



## HOW TO CREATE A FOOD FOREST

growing food forests. Growing as a matrix in the soil, mycelium is part of the fungal body that spreads throughout the soil profile. Creating soil structure as it spreads and coating the roots of plants, many fungi maintain essential symbiotic relationships with plants.

Some of our favorite edible mushrooms are capable of symbiotic relationship with some of our favorite food forest plants. Morels, puff balls, and chanterelle mushrooms love growing with trees like oak, beech, and pine. We can inoculate our food forests with edible mushroom spores purchased from reputable labs.

Other types of edible mushrooms such as wine caps are decomposers that work to transform the forest's organic waste into delicious delicacies. The food forest floor should always be covered in plants, leaves, and mulch to encourage the widespread growth of edible fungi.

### 2 ROOT LAYER

Native plants with edible roots such as daylily, ramps, spring beauty, and sunchoke are excellent additions to the root layer. Don't be hasty pulling weeds because some weeds (including burdock, dandelion, garlic mustard, and nettle) have edible roots.

### 3 GROUND COVER LAYER

Keep the ground covered in green to protect from harsh weather and scorching sunlight. Edible native options for ground cover include low bush blueberry, sheep sorrel, Virginia waterleaf, wintergreen, wood sorrel, and woodland strawberry.

Bee lawn seed mix containing creeping thyme, self-heal and white clover are a perfect ground cover because all three are edible, easy to establish, and together they feed over 50 species of Minnesota native bees.

### 4 HERBACEOUS LAYER

Perennial vegetables including asparagus, garlic, horseradish, and rhubarb can be mixed with native edible herbs such as ostrich fern, common milkweed, and wood nettle and self-seeding edible annuals (including arugula, cilantro, dill, kale, lettuce, and mountain spinach) to provide many edible options in the herba-

ceous layer. Blend in grasses, sedges, and native pollinator plants like bee balm, calendula, and hyssop which can be used in tea.

### 5 VINE LAYER

The vine layer grows in three dimensions – up, down, and across – the forest finding light that would otherwise slip through the cracks in the upper canopy. Grapes are fun and easy to grow, and wild grape is particularly good at spreading from seed by birds and other animals.

Vining veggies like cucumber, nasturtiums, pole beans, pumpkins, squash, tomatoes, and zucchini can be added into the forest edge wherever the sunlight allows.

### 6 SHRUB LAYER

Birds love the shrub layer. People do, too. Go nuts and incorporate hazelnut shrubs as a protein source in your shrub layer. Bearberry, blackberry, blueberry, chokeberry, currant, elderberry, gooseberry, highbush cranberry, raspberry, and sandcherry, are a few fantastic native fruit options that will have you out snacking with the birds. A honeyberry shrub planted on your property line will guarantee good neighboring relations.

### 7 THE UNDERSTORY

Short native trees that feed people and wildlife are perfect for the understory. Black cherry, chokecherry, mulberry, pin cherry, serviceberry, and wild plum are a few beloved native fruit trees. Non-native fruit trees can be added at the forest's edge.

Add non-edible understory trees for the bees and birds to enjoy. Blue beech, mountain ash, pagoda dogwood, and redbud are all beloved by birds and pollinators.

### 8 THE OVERSTORY

Healthy landscapes transform and mature over time. Planning for succession in a landscape means including seedlings of trees that will one day grow quite large. In a typical urban yard there is room for two large trees, one in the front yard and one in the back.

Edible options include basswood for edible spring leaves, black walnut and oak



for the proteins they offer, sugar maple for the sap, and black locust filled with edible flowers every spring. White pine seeds, while not edible for people, will feed a wide variety of animals and they make a magnificent over-story tree.

### TIME TO REFOREST

Food forests sequester atmospheric carbon, transforming it into healthy soil. They filter water, provide habitat for pollinators, and they grow local, organic health food for animals and people.

We can regrow the food forests of the world by working together, one yard at a time.

*Russ Henry is a Longfellow resident who has served on Homegrown Minneapolis, a local food policy body, and the Minneapolis Parks Pesticide Advisory Committee. He is the founder of Bee Safe Minneapolis, an education and advocacy branch that works with community partners to create safe places for pollinators, one garden, yard, business, school, church, conversation at a time.*

by RUSS HENRY

Food forests represent an abundant past and a hopeful future. A diverse planting of native trees, shrubs, and perennials that bear edible flowers, fruit, nuts, and seeds; food forests grow all the basic requirements for a healthy diet in humans and wild animals.

Much of the world was once covered in food forests. As people, birds, and other animals spread the seeds of their favorite edible plants, the land reflected the needs and desires of the creatures occupying it. Food forests provided enough nutrition to allow thousands of species including humans to thrive under a canopy of giving trees.

There are eight intertwined layers in a well-planned food forest.

### 1 MYCELIAL LAYER

Strong ecosystems are rooted in healthy soil. Fungi is an essential component of healthy soil and our partner in

