Dry Farming to Produce Quality Winegrapes
AmByth Estate, Templeton, CA

AmByth Estate is a dry farmed vineyard on top of a hill in Templeton, California. During a recent field day to discuss dry-farming techniques, there was a common exclamation among the participants: “I didn’t know you could dry farm this far east!” And there was good reason for this shock. AmByth Estate is located in an area that is supposed to receive around 18 inches of annual rain, but this year they received about 3 inches and last year only 9 inches. Even worse, it is hot. The dry and hot summers see frequent temperature spikes of over 100°F. But despite this climate, Phillip and Mary Hart have 20 acres boasting 10 varieties of grapevines and 8 types of olive trees—all dry farmed. They have an additional 22 acres with oak trees, gardens, and beehives. So how and why did the Harts plant a vineyard in 2004 