

## Composts used at Posh Squash

(Updated 1.25.22 to include Forest Compost)

There have been some questions about the 4 composts we use, and about the use of woodchips in the garden. They all provide a multitude of benefits to the garden; however, we use each in a different way.

All 4 composts & the woodchips provide great numbers of soil-enhancing microbes; the 4 composts are composed primarily of leaves & plant wastes; all add organic material to hold soil moisture and preserve/enhance micronutrients in the soil, which feed the Web of Life (soil microbes that produce the compounds that feed our crops). All are vital to the health of the Garden; each is providing a slightly different set of benefits. All are materials that might otherwise be placed in a landfill, so using them in a beneficial way lowers our carbon footprint and recycles natural materials in a way that benefits the environment, as well as our garden.

1. **Homemade Compost:** Find in the bins behind the kitchen scrap bins, if a bin is ready for the garden, it will have a hanging sign above it saying “**READY**”
  - a. Made in the bins by the Compost Team with shredded material provided by The Thursday Team & kitchen scraps provided by Gardeners (& others)
  - b. To be used beneath other layers, as it does not get hot enough in the bins to kill the seeds of the kitchen scraps or other seeds it may contain.
  - c. Utilizes our waste material to keep our environmental footprint small; most of the ‘cost’ is our labor.
  
2. **Longterm Compost:** Find the 2 piles below the end of the raspberry rows, (black plastic may be covering one or both). One pile is being filled at a time, while the other is either ‘cooking’ the weeds and trimmings, or we are digging out and using the composted contents. There is a sign to mark the area: “Longterm Compost”, and a sign posted on each of the 2 piles: “1” & “2”, which will be noted on the chore list as well to indicate which pile is currently accepting deposits- (being filled with weeds & garden debris); which pile is currently finished & being returned to the beds. When a pile is securely covered with black plastic it is ‘cooking’, and needs to be left alone. Heat and time are producing our compost.
  - a. Weeds and Garden trimmings (those not desired by the Compost Team for the Homemade Compost) are to go into the Longterm Compost; a significant amount of topsoil attached to the roots of the weeds is also deposited here. Time and heat from the micro-organisms that facilitate the decomposing process (plus extra heat from the sun on the black plastic cover) kills insects & their eggs, weed seeds

& rhizomes & most roots cuttings. No turning is needed, we allow a longer timespan to let the microbes do the work. (Any sticks that are not decomposed the first time are placed at the bottom of the pile to cook longer under the next batch of weeds). **(Exceptions: no Ivy or Periwinkle; no thorny material is to be left there: ivy & periwinkle are very invasive and may not be killed in the composting process, and thorny material is a hazard to the gardeners, both during pile management and when returned to the garden, as thorns often remain woody and sharp).**

- b. The Longterm Compost is our way to salvage **all** the topsoil lost from the beds and paths in the weeding process. This soil was lost to us permanently previously, when weeds were taken to the Haul-away Pile (Moveable Pile). We now recover all of it, and return it to the beds enhanced with the organic content of the weeds & grasses.
  - c. **Long term Compost** is to be used atop Homemade Compost, as it is heated sufficiently in the LT pile to kill most of the weed seeds, and will prevent seeds in the lower layers from germinating by keeping them well below the surface & sunlight. It is the resource to use when adding depth to a bed, as it is part topsoil, part composted organic material.
  - d. **Longterm Compost** contains larger chunks & pieces of twigs, dry grass, etc., which give the soil pockets for air & water that are beneficial to roots & soil microbes, helping sustain the them. These larger pieces continue to decompose in the beds, feeding the soil for a longer time than small pieces allow.
3. **Commercial Compost:** find in one of the 2 bins in the storage yard, kept covered with tarps to keep it damp but not wet. Often the signs that label the bins may be tarp-covered, it can be visually identified as it is the only material that looks like planting mix from a nursery: dark brown and crumbly. The other bins in the storage yard contain wood chips (easy to ID the chips), or topsoil, which is 100% dirt and contains no finely-ground plant material). Commercial Compost is made from chipped & ground wood & plant wastes & other organic materials, and composted commercially to a high temperature to kill all seeds and insects.
- a. We use Commercial Compost as the top layer when prepping beds, it covers the fertilizers & other composts and the topsoil. It acts as a barrier to prevent the weed seeds in lower layers from germinating; holds moisture and nutrients, and adds a significant amount of nitrogen, potassium, and phosphate so we can use less fertilizer.
  - b. The single 1" application annually is sufficient for the season.
  - c. While it is a significant part of our budget, we are not able to produce a sufficient amount (or make it completely weed-free) of compost ourselves to replace it.

