

#22 October 2020

Green Thoughts

Conversations and ideas about growing at The Spring Gardens

There is an off-ramp from the planting highway. Some people at TSG took the exit and are wrapping things up by putting their plots to bed. Others have planted cool weather crops to

*An enemy of
the people?*

continue the growing season. As I walk around I can see rows of spinach, lettuce, beets, bok choy, broccoli, kohlrabi and other *brassicas*. Radishes are growing well and my generous neighbor Josh gave me a beautiful

*Tomato/
potato*

bunch of delicious red and white varieties. Several of the crops listed above are able to winter over. They just need a little protection – a layer of thin polypropylene cloth will do. You can have early spring spinach and lettuce.

What a strange growing year this has been. Cold snaps and torrential rain. Some of our tomato plants didn't have the longevity they usually have. The tomatoes we did have were great especially compared to store bought ones. The beans were very good. Bush snap beans, and pole snap beans were excellent and plentiful and the gita beans were delicious and bountiful (if anyone wants some gita seeds let me know). I even had a decent yield of eggplants that produced into mid-October. I'm not quite sure why I did so well, but they started out as pretty big plants and they had some space around them. So that may have helped. Earlier I had several pints of tasty strawberries and delicious, wintered-over spinach and lettuce

Enemies of the People?

Eagle-eyed Liz McIlvaine spotted the hive on a tree on North Street just outside TSG. It was just east of the main entrance. She took a picture of it with her cell phone (see arrow right). It was no beehive. It looked very paper-y and with closer inspection the hive looked like it was a home to paper wasps. They are very common in the eastern 2/3 of the U.S.

Could we actually see the wasps? Our intrepid Green Thoughts photographer crept closer to the hive, keeping social distance of course, and took a snap shot (next page). It



turned out they *were* wasps. With yellow bands around the back part of the abdomen. We had to severely modify the contrast and brightness of the photo, but you can see a paper wasp (red arrow) guarding the entrance to the hive (blue arrow). You may have to blow up the image. According to the Golden Guide to Insects, the paper wasp builds its nest by eating wood and using saliva to turn it into paper. The hive is used for embryos. Unlike bees, no food is stored in the hive. Wasps eat lots of insect pests and they are decent pollinators. But they stung Doris and Holly of the Horticultural Committee. And that is unacceptable. Someone called Parks and Recreation, which TSG is part of, and some workers made short shrift of the wasps. The hive was constructed perhaps in early September and was gone by 14 Sept. I didn't witness its destruction but observers say there was a long nozzle that was inserted into the hive and some spray was used. If you know more please let Green Thoughts know.

Years ago, I found a wasp hive under an eave next to my roof. It was quite scary. An entomologist friend of mine said wait until dark – the wasps go dormant at night – and then you can cut down the hive and put it into a plastic bag and cart it away. I don't remember what happened next.

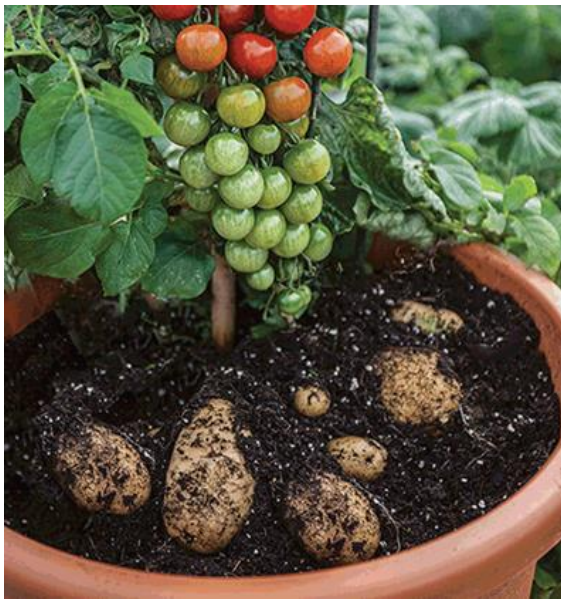
I once was mowing and got stung by a wasp or yellow jacket. I had a very strong and painful reaction. I was told if I was bitten again my immune system could go full tilt and I might end up in anaphylactic shock. One's blood vessels dilate and blood pressure drops disastrously. The main remedy is to get a shot of adrenalin as quickly as possible. Adrenalin contracts blood vessels and BP is restored.



