CASCADE WATER ALLIANCE

Strategies for a Successful Veggie Garden

by Emily Bishton © 2023

Step-by-Step

1. **Investigate the sun, heat, soil, wind, and water conditions of your site:**
   - Sun: Most edible plants need at least 6 hours of direct sunlight each day, and hot weather crops such as tomatoes, beans, corn, and peppers need 8-10 hours.
   - Heat: Existing retaining walls, rockeries, patios, and other paved surfaces act as "heat sinks" and increase soil and air temperatures, which improves conditions for hot weather crops. Raised beds allow the soil to heat up earlier in spring and stay warm later in the fall. Repurposed materials such sidewalk concrete pieces, brick, containers, etc. can be used to create heat sinks.
   - Soil: Do a simple "soil shake" test to find out the % of sand, silt, and clay in your native soil.
   - Wind: A site with NE wind exposure may have challenges to early spring-late fall growing.
   - Water: Where do your downspouts discharge and/or any subsurface water exist? Most vegetables need well-draining soil to thrive.

2. **Think Outside the Box:**
   - Framed raised beds can be an efficient and effective way to grow food, but there are many other options for edible landscaping.
   - Fruit trees and berry bushes are the edibles most easily incorporated into existing ornamental beds. Many species are very ornamental in their own right, and can add greatly to the aesthetic beauty of the landscape.
   - Herbs are very ornamental too, and another great addition into existing landscape beds. Since most are also low-water use plants, it's important to add them to beds with similar water needs.
   - Many vegetables can also be grown in existing ornamental beds, rather than building separate raised beds just for them. Lettuce, Spinach, Parsley, and other salad greens make a good annual groundcover that can be sown underneath trees and shrubs in ornamental beds.
   - Ceramic, wood, or stone containers, galvanized stock tanks, etc. are also an attractive garden feature, and can also be a valuable component of crop rotation strategies in any garden.

3. **Consider Maintenance from the start:**
   - Plant edibles that need the most monitoring and care closest to your home's entries, walkways, or gathering areas, so that it will be easy to water, monitor for any pest problems that occur, harvest as often as needed, etc.
   - Edibles with the least maintenance needs, such as fruit trees and cane fruits, can be planted further away. This is especially important to consider when gardening on a large property.
   - No matter how large or small the site, most of us will be more inclined to maintain "frequent care" plants if the crop is in view of other areas we use during our daily activities.
   - Easy access to water is important, as no vegetables are truly drought tolerant. Paths or other easy access to beds is vital for making it easy to plant, mulch, monitor, harvest, and maintain edible plants too.
   - Drip irrigation has many benefits for vegetables: it's easier to do consistent watering with less soil compaction, flexible for annual crop rotation, and a timer allows watering in early morning or evening for less evaporation and more efficient use of water.
   - Mediterranean herbs like Rosemary, Lavender, and Thyme should get summer water only until their roots are established. At that point, they will thrive best with little or no water or fertilizer!

4. Soil Preparation, Plant Selection, and Pollination:

- Amending your native soil with compost is important whether you have sand, silt, or clay soils. In new beds, incorporate 3 inches of compost into the top 10 inches of soil, and in beds with existing plants, "scratch in" 1-2 inches of compost, and add the rest as a top mulch.
- Choose PNW-grown fruit trees, vegetable seeds and starts whenever possible, as they are more likely to thrive in our climate.
- Plan for pollination and natural pest control by growing flowering herbs and perennials near your vegetables that attract and feed them. (see list below)
- Put up Orchard Mason Bee blocks to increase tree fruit pollination, and provide Bumblebee habitat with small patches of bare soil, dry leaf piles, and/or hollow logs.
- Avoiding the use of pesticides in all landscape areas will preserve and encourage beneficial insect populations.
- Position wind-pollinated plants such as corn, in blocks or side-by-side rows for best pollination.
- Always use watering methods that preserve pollen!

5. Plan for Crop Rotation

- Plants that are in the following "Big 3" families must be planted in a 3-year rotation in order to prevent soil-borne fungi and bacteria from building up in the soil: Tomato (Solanacea), Broccoli (Brassica), and Onion (Allium). If you don't rotate crops from these families into different beds/soil, harmful fungi and bacteria buildup will cause severe disease problems in your garden. Other plant families can be rotated also if desired, but are not mandatory.
- Draw a simple map of your garden beds, and make 3 copies (1 for each rotation year) so that you can create a rotation plan that can be used over and over.

Last but not Least: It's a good idea to start small with the amount of edible plant additions and/or new landscape beds you create, and then add more as you gain experience and confidence. Starting small and growing bigger is the way of all living things! This will also help you gradually become accustomed to the higher maintenance needs of edible plants instead of taking on a large amount of time and energy commitments at once.

Plants for Attracting Beneficial Insects for Pollination and Natural Pest Control

Botanical name	Common Name	Attributes
Umbelliferae Family	Dill, Fennel, Parsley, Anise, Cilantro/Coriander, etc.	The easy-access nectar in their flat, wide flowers attracts bees, lady beetles, soldier beetles, and lacewings.
Asteracea Family	Yarrow☑, Blanket Flower, Fall Aster☑, Black-Eyed Susan, Calendula, Marigold, Fleabane, Chrysanthemum, Cosmos, and many more	These attract many species of butterflies, skippers, and syrphid flies, as well as all the insects listed above. These top 2 plant families are "must haves" for attracting beneficials.
Lamiaceae Family*	Lavender, Oregano, Sage, Savory, Mint, Thyme, Basil, etc.	Nectar feeds bees and butterflies (always grow mint in a container!)
Brassicacea Family*	Alyssum, Erysimum, Candytuft, Rock Cress, Mustards, etc.	Nectar feeds bees, butterflies, and lady beetles

All plants listed above except mint and basil are low-water-use *once their roots are well-established*.
A checkmark ☑ indicates that this plant has at least one species native to Western Washington.
An asterisk* indicates plants that also are very attractive to hummingbirds.

Free Online Resources!

- Cascade Natural Yard Care Program: https://cascadewater.org/water-efficiency/natural-yard-care/
- King Conservation District free soil test program: https://kingcd.org/programs/better-soils/healthy-soil
- The Garden Hotline, with free answers to your questions via phone or email: 206-633-0224 or www.gardenhotline.org
- King Co. Master Gardener Program, with free answers to your questions via phone or email: https://extension.wsu.edu/king/gardening
- City Fruit- factsheets on selecting and care of disease-resistant tree and cane fruits for your garden: https://www.cityfruit.org
- WSU Fruit Research publications: https://extension.wsu.edu/maritimefruit/publications
- Grow Smart, Grow Safe Gardener's Guide to lawn and garden products: www.growsmartgrowsafe.org
- Good Bug Guide for beneficial insects: https://growsmartgrowsafe.org/GoodBugGuide
- WSU extension HortSense: http://hortsense.cahnrs.wsu.edu/Home/HortsenseHome.aspx
- Saving Water Partnership: https://savingwater.org
- King Co. Natural Yard Care program: https://kingcounty.gov/depts/dnrp/solid-waste/programs/natural-yard-care.aspx
- Bellevue Natural Yard Care Program: http://www.ci.bellevue.wa.us/naturalyardcare.htm
- Snohomish Co. Natural Yard Care Program: https://snohomishcountywa.gov/1097/Natural-Yard-Care
- Kitsap Co. Natural Yard Care Program: https://www.kitsapgov.com/pw/Pages/naturalyardcare.aspx