


Welcome

Eggleston Park Food Forest



A program of  Citizens' Greener Evanston
Act Locally. Breathe Globally.



An educational demonstration showing how to obtain a yield while caring for the earth and people.

WHAT IS A FOOD FOREST?

A food forest is a reduced-maintenance, **sustainable food-production system** modeled on natural woodland ecosystems. The goal is a diverse, high-yield system that is good for the earth and requires fewer resources and less human input than conventional monocultures.

Forest gardening has been around as long as humans have farmed. However, recently food forest design has evolved to use a permaculture approach: a well-designed food forest strives to create **synergies** in which elements nourish, complement and protect each other. Each element added should serve a minimum of two **useful purposes**, and plants fill all **layer niches**.

All ecosystems are in a state of constant change. A permaculture food forest attempts to mimic the state of a forest when the plants, fungi, animals, insects have reached a point close to equilibrium but the system still has growth potential to provide us with **abundant, diverse yields** with few external inputs.

THEN AND NOW

Our food forest is a diverse, integrated planting of perennial trees, shrubs and herbaceous plants—including edible fruits, vegetables, nuts and herbs—using permaculture principles.

It began life as the Eggleston Anniversary Orchard in 2013, a Northwestern student class project concept.

Edible Evanston facilitated its development and maintains it in cooperation with the City of Evanston. Initial funding came from the Evanston Community Foundation, which also helped Edible Evanston transition from a conventional orchard to a sustainable, ecological edible landscape.

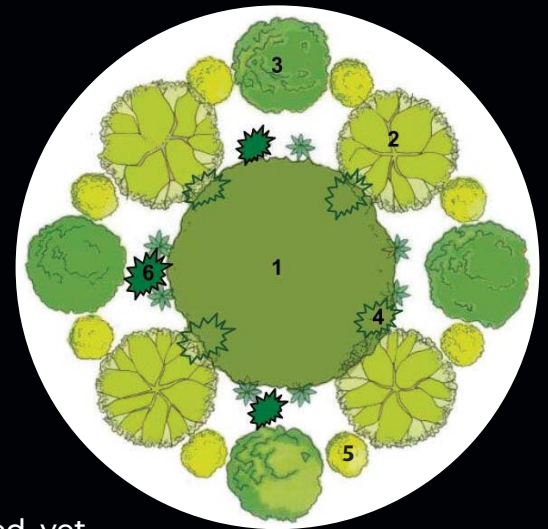
Learn more at
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Guilds and Layers

GUILDS

In forest gardening and food forests, we refer to carefully designed, purposeful polycultures as a **plant guild**. Plant guilds are groups of plants and organisms that occupy a specific ecological niche. Within this niche of specific conditions of soil, water, light, etc., certain plants and organisms work as an integrated group. “Guilds” partition and **share resources** to minimize competition and create networks of mutual support.

Plant guild design is an effort to speed-up nature’s normal succession to quickly create a relatively diverse and balanced, yet highly productive, food system. Guild companion plantings can include fruit and nut trees, shrubs, herbs, vines and perennial vegetables **yielding food or materials** useful to humans, as well as plants to **feed pollinators**, to serve other **beneficial creatures**, and to **enrich the soil**. Carefully selected plants are intermixed to grow in various vertical layers to build a woodland habitat.

