May 2013 Laura Matter: Building habitat for beneficials in the garden

RGC welcomed speaker Laura Matter, Education Coordinator of Seattle Tilth's Garden Hotline, whose subject was "Building Habitat for Beneficials in the Garden". She began by describing bug-specific habitat. The goal is to get the good ones to get rid of the bad ones. A nurturing habitat is needed and also the ability to identify good bugs from the bad. How you construct your garden will affect what lives there. The habitat creates home for organisms. For instance, some butterfly species are non-native and it's better to try to attract the natives.Garden as a Habitat. Some insects don't travel far and need smaller spaces. With soil, it's more important what's underneath than what's on top. Many edibles and ornamentals are non-native.

Space: There is competition for space in your yard, where both garden and lawn compete for sun. Tall trees and buildings in urban settings provide shade, but urban settings are often space-challenged. You must integrate your garden with the rest of the yard, e.g., plant vegetables with flowers.

Soil Life: There are 100 to 1 billion bacteria in one inch of soil, plus several yards to miles of fungi. Several thousand protozoa to several million exist underground, as well as 10 to several hundred species of nematodes. Soil is composed of minerals and organic content along with air, water and microorganisms. Most NW soils are not suitable for growing food with large forests, winter rainfall, low pH and glacial till. River valley soils are richest and overused. Commercial soils are manufactured and vary in quality, so check carefully what you use when amending your soil. Different soil used for different purposes. Native plants can adapt to native soils, but know your pH.

Non-natives: Most plants in gardens originate in other ecosystems and many noxious weeds are introduced with ornamentals, so check bought plants. Vegetables like soil with a slightly acid pH, more alkaline than our native soil. Particular plant families are susceptible to disease and insect infestation, so crop rotation is important. Horsetails are native to our area. To kill, cut stems early before sporing to control. Don't try to pull them out; as they have long roots that just stimulate regeneration.

The Garden Population: To control leaf miner, pick leaves off and dispose them away from gardens. Bad boys are slugs, aphids, cabbage worm, grasshoppers and cut worms, which dwell in the soil. Problematic residents: Eastern cottontail rabbits, squirrels, moles (use X-Lax to discourage them), crows, mountain beavers, Norway rats. Also, with plants, it's horsetails, bitter cress, bindweed which is like a white morning glory, but the golden beetle will eat it.Garden Good Guys: The bushtit (a bird), lady beetles, hummingbirds, ground beetles (aphid eaters), parasitoid wasps, dragon flies and soldier beetles.

Natives: Oregon grape, Sitka willow, red-flowering currant. Native plant families: carrot, daisy & mint.

Supplemental Habitat: An insect hotel will hold several different species in one place. Go to the website, www.inspirationgreen.com for photos and introduction. You must do all of the following to be successful: 1. Practice tolerance, eliminate pesticides. 2. understand your own garden's ecosystem3. Encourage diversity by providing the right environment for plants and helpful insects. 4. Use mulch to prevent weeds, conserve water and modify soil temperature. 5. Pull weeds before they go to seed, although some weed's flowers are attractive to beneficials. 6. Water wisely, avoid wetting leaves, and allow plants to dry before nightfall. 7. Mix it up! Mingle flowers and vegetable plants. Add plants to attract beneficials. (Families of carrot, daisy and mint). 8. Add plants for birds, shelter and nesting. Use natives especially. Provide water sources for all beneficials. 9. Use trap plants to detour pests. 10. Relax about moss; it's a great nesting material.

Laura helped us envision the addition of colorful, diverse and productive habitat plantings, including plants that will attract parasitoid wasps, ladybeetles, bees, songbirds and even bats to help manage pest problems in the growing season. They'll also make your fruiting plants more productive and can even provide additional plants to harvest, while you provide beneficial habitat at the same time.Books to Look For: Insects of the Pacific NW—by Peter Huggard and Judy Huggard; Attracting Native Pollinators: Protecting No. America's Bees and Butterflies—The Xerxes Society; Gardening with Native Plants of the Pacific Northwest—Art Kruckeberg; Plants of the Pacific NW Coast—Jim Pojar; Your Farm in the City: An Urban-Dweller's Guide to Growing Food—Lisa Taylor; Bees, Wasps and Ants—Eric Grisell and The Maritime NW Garden Guide—Seattle Tilth.