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Bucklin Old Hill Ranch Dry Farming Ancient Vines Sonoma Valley



Will Bucklin's Old Hill Ranch was established in 1885. The ancient vineyard is a field blend of predominately Zinfandel. The 14-acre section of his entire vineyard is dry farmed.

Will Bucklin's Old Hill Ranch is the oldest vineyard in Sonoma Valley. The ranch was established in 1885 and many of the original vines are still in production. In 2012, Bucklin had 30 acres of vines in production. Fourteen acres of his vineyard is comprised of an ancient field blend and is completely dry farmed. This vineyard has always been dry farmed, but Bucklin had to make the decision to continue to dry farm this vineyard. When Bucklin took over the ranch over 30 years ago, the ancient vineyard was only yielding $\frac{1}{4}$ - $\frac{1}{2}$ tons per acre. The soil was compacted and low on nutrients, stifling the production of the vines. Bucklin was told by others that he should either irrigate the old vines or simply pull them out- that it was too difficult to increase the yields and make the vines healthy again. But Bucklin disagreed, and after years of adding compost and cultivating the soils, he has reversed the soil compaction, improved soil health, and increased vine productivity. The ancient vines now yield an average of 2 tons an acre.

The decision to keep dry farming the ancient vineyard was made in part to preserve the character and history of the vineyard and the wine, but also because, as Bucklin states, dry farming is an easier way for him to grow grapes. Bucklin has newer blocks of vines, of which some are irrigated and others not. One day, he says, it will all be dry farmed. Bucklin comments that his farming experience would be far easier if he could make his newer vineyards like his older dry-farmed blocks. Dry-farming produces vines that are resilient and self sufficient.

Bucklin recalls a two day heat spell of nearly 118 ° F starting on July 18th of 2005. This heat is outside of the normal temperature range for Sonoma Valley. He was worried about his dry-farmed vines; they were already a little stressed from the dry time of year. After the heat spell, the vineyard looked terrible. The leaves hung like tissue paper and lost color, turning yellow. But a week later, although the vines had lost some fruit that shriveled and dried in the heat, the dry-farmed vines quickly recovered, losing only 5% of their fruit. In contrast, the irrigated vines, which he watered during the heat event, seemed to be unstressed at the time, but ended up losing 30% of their fruit. And now he knows which vines to worry about.

That year, Bucklin saw two different systems at play. When stress was applied to the old vines, the vines simply shut down and conserved energy. Conversely, the irrigated vines attempted to power through and try harder when stressed. Bucklin is quick to say that one system is not necessarily better than the other, but they do represent entirely different approaches.

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<http://www.buckzin.com/index.html>

The Vineyards

The Ancient Vineyard:

- 14 acres of vines, some were planted in 1885
- Completely dry farmed
- Following the planting norms of the time, about 1/3 of the vineyard is comprised of a mix of red varieties, such as Petite Syrah, Grenache, Alicante Bouschet, and Tempranillo. The rest of the vineyard is Zinfandel.
- The vines are all head trained
- Vines are spaced at 5 x 10 feet

The Younger Vineyards:

- A ten-acre mixed red field blend planted in 1998
- A six-acre Cabernet Sauvignon block planted in 1983
- Bucklin is also continually planting new ½-acre blocks of vines
- Uses St. George rootstock
- Vines are wire trellised



CAFF Workshop at Bucklin Old Hill Ranch in 2010

Cultivation and Old Vine Maintenance:

Bucklin's ancient vines present unique management challenges. Every vine ages differently, disease susceptibility increases, and sometimes the vines simply die. Bucklin stresses the need for healthy soils and nutrients to support the old vines.

Bucklin plants a cover crop in the fall and flail mows the cover crop in the spring. He then spades the organic matter into the soil and spreads 3 to 5 tons of compost per acre as well as calcium phosphate. His soils had low phosphates, so the addition of calcium phosphate may have been helpful in terms of increasing yields.

Once he spades the rows, Bucklin tries not to drive on the rows for about a month. This allows the green fluffy dirt to retain air and the compost. About a month after spading, he will make one or two passes with a harrow to finish off the surface of the rows.

Converting Vineyards

Bucklin's goal is to dry farm all of his vineyards. Even now, he minimally irrigates his newer blocks, having only started to irrigate on August 1st of 2012. This is in contrast to other vineyard managers in his area, who may start irrigating in May. He is pretty sure he could simply turn off the irrigation and the vines would live, but he would experience a production loss. For this reason, he has been slowly weaning the vines off of irrigation.



Head trained Zinfandel at Bucklin Old Hill Ranch

Planting New Vines and Vineyards

When planting new vineyard blocks and replacement vines, Bucklin will use St. George rootstock and cuttings from his old vines. Even if the vineyard or vine will eventually be dry farmed, he irrigates the vines for the first year. He grafts the cutting on to the rootstock in the fall.

Bucklin will drop the fruit from the vine each year of early production. This allows the vine to focus on root system growth, instead of producing berries. Bucklin is still experimenting with the number of production years to drop the fruit. With his dry-farmed vines, he may want to remove the fruit through to the third year of production and harvest fruit for wine during the fourth leaf. Whereas with the irrigated blocks, he is typically using the fruit for wine in the third year.

If he is planting new vines in the old dry-farmed vineyard, Bucklin will break up the soil around where the new vine will be planted. This is to remove the roots from the older vines to give the new vine space to grow and find water. In the spring, he will plant the rootstock and water the vine by placing a five-gallon bucket with a hole in the bottom over the top of the vine. Bucklin pays close attention to these new vines; it is especially important to drop the fruit for the first few years to help the vine establish itself while surrounded by the root competition from the other vines.

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