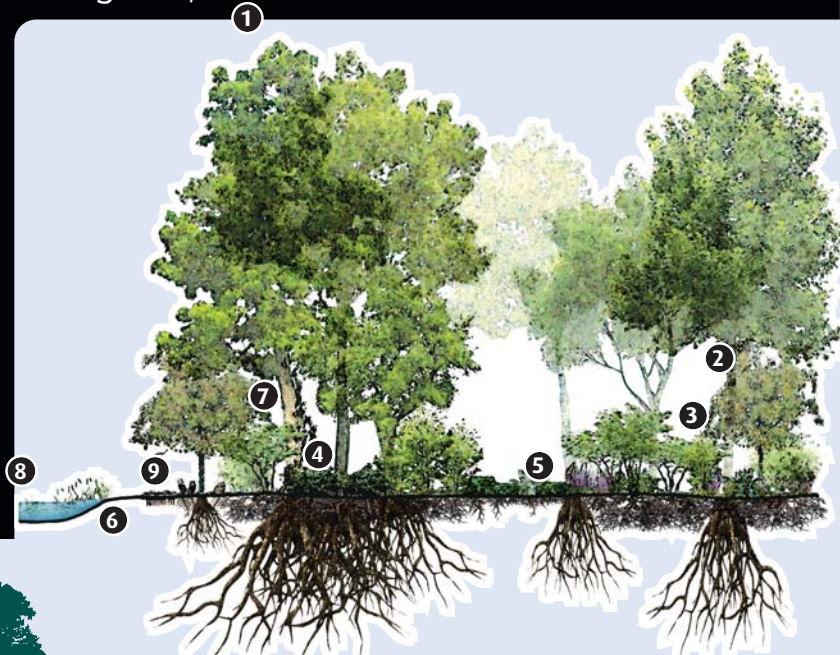


Sample guild design with layer elements numbered

LAYERS

Nine layers in space and many layers of use

1. Canopy Layer — large, mature trees for timber, nuts, fruit
2. Sub-canopy Layer — lower, smaller trees bearing fruit, nuts
3. Shrub Layer — bushes bearing fruit, nuts; hardy herbs
4. Herbaceous Layer — large herbs, vegetables, flowers
5. Ground Cover/Creeper Layer — herbs
6. Underground Layer — root crops, tubers, soil health
7. Vertical/Climber Layer — fruiting vines
8. Aquatic/Wetland Layer — herbs
9. Mycelial/Fungal Layer — mushrooms



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Evanston**

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Permaculture

BASED ON WORK BY DAVID HOLMGREN AND BILL MOLLISON

Permaculture is a design system based on ecological principles. David Holmgren's definition of permaculture is "Consciously designed landscapes which mimic the patterns and relationships found in nature, while yielding an abundance of food, fibre and energy for provision of local needs." People, their buildings and the ways they organize themselves are central to permaculture.

Permaculture's roots are in sustainable agriculture, but it can be applied much more broadly and has evolved into a design system for a permanently sustainable culture.

PERMACULTURE'S ETHICS

- **Earth Care** — care for the soil and the environment
- **People Care** — care for self, family, community
- **Fair Share** — return of surplus to the Earth, other creatures and people

PERMACULTURE'S TWELVE DESIGN PRINCIPLES

1. Observe and interact
2. Catch and store energy
3. Obtain a yield
4. Apply self-regulation and accept feedback
5. Use and value renewable resources and services
6. Produce no waste
7. Design from patterns to details
8. Integrate rather than segregate
9. Use small and slow solutions
10. Use and value diversity
11. Use edges and value the marginal
12. Creatively use and respond to change



WHAT DOES THIS MEAN FOR OTHER SPECIES AND HABITAT?

Unlike traditional agriculture, **permaculture** strives to put the needs of the earth and other beings on equal footing with those of people.

Permaculture's ethic of Earth Care guides us to purposely create habitat for all other creatures and care for the soil and the organisms in the soil which in turn feed the plants and birds. Fair Share guides us to allow and plan for all living beings, including humans in our community, to enjoy part of our yield. When we plant desirable species like hazelnut and gumi berry we expect wildlife to harvest part of our crop. By providing habitat, for instance to birds, they are encouraged to also feed on orchard "pests." We provide alliums to pollinator species, which can deter browsing deer. This helps us provide a safe and organic means of pest control.



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Apple Guild



Mid Canopy Layer

REDBUD
Cercis canadensis
Edible Flowers,
Young Leaves & Pods

SERVICEBERRY
Amelanchier arborea
Edible Fruit, Fall Color,
Insectary

Low Canopy Layer

APPLE
Malus pumila
Edible Fruit, Insectary

GOOSEBERRY
Ribes hirtellum
Edible Fruit, Insectary

GOUMI
Elaeagnus multiflora
Edible Fruit,
Nitrogen-Fixer

RUGOSA ROSE
Rosa rugosa
Edible Hips, Insectary,
Beauty

SEABERRY
Hippophae rhamnoides
Edible Fruit,
Nitrogen-Fixer

Herbaceous Layer

ASPARAGUS
Asparagus officinalis
Edible Stems

CHIVES, GARLIC & ONION
Allium — various
Edible Leaves & Flowers,
Insectary, Deer/Rabbit/
Vole Repellent

COMFREY
Symphitum officinale
Medicinal, Insectary,
Mineral-Accumulator,
Mulch

BLUE WILD INDIGO
Baptisia australis
Nitrogen-Fixer, Beauty,
Medicinal, Dye-Making

RHUBARB
Rheum rhabarbarum
Edible Stems,
Mineral-Accumulator,
Rhizome Barrier

YARROW
Achillea millefolium
Edible Leaves, Insectary,
Medicinal

Ground Cover

STRAWBERRY
Fragaria
Weed Control,
Edible Fruit

OREGANO
Origanum vulgare
Edible Leaves

Pear Guild



Low Canopy Layer

PEAR/ASIAN PEAR
Pyrus communis/Pyrus pyrifolia
Edible Fruit

Shrub Layer

HONEYBERRY/ HASKAP BLUE HONEYSUCKLE
Lonicera caerulea
Edible Fruit, Insectary

SEABERRY
Hippophae rhamnoides
Edible Fruit,
Nitrogen-Fixer

Herbaceous Layer

BORAGE
Boerhaavia officinalis
Edible Flowers, Leaves,
& Seed Oil, Insectary,
Tap Root Breaks Up Hard
Soil, Mineral-Accumulator

