

FOOD GUILD: A group of mutually beneficial plants assembled into an interactive community, emulating nature and creating a polyculture. Compared to a monoculture, there will be less of any one crop, but more value overall.

The goal is:

- to be biologically sustainable (able to cope with stressors)
- to be productive (yield large number of different crops)
- to be low maintenance (create a mostly self-maintaining system)

There are two ways to view the plants in a Food Guild:

(1) THE 7 LAYERS/PLANT FORMS:

1- Canopy/Tall Trees – full-sized fruit trees, nut crops, timber trees

2- Understory/Small Trees & Large Shrubs – dwarf rootstock fruit trees and smaller nut trees; the mature plants are easy to harvest, and accommodate the sun needs of the layers below them.

(filbert, black mulberry, American persimmon, pawpaw)

3- Woody Shrubs – mostly shade tolerant perennials in a range of sizes to produce food, fibers, and wildlife habitat.

(currants, barberry, bamboo, gooseberries, aronia, goji berry)

4- Herbaceous Perennials – leafy plants that go dormant below ground in winter and re-sprout from their roots in spring.

(cut flowers, chives, leafy greens, perennial culinary herbs (rosemary, thyme, oregano, lavender, mint, sage), perennial vegetables (artichokes, rhubarb, asparagus, tree collards))

5- Climbers & Vines – use the tree as a trellis to take advantage of underutilized space; something to be added later, once the trees are big enough to support them.

(hardy kiwi, grapes, passion fruit, akebia, chayote, groundnuts)

6- Ground Cover – plants that spread horizontally, form a living mulch and help with erosion control; can be an herbaceous perennial.

*(cornels, carpeting brambles *Rubus calycinoides* & *R. tricolor*, alpine strawberry, nasturtium)*

7- Rhizosphere – deep taproots bring nutrients up to the surface to feed other plants; the top portion may be a vine, shrub, groundcover or herb.

(licorice, barberries, root vegetables, horseradish, carrots)

(2) THE PLANT FUNCTIONS:

Much like the offerings at a good potluck, where you end up with one each of appetizer, salad, entrée, side dish, bread, drink, and dessert, a good food guild is a collection of plants with complementary functions that work together and support each other.

Basic functions usually include:

a nitrogen fixer – (*lupine, clover*)

an insectary (hosts beneficial insects), – (*yarrow (attracts parasitic wasps, lady bugs, spiders), black-eyed susan, sweet anne's lace, tansy, chives*)

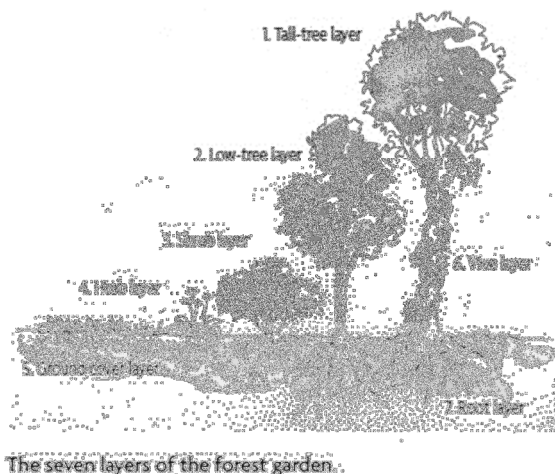
a pollinator attractor, – (*echinacea, bee balm, dill, fennel, borage*)

a ground cover – (*clover, nasturtium*)

a dynamic accumulator – (*comfrey, horseradish, nettle, licorice, sorrel/docks [*Rumex spp*], dandelion*)

It doesn't have to stop there, though. Depending on your personal desires, you can choose to add extra functions:

windbreak, wildlife food and habitat, pest repellent, fragrance, plants that provide materials for basketry, wood products, fibers, medicine, dyes, oils and cut flowers.



further reading:

[Edible Forest Gardens](#) by Dave Jacke and Eric Toensmeier

[Edible Landscaping with a Permaculture Twist](#) by Michael Judd

[Practical Permaculture](#) by Jessi Bloom and Michael Boehnlein

[Forest Gardening: Cultivating an Edible Landscape](#) by Robert Hart

[Creating a Forest Garden: Working with Nature to Grow Edible Crops](#) by Martin Crawford

[Gaia's Garden](#) by Toby Hemenway

https://en.wikipedia.org/wiki/Forest_gardening

[http://www.rivendellvillage.org/A_Permaculture_Guide_\(West_Coast_Food_Forest\).pdf](http://www.rivendellvillage.org/A_Permaculture_Guide_(West_Coast_Food_Forest).pdf)

https://www.youtube.com/playlist?list=PL-WIU6_H4uiTAZAc4jVec9pvgMla41U4V

Blue Banana Bean (*Decaisnea fargesii*)- 10 ft tall and wide deciduous shrub with long, pinnate leaves produces metallic blue seedpod full of white juicy pulp with a sweet, fig/grape/banana flavor. **Tolerates heavy clay soil. Likes shade.** Doesn't like wind. **Vulnerable to late frosts.** Casts light shade. Flowers June, ripens Sept- Oct. Propagated from cuttings.

