The Gift of Planting/ Tome Shaaltiel

When the sun comes out from behind the clouds right after a heavy rainstorm, the vegetation seems like it's the happiest it can be. There are sparkling drops of water caught on leaves, in flowers, like drinking cups for insects and tiny mammals. The plants that are soggy from the downpour rise with each touch of sunlight and dance with the blowing wind lingering still. Everything lights up and becomes so vital. Such is the feeling of observing a plant you planted, sprouting for the first time, coming out of the darkness from inside the sprout's sheltering seed. The reaction of the plant to the combination of soil, water, sunlight, and lots of love is extraordinary. It gets me excited every time.

It is said in Genesis 2:15: "The Creator took the human and placed the human in the Garden of Eden, to till it and tend it." To my understanding, it is part of humans' job to be caretakers of the earth. Meaning, as a part of the natural cycle, to protect wildlife habitats, water, soil, the F.B.I (fungus, bacteria and invertebrates) that create the soil, make sure that we live in harmony with other beings on this earth and encourage it's growth by growing more plants and animals. I see planting as a sacred gift for the earth and all the living creatures that live upon the earth. We all have a role in life on Earth.

When I tell people anything about planting, most react with excitement, but not necessarily want to go ahead and plant. Planting is something anyone can do if they open their mind to it, even on a small scale. All you need is seeds or propagated produce scraps, as I shared in detail in my previous blog, soil, water, some space with drainage and sunlight. And some plants don't even need so much sunlight.

Here are different ways we can honor our role, different ways we can get our hands dirty and plant the seeds of life:

1. **Planting indoors** is great for people who live an urban lifestyle, people who live in climates that have a short growing season (cold weather most of the year), don't have a front/back yard, are temporarily living in a certain place, to grow in a controlled growing environment or to just start your sprouts before transplanting into the ground. When using containers, you always need to create a drainage system, to discharge surface or surplus water. Let me show you how to make them:

   a. **Container gardening**- Each plant needs a different size of growing space, so before you decide on what container to use get to know the plant you want to grow. Usually plants need the same amount of space underground as they do above ground.

   In order to make a container you can use any plastic/ wooden/ concrete/ ceramic/ rubber/ glass (more likely to break and magnify heat)/ metal (more likely to rust and conducts heat, which can leach the metal to the soil) container you have available. It can even be water bottles, milk cartons, buckets, as explained by another educator at Pearlstone in her video on Upcycle Planting. All you need is to make drainage holes on the bottom of the container as shown in the photo below with a knife or scissors, make sure you have another container underneath to catch the surplus water, find a sunny spot at home for your container garden, add soil, in the soil plant your seeds or seedlings or propagated produce scraps and water it daily. This is the simplest way to create a container garden. There are more elaborate ways to make containers, like
adding rocks or wood chips on the bottom of the container for more drainage or creating a self-watering container.

b. **Start seeds indoors** - you don’t have to have a greenhouse available to start your seedlings/sprouts. You can start them on a table by a window that lets sunlight in. Most farms use containers called flats, they have multiple connected plastic cells, where each cell is filled with soil and is designed to start one plant. If you don't have access to such container, you may use egg crates as you can see in the photo below. When transplanting from the egg crate to the ground, the seedlings don’t have to be disconnected from the cells like they do with the flats, since egg crates are biodegradable (unless they are plastic or Styrofoam egg crates). You can separate the cells and transplant the seedling, with the egg crates still attached, into your garden bed. **For drainage**, if you are using egg crates there is no need to make holes on the bottom of each cell, since water can seep through the carton. But if you use plastic containers make sure you do. It is also necessary to have another container underneath the flats to catch the surplus water. For example, you can use a used disposable pie pan, thick cardboard trays, plastic tub. I used old lids as shown in the photo below. **Feel free to be creative**.

I recommend to always label your seedlings, since many varieties look very similar when are just sprouting.
2. **Planting vertically** is fitting for folks who have more space to fill vertically rather than horizontally: along a fence, along the outside of the house or shed, on the windowsill, on the sides of your composter, down the side of a balcony (if it is alright with your neighbors below). Even if you live in the smallest home there is always space for a vertical garden. A vertical garden can be made from anything: stringing together water bottle planters one on top of the other, hanging baskets, trellises or grids with climbers, using a hanging shoe organizer or a hanging toiletry bag to plant in, or standing a wooden pallet as shown in the photo below.

To make the vertical garden from a wooden pallet, you will need a wooden pallet, 2 wooden boards the size of a wooden pallet, a drill/screwdriver, screws, a crowbar, a shovel, soil, seedlings, a sunny spot facing south along a fence or a wall and water.

First dig a ditch the size of the wooden pallet so the structure can be embedded in the ground. Next take apart the horizontal small wooden planks from one side of the pallet and reconnect them either on the thin sides or attach each one in a 90-degree angle to create a stack of planters. Then screw one of the big boards to the side that was dismantled. Take the structure you built and place in the ditch, cover and pack down the soil so it stays in place. If that is not enough you can stake a wooden stake on each side to keep it in place. Once the structure is standing, place the second wooden board on the other side and ask someone to hold it tightly connected to the pallet while adding the soil from the top. Don’t worry if some spill out, you can always pick it up and add it later. Add water and soil as needed until the structure is filled with soil. Plant your seedling on the top and in between the wooden planks. Enjoy!
3. **Planting in raised beds** is mostly used when your soil is not fit for planting either because of pollution or legal permits, or when you try to separate your garden beds from your paths, but can also be used for accessibility purposes, beautification reasons, or to have a more controlled growing environment. Some raised beds are detached from the ground and are like a huge container garden bed and some are literally what they mean, raised above the surface, as shown in the photo below featuring the calendar garden at Pearlstone.

To build a raised garden bed you can use wooden planks, stones, pieces of metal, bathtubs, etc. Create the structure you like and add soil or compost in it. You can either transplant seedlings into the soil or direct seed on the ground. Some root vegetables, legumes and grains are best seeded directly into the soil, such as: wheat, peas, radishes, carrots and more. Once you sowed your seed make sure to cover with a bit of straw or leaves so they are not blown away. Always keep your soil covered- that is called mulch, any dry organic material such as, leaves, straw, wood chips, etc. If you live in a hot climate you might want
to consider building watering irrigation system or harvest rainwater for your garden.

4. **Planting in the ground** is best when you have access to a piece of land, at your home in a communal space, in your neighbor’s backyard, whatever is available. It is recommended to check your soil and water quality before starting to plant anything, especially if you want to grow food. There are ways to [test your soil on your own](https://www.mother-earth.com/soil-testing) or [by purchasing a soil kit](https://www.mother-earth.com/soil-testing-kit) or [by sending samples of your soil to a lab for analysis](https://www.mother-earth.com/soil-testing-lab). If you have never planted before in the ground you have chosen to use I recommend to sheet mulch it first, as explained in this [source sheet](https://www.mother-earth.com/soil-testing) I created for the video about [pollinators](https://www.mother-earth.com/pollinators) presented by the Sustainability Director at Pearlstone, Joan Plisko. You can plant in the ground in the same way I explained about the raised garden beds as shown in the photos below featuring Pearlstone’s greenhouse garden beds.
5. **Planting on large scale fields** is recommended for people who have access to a large piece of land as you can see in the photo below featuring Pearlstone's U-pick strawberry field and U-pick blueberry hillside. You can farm in a large scale similarly to small scale but most farmers prefer using larger tools and vehicles for that.