February 2022 | Northwest Flower & Garden Festival | Christina Pfeiffer presents:

Five Steps Toward a More Drought Resilient Garden

The Puget Sound has a winter rain / summer drought climate. Summers have become warmer and dryer over recent years, increasing drought stress in previously adapted native and ornamental plants. The extreme hot temperatures in early June of 2021 brought laser focused scorch and damage to many plants and prematurely dried out the ground in many areas. Drought resiliency (the ability for plantings to tolerate and recover from episodes of drought stress) of home gardens can be improved with some simple adjustments to routine plant care methods.

Step 1. Water deeply and infrequently.

Maximize water penetration into the soil. Check before and after watering to see where the water goes and adjust water rates to increase moisture depth. Inspect and manage thatch build up on lawns, which can impede irrigation or rainfall penetration into the soil beneath. Periodic deep irrigation will increase the amount of water held in the soil and promote deeper root growth, increasing resiliency to episodes of high temperatures. Running sprinklers for a few minutes every day does the opposite.

Step 2. Mulch matters!

Using a chunky, woody mulch will aid water penetration into the soil and help reduce evaporative loss of soil moisture. Examples of coarse mulch are leaf mold (shredded, partially composted leaves), and woody mulch (arborist chips, bagged wood chips sold by color, coir fiber mulch cubes, and other wood-fiber based blends). These types of organic mulch support beneficial soil organisms and slowly release nutrients as they decompose, benefiting root growth and function. Avoid fine textured composts which tend to crust over (place them under coarse mulch). Avoid fine bark, as its waxy fibers tend to compact into water repellant layers. Protect soil with good mulch and minimize digging. Avoid synthetic weed barriers, as over time they interfere with movement of air, moisture, and beneficial soil organisms within the soil.

Step 3. Fertilize lightly.

Fertilize based on plant needs and soil tests, rather than routine blanket applications. Surface applications of compost and coarse organic mulch are a source of slow-release nutrients. Regular mulch-mowing cycles nutrients back into lawns. Overly generous fertilization can push extra lush growth that demands more water. Cultivate for a lean-but-healthy garden.

Step 4. Prune trees and shrubs for natural growth habit.

Prune shrubs in moderation and preserve the natural growth habit. Don’t over-thin trees and shrubs. Removing the smaller interior branches to expose trunks and main branches robs trees of shade leaves that help maintain water flow and photosynthesis during hot spells. Overthinning trees and shrubs can make them more drought susceptible and possibly lead to sunscald on branches.

Tightly sheared shrubs are more vulnerable to drought stress and have higher water demands to supply replacement growth after each shearing. With interior leaves are shaded out, the thin mantle of leaves on sheared shrubs are more readily scorched and killed during periods of high heat.

Step 5. Plant trees and shrubs in cool seasons.

Planting trees and shrubs between fall and early spring gives roots a head start before new shoot growth starts in spring. Similarly, fall is a good season for planting bulbs, ferns, and many perennials. When planting vegetable starts, annuals, and other plants in spring, be mindful of planting later in the day and choose to plant on cooler overcast days over sunny warm days.

Proper root ball preparation promotes better root establishment and reduces moisture stress during establishment. Release the roots from the confined dimensions of the nursery container to position root tips in direct contact with garden bed soil. Tightly matted roots at the bottom or sides of container stock should be cut off, stimulating new growth extending out from the root ball. Don't add anything to the planting hole except the existing soil. Do be sure to mulch around new plants (but don't bury trunks or stems).

Drought resilient gardening month-by-month:

December – February: Maintain coarse woody mulch to aid water infiltration. Observe water movement during rain periods. Plant and transplant during periods when the weather is not too freezing or wet.

March – April: Replenish coarse woody mulch for a total 2 to 4-inch depth to conserve moisture into the growing season.

April: Begin watering new plants approximately 1/week. Water established plants deeply and infrequently based on weather and soil conditions.

May – June: Manage early season irrigation to avoid drought stress and preserve good early season growth.

July – August: Most woody plants and herbaceous perennials can survive well with less water during the latter half of the growing season. Watch for drought stress on new and established plants. Make notes for soil improvements, transplanting, or plant removal for plants that show severe or chronic drought symptoms.

September: Taper off irrigation toward the end of the growing season. Provide targeted, slow deep watering for stressed plants so roots go into the dormant season well hydrated. It can take a while for fall rains to fully moisten the ground again.

October – November: This is mulch season! Surface applied compost and organic amendments, shredded leaves, and wood chips applied now protect against erosion and compaction, improve infiltration of rain water, and support important soil building organisms that work to condition the soil over winter. Resist the urge to scour garden beds down to bare ground in the fall.

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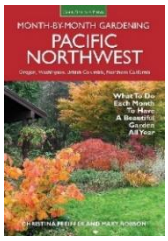

Pacific Northwest Month-by-Month Gardening
by Christina Pfeiffer with Mary Robson, Cool Springs Press