

Green Thoughts

Conversations and ideas about growing at the Spring Gardens

This is being written in late August. Harvest time. In most of our plots ripe tomatoes are in full tide. Fa-get about Jersey types, there is nothing like a Philly Spring Gardens-grown tomato ripened on the vine – big, or cherry, or plum, in a variety of colors - red, or orange, or yellow. Our fellow gardeners who grew determinate varieties had an early bounty. Those who have grown indeterminate varieties are steadily picking away as individual tomatoes ripen at their own pace and the plants continue to grow towards the sky. We should do well through September and into October. If it is a very mild fall we might be harvesting tomatoes into November. Perhaps until Thanksgiving? We are, after-all, only 35 miles north of the Mason-Dixon line and the climate is in a warming phase.

injuries

injuries

Asparagus

If you are patient and have a long view of your plot there is nothing like growing asparagus to give you continuity. They are very hardy perennials that can easily last 30 years or more. And they are delicious. I bought some asparagus roots in late spring of this year and planted them at two sites. I mixed into the soil some compost I had made at my plot. I regularly and evenly watered the sites. It took only a few weeks for tiny asparagus spears to bravely emerge from the ground (see photo on right). I welcomed them to their new home and made sure to mark where they were and to protect them with salt hay. I'll let you know how things progress...



Asparagus shoots emerging from surrounding salt hay and forming delicate fern-like foliage 26 August

Garden related injuries

My broccoli plants, the ones I planted in fall 2016, did very well this spring. They produced lots of delicious full heads and smaller versions from side shoots. By early summer the plants became unproductive and a magnet for various pests. So it was time to uproot them and chop the stems into small pieces. I got out some sturdy hand pruners to do the chopping. No problem I thought. But the stems turned out to be much tougher than I expected.

One thinks of gardening as a benign activity but you can't tell that from me. I had trouble cutting through those broccoli stems. So I decided to squeeze with extra strength to finish a particular cut. Instead, I got a sharp pain at the outer joint of my little finger. The outer-most part of the finger remained in a flexed position and I could not extend it to make the whole finger straight. Oh dear. It turned out that I had exerted too much force in trying to flex the fingers while squeezing the pruners. I had over-stretched the tendon used to extend that part of the finger. The medical name for such a condition is 'avulsion of the distal interphalangeal tendon of the little finger'. The common name is 'mallet finger.' I saw a local orthopedic surgeon who specializes in hands. He put a splint on the finger to keep it straight. He said that if the finger is kept straight, usually in 4 to 5 weeks the tendon will heal. Tendons are made of collagen, a protein. Nearby cells synthesize the collagen in a soluble form. The new collagen cross links with collagen in the tendon to form a tough insoluble bond.

Eventually the tendon will be whole again. At least I hope so.

I have had gardening related injuries in the past. About 15 years ago I was watering some distant plants with a full watering can. I had extended my arm and cantilevered my body toward the direction I was watering so there was a lot a force on my lower back. Suddenly I felt a sharp twinge in my lower back. I thought the pain would go away as pains like this had previously. But it didn't. For three months I tried various remedies to mitigate the pain. But they didn't work. I was on crutches and I was desperate. As a last resort I decided to have surgery even knowing that surgical success rate isn't that great. Luckily the surgery did work. And only then did I get serious about learning what I had previously been doing wrong. I consulted with a very knowledgeable physical therapist who showed I sat in the wrong kind of chairs, I stood in poor positions, I bent over in ways I shouldn't, I slept in poor positions, and I lifted things incorrectly. In addition, I was advised to do daily back strengthening exercises based on something called McKenzie Therapy. I continue to follow the therapist's advice to this day. And it works. Even if I do something dumb, similar to that watering can disaster, I have residual strength and flexibility to get through it.

I read recently that knee problems are very common among gardeners. I am frequently on my knees when I am gardening and regularly wear knee guards. I haven't had any serious knee problems but if you are, talk to people who can help. Gardening shouldn't be a pain.

Thinking fall and spring

I'm getting more confident about starting certain crops in the fall for spring harvest. I will be planting spinach seeds in early September. If conditions are favorable I can harvest late fall spinach but in any event I'll let some spinach plants winter over so they can grow more fully in the spring. Spinach is very cold hardy. In mid-August I germinated seeds of broccoli and Brussels sprouts – by putting the seeds in damp paper towels and then covering them with plastic wrap. Once they germinated I put the seedlings into small pots. Later I will transplant the seedlings into my plot. I'll protect them over the winter with a polypropylene cloth cover and surround them with salt hay.

