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Designing a Garden Using Guilds

Diana Liga

Many of you who are long time gardeners may not be familiar with the term “guild,” but are probably familiar with the concept. Guilds, as defined by Bill Mollison’s Introduction to Permaculture, are “a species assembly of plants and animals which benefit each other, usually for pest control.” You are probably saying to yourself: “I know this, it’s called companion planting or forest gardening.” True, all of these concepts are very similar, and their common goal is to work with the environment instead of against it. The purpose of this article is to present the concept of a guild so that no matter what environment you live in you will know what elements should go in your design.

Guilds are traditionally used to combine vegetables, herbs, fruit trees, and native plants in a diverse, mutually beneficial environment. They also used to create native plant communities to support wildlife and to attract beneficials into the garden. Most urban permaculturists create guilds for intensive production of food in a small area in a way that does not destroy soils or harm the environment.

The Central Element

The first step in designing a guild is to identify a central element. This is usually a large tree that can provide food, shade, and habitat. You would ideally like a native tree that has food value for both you and wildlife. Unfortunately, if you live in an urban lot where space is limited, this may not work too well. If you would like to grow as much of your own food as possible, you may want to use a traditional fruit tree such as citrus as your central element. Whichever you do, the central element should be as multi-purpose as possible.

Building a Guild

After you have identified your central element, identify plants that perform some of the following functions:

- Plants that act as living mulch that can replace and deter grass.
- Plants that can act as nutrient accumulators (e.g. many herbs with long taproots absorb unavailable nutrients) and be cut down to provide nutrients to the guild.
- Certain bulbs and herbs can help break down soils.
- Make sure you have plants that function as nitrogen fixers. Many legumes improve soils by adding usable nitrogen.
- Certain families of plants, the Umbelliferae (Carrot Family), the Cruciferae (Cabbage Family) and the Asteracea (Aster-sunflower Family) are known as beneficial insect and bird attracting plants.

- Vines are also an important and often overlooked element of a plant community. They use vertical space by climbing your central element and provide food for you and protection for the tree.
- Not all the elements should be herbaceous plants. The best guilds are comprised of understory trees and shrubs, all of which should have more than one function.
- Be mindful of which shrubs are deciduous and which are evergreen. If you plant all deciduous shrubs, you will have a very barren plant community in the winter.
- You may also add a few sacrificial plants that can act as traps. For example, long beans attract stinkbugs, which make it easier for you to pick them off, and marigolds are the preferred food of spider mites.
- If you are able, add a pond. Ponds attract some of our most beneficial insect predators such as: anoles, frogs, toads, and dragonflies. Be sure to add a few fish to keep mosquito populations down

Connecting Diversity

Another thing to think about is diversity. Diversity creates a more balanced ecosystem and lowers garden maintenance. A diverse guild attracts a variety of pollinators and predatory insects, thus reducing the incidence of complete crop failure. Your risk of losing your food supply is lessened by diversity. There are limits to everything, but often the more intensively you plant diverse crops, the more total output you will get.

Although the number of individual elements is not as important as “the number of functional connections among these elements,” diversity is the key to the design. So be sure to research every plant that you plan to put into your guild. You would not want to plant allelopathic plants (plants that release toxins to inhibit the growth of nearby plants) as part of a guild, nor would you want to place plants that require different conditions than those that you are providing. Place plants where they thrive. If they are merely surviving, you will increase the number of pests and incidence of disease.

This is a very brief introduction to guild design. There are many more benefits to designing using these concepts. For more information on plant communities that you can create in the Houston area, refer to *Year Round Vegetables, Fruits and Flowers for Metro-Houston*. If you are interested in native plants and habitat gardening, please visit the Urban Harvest library. Whether you call your guild a single bed or a landscape, hopefully you will have a few more things to consider next time you design a new part of your garden.

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2311 Canal Street, Suite 200, Houston, Texas 77003, 713.880.5540, urbanharvest.org