#### 4. Forest Compost

Forest Compost is the decomposed woodchips from TSRA tree work, composted by TSRA for 15-20 years. Find in the bin to the right of the Wood Chip Bin in the storage yard. We will begin this season to use it for all the uses within the beds we previous had for the woodchips. (it will not be used for pathways.)

- a. The original material is from the trees and branches that have been cut by F & R on TSRA property. Originally, it was a blend of tree branches, trunks, and leaves and needles that have decomposed for many many years. It is dug from beneath the mountain of woodchips stored near the Dog Park, and is free and delivered free for our use. A mutual benefit arrangement.
- b. We began receiving it late in the Fall of 2021, and have applied to several beds to test it over the winter. It appears to be good at moisture-retention, combines nicely with the soil, and has shown it can be used where new seeds are sprouting, so is not depleting nitrogen form the soil. The PH was tested, it is approximately the same PH as all our soil – between 6.25-6.75 (neutral).
- c. We will be adding several barrows full to each bed we prep this Spring, after the fertilizer (7-5-7) has been added; raking it out to cover the bed. It will be topped with 1” of commercial compost
- d. We will be using it as mulch in all beds needing mulch this year (Strawberry beds, asparagus, broccoli, broccolini, cauliflower, cabbage, raspberry, boysenberry, blueberry, etc) .
- e. It should allow us to step up the amount of compost we can add to each be each year, as we had to limit the quantity we used previously for budgetary reasons. Meaning our soil improvement project can really get a boost.
- f. Just as the fresh woodchips do, these are also reducing our carbon footprint significantly, as they are produced by TSR maintenance crews and TSR would have to pay to haul away all that cannot be returned to our local area’s soils. Additionally, they provide us an unlimited free supply of compostable materials, and are delivered free. It is one of our opportunities to enhance our soil while we sequester the carbon they contain in our soil, where it will be food for microbes instead of a source of greenhouse gasses.
- g.

#### 5. Woodchip use

**For a quick overview of the goodness of woodchips in gardens,** see the videos posted to the Posh website about woodchips.

- a. **Woodchips** are found in the bin in the storage yard near the sign shed.

- b. **Woodchips** are a source of organic material to enhance our soil, as well as providing a good walking surface for the pathways. Initially, they function as a mulch, keeping weeds down and moisture in the soil; preventing the sun & wind from drying & cracking the soil surface. They help keep the crops' roots cooler in the summer and warmer in the winter: under our pathways are areas the roots of the larger plants grow to seek water & nutrients, so covering them with chips helps keep the soil moist and keeps weeds from growing in the paths, which would compete with the crops for water.
- c. After the chips decompose, they release the nitrogen they absorbed & used in the decomposition process, and slowly feed the soil, as well as providing beneficial fungi & other micro-organisms to feed the Web of Life in the soil. Within a few years, they will have completely broken down and become part of the topsoil. (see the videos posted to the Posh website about woodchips)
- d. **Wood Chips** make an excellent mulch for larger plants, in 2022 we will begin using the Forest Compost for the mulching: it is well-decomposed woodchips, so will also add the benefits of compost along with the woodchips benefits, gradually helping to build a layer of 'forest duff' to nurture our perennials. (Now that we have Forest compost available, we will use that for mulching crops in the beds, as it has the added benefit of active soil microbes)
- e. **Woodchips** are reducing our carbon footprint significantly, as they are produced by TSR maintenance crews and TSR has to pay to haul away all that cannot be returned to our local area's soils. Additionally, they provide us an unlimited free supply of compostable materials, and are delivered free. It is one of our opportunities to enhance our soil while we sequester the carbon they contain in our soil, where it will be food for microbes instead of a source of greenhouse gasses.