

Harrison Vineyard

Dry Farming to Control Soil Moisture and Vine Vigor Sonoma

Terry and Carolyn Harrison own a small farm in Sonoma. They currently grow wheat and have a mixed fruit orchard, but from the 1970s to early 2000s, they were wine grape growers.

Harrison Vineyard was started in 1974. The Harrisons planted 6.5 acres of grapevines. The majority of which was Sauvignon Blanc, but they also had 100 vines of Chardonnay, Gewurztraminer, and Pinot Noir. And the last three varietals were really for home production. Back in the mid-1970s, Harrison Vineyard represented 5% of all the Sauvignon Blanc in Sonoma. They were also the second vineyard to be certified organic on the North Coast in 1982.

When the vineyard was planted, the Harrisons were living in Berkeley and driving up to the vineyard during the growing season to tend the vines. They had put in drip lines during planting, and the vineyard was minimally irrigated, only when they traveled up from Berkeley. After three years, they removed the irrigation system and dry farmed the vineyard.

The Harrisons found that they did not need to irrigate their vines. The vineyard was located on an alluvial plane near an intermittent creek on clay loam soils. Being located near the creek and with soils with incredible water holding capacity, the Harrisons had more water in the soils than their vines needed to produce high quality wine grapes. By 1977, the drip lines were removed.

Sauvignon Blanc is a vigorous grape varietal. The Harrisons had their vines on AXR1 rootstock and a large spacing, 8 x 12 feet. Because of the larger spacing, amount of water in the soils, and the vigorous winegrape varietal, dry farming was an obvious choice for Harrison Vineyards, and their cultivation practices actually included methods to reduce the soil moisture content.

Cultivation and Management

At first, the Harrisons planted a cover crop in the fall and then disked the mowed crop into the soils in the spring. But the vine growth was too vigorous; some years, the canes of the vines would meet across the 12-foot wide rows. The excess vegetative vigor was reducing the vines crop production, so they began planting a permanent cover crop, and this competition for water helped control the vigor of the vines and suppress vegetative growth.

The permanent cover crop was mowed two or three times in a season by making two tractor passes down the rows, and an additional pass underneath the vines each time. The Harrisons experimented with different blends of cover crops and flowers to provide habitat for the beneficial insects. Perennial weeds would eventually infiltrate the cover crop mix. Every five years or so, the cover crop would be mowed, disked into the soils, and a new crop seeded. The most successful cover crop was Bird's Foot Trefoil.

To further control the vegetative vigor, they pruned the more vigorous vines back to five canes. One month before harvest, an additional cane would be removed leaving the vine with four fruiting canes and concentrating the vine's energy into the remaining berries. The vines were cane pruned frits on a two-wire trellis, then trained out to a cross arm trellis with the fruiting canes on four wires.

The Harrisons crop load varied between about 2.5 and 6 tons an acre. Their goal was around 3.5 to 4 tons an acre; the year they had 6 tons an acre, the vineyard was over cropped. They quickly developed relationships with local wineries, selling their Sauvignon Blanc grapes to be produced with the Harrison Vineyard Designation. One long-term relationship was with Russian River Vineyards in Forestville, CA, and a number of medals were given to the Sauvignon Blanc wine made from their grapes.