Heritage Farm – a report from fellow Spring Gardener Russ Troyer

In Philadelphia out near City Avenue on Monument Road is a four acre gem of an organic farm – Heritage Farm. It sells its produce to commercial restaurants (Amis, Talula's Garden, Vetri, Osteria, Zahav, Fork and others) and also provides food for "families in need." Russ Troyer went out there to see for himself and here is his report:

Recently, Anne [Cook] and I attended a seminar on Korean natural farming (KNF) practices at Heritage Farm. The sponsor was PASA (Pennsylvania Association of Sustainable Agriculture). I made two discoveries. The first was Korean Natural Farming. I had never heard of it prior to the

seminar, didn't research it beforehand and had only modest expectations. I was pleasantly surprised. The techniques strike me as completely plausible from a scientific standpoint and, if the robust look of the plants there are any indication, it's quite effective.

The second discovery was Adrian. He's the farm manager at Heritage Farm and is a



Adrian Galbraith-Paul, farm manager of Heritage Farm

delightful combination of laid back style and science-based farming knowledge. He is infectiously enthusiastic about growing things really, really well plus he's a natural at leading a group. I recommend you check out their website and see if any upcoming events suit your interests. <https://www.heritagefarmphiladelphia.org/>

My take on Korean Natural Farming (KNF)

Adrian has been using these techniques intensively for two years at Heritage Farm. Its primary cash crops are lettuces and various greens they sell to high-end restaurants. He has hundreds of feet of rows of gorgeous lettuce and greens, very few row covers in sight and no flea beetles or white flies. Robust doesn't really do justice

to his tomatoes and even the nasturtiums were enormous, maybe like you'd expect to see at Longwood. I was officially now interested.

Sour dough starter as model for soil starter

If you bake sourdough bread (or have heard about it), you know that it's based on a "starter" you maintain. It's easy. Just routinely feed the starter with fresh flour and water to keep it healthy. You then use it to leaven bread, pancakes or whatever instead of commercial yeast. Many people have stories like "I got mine from my grandmother 40 years ago and it's still going strong."

Sourdough starter is a symbiotic village of various yeasts and bacteria. Some of them acidify the starter so that the bad guys are suppressed. The waste of some is the food for others. Some thrive early in the process after they've just been fed while others thrive at later stages of consuming the new food. It's very complex and only recently studied seriously in the laboratory.

Commercial yeast, by contrast, is a single species of yeast bred to multiply very rapidly and produce lots of carbon dioxide, the gas that gets trapped in the dough and causes it to rise. It's simple and effective, if your goal is to quickly go from mixing dough to putting it in the oven. What it cannot do is ever achieve the level and complexity of flavors, and some say nutrition, produced by sourdough. A single yeast strain simply cannot moderate enzymes, break down various starches, convert sugars to various complex flavor and all the myriad other bits of chemistry that sourdough achieves.

The Korean Natural Farming techniques, at their core, have recipes for producing various kinds of complex microbial collections to benefit your soil and plants. Think sourdough starter taken to a new level. They recognize the extraordinary complexity of healthy soil and emphasize that it is not just a few available chemical elements (think Miracle Grow) but an entire zoo of bacteria and fungi that are necessary.

KNF emphasizes that your garden's soil zoo is going to be different from mine, perhaps radically different. Your geographic location, weather, soil type and on and on all affect what your particular zoo has evolved to be. You simply cannot buy something that will work as well as what is already close at hand. The KNF term is indigenous microbes.

Step one, therefore, is to locate a patch of woods as close as possible to your garden where you can find really great soil just under the leaf litter. You only need a shovel full. That's going to become your "starter" from which you can create soil additives, foliar sprays, compost kick-starter and much more.

All of the recipes Adrian showed us produce either concentrated liquids or a mat of fairly dry material. The liquids are typically diluted 1:1000 for spraying or watering while small chunks of mat are broken off for various uses, like inoculating your compost pile.

Although this may sound complicated, I don't think it really is at all. It takes some time but that is almost entirely waiting – there is very little active time involved. It seems to me to boil down to recognizing that

really, really good soil is a microbial zoo.
This is just a formalized and reliable way of
capturing that zoo in a form that lets you
conveniently add it to your garden.

I'm now figuring out where in Fairmount
Park I'm going to capture my zoo....

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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