You say potato, I say tomato

Here is something that sounds like gardeners sitting in a bar and having a bit too much to drink. One of them thinks out loud – hey, we could save a lot of space if we grew potatoes, which grow underground, and graft a tomato plant onto the potato stem. So tomatoes on top and potatoes below. Someone slightly more sober might say, if that could be done, it would have been. There is something wrong there.

Sometimes truth is stranger than fiction. Somewhere in Japan some gardeners were perhaps drinking saki and were really plant technologists and weren't so drunk after-all. They realized you can't graft tomato plants onto potato plants – they *are* incompatible. But perhaps some plant, compatible with both tomatoes and potatoes could be grafted as an intermediary. The gardeners knew the plant literature and said “*Nicotiana!*” Otherwise known as a tobacco plant. They were off to the races. And they succeeded. This is not a GMO, i.e. a genetically modified organism, rather, it is just a fancy compound graft. We are not just blowing smoke.



An article was published about this in the 7 August 2020 issue of Science. The photo above is from that issue.

And they didn't stop there. They knew that eggplant is genetically very similar to tomatoes so why not try to graft eggplant onto potato using a tobacco plant as an intermediary.



How strange and delightful. The above photo of an eggplant/potato chimera is from the same issue of Science. And imagine all the potential land they are saving on that cramped island nation.

What shy gardener wouldn't pay big bucks for such plants? It is a conversation starter. Of course, the real aim of the research is to learn more about scientific methods of grafting.

More on Composting

Luke, TSG's maestro of composting, is turning out soil with static aerated piles. The only drawback is that the composted material still has sticks and fibrous material that have not broken down. He has come up with a way to sift out the soil from the sticks.



He got a sturdy electric mixer (orange) that can spin around. It came in parts with assembly instructions that were incomplete. Luke is mechanically competent so by trial and error he put it together despite the instructions. Then he purchased a waste basket (blue) with an open grid pattern on the sides and bottom. He then invented a way to attach the basket to the mixer using a combination of turnbuckles and hooks. The result is that the coarse material stays inside the basket and the soil comes out the bottom.

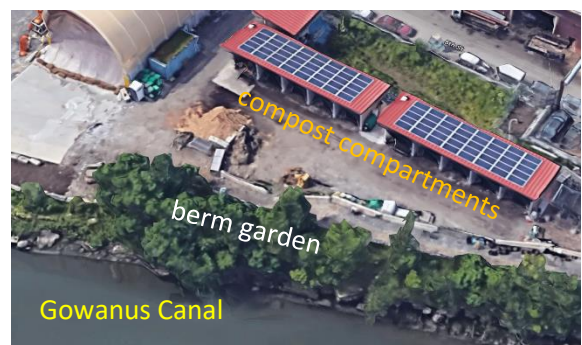
I then talked to daughter Diana who works for the Gowanus Canal Conservancy in Brooklyn which is transforming a polluted Super Fund site into attractive, cleaned-up land. She is a combination of chief horticulturist and landscape director. There are many Gowanus areas that need

restoration. The basic aim is to plant native species wherever possible. The Conservancy has its own nursery but also there is much material that needs composting. They are partnering with organizations nearby so the composting is a major operation and includes food waste. There are 10 compartments to encompass very large aerated static piles. To get a sense of the scale of the operation, below is Diana standing next to two of the compartments. To the left of her is a pile that is being composted; to the right is an empty



compartment showing a grating on the floor where air gets pumped into the pile and any excessive water can be drained off.

Below is a Google Earth shot showing the 10 composting compartments in two groups of



five. The roofs are covered with solar panels which power the pumps that force air into the piles. The pumps are not on continuously so green electric power is fed back into the electric grid. Off camera to the right is the

nursery that the Conservancy uses to grow native species. The area is shared with the NY Sanitation Dept. One of their salt piles (stored and readied for icy road conditions) is seen in the upper left.

So TSG, in its own modest way, is part of the future trying to reduce our contribution to landfills. Thanks to Luke and the people who helped assemble the new composting system for showing us the way.

Election Day

Election day is coming 3 November. If you have not already voted, please do. And encourage your friends, family and neighbors to vote also. This is a very critical election. Thank you.

This is the last issue of Green Thoughts for 2020. See you early next year

Please send your ideas, thoughts, suggestions and observations to:

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that address can also be used for getting on the mailing list for **Green Thoughts**, or getting off.

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