COMMUNITY ALLIANCE WITH FAMILY FARMERS

Wolff Vineyard
Edna Valley
Dry-Farming Case Study
October 2012

Jean-Pierre Wolff is the owner and vintner at Wolff Vineyards located in the Edna Valley. He currently has 55 acres of dry-farmed Chardonnay and additional acres of irrigated Pinot Noir, Syrah, Petite Syrah, and Riesling. The Chardonnay vines are 35 years old and were converted from an irrigated to a dry-farmed vineyard. The entire vineyard is certified Sustainability in Practice (SIP) by the Central Coast Vineyard Team.

His Vineyard

When Wolff purchased the vineyard 12 years ago, the Chardonnay was conventionally irrigated. He was told that if he took it off irrigation, the vines would die within three years; however, with 22.5" of rain a year on average, Wolff thought he could dry farm this block.

The Chardonnay vineyard is located at the base of the hillsides containing Wolff's other vineyards. The Chardonnay is planted on its own rootstock with a spacing of 12X8 feet. The vines are trellised and cane pruned, yielding 3 ¾ tons per acre in a good year, and between 2 ½ to 3 tons per acre in a stressed year. The soils are sandy loam and clay loam.

To Convert the Vineyard

Wolff did not simply turn the water off on his Chardonnay block. He first drought proofed the vines by deep ripping the soils around the base of the vine every year to remove the shallow surface roots. This process forced the vines to grow deeper roots to seek out water sources and sustain the vine without irrigation.

Wolff also harvested the water from his land. He used the topography of the hillsides and location of the Chardonnay block to build infrastructure to channel the water into the dry-farmed vineyard. He did this using culverts and ditches to direct the water. He also sloped the road along the outer edge of the vineyard inward to minimize water runoff from the vineyard. This helped to hold the water in the Chardonnay vineyard so it could infiltrate into the soil profile instead of running off the surface. The road barrier also reduces sediment runoff into an adjacent stream, protecting stream flows and fish habitat.

Wolff also re-trellised and re-trained his vines to reduce their energy and water usage. When he purchased the land, the Chardonnay vines were spur pruned and are now cane pruned. He also reduced canopy cover, which has reduced vine water usage. This also allows him to expose the fruit to the sun light as he wants.

Cultivation and Management

Wolff does not disk the rows of the Chardonnay vines, as he believes this interrupts the soil microbes and health of the soils. He uses grasses and cover crops to promote capillary action, helping the water move through the soils. To cultivate, he alternates mowing one row and using a keyline plow on the other row in the spring. The keyline plow opens up and aerates the soils. He pulls weeds around the base of the vines with shovels.

In the fall, Wolff applies 1.5 ton per acre of gypsum and compost. The gypsum maintains the pH of the soils and increases water infiltration into the soil. The compost is spread around the base of the vines. Wolff also uses fertigation on the old Chardonnay vines as needed.

Wolff Old Vine Chardonnay
Wolff produces an estate old vine dry-farmed Chardonnay that is sold directly through his tasting room and wine club. He also sells his grapes to other wineries and has long-term contracts for his grapes. Wolff receives about 20% more per ton for his dry-farmed Chardonnay grapes than for his other varieties.

Advice for Dry Farmers
Wolff's advice for anyone wanting to dry farm wine grapes is to consider rootstock, spacing, trellising, location, soil profile, and water availability before planting the vineyard. Site selection based on the geography, topography, and the timing and frequency of rain is extremely important as well; winter rains are key to filling soils with moisture, and events like coastal fog can help vines be productive through hot and dry summers.

Wolff also states that people may have to adjust their yield expectations. But, with dry farming, high quality grapes can be grown, and the economic benefit that can be realized from such grapes may be greater than any yield loss.