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Green Thoughts

Conversations and ideas about growing at the Spring Gardens

in Just –
spring when the world is mud-
luscious… *e.e. cummings*

When should we start to plant seeds in our plots? Perhaps when the soil less than mud-luscious. If we plant later there is less likelihood of getting an extended freeze after our seeds have already germinated. Also too much cold rain now could be bad. We don't want to drown the poor things. It can't hurt to wait to plant seeds of lettuce, beets, spinach and arugula. But it is trickier with peas. If it is too cold the seeds won't germinate The weather at harvest time also can mess up the crop. If it is too hot the pea plants rebel. Philadelphia summers can come on fast. And the clock is beginning to tick *now*. I haven't had much luck if I wait as late as St. Patrick's Day, the traditional benchmark date for planting peas. The 10 day forecast didn't warn of an impending nasty cold snap, so I took my chances and planted on 25 February. As we mentioned last year, polypropylene cloth really does help. It warms the late winter soil by letting in lots of sun, it is permeable to water and it protects seedlings from heavy winds. Please let us know of your experience and wisdom in planting peas and what is your best guess about when to plant.

time to plant? *time to plant?*

I never saw a purple carrot…

Just in, we heard from fellow gardener Marcia who is trying to grow purple carrots. They are supposed to be delicious. Her problem in growing this variety is, like peas, they don't fancy the hot weather. Also, these carrots take about 90 days to grow. So Marcia planted her purple carrot seeds in mid-February. She has raised beds with excellent soil that drains well. We will check later on how things go.

….but I'd rather see than be one

Our neighboring field

Just to the south of the Spring Gardens is Roberto Clemente Park. Its athletic field gets plenty of use for baseball (many variants), soccer and volleyball. Unless there has been regular rains, by mid-summer the greensward in center field has turned into a hard-baked brown adobe. You could fashion that ground into bricks and make a Little House on the Prairie. About that time of year co-ed touch football teams are out in force. As they chase after each other they

generate clouds of dust from the ground. What comes to mind is – does that dust contain a serious amount of lead? Various state extension services say that it is the direct ingestion of lead-tainted soil that is most toxic. So how much lead is in the dust at Roberto Clemente? Green Thoughts decided to find out. We took samples from the barest part of the outfield, mixed them together, and sent them to the Penn State Extension Service along with $27 for analysis at their Agricultural Analytical Services Laboratory. The lead reading was 112.56 mg/kg. Penn State says that if the reading is less than 150 mg/kg that means "none to very low lead contamination. There is no need to be concerned about lead exposure from these soils." But see our previous issue. Nonetheless, those athletes shouldn't be breathing in that dust. It has all kinds of microbes and other contaminants. I once harvested wheat in North Dakota operating a combine that threw huge amounts of dust into the air. The driver's seat of the combine was in the open. It did not have a cab with filtered air. Nor did the crew use dust masks. Within a week I had a very bad case of bronchitis. Perhaps in dry weather our neighbors should regularly water down the non-grassy areas. But at least the density of lead in the soil is low. And we don't have to report bad news like that guy in the Ibsen play.

Composting vegetation from our plots

One of the early spring rituals for several plot holders is to bag up all the accumulated dead weeds and last year's plant detritus (desiccated leaves, stems and roots). The 40 gallon paper bags are then carted away leaving the denuded plots looking pristine but deprived of genuine organic material.

The assumption seems to be that the material is made of the same stuff, - atoms, molecules, etc. – in the same proportions, as found in the soil. And who knows what dubious things are admixed in there?

But actually almost all the stuff of plants (and weeds) comes not from the soil but from the combination of carbon dioxide in the air and from water, in rain and in irrigation. They are the raw materials. Just CO_2 and H_2O. You have to expose plants to sunlight for energy. Then our friends the green plants carry out photosynthesis making huge amounts of carbohydrates, a sensible name for stuff made of carbon dioxide and water. The manufacturing mechanisms are complicated multistage processes but the green plants do all the work and thinking for us. Thank you very much. They start by producing glucose and then go on to make bigger molecules – sucrose and starch and cellulose (said to be the most common molecule on the surface of the planet). But it doesn't stop there. Fats can be made too, and proteins if you throw in some nitrogen (about 78% of the air molecules are nitrogen) and a soupçon of sulfur where needed. Carbon dioxide is a mere 0.04% of the molecules in the air. But it has risen from about 0.03% in the lifetime of some of Green Thoughts readers. And you know what a rising CO_2 level can do.

So perhaps it might be useful to compost that material instead of bagging it. Let various microbes and worms do the job of recycling the molecules that the plants worked so hard to produce.

Finally, please send in your ideas and discoveries. And let us hope we have a wonderful growing season. Those store-bought tomatoes have worn out their welcome.

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. Back issues available.

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