

Foraging at Home

Part 3 of 4:

(Planting a Food Forest)

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Up until now, the goals have been set, the site observed, and the non-plant aspects planned. Now comes the fun part: finding plants. To be able to compare the plants and determine the best ones for the site, a master list will be needed. Create a spreadsheet for the master list either on paper or the computer that categorizes the plants.

The categories for this spreadsheet should include the plant's names (common and scientific), its needs (light, water, soil, etc.) and size (height and spread). It should also include the uses of the plant: culinary, medicinal, pest control, weed control, and mineral accumulative, and the layer in the forest it would occupy. Other categories can be added if they are important for the choice of plants. One such category might be origin (where the plant originated from) or definition (native, exotic, adapted, invasive, etc.)

Looking at catalogs, books, or the Internet, research the plants. These plants can be native to the area being planted, or they can be from other areas of the continent or the world. With each plant, fill out the information on the spreadsheet. Also, observation of plants in the area of the food forest is helpful. This research can be combined with the observation of the site. Not all plants may be food plants for people; some may provide nutrients for other plants, soil, or wildlife.

Plants chosen for a food forest do not need to be native to the area; however, native plants usually thrive better without much attention. If wished, plants may be translocated (from another area of the continent) or exotic (from another continent). One major factor to consider is whether a non-native plant will become invasive if used. When a plant is introduced and out-competes the native plants, it is considered invasive. Finding species that are ecologically equivalent helps create harmony in the forest. These are the types of plants that would naturally grow together in their native habitat. If plants from different areas in the world grow in the same climate, they might work well together in one area.

Once the ecological species are chosen, create guilds from the plants. These guilds are plants that share resources and support each other (polycultures). If possible, each guild should include nitrogen fixing plants, mineral accumulative plants, beneficial insect plants, pollinator plants, aromatic plants, ground cover, and plants with different root systems. The number of different types of plants in the forest is determined by the size of the forest and its uses. A small forest may need more edible plants and fewer soil building plants. The more of each type of plant included adds strength to the overall health of the forest. In addition to plants, fungi are important to the forest. The fungi help add nutrients and help break down plant material.

As the planning progresses, experiment with possible plants looking at their niche in nature and what other plants they might interact with. Planting borage at the base of tomato vines is one example. Tomatoes can vine up a trellis or fence; however, it will not shade out the borage which also likes light. Borage will help deter pests from the tomatoes and shade the roots to keep the tomatoes moist. Even though borage and tomatoes are exotic from different areas of the world, they adapt well to North America and support each other. Creating a guild with a random mix of plants is not usually successful. They may not have the same requirements, or they may compete for the same niche in the garden. Looking at nature or some gardening articles, model templates might be used. These templates are a starting place where changes can be made to fit the need of the gardener.

As the guilds are created, list the plants that are in the guild. Each guild should create a biodiverse polyculture that satisfies a niche in the food forest. Some of the guilds may be in an area that only need ground cover, while other guilds may include all seven layers of the forest. Whether the guild uses one layer or seven layers, it should not be a monoculture with only one plant. Whichever layer is included, a polyculture of plants should fill the area. Each plant should support the others in some way or help provide food for the table.

Next, do patch designs. These designs define areas of plants and their spacing. Each patch should be designed individually. It could be one row, a contour, or a group in one area. The spread, height, and needs of the plants are considered in this design. A good rule of thumb is “crown touching” where the crown of one plant just touches the crown of the adjacent crown. However, for the canopy, adding 30%-50% of additional space between the crowns helps add sunlight for the understory plants. In the understory, consider the canopy trees as well as the shrubs for the crown touching rule. When designing the understory, several points have to be considered. If the canopy trees are fruit trees, shrubs should be placed outside the drip line. In this way, the fruit is easier to gather since the fruit is harvested from the tree, and the shrubs are not in the way. If the canopy trees are nut trees, ground cover should not be dense, or it should die back or be cut back before harvesting season since most nuts are harvested after they fall from the trees. Another consideration is the available sunlight. Small shrubs should be placed to the south of larger shrubs or trees unless they are shade-loving. Once a patch is designed, it should be compared to the other patches for placement with them. The overall layout of the patches gives an idea of the spacing of the patches, and the placement of the patches gives an idea of the overall look of the garden.

Once the garden is designed on paper, the planting process can begin.

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