## THE GREAT OUTDOORS



When creating my raised beds, the author repurposed materials to keep them from the landfill. Here, leftover fencing material from a project, was turned into a highly accessible planting area. Photo: Tony Klock.

## **Thinking Inside the Box**

Incorporating containers and raised beds in your garden has many benefits – and autumn is the perfect time to get started.

## By Tony Klock, CU Maurice River

Having been a gardener for several decades now, I have spent many hours on hands and knees setting out, weeding, and tending my plants. As I began to get a little older and clambering up and down began to take a bit more effort, I started to realize that I should consider having my garden plants more reachable. Over the past few years I started to move towards installing raised beds and using containers. Having the plants nearer to me gave me an opportunity to develop a closer relationship with my plants and make it more likely that I would pull that weed or squish that Japanese beetle than if I would have to get down on all fours. That being said, there are several important considerations to make when deciding to adopt container and/or raised-bed gardening, including which container or materials to use, selecting plant material, as well as the care that they will require.

Your first decision would be to choose the type of container or raised bed that you are looking to install. If you are considering planting perennials in your containers you would want to use a larger size in order to

protect the plants' roots from frosts, particularly in areas with cold winters. Consider the porosity of the container because certain types of materials, like terracotta, can wick moisture away from the plants more quickly and would necessitate more frequent watering.

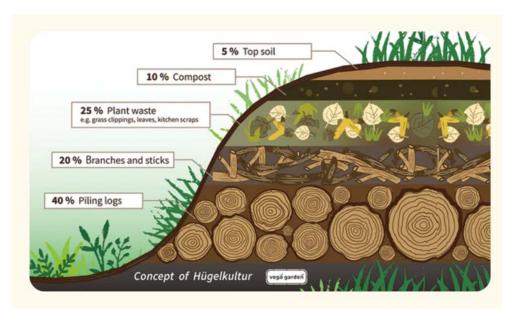
To counter this, if I am using porous materials I often cover the inside walls of the container or raised beds with impermeable materials like plastic liner. This helps to keep the moisture available near the roots, but additionally lining the inside may also help to preserve the wood in your raised beds by slowing down decomposition and giving them a longer life span. When using containers like pots or wooden barrels, excellent drainage is crucial in permitting excess water to drain away and not remain in the container to potentially result in root rot or other fungal growth which could kill your plants.



Gleneagle's resort in Scotland shows off a versatile display utilizing raised beds. Grasses and weeds from the adjacent areas are also less likely to creep into your boxed beds. Photo: J. Morton Galetto.

Think of a raised bed as a box that's open on top and bottom. Sitting on top of the soil allows the plants in the raised bed to access water and nutrients from the soil below. Once again your intention for planting will guide you towards the types of materials that you would use in constructing a raised bed. For example, if you are planting food crops, you would want to stay away from treated lumber that could potentially leach dangerous chemicals into the soil in which

they are growing. An interesting and ancient way of constructing a raised bed is referred to as "hügelkultur": this literally means mound culture.



Hügelkultur plantings may take several seasons to achieve their maximum potential, so Autumn is an opportune time to begin the process. Hügelkultur can be achieved in a box or mound. Diagram source Vegogarden.com

Hügelkultur involves using large amounts of woody material like fallen trees or branches that are laid directly onto the ground and interspersed with organic layers like grass clippings, leaves, or compost. As you build onto the mound layer by layer, eventually it will rise to upwards of four feet or higher. The rationale behind this type of raised bed is that the decaying woody material will, over time, serve as a source of nutrients to

the mound as well as providing a spongy material that can help to retain moisture towards the bottom of the pile. Over several years the mound will settle as the woody material continues to decay.



Volunteers incorporated aspects of the hügelkultur process when planting CU Maurice River's Neighborhood Garden in Millville. Photo: Karla Rossini.

Autumn is a great time to create a mound or box-style Hügelkultur, while temperatures are cooler and garden demands are less. An excellent source of information about this type of raised bed is available from the "Farmer's Almanac" website. I find that one of the greatest benefits of using raised beds and containers is that I control the soil that my plants grow in and this enables me to choose different types of plants that I might not otherwise be able to consider due to limitations of soil of my property.

If you are going to plant different types of plants like perennials or bulbs in your containers, you would want to use a good quality potting mix especially in the top six to eight inches. If you are intending to move your containers around or are planting shallow rooted annuals, you might try filling the bottom third or half of the container with a light dry material such as Styrofoam or inverted pots or buckets that take up space but do not add to the weight of the container as much as if it were filled fully with soil.

So you've got your container and your soil in place; now for the fun stuff – the plants! I like to offer a selection for pollinators, so my plants are nectar-rich varieties for butterflies and hummingbirds. When gardening for wildlife avoid the hybridized versions of some of our native plants; instead opt for ones that are true to the original species because

those are the ones that wildlife has evolved to utilize. Also be certain that your nursery does not use systemic pesticides like neonicotinoids.



Abundant containers filled with a varied plant palette will attract butterflies and hummingbirds to areas of your property not normally thought of as providing quality habitat, such as poolside. Photo: Tony Klock.

Aim to plant for the entire growing season. I include bulbs so that I have a spring display, and then as they start to fade my perennials will begin to kick in. I supplement my perennial plantings with annuals like the tropical sages that I overwinter in the house. I've had a lot of luck with Joe Pye weed in containers as well as New York ironweed, boneset, New England asters, and of course milkweeds for the monarch butterflies. This summer I'm relying heavily on the annual Mexican sunflower otherwise known as tithonia, and these have had constant attention from skippers and monarchs as well as many bees. You might want to mix in food plants, like tomatoes and peppers or herbs, along with annuals in containers.

Caring for your containers and raised beds is an almost daily consideration. You must be aware of their watering needs as the soil can become dry much more quickly than plant beds in the ground. A rule of thumb is the smaller the container the more likely that you will be watering it quite often. Consider a drip irrigation system to maintain adequate moisture. When irrigating, water deeply until the water runs from the drainage hole.

Shallow watering discourages your plants from developing deep roots.

Providing more frequent supplemental nutrition is important due to the fact that frequent watering may carry nutrients away more rapidly. I use a slow-release organic fertilizer and fish emulsion to feed my plants.

Using containers throughout your garden allows you to have more flexibility in your planting schemes as containers can be mobile and be relocated if they're not working out where you originally planned to put them. Additionally, I often mix containers with planted stands of perennials to break up the beds and add little areas of Interest to the garden.

Gardening with containers is a particularly forgiving form of cultivation. Every year you can change it up to suit your interest and you are not tied to a particular scheme. Give containers and raised beds a second thought; you'll be glad you did.