



COASTAL CALIFORNIA VITICULTURE: FOCUS ON RUSSIAN RIVER AND SONOMA (MARIN) COAST

- 1) General
 - a. Sonoma County – approximately 1 million acres total, 60,000 planted to grapes; 11 AVAs, 4 of them—Russian River, Green Valley, Sonoma Coast and Carneros (with much overlap of their boundaries)—are considered cold coastal. These 4 include approximately 12,000 planted acres.
 - b. Marin County –approximately 100 planted acres, all cold coastal.
 - c. Greatly convoluted topography, for varied, small vineyards of unique fruit characteristics and personality.
- 2) Climate factors – the overwhelming factor is the amount and nature of maritime (fog) influence on a particular site. This is dictated by:
 - a. Proximity to the Ocean/Bay.
 - b. Topography between water and vineyard site (conduits/barriers with respect to fog and cold air intrusion).
 - c. Water temperature (ocean water is colder than bay water, and the ocean gets cooler to the north, with Monterey Bay being a break point).
 - d. Elevation – lower areas hold fog longer; over approximately 1,000 ft. you are generally above marine layer.
 - e. Aspect on the slope – the inland side of coastal hills is always warmer.
- 3) Soil factors
 - a. Origins – volcanic, ocean floor, fractured rock.
 - b. Physical structure – nutrient content, permeability and water holding capacity (often dictated by clay content), depth, subsoil structure.
 - c. High quality fruit comes from well-drained soils with balanced nutrients (high nitrogen is not good) and moderate water holding capacity.
- 4) Generalized climate and soil effects
 - a. Cooler spots produce higher acid, more red fruit characteristics in reds, more citrus in whites; brighter (but not necessarily more intense) color in reds, more moderate alcohol, longer hang time for frequently greater fruit concentration, more fear and stress in growers.
 - b. Warmer spots produce more tropical and ripe apple characteristics in whites, blacker fruit characteristics in reds, often deeper, but not as bright color, more reliable harvests, lower acids, higher alcohols.
 - c. Shallow, drier soils tend to give higher tannins, earlier harvest, high intensity, often more mineral characteristics. Deeper soils of some valley floors can give the brightest berry, cherry flavors in the reds and focused lime in the Chards.
 - d. This cold neighborhood, with all its little nooks and crannies, is best characterized by reds of bright, berry fruit, substantial tannins, balanced acidity and great ageability; and whites with a vibrant citrus core, focused fruit, balanced acidity and alcohol, and longevity.
- 5) Favored Varieties
 - a. Pinot Noir – likes cold, east facing hills when further inland (the east face is away from the sun in heat of late fall days), south and protected west faces nearer to the coast; shallow low vigor soils, low crop, good karma, growers with other means of income.
 - b. Chardonnay – most forgiving – grows well in many places but brings out the unique character of any site; likes cold foggy spots with very cold nights for high acid and long hang time. Old, cold valley Chards are often our last grapes picked.
 - c. Zinfandel – likes the warmer areas of our appellation; very well drained soils, hillsides. Needs low crop to ripen well in our area, but offers unique, crystalline fruit focus, brightness and great acid/alcohol balance in these cool spots.
 - d. Syrah – likes our warmer, sunny hillsides, southern exposures. Will be harvested about a month later than Pinot Noir in the same site. Coastal California Syrah provides bright berry fruit, vibrant acidity, lush tannins and moderate alcohol not often associated with California Syrahs.
- 6) Sonoma Coast Appellation
 - a. Extremely large (over 500,000 acres) and diverse (some would say far too much so). Ranges from the Mendocino border, along the coast, takes in almost all of the Russian River Appellation, Petaluma and Lakeville, the southern part of Sonoma Valley, and Sonoma Carneros. Originally drawn to point out the coolest areas of the county.