Herbaceous Layer

CHIVES, GARLIC & ONION
Allium — various
Edible Leaves & Flowers,
Insectary, Deer/Rabbit/
Vole Repellent

DAFFODILS
Narcissus
Deer/Rabbit/Vole
Repellent, Beauty

Ground Cover

STRAWBERRY
Fragaria
Weed Control,
Edible Fruit

VETCH
Vicia
Nitrogen-Fixer, Edible
Shoots & Pods, Weed
Control

Pawpaw Guild



Mid Canopy Layer

PAWPAW
Asimina speciosa
Edible Fruit

Shrub Layer

NANNYBERRY
Viburnum lentago
Edible Fruit, Insectary

Herbaceous Layer

MAYAPPLE
Podophyllum peltatum
Edible Fruit, Insectary

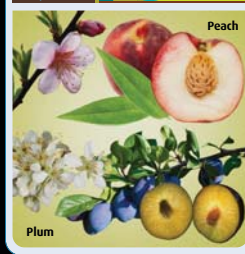
TOMATO
Solanum lycopersicum
Edible Fruit, Shade/Nurse Plant

Ground Cover

WILD GINGER
Asarum canadense
Edible Roots, Pollinator

RAMPS
Allium tricoccum
Edible Leaves & Roots

Stone Fruit Guild



Low Canopy Layer

APRICOT
Prunus domestica
Edible Fruit

PEACH
Prunus persica
Edible Fruit

PLUM TREE
Prunus domestica
Edible Fruit

Shrub Layer

BLACK CHOKEBERRY
Aronia melanocarpa
Edible Fruit

HORSE RADISH
Armoracia rusticana
Edible Leaves & Roots,
Insect Repellent

CHAMOMILE
Matricaria chamomilla
Medicinal, Insectary

Herbaceous Layer

GARLIC
Allium sativum
Edible Bulb,
Deer/Rabbit/Vole
Repellent

CORIANDER
Coriandrum sativum
Edible Leaves & Stem,
Seeds for Flavoring,
Medicinal, Insectary

DILL
Anethum graveolens
Edible Leaves & Stem,
Seeds for Flavoring,
Medicinal, Insectary

Ground Cover

WHITE CLOVER
Trifolium repens
Insectary, Nitrogen Fixer

Walnut Guild



High Canopy Layer

BLACK WALNUT
Juglans nigra
Edible Nuts

Shrub Layer

SPICEBUSH
Lindera benzoin
Medicinal, Scent,
Insectary

Herbaceous Layer

BEE BALM
Monarda didyma
Flowers & Leaves for
Tea, Insectary

SWEET CICELY
Galium officinale
Edible, Medicinal,
Insectary

SOLOMON'S SEAL
Epipactis atrorubra
Edible, Medicinal,
Insectary

Ground Cover

SAFFRON CROCUS
Crocus sativus
Beauty, Edible Stigma,
Dye-Making

WILD GINGER
Asarum canadense
Edible Roots, Pollinator

Underground/ Fungal Layer

WINE CAP MUSHROOMS
Stropharia rugose-annulata
Edible, Decomposer,
Detoxifier, Symbiotic
Nutrient Release

Elderberry Guild



Low Canopy Layer

ELDERBERRY
Sambucus nigra
Edible Flowers & Fruit,
Medicinal

GOI BERRY/ WOLF BERRY
Lycium barbarum, Lycium chinense
Edible Leaves & Fruit

Shrub Layer

BLACK CURRANTS
Ribes nigrum
Edible Fruit

WHITE WILD INDIGO
Baptisia alba
Nitrogen-Fixer, Beauty

Herbaceous Layer

RASPBERRY
Rubus idaeus
Edible Fruit

Ground Cover

SWEET WOODRUFF
Galium odoratum
Scent, Leaves for Tea

Hazelnut Guild



Mid Canopy Layer

HAZELNUT
Corylus avellana
Edible Nuts

Herbaceous Layer

RED GIANT MUSTARD
Brassica juncea
Weed & Soil Disease Suppression,
Edible Leaves

Underground/ Fungal Layer

OYSTER MUSHROOMS
Pleurotus ostreatus
Edible, Decomposer, Detoxifier, Nutrient Release



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