we saw was in sunflowers. We germinated a



2 sunflower plants in "top soil" (above) 2 sunflower seeds planted directly in our plot (right). Seeds were germinated at same time. Magnification same for both photos!



bunch of seeds. Some of the seedlings were placed in flats with that dubious top soil and others of the same cohort of seedlings we planted directly in the ground. The seedlings in the plot are now sizeable plants, 6 inches wide, 5 inches tall. The seedlings in pots haven't yet grown past producing a pair of tiny true leaves, even when we later transplanted them in our plot (see photos above). They are still surrounded by that 'top soil.' Yuck. We had equally bad luck with seedlings of kohlrabi, zinnias, asters and marigolds. We have discarded that 'top soil' by placing it in an obscure location of our backyard and placing compost over it.

Artichoke Plant

Another question we have asked before is how many years an artichoke plant can survive at the Spring Gardens? Artichokes are perennials but Philadelphia, in principle, is a zone too cold for artichokes to winter over. Nonetheless, Holly and Wayne Wright planted two artichoke plants in 2019. Each produced fruit the first year and the second year also. One of the plants then died but the other one is still going strong into its third year residence at TSG (2021). As of 23 May it already has an artichoke fruit zooming up (red arrow) and a second artichoke fruit is



emerging (orange arrow) in the shadows. The yellow line is 18 inches wide.

So why has the plant done so well? We are not sure, but Wayne won't rule out the possibility of the efficacy of prayer.

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 a partial index of Green Thoughts subjects can be found on The Spring Gardens Website under Resources

More stuff on next pages

Design for the new shed

Here is a look at the design for a new shed to replace the current clunky temporary industrial storage shed at the Wallace St. side of TSG. The new structure consists of a permanent one-story lockable shed with a flat roof and openable window vents near the top. There is also a second roofed structure without walls, suitable for other functions. The vertical post-like objects represent people (we think) to give a sense of the scale of the structures. It is not yet clear where the shed will ultimately be sited. Zoning laws suggest that construction of permanent structures in parks shouldn't be located too close to dwellings.



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SPRING GARDEN CDC

Green Thoughts Supplement

And here is something that takes composting to a completely different level. You can even compost wood logs. Diana Gruberg of the Gowanus Canal Conservancy found this information on line. It is about Hügelkultur:

The Many Benefits of Hugelkultur

From: Inspiration Green and Permaculture magazine Thursday, 17th October 2013

Hugelkultur are no-dig raised beds with a difference. They hold moisture, build fertility, maximise surface volume and are great spaces for growing fruit, vegetables and herbs.



Hugelkultur, pronounced Hoo-gul-culture, means hill culture or hill mound.

Instead of putting branches, leaves and grass clippings in bags by the curbside for the bin men... build a hugel bed. Simply mound logs, branches, leaves, grass clippings, straw, cardboard, petroleum-free newspaper, manure, compost or whatever other biomass you have available, top with soil and plant your veggies.

The advantages of a hugel bed are many, including:

The gradual decay of wood is a consistent source of long-term nutrients for the plants. A large bed might give out a constant supply of nutrients for 20 years (or even longer if you use only hardwoods). The composting wood also generates heat which should extend the growing season.

Soil aeration increases as those branches and logs break down... meaning the bed will be no till, long term.

The logs and branches act like a sponge. Rainwater is stored and then released during drier times. Actually you may never need to water your hugel bed again after the first year (except during long term droughts).

Sequester carbon into the soil.

On a sod lawn <u>Sepp Holzer</u> (hugelkultur expert) recommends cutting out the sod, digging a one foot deep trench and filling the trench with logs and branches. Then cover the logs with the upside down turf. On top of the turf add grass clippings, seaweed, compost, aged manure, straw, green leaves, mulch, etc...







Sepp Holzer recommends steep hugel beds to avoid compaction from increased pressure over time. Steep beds mean more surface area in your garden for plants and the height makes easy harvesting. The greater the mass, the greater the water-retention benefits.



Hugel bed dug in clay with logs put in vertically, next branches and lots of wood chips. Top 6" will be wood chips and dirt. This bed will store water and give nutrients for many years to come.



Straw bale gardens require less soil, less water and hold heat. As the straw breaks down nutrients feed the plants. Combining a straw surround with a hugel interior, topped by lasagne layering is an excellent idea for an area with poor quality soil.