

# Gardening Like the Forest

Imagine a landscape abuzz with life and dripping with food. As you step around dwarf trees, in-between mature shrubs and over perennial herbs, you realize you've just walked past cherries, peaches, plums, goldenseal, hazelnuts, kiwis, currants, gooseberries, mint, basil and much more. It's literally a modern day Garden of Eden. And now imagine all this - in your backyard... That's an edible forest garden.

An edible forest garden is alliteratively defined as a 'perennial polyculture of multipurpose plants.' So what does this mean? At its very essence, an edible forest garden is a 'cultivated ecosystem' composed of a wide diversity of primarily perennial plants (trees, shrubs, and perennials) that work together to provide for both the needs of the garden and the gardeners. Modern gardeners have grown accustomed to separating different types of plants - herbs in one bed, veggies in another, perennials and flowers somewhere else, while the orchard stands alone. As forest gardeners, we work to build connections between the needs of our garden plants (minerals, mulch, pest and disease suppression, pollination) with their products (nitrogen-fixation, mineral accumulation, mulch, beneficial insect attraction, etc) so that in time, the garden becomes largely self-maintaining. To be clear, we aren't talking about establishing a garden *in* the forest - we're designing, installing and maintaining an ecosystem that functions *like* the forest and provides myriad yields, sometimes referred to as the Seven F's - food, fiber, fodder, fuel, fertilizer, 'farmaceuticals' and fun. Read on to find out more about how to establish your own backyard edible forest garden.

Before we explore *how* to design a forest garden, it's worth taking a moment to ponder why. Consider your annual garden. For many of us, each year we till the soil, start seeds, carefully tend, weed and water them and enjoy copious yields. Annual gardens are very effective at producing large quantities of food for humans. That said, they require a significant amount of work - much of it actually devoted to fighting against the natural process of succession - the return of bare ground to forest through a shifting mosaic of species over time ('weeds', to perennials, to shrubs and pioneer trees, to forest). Additionally, annual gardens are often planted in single-species rows or blocks, making them far more susceptible to pests and disease.

As forest gardeners, we ask - 'instead of motoring against succession with each passing season, why not put up a sail and follow along?' So with this in mind, we design our gardens to develop and evolve over time, requiring no tillage, little to no watering or planting once established, few pest and disease problems all while growing more and more productive with each passing season. And as we do this, our role as gardener begins to evolve. We shift from serving as the 'garden border immigration officer' - constantly battling to maintain a homogenous population, to one of an active participant in the garden's evolution, helping steer it on course. While we've greatly romanticized the plight of the indigenous hunter-gatherer, recent archaeological evidence increasingly supports the idea that humans have always had this very same relationship with the natural world; shifting the structure and composition of the landscapes they inhabit to better provide for their needs. Forest gardens provide us with a modern day opportunity to do just that.

Edible forest gardens will thrive at just about any scale, and for all intensive purposes, an urban or suburban back- (or front!) yard is just about perfect. Probably the first place to start is to select a site for your garden. Like most plants, many of the species we'll want to highlight in our forest gardens are much more productive in full sun, so paying close attention to the patterns of sun and shade will pay off greatly. Generally, if possible, I plant trees and large shrubs along the northern boundary of a property to reduce the effect of their shade on the rest of the yard and garden. In this way, the garden takes on a 'stepped' character, with plant height increasing from south to north. And if you are in an

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urban area, (though really it's worth it for anyone planting a new garden) test your soil. It's incredibly helpful to know the status of your soil's mineral reserves, and in urban areas, it's vital to test for contamination - namely lead. Many agricultural Universities offer soil testing services.

Once you've chosen your garden site, it's time to start to develop a plan. To do this, let's look briefly at the components of a forest garden. Most simply, we break it down into two primary categories - structure and function. Consider a natural forest. It's vegetative structure is made up of layers - trees, shrubs, perennials/herbs, annuals, ground covers, roots and vines. It's this stacking of vegetation that makes natural forests immensely productive, and we can do the very same thing with our gardens. So one way to begin is to start off with a list of categories describing each layer of vegetation and make a list of the plants you like most. When approaching design for backyard scale forest gardens, I typically begin with the 'overstory' - the trees that will comprise the canopy of the system. Depending on your local microclimate, Vermonters have an impressive array of fruit and nut trees to choose from. Peaches, plums, nectarines, apricots, quince, apples, pears, walnuts, hickories, hardy pecans, paw paws are but a few.

Once you have a canopy tree chosen, you can begin to select a complementary 'guild' of species that fill in the structure and provide some of the important functions - fertilization, pest control, pollination and mineral cycling - that make for a healthy, resilient plant polyculture. Thus we may choose to include a native nitrogen-fixing perennial vine like groundnut, a couple of fruiting, shrubby currants, a white clover ground cover, patches of mint for tea and pest suppression and a few tomato plants to fill in the gaps while the guild is still young. While the process may seem overwhelming at the outset, if we approach it systematically, we develop gardens that thrive in beauty and productivity while we grow intimately connected to the guilds we create.

Edible forest gardening is really about building connections between natural elements. As we actively and knowingly participate in our gardens, we become more aware of our role in the ecology we are a part of, and we create living legacies that nurture, maintain and evolve themselves over time. And what could be more rewarding than leaving a little piece of the planet more diverse, healthy, beautiful and productive than it was when you found it?

## Resources

### *Books*

Dave Jacke and Eric Toensmeier's *Edible Forest Gardens Volume 1 and 2* are the most extensive work on Edible Forest Garden design and species selection. Available from Chelsea Green Publishing.

### *Plants*

Nicko Rubin's East Hill Tree Farm in Plainfield, VT <http://easthilltreefarm.com/>

Elmore Roots Nursery - Elmore, VT <http://www.elmoreroots.com/>

St. Lawrence Nurseries - Potsdam, NY <http://www.sln.potsdam.ny.us/>

### *Bio*

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