



BOSTON FOOD FOREST COALITION

Common Features of Food Forest & Permaculture Gardens

What is a food forest?

Also called a forest garden, a food forest is a multi-layered collection of diverse, often edible plants that attempts to mimic a woodland forest.

Inspired by permaculture gardening, food forests combine edible landscaping, native plant cultivation, and wildlife biodiversity to nurture low-maintenance, productive ecosystems. Full of edible plants like fruit and berries, food forest plantings tend to attract pest-controlling insects and build healthy soil.

Each plant in a permaculture garden has a specific purpose. Some are used for food and others for medicine. Some attract beneficial insects, while others deter pests. Some improve soil health, while others boost the garden's beauty. Usually what these plants have in common is that they are perennials — they return year after year without having to be replanted by humans.

An established food forest provides fruit, vegetables, berries and more while increasing the overall health of the land itself. Food forests take a “whole system” approach to land stewardship, increasing environmental health, human health, and community health.

Permaculture growing is not new. People have been practicing it for millions of years across the globe, and we have much to learn from these indigenous land management practices.



LAYERS IN A FOOD FOREST

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| 1. Canopy (tall fruit and nut trees) | 5. Rhizome layer (root vegetables) |
| 2. Low tree layer (dwarf fruit trees) | 6. Ground cover layer (clover and other close-to-the ground plants) |
| 3. Shrub layer (berries) | 7. Vine layer (climbers and vines) |
| 4. Herb layer | |

Common Features of Food Forests & Permaculture Gardens

Pollinators: Food forests feature a diverse display of plants and flowers that attract beneficial insects. These critters help to pollinate the fruit crops and keep harmful pests causing damage to the ecosystem. Some examples of pollinators are echinacea, goldenrod, and milkweed.

Fruit & Nut Trees: Fruit and nut trees are a staple of most food forest gardens. These trees provide a relatively reliable source of food for people and wildlife, while requiring fairly little maintenance. Over their lifespans, these trees provide shade and green canopy, which keeps land cool during hot summers.

Permaculture Guilds: A guild is a grouping of plants that supports a central element – such as a fruit tree. A guild creates a mini ecosystem that mimics how plants are grouped together in nature. Guilds increase biodiversity by including plants that

fertilize, repel pests, attract beneficial insects, create mulch, suppress grass, and more.

Perennial Food Systems: Food forests mostly feature perennial crops – plants that return naturally year after year. Because the land doesn't have to be replanted each year, less time and resources are required to keep the land healthy and lush. Also, keeping plant roots in the soil year round supports healthier, more stable soil structures.

Water Systems: Rainwater collection systems are a common feature in food forests. These systems can be as simple as a rain barrel for collecting water, or as complex as ground-shaping techniques that keep water on the site by capturing runoff.

Compost: Compost is a mixture of decaying leaves, vegetables, manure, and other natural materials. It can be spread on soil to add nutrients and organic matter, improving soil health and helping plants grow. Compost also alters soil structure, making it less likely to erode and helping it to drain and retain water. Compost is a superfood for soil!

Herbs: Many culinary and medicinal herbs are also perennial plants and pollinator species, and help to stabilize soil and increase biodiversity all at the same time. Many food forests include herbs in their fruit trees guilds, and may even designate entire areas as an herb garden.

Annual Food Systems: Some food forests may include annual food systems, which do not return and year after year but rather have to be replanted each season. These systems may take the form of raised beds or vertical gardens – both of which are intended to maximize growing space and provide ample food to harvest. These systems are reminiscent of more traditional agricultural techniques, but can absolutely have a home in food forests.

Mulch: Sheet mulching is used to reduce maintenance and to increase soil health. Rather than tilling the soil, which disrupts soil structure and increases runoff and erosion, a layer of mulch is applied to the soil's surface. The mulch breaks down over

time, allowing both water and plant roots to enter the soil. Decomposing mulch also adds nutrients and organic matter to the soil.

Soil Health: Food forests think about ecosystem health from the ground up – starting with the soil right under your feet. By utilizing nitrogen-fixing and nutrient-accumulating plants, 'chop-and-drop' weeding techniques, and returning waste to the land, food forestry creates healthy soil (and decreases the need for fertilizer!)

Layered Growth: Food forests often include several layers of growth in order to maximize use of small spaces. This is also how plants and trees grow in the wild, one on top of the other. Typical layers include a canopy layer (a large tree), a shrub layer, and a vine layer – just to name a few!

Community Gathering Space: Permaculture design often places community gathering spaces in the center of a space, with all other features emanating out from there. In BFFC food forests, community is the focal point as well, so this space and others like it are designed with neighbors and community members in mind. Whether it's a workshop or a potluck, a concert or a meeting, this food forest belongs to community members, and it exists to bring us together!