Foraging at Home

Part 4 of 4:

(Creating a Food Forest)

By Donna Nesbit, Grayson County Master Gardener

Once the patches are designed, the forest is ready to become a reality. Finding the plants and preparing the site can be accomplished at the same time.

Two methods are available for sourcing the plants. One method is to buy plants from a reputable source. This method is useful for those that do not have the time or energy to start their own; however, some plants are best started on site, usually from purchased seed. Another method is to propagate plants from cuttings, divisions, or seed swaps. This can take more time, but can be more satisfying. Whichever method is used to start the forest, the goal should be for the forest to be self-sustaining once established. Since the goal is for a self-sustaining forest, the plants are usually perennials. Since many common vegetables are annuals, they can be a self-sowing variety, or planned for accessible areas of the forest (such as clearings), or for a separate garden. As the forest becomes more self-sustaining, the gardener may want to have their own nursery to propagate replacements for plants as needed.

Site preparation can begin as the plants are sourced. Adapting the site to the needs of the forest is the first step. Some of this can be done as the site is observed. Determining the desirability and location of existing plants and shaping the earth are the starting points. As the existing plants are observed, their function in the garden should be determined. If the plant is useful, its place in the garden should be determined. If a plant is not useful, it should be removed either to a different location on the property or disposed of. Tarps, newspapers, cardboard, or other mediums can be laid to kill large areas of undesirable plants. Cover crops can be planted to help with soil improvement

After the plants are analyzed, the earth should be shaped for ease of use, water retention, and plant use. If it has been determined that swales will be needed, recontouring should be placed that will promote water filtration, distribution, and storage for future use. Once the swales are in place, irrigation should be placed to maximize the use of the swales as well as individual plants. If water tank or cisterns are needed, they should be placed at this time also.

After the water system (swales, irrigation, and containment) are in place, pathways can be laid. The purpose of the pathways besides providing access is to define growing zones, protect plants form competition, protect the soil from compaction, and can create runoff to desirable areas. These pathways may be paved roads where mechanized or heavy traffic can have access, or they may be along swales, or across berms. If the pathway is to be covered with a hard surface, cement, rock, or gravel, it should be laid at this time.

Windbreaks and fencing should be planned or put in next. Windbreaks can be trees, shrubs, and vines to help with the cooling or warming of sections of the gardens. The site of the windbreaks should be determined, but these windbreaks are not installed yet. Fences and walls can also be used as windbreaks. Besides directing the wind, these structures should also protect the forest from encroachment from people and wildlife. Trees and shrubs may not keep out wildlife, but vines, walls, and fences can. Some more open fences can protect the forest without creating a windbreak.

After the fences are put in, the planting areas should be prepared. Beginning when the swales are installed, any soil amendments should be added. These amendments might be soil improvers such as fertilizer, decomposed granite, or other products that change the ph. or structure of the soil. Cover crops can be dug in to improve the soil structure and fertility. As the soil is prepared for planting, compost and other amendments can be added as needed to improve the soil. Once the planting begins, mulch should be placed around the new installations. As the forest matures, it will create its own mulch and compost. Also, with the correct choice of plants, nutrient levels will improve in the soil.

The site is prepared and the plants sourced; now is the time to plant. Planting is usually done in stages. As the plants in each stage are planted, mulch should be added to the area. This mulch stabilizes the moisture level and temperature in the soil and adds weed control. During the first and second year, the windbreaks and the canopy are installed. Windbreaks are installed in the places planned for them. These windbreaks can be hedges or edges (trees, shrubs). Along with the windbreaks, the canopy is planted. These are the plants in layers one and two. Planting the fruit and nut trees gives them time to mature before planting the understory. As well as the fruit and nut trees, canopy nitrogen fixing plants should be planted. Starting with year three, the understory and ground cover should be planted. These are the plants in layers three, four, five. The shrubs and herbaceous layers provide more nutrients for the forest and forage for people and animals. Starting in year three, any annuals, biennials, and climbers can be planted. If the trees are to be the trellises for the vines, the trees need to be large enough to support the vines. Compare the height of the trees with the height of the vines before planting. If the tree is not large enough, wait a year or two or install a temporary trellis to support the vine.

After year three, the forest will gradually mature to a fully-functional forest. As the forest is harvested, it should be inspected for any damage or disease. The mulch should be maintained at a two- or three-inch depth. Mulch should be added if the canopy does not provide enough mulch. Unproductive or diseased plants should be replaced as needed. Water when necessary. Some herbaceous plants can act as accurate water monitors. If they are dry or wilted looking in the morning, water should be added to the forest. The food forest should provide good foraging for many years.

Many books and websites are available for those interested in food forests. To find out what a food forest really looks like, search for “Food Forest” on YouTube. These videos give many different ideas and methods for creating food forests in many areas.

Grayson County Master Gardeners Association is a non-profit 501(c)(3) organization sponsored by the Texas A&M AgriLife Extension Service. Reach us by email at mastergardeners@co.grayson.tx.us, by phone 903-813-4204, our web page txmg.org/grayson, or our Facebook group.