Chilean Guava (*Ugni molinae* or *Myrtus ugni*)- 3- 7 ft tall and wide, **shade-tolerant evergreen shrub** with produces lots of **small, delicious strawberry/guava-like berries.** **Tolerates 10- 15°F. Drought and wind-tolerant. Vulnerable to late frosts.** Easy to grow. **Good hedge.** No pest or disease problems (including oak root fungus). Flowers June- July, ripens Aug- Oct. Propagated from softwood cuttings, layering, and soaked seeds in Feb.

Honeyberry or Blue Honeysuckle (*Lonicera caerulea* var. *kamtschatica*)- up to 6 ft shade-tolerant shrub produces ½ inch blueberrylike fruit in May. Not for Zone 9. **Prefers full shade.** Fire-resistant. **Need two varieties for fruit. Resistant to oak root fungus.** Protect small plants from mollusks. Flowers March, ripens May- June. Propagated from cuttings, layering.

Akebia (*Akebia quinata*, *A. trifoliata*)- up to 36 ft beautiful, fast-growing vines produce occasional *3- 5 inch fruit with a roll of tapioca-like pulp.* The *young shoots can be used in salads.* Prefer a **warm, humid site with partial shade and well-drained soil. Vulnerable to late frosts.** Tolerate **wide pH.** Evergreen in very mild areas. May flowers are very fragrant. **Need two varieties for fruit.** Fall color. **Can be grown as a groundcover.** Vines used for basket-making. Resistant to oak root fungus. Flower March- May, ripen Sept- Oct. Propagated by cuttings, layering.

Maypop Passionfruit (*Passiflora incarnata*)- If pollination is a problem, hand-pollinate a fresh flower in the morning using a flower from the previous day.

Perennial Vegetables/Herbs

Black Salsify (*Scorzonera hispanica*)- 2- 3 ft, shade-tolerant plant with edible leaves and roots. Flowers June- Sept

Dandelion (*Taraxacum officinale*)- **leaves** are high in Ca, Cu, Fe, K, Mg, Mn, Zn, B vitamins, and vit E, very high in vit C, and super high in vit A and K. **Roasted root** is a coffee substitute. **Edible flowers. Shade and drought-tolerant.** Cultivars available. Deep taproot accumulates Na, Si, Mn, Ca, K, P, Fe, and Cu. Deer-resistant. Good insectary. Flowers March- Sept. Propagated from divisions.

Garlic Chives (*Allium tuberosum*)- 16 in, shade-tolerant, garlicky chives. Edible flowers. Said to confuse pest insects. Insectary. Flowers Aug- Sept. Propagated from divisions.

Garlic Cress (*Peltaria alliacea*)- 1 ft tall evergreen, spreading plant whose garlic/mustard- flavored leaves can be harvested year round. Flowers June.

Good King Henry (*Chenopodium bonus-henricus*)- 1 ft tall, nutritious, **shade-tolerant,** and self-sowing green **related to quinoa.** High in Fe. Grows in poor soil. **Insectary.** Flowers May- July. Propagated by division.

Horseradish (*Armoracia rusticana*)- 2- 4 ft, shade-tolerant producer of greens and pungent root high in minerals and vit C. Tolerates poor drainage and clay soil. Deer-resistant. Allelopathic. Flowers April- June. Propagated from divisions and pieces of root (can be hard to eradicate)

Lovage (*Levisticum officinale*)- celery-like plant can get up to 4 ft and grows in **partial shade.** Leaves used in salads, as well. Cut down flowering stalks to maintain leaf production. **Good insectary.** Flowers July- Aug. Propagated by division.

Mallow (*Malva* spp.)- various species with edible leaves and flowers that can be used as a lettuce substitute. *M. moschata* is one of the best. Deep taproot. Tolerant of partial shade. Insectary.

Violet (*Viola* spp.)- **groundcover** with numerous species which are all totally edible (except maybe the yellow-flowered ones) and **shade-tolerant. V. odorata reaches 4 in and is excellent for salads.** Deer-resistant. Some species can be invasive.

Shade-tolerant Perennial or Self-sowing Herbs

Anise Hyssop (*Agastache foeniculum*)- up to 3 ft tall North American native with delicious, anise-flavored leaves. Lives for about 3 years. **Insectary.** Flowers June- July.

California Bay Laurel (*Umbellularia californica*)- native, 25- 80 ft tall evergreen tree whose leaves are used as seasoning. Can kept as a small hedge. Seeds are reminiscent of hazelnuts when fully dried and roasted at around 425°F. When ground with sugar they taste like chocolate. Tolerant of full shade. Flammable. Susceptible to oak root fungus. Deer-resistant. Allelopathic. Flowers Dec- March.

Houttuynia (*Houttuynia camelion*)- variegated, **deciduous groundcover with a ginger flavor.** Spreads quickly. Tolerates wet soil. Flowers June-Aug. Propagated from cuttings, divisions.

Sweet Woodruff (*Galium odoratum* or *Asperula odorata*)- 1 ft **groundcover, edible leaves and flowers.** Can be invasive. **Tolerates full shade. Prefers basic soil.** Fire and deer-resistant. Flowers May- July. Propagated by division, cuttings.

Fruiting Groundcovers

Japanese Strawberry-Raspberry (*Rubus illecebrosus*)- **shade-tolerant,** 2 ft herbaceous groundcover that produces a 1+ inch fruit. Fire-resistant. Flowers June-July, ripens Aug. Propagated by seed, cuttings, division, layering.