



Ecological Gardens Newsletter

Spring 2004

<http://www.ecologicalgardens.com/>

“The most wonderful mystery of life may well be the means by which it created so much diversity from so little matter” E.O. Wilson

Spring is a magical time of year when our part of the world comes to life after a long dormancy. This spring seems earlier than usual – the greenhouse is already full of flowering blueberries, the heirloom tomatoes and peppers are waiting to be transplanted, and the garlic is beginning to grow through the mulch. There are many fruit and nut guilds to plant - northern pecan, apricot, plum – and new shrubs and vines to try - sea buckthorn, aronia, and hardy kiwi.

Planting Tips for Woody Plants (Trees, Shrubs, Vines)

Fungi play a critical role in the soil biological community of woody plants. Mycorrhizal fungi help move nutrients back and forth between the soil and plant roots. The presence of the right mycorrhizae promotes strong root development and disease-resistant plants. Fungi are destroyed when soil becomes compacted or waterlogged. As a result, mycorrhizae is often absent or exists in low quantity in garden and farm soils. Fungi can be added to the soil prior to planting new woody plants. Currently mycorrhizal fungi is only available in wholesale quantities but Ecological Gardens carries a supply for our landscaping work. If you are interested in purchasing small amounts, call 612.588.3942 and we will try and accommodate your needs.

Insectory Plants – Providing for Beneficial Insects

Providing food and habitat for beneficial insects is key to gardening without chemicals. There are four types of beneficial insects – predators (beetles, wasps), parasites (small wasps, flies), pollinators (bees, butterflies, beetles, bats), and weed feeders (beetles, moths).

Insectory plants are host plants for beneficial insects providing nectar and pollen, foliage for the larvae to feed on, and habitat for these prey species. A diversity of plant species is needed to maintain a healthy and breeding population of beneficials. Multiple plants should be blooming at

any given time to insure an adequate food supply. Some useful species are English lavender, fennel, dill, angelica, caraway, parsley, yarrow, basket-of-gold, tansy, lemon balm, and mints.

Patterns in the Garden – Herb Spirals

If you have a small space or would like to try a new pattern in the garden – try an herb spiral. The spiral begins as a mound of good soil 3' high and 5' across. To turn the mound into a spiral, place fist-sized to head-sized rocks in a spiral pattern that winds from the bottom inward to the top. Leave about a foot of soil between the tiers of the rock spiral.

In addition to saving space, the spiral has slopes that face in all the directions of the compass, creating microclimates suited to different plants. The south-facing slope will be hotter than the north. The east-facing slope will dry out earlier in the day than the west one. The soil at the bottom will be wetter than the soil at the top. Plant your herbs in the microclimates they prefer – oregano, rosemary, and thyme on the sunny south side near the top, parsley and chives on the cooler north side near the bottom.

To conserve on topsoil, place a few rocks or a heap of subsoil at the base of the mound and then build over that. To water the spiral easily, run plastic irrigation tubing (¼" to ½") inside the mound, emerging from the top, and attach a mini-sprinkler.

Sample herbs include feverfew, calendula, coriander, parsley, chives, fennel, yarrow, sage, Echinacea, chamomile, thyme, oregano, rosemary, and dill. For more information see Hemenway, Toby. [Gaia's Garden: A Guide to Home-Scale Permaculture](#). Chelsea Green, 2001.

Multifunctional Plants – Common Chokecherry

Plants perform many important ecological functions in the landscape as well as provide beauty, medicine, and food for humans and wildlife. Common chokecherry is a native plant with many functions and uses.

Chokecherry fruit can be eaten raw or cooked and is very nutritious. It is normally used in pies and jellies.

Chokecherry has a long history of medicinal use. The Indians of the Prairie Bioregion used chokecherry juice for diarrhea and sore throat. The bark is a bitter astringent and very useful in treating fevers, dyspepsia, lumbar abscess, chronic asthma, and hysteria. It reduces pulse from 75 to 50. Blackfeet mothers drank the tea to pass its medicinal qualities to their nursing babies through the milk. The Sioux drank a tea made from the boiled bark to treat various stomach complaints, diarrhea, and dysentery. Chokecherry is no longer used medicinally since more effective medicines have replaced it.

Chokecherry is an important food source for small mammals and many birds.

Chokecherry is a good drought-tolerant nurse plant establishing quickly and creating a favorable microclimate for other plants.

Chokecherry is a good companion plant for orchard and vineyard fruit. Research has shown borders of mulberries, dogwood, chokecherries, and other aromatic fruits keep birds away from peaches, cherries, and orchard fruit.

Guilds in the Garden

A plant guild is a collection of plants that work together to perform one or more ecological functions in a plant community. Guilds are designed to function as mini-ecosystems with plant needs being met by other guild members. Guilds increase abundance, eliminate chemicals, conserve water, and reduce labor. In addition they may have wildlife value, aesthetic value or food value. To design a sustainable landscape guild, you start with a central element e.g. a cherry tree.

A cherry tree needs nutrients, root protection, pest protection, and weed management. Plants forming the backbone of the guild must perform one or more of these functions. Guild members may include:

- White and purple prairie clover fixes nitrogen;
- Fern-leaf yarrow accumulates nutrients with its deep taproots;
- Alpine strawberry provides a good living mulch with its soft, degradable leaves;
- Garlic and chives make good pest repellents deterring squirrels, rabbits and mice;
- Daffodils and camas bulbs make good weed suppressors;
- Coneflowers, lavender, parsley, dill, borage, tansy, asters, and stonecrop are good insectory plants providing food and habitat for beneficial insects;
- Chokecherry and dogwood fruits are good detractors for birds;
- In addition, the cherry tree's open canopy allows enough sunlight to penetrate so many other edibles to be grown.

We can use your ideas for designing additional plant guilds.

Are there problems in your landscape you would like to have a plant guild designed for?

Are there assets in your landscape – particular trees, water features, etc – that you would like to have a plant guild designed for?

Send any suggestions or ideas to: paula@ecologicalgardens.com

Enjoy the spring!!

For information on upcoming events:

http://www.ecologicalgardens.com/upcoming_events.cfm

For information on products and services:

[http://www.ecologicalgardens.com/what we do.cfm](http://www.ecologicalgardens.com/what_we_do.cfm)

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Creating and Conserving Vibrant Plant Communities