DUTTON *Goldfield*

- b. Regions within the Sonoma Coast Appellation
 - i. The thin western strip (which some call the “true Sonoma Coast”) comprises the first two ridges from the Pacific, from the Mendocino border to the Marin border. The soil ranges from volcanic to Gold Ridge. Vineyards are high on hills ranging upwards of 1,000 ft in elevation. Lots of rain in the winter, dry and warm in the summer. Frequently above the fog level. Generally cooler (and lower) as you go south.
 - ii. Petaluma and Lakeville vineyards tend to have deeper soils (around Lakeville, quite thick and dark clay), lots of flat bottomland, and are quite cool since they are in the direct line of the Petaluma wind gap, though can be quite a way inland.
 - iii. The southeastern portion is essentially Sonoma Carneros, though it extends further north into Sonoma Valley: the topography is rolling hills, some clay soils; primary coastal influence is the San Francisco Bay.
 - iv. South Sebastopol – rolling hills, quite cool, Gold Ridge Soil, essentially a southern continuation of the Green Valley area of Russian River, and most likely soon to be part of the RRV appellation.
- 7) Russian River Valley appellation
 - a. Established 1983. Like the rest of the California coast, it is the interplay between the cold marine air coming off the Pacific, and the coastal hills that partially block that air, which creates both the uniqueness of the appellation and the significant climatological diversity within it.
 - b. The primary channel for cold fog in the RRV is not actually the river, but the Petaluma Wind Gap at the southwest corner of the appellation. The Petaluma Wind Gap (or Estero Gap) is a break in the coastal hills running from Bodega Bay toward Sebastopol, about ten miles south of the mouth of the river. Generally, the further south, west, and lower in elevation you get, the greater the fog influence. In just a 2-mile radius, there can easily be a month difference in harvest date for the same variety due to variations in these climatic factors.
 - c. Geographical areas within the Russian River (only Green Valley is an actual AVA)
 - i. The Middle Reach - the north-south stretch along the Russian River between Forestville and Healdsburg. The Middle Reach starts just upstream of a bend in the river, which goes around a ridge, called Guilder Ridge. The flow of fog is somewhat slowed here, and the area gets warmer as you head north. It is also warmer as you go up the hills on either side of the river, as it is a long way west to the coast at this point. Some of the best vineyards are in very gravelly soil right along the river.
 - ii. The Santa Rosa Plain - encompasses the gently rolling country of the eastern swath of the appellation. This area also gets warmer as you go north, while its southern end, though fairly inland, can be quite cool as the coastal fog which has been broken up by the hills to the west reforms over the plain.
 - iii. Laguna Ridge - the north-south row of hills on the western edge of the Santa Rosa Plain, to the west of the Laguna de Santa Rosa. This ridge has areas of red clay soils that give unique character to some of its vineyards.
 - iv. Green Valley - an official AVA in its own right since 1983, the Green Valley is delineated by Laguna Ridge on the east, Stoetz (or Occidental) Ridge to the west, the river to the north, and the Petaluma Wind Gap to the south. The bottom of the Green Valley is extremely cool as it is the first area to get the fog in the evening, and the last to lose it in the mornings. Up the hills to the west, harvest comes quite a bit earlier as the fog burns sooner each day, and the soils are shallower.
 - v. The fifth, and until now very sparsely planted area, is the western edge of the appellation, essentially from Freestone to Guerneville. This is an extremely varied area of complex ridges, redwood groves and some river bottom. The Freestone area is seeing a lot of planting currently. It is very cool, as it is just north of the wind gap and open to the ocean, but still low enough (about 400 to 800 ft.) to generally be in the marine layer.

Clearly, there is great diversity throughout the viticultural regions of the Sonoma and Marin Coast, but the unifying factor is the cool weather and fog influence. This gives us wines of bright acidity, solid structure, good longevity, and generally moderate alcohols. As winegrowers, we try hard to characterize and utilize the unique personalities within our diverse appellation. We are clearly only just beginning.