

NORTHWEST FLOWER & GARDEN FESTIVAL 2020

“Lessons from Mediterranean Landscape Design: It’s All About The Plant Selection”

1. **Definitions:** A Mediterranean Climate Model (MCM) is typified by wet winters (which can be warm, cool, or cold) and dry summers (which can be warm or hot). It is characteristic of the Mediterranean region and parts of California, Chile, South Africa, and southwestern Australia.’
2. **Common Characteristics of MCM regions:**
 - a. Climate: wet winters with dry summers
 - b. An ocean immediately to the west
 - c. Soils that are stony and well-drained
 - d. Hilly topography
 - e. Plant growth that is diverse & scrubby
3. **Names of MCM areas:** France: Maquis or Garrigue; Spain: Matorral or Chapparal; Italy: Macchia; Greece: Phrygana; Israel: Batha; South Africa: Fynbos (i.e. fine bush); Australia: Mallee
4. **How do we differ?** The magic number 20! The PNW differs substantially from these other areas because we receive far more precipitation than is typical of a MCM. Most MCM’s receive less than 15” of precipitation; Western Washington receives 40”+.
5. **The Impacts of Climate Change on the MCM of the PNW:**
 - a. A yearly average temperature increase of between 3.3 and 9.7 degrees
 - b. Most of that temperature increase will be in summer months
 - c. A likely 30% decrease in summer precipitation (what’s a 30% decrease of zero?!)
 - d. A likely slight increase in regional precipitation of 5% to 10% in non-summer months
 - e. More intense rain events (because warm air holds more moisture)
 - f. Less snow at lower elevations
 - g. Less snow pack overall – thus less melt off available later in the summer when it’s really needed downslope
 - h. Zonal Shift – Seattle will become more like San Francisco (shift from zone 7/8 to 9,10 or even some 11)
6. **Plants for a Mediterranean Climate :** “For many years gardeners were taught to adapt the soil and water to the plant; now the time has come to find plants that are adapted to the climate and conditions. It is incumbent on gardeners to take up this challenge.” – Paul Bonine – in ‘Gardening in the Pacific Northwest’ (2017; pg. 282)
7. **Characteristics of MCM Plants:**
 - a. Look for plants with appropriate root structure (not shallow or fibrous) but
 - i. Double Roots
 - ii. Tap Roots
 - iii. Sinuous Roots
 - iv. Fleshy Roots (esp. geophytes like corms, bulbs, tubers, or rhizomes)
 - b. Look for plants with:
 - i. smaller leaves vs large leaves
 - ii. needle shaped leaves or plants that hold their leaves on edge to the sun
 - iii. gray or silver colored leaves that shade the plant and protect from solar gain
 - iv. overlapping scale-like leaves
 - v. leaves that are spines or fleshy
 - vi. ‘Sclerophyllous’ (i.e. hard leaved) plants
 - c. Look for aromatic plants with essential oils – the evaporation of the oil cools the plant and protects it
 - d. Look for low, scrubby, hummock formed plants (e.g. lavender or santolina)

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- e. Consider the use of cactus & succulents – provide them good drainage and a sunny location!
- f. Consider plants whose flowers are saturated colors

8. Do your research: there’s 45,000 plant species in the world’s Mediterranean Climates.

- a. Look for where the plant is *native*
 - i. greater Mediterranean (including Asia minor and the Middle East), North Africa, South Africa, Australia, Southern California
 - ii. look for plants that meet the characteristic criteria
 - iii. certainly consider the use of our complement of PNW native plants that are adapted to dry summers (species: Arbutus, Arctostaphylos, Mahonia, Philadelphus, Holodiscus, etc.)
 - iv. Consider other climate-adapted species that can thrive in a MCM (e.g. plants from Central Asia & China vs those say from Japan or other temperate climates)

9. MCM Plant Selection Caveats:

- a. Caveat #1: Selections should be cold-hardy, drought resistant, able to handle dry summers, wet winters, and be *non-invasive*
- b. Caveat #2: know your soils – MCM plants like well-drained soils (gravely, sandy, rocky) and more often than not, you don’t need to amend your soil with lots of organic matter – again, where they’re native usually has poor but well draining soil

10. Mediterranean Garden Design Characteristics:

- a. **Style** – usually informal, but MCM plants can be used in any style of design – don’t limit yourself
- b. **Stone** - most MCMs are very rocky and stony and this is reflected in their gardens. Additionally, because most MCM plants have small leaves, stone provides a nice textural as well as temporal contrast
- c. **Containers** – when most MCM plants have gone dormant for the summer, containers can hold limited other colorful plants that use more water. Or, put into containers those plants that need exceptional drainage in our wet winters
- d. **Turf** – because most MCMs don’t have a lot of precipitation their gardens have minimal turf or turf areas that are *carefully right-sized*. Turf needs a lot of water in the summer
- e. **Shade** – because most MCMs don’t have enough precipitation to grow big trees, their gardens tend to have man-made shade: pergolas and arbors. We have trees, but arbors and pergolas have romance!
- f. **Water** – precisely because most MCMs don’t have a lot of precipitation, they almost always have a water feature to help with sound and cooling. Even a token water feature is useful.
- g. **Aromatic Plants** – as a consequence of plant selection, most MCM gardens are full of aromatic plants

11. Conclusion: “What a dry garden represents is the future of landscaping in the West.”-Paul Bonine (*Gardening in the Pacific Northwest* by Bonine & Campion; pg 282) Consider: WWJD?!

12. Resources For Your Consideration:

- a. *Timber Press Guide to Gardening in the Pacific Northwest* by Carol Hall and Norman Hall (2008)
- b. *Gardening in the Pacific Northwest* by Paul Bonine & Amy Campion (2017)
- c. *Gardening with Native Plants of the Pacific Northwest* by Arthur Kruckerberg & Linda Chalker-Scott (2019)
- d. *Waterwise Plants for Sustainable Gardens* by Lauren Springer Ogden & Scott Ogden (2011)
- e. *Pretty Tough Plants: 135 Resilient, Water-Smart Choices for a Beautiful Garden* by Plant Select (2017)
- f. *The Gardener’s Guide to Weather & Climate* by Michael Allaby (2015)
- g. *Sun-Drenched Gardens: The Mediterranean Style* by Jan Smithen (2002)
- h. *The Dry Gardening Handbook: Plants and Practices for a Changing Climate* by Oliver Filippi (2007)
- i. *Mediterranean Landscape Design: Vernacular Contemporary* by Louisa Jones (2012)