

Planting a Water Smart Garden  
City of Kirkland - Natural Yard Care – Saturday, May 21, 2016



**PART ONE – Choosing the Right Plants**

**Setting Up Your Garden to Succeed**

Mapping Your Garden:

- Soil conditions – wet, dry, rocky, hardpan, sandy, clay
- Sun, shade and in between – and when? Morning or afternoon sun?
- Slopes – steepness and erosion control, flooding, dry hillsides
- Aspect – neighboring buildings, what interferes with the sun
- Exposure – wind, reflection, water features, house eaves
- Microclimates in the garden – take advantage!
- Access for maintenance

**Imagining Your Garden**

- What is the primary use of your garden? Children, animals, relaxing, growing food or more
- Decide on time and funds available to maintain
- Shop the neighborhood for ideas- what works in your area?
- Use the many excellent local resources!

**Making a Plan**

Choosing Plants:

- Become familiar with USDA and Sunset zone maps
- Group like needs together – wet site plants, drought tolerant plants, sun or shade, sandy or clay soil
- Choose plants that need less water and less maintenance - know a plant's native origin

- Native plants
- California and Mexico
- Mediterranean
- New Zealand
- Plan for diversity
  - Year round interest
  - Layer the structure of the garden – groundcovers, perennials, shrubs and trees
  - Include plants that attract beneficial wildlife – will help with pest management
  - Include edible plants – perennial and annual vegetable gardens
  - Plants can have more than one function – espalier apple tree fence provides food **and** structure in the garden
- Avoid Noxious Plants!
  - King County and State Noxious Weed Lists
  - The problem with noxious weeds – escaped ornamentals with few control elements in this ecosystem

Plan for Access:

- Identify best places for pathways and entries and exits from the garden
- Place plants that need the most attention closest to the house
- Plan for ease of watering - use an automatic irrigation system, get good tools for hand watering, keep hose bib access clear and near plants
- Establish sitting and resting areas – hammocks, tables and chairs, swings

- Utilities – decide where to place compost bins, curbside bins, dog houses, protect meter access, place a toolshed or greenhouse on site

### **Start Your Plants off Right**

- Healthy soil is key!
- Learn correct planting techniques for each type of plant
  - Avoid girdling roots
  - When and how to plant bare root
  - Loosening a root ball
  - Depth and width of hole relative to the root ball
- Choose the Right Mulch
  - Wood Chips – perennials, shrubs, trees and pathways
  - Leaves – veggie gardens, perennials, shrubs, trees
  - Compost – veggie gardens, annual flower beds
  - Straw – veggie gardens, perennials
  - Manufactured Sawdust and Manure Mix – annual flower beds, perennials, shrubs, trees, paths
  - Gravel – paths
  - Bark – not recommended unless well composted – leaches nutrients, often has added dyes, no nutritive content, compacts and makes water

## **PART TWO – Smart Watering**

### **Setting Up Your Garden to Succeed**

- Provide healthy soil
  - Compost
  - Mulch

- Use plants adapted to the soil type - wetland plants, prairie plants, desert plants, alpine plants
- Group plants according to water needs
- Site lawns appropriately
  - Lawns need sun, good drainage, good nutrition, adequate water
- Decide on type of irrigation you will use
  - Automatic with timer – good if you have a large yard with lawn and diverse planting beds
  - Consider drip irrigation – good for isolated plantings like a vegetable or perennial garden, for establishing shrub beds, for collection of pots
  - Soaker Hoses – good for similar situations to drip but not as specific in their delivery of water
  - Hand Watering – allows for less water use and specific targeting of plants

### **Smart Watering Practices**

**Conserve water, reduce plant disease by avoiding soil splashing and wet foliage, save time, prevent erosion, and water more efficiently**

- Automatic Irrigation Systems
  - Use smart timers that allow for shut off during rain
  - Set clock to water a short cycle then longer cycle which allows water to soak in better
  - Water early in the morning when water pressure is best
  - Check sprinkler head patterns to avoid missing your target!
- Drip Systems
  - Use the right emitter for the situation

- Use a timer attached to the system to allow for adequate coverage
- Soaker Hoses
  - Bury under mulch to reduce evaporation
  - Do not lay out more than 100 feet of hose in one line – lower pressure at the end of the line
  - Start uphill and run water down the hose
- Hand Watering
  - Use the right tool for the right job – long handled wands, wands with shut off and multiple spray patterns, watering cans
- Always time and measure irrigation to make sure plants are getting the water they need - no more, no less. (tuna can test )
- Allow water to soak in slowly and deeply – you are trying to nourish the roots
- Water in the morning to avoid leaves staying wet at night and reduce incidence of disease

### **Learning Your Plants Water Needs**

- Root Depth – each plant has a different structure so you need to know how it grows to know how deeply to water
- Know the origin and need of your plants to determine water needs
- Touch your soil to determine moisture content – dig into the soil at root zone of plant
- Soil should be cool and moist 2 inches down – if not it is time to water
- Trees and shrubs may only need summer watering in our hottest months – traditionally July and August but increasingly June and September shoulder months
- Lawns need only 1 inch per week of water during summer, including rain

- Containers will need checking more often than other plants
  - Unglazed terra cotta and non-painted wood dry out fastest
  - Eco pots made with rice hulls and /or bamboo dry out very slowly
  - Plastic pots and glazed terra cotta hold moisture evenly

## **Resources**

***A Pocket Guide to Herbs***, by Jenny Linford; Bath, Paragon Books, @2007

***Gardening with Native Plants of the Pacific Northwest***, by Arthur R.

Kruckeberg; Seattle, University of Washington Press, @1996

***Maritime Northwest Garden Guide***, Lisa Taylor and the Gardeners at Seattle

Tilth; Seattle, @2014

***Perennials, the Gardener's Reference***, by Susan Carter, Carrie Becker and Bob

Lilly; Portland, Timber Press, @2007

***Right Plant, Right Place***, by Nicola Ferguson; New York, Fireside, © 2005

***The New Sunset Western Garden Book***, by the editors of Sunset Magazine;

Oxmoor House, @2012

***Teaming With Microbes – A Gardener's Guide to the Soil Food Web***, by Jeff

Lowenfels and Wayne Lewis; Portland, Timber Press, @2006

**Sprinkler Efficiencies** <http://cascadewater.org/irrigation.php>

**Great Plant Picks** [www.greatplantpicks.org](http://www.greatplantpicks.org)

**Go-Native King County** <https://green2.kingcounty.gov/gonative/index.aspx>

**King Conservation District Plant Sales** <http://kingcd.org/programs-native-walk-up-sale.htm>

**Garden Hotline** [www.gardenhotline.org](http://www.gardenhotline.org) 206-633-0224

Monday through Saturday 9:00 am to 5:00 pm