

#23 January 2021

Green Thoughts

Conversations and ideas about growing at The Spring Gardens

We gardeners are used to waiting. It takes days or weeks to germinate seeds. Then we wait until the plants produce flowers or fruit. We are patient people. Gardening is variable because of

Waiting

weather conditions - cold spells; too much rain or too little rain. We can adapt to variability. Some things are highly predictable. The length of the day – The time between sunrise and sunset. In late

*A snapshot
of TSG*

January each subsequent day is longer by about 2 minutes. At the winter solstice on Dec 21 the sun rose at 7:23 AM and set at 4:30 PM. By late January sunrise is about 7:10 AM and sunset is about 5:15 PM. Where the sun rises and sets is also quite predictable. Both are moving further north each day until the summer solstice. From rising in the southeast and setting in the southwest to rising in the northeast and setting in the northwest.

The year 2020

I don't know about you, but I had trouble getting through the last year. I would add January 2021 to 2020. Perhaps we can start fresh in February 2021. The patience of gardening is one thing, but tolerating the lies chronically asserted and repeated from The Leader and his lackies, "alternative facts" they called it, in their Orwellian way, is something else. There is no global warming they say. Last March, then last April they said the pandemic will soon be over. And hydroxychloroquine is a cure and so is bleach. Elections are dishonest if one side doesn't win. Even before the ballots were counted the results were dismissed and afterwards, especially afterwards, after the ballots were counted, they ramped things up. Sore losers. Over and over again they said don't believe fake news from the media. Then came the storming of the Capitol while Congress was in session to report on the

results of the Electoral College. Good grief. Gardening is usually a wonderful distraction from all this. An end in itself. In 2020 we had to wear masks unless we were in our own plot but even at TSG we disagreed how many people should be allowed in for events. "We should not impose the vulnerability of older people on younger members." Oh dear. But enough of this. Let's talk about gardening

Seeds for 2021 planting

I ordered seeds from Jung for this upcoming year. My packets arrived via USPS within one week of placing the order. I bought my usual seed types of veggies and flowers. I didn't buy varieties where I had seeds left over from last year

A snapshot of TSG on 18 Jan 2021

There was a layer of icy soil in my compost pile. We have already had frosts. The layer was about an inch below the

surface. Nonetheless, cold-hardy plants persisted in growing whenever the temperature rose above freezing. Some were growing under cloth, some weren't. The cloth or the more elaborate meshed tunnels were mini-greenhouses. There is still more winter to come. We'll report later on how the plants did. I worry about that artichoke plant (see below). There are predictions of really cold weather coming soon to Philadelphia when the temperature during the day will not get above the twenties. We aren't as mild as Castroville, CA, the Artichoke Capital of the World. We are slightly outside the growing zone for artichokes.



Sarah's Brussel sprouts under a cloth tunnel



Spinach uncovered for photo



Broccoli uncovered for photo



Bok choy, no cover



Rosemary in flower



Wayne and Holly's broccoli under netting



Curly kale



Elephant kale



Swiss chard



Wayne and Holly's artichoke plant with no cover



Purple kale

On-line Sign-up for plots this year

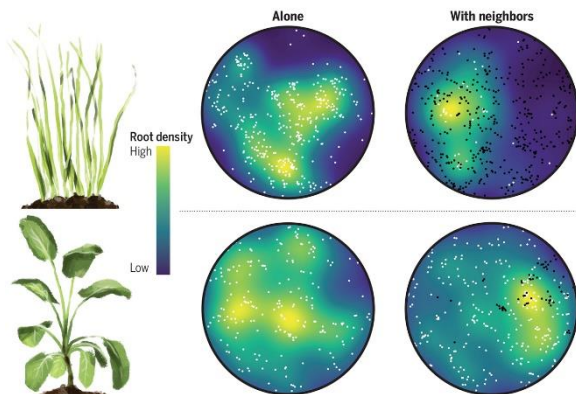
We won't get to meet our fellow gardeners when we sign up for our plots. We are still in quarantine mode. Keep your eye out for email instructions for how to sign up for your plot and for one Saturday work day and one week of chores. Everything is on-line. Let's hope it will go smoothly. But we are patient gardeners after all.

Competition for root space

There is a lot of activity underground. Plant biologists talk about roots as foragers, spreading out in search of nutrients. In a recent issue of Science biologists at Princeton and elsewhere showed that some plant species will keep their roots closer to their stem if there are neighbors nearby. Other plant species place their roots in high density near neighboring plant roots. In the figure below, the root density is highest where it is yellow. Black dots represent neighboring plants' roots.

Mapping plant roots

Roots (white dots) explore soil widely in the absence of neighbors (left-hand circles; root density increases from blue to yellow). In the presence of neighbor roots (black dots in the right-hand circles), the plant in the top row keeps roots close to its stem, whereas the plant in the bottom row places them toward neighbors' roots (7). Root mapping enables testing of plant behavioral theory.



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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