

"Water-Wise Gardening Basics: Design, Installation, & Maintenance "

Yakima Master Gardeners Spring Symposium 2015

Greg Butler, 03.11.15

"What Does Some Guy From Seattle Know About Drought...?"

The Folly of English Gardens in the Shrub Steppe

Robert Nold "High and Dry"

Denver Botanical Garden "Water Wise Handbook"

Principles of Xeriscaping

Planning and Design

Soil Analysis

Mulch

Efficient Irrigation

Practical Turf Areas

Appropriate Maintenance

Appropriate Plant Selection

Planning and Design

Hardiness Zones & Microclimates

Windbreaks: Hedges, Walls, Fences

How Dry is Dry? English County Garden/ Drought Tolerant/ Xeric

Designing a Chimichanga Garden

Oasis Zone: Keep it Small, Save it for most visible areas & lawn, amend soil with compost

Transition Zone: Use low water plants, amend soil with compost, plant in layers, channel runoff from hardscape to beds, use drip irrigation

Low Water Zone: Use native plants or plants from other shrub steppe climates, amend soil with compost if needed/desired, use temporary drip systems, plant windbreaks

Soil Analysis

Eastside soils are generally high in nutrients, free draining, low in organic matter, and slightly alkaline

Soil test: umass.edu/soiltest

Arsenic, Compaction & Compost

Amending Soils: Rototiller, Excavator, Sub-Soiler, Fork and Spade

30 minutes of work = one glass of wine

Some plants prefer unimproved soils, soils in turf areas should always be amended

Do not amend individual planting holes, don't change grade or dig around tree roots

Mulching

"Any material which covers the soil and reduces evaporation"

Discourages weed germination, makes weeding easier

Adds nutrient and organic material, opens up soil, allows water to penetrate

Organic mulches: Composted yard waste, composted bio-solids, bark (avoid fine bark), arborist chips

Inorganic mulches: plastic sheeting, weed barrier fabrics, tarps, geo-textiles, rubber mulch

Stone mulch: drain rock, gravel

Mulch wide, not deep

Best mulch is thick layers of plants

Efficient Irrigation

Water deeply and infrequently, allow top 3" of soil to dry out between applications

Use drip for beds, sprinklers for turf

Go low and slow, water in intervals if necessary.

Water early in morning or in the evening, watch for leaks, use timers

Drip irrigation saves water!

Soakers vs. drip; soakers weep water along entire length, drip uses emitters

Keep layout simple, works great on slopes

Filter, Backflow preventer, timer, pressure regulator

Soaker hose maximum length is 100', space lines by soil type, cover soakers with mulch

Drip and emitters

Pros: Puts a precise amount of water exactly where you want it

Cons: Easily damaged, can be as much of a hobby as a "system"

Micro-sprays

In-line drip

Tree Gators, Redneck Drip System®, Watering Basin

Watering Lawns with Sprinklers

Turf needs 1" of water per week during the growing season; tuna can test

Use rotating or oscillating sprinklers, large drops are best

Checking for soil moisture

Underground Sprinklers: Must be operated and maintained properly, check for overspray, adjust for weather or add rain sensor, monitor buried head, broken valves, pipes, heads

Need help? Get a system check-up from an Irrigation Association Certified Auditor

Fall and Winter watering

Practical Turf Areas

Turf grass is not always the right plant for every place

Lawns take more work over time, beds get better with age

Keep it small, give it a shape, make it easy to water and mow

Appropriate Maintenance

Don't top your trees, and don't shear your shrubs

1 mature tree = 4 air conditioners

Leave a snag

Plant Amnesty

30 minutes of weeding = 1 glass of wine

Chemicals are not the answer; attitude, not herbicide!

Aerate and top dress to improve soil beneath turf, mow higher and keep your blade sharp

Appropriate Plant Selection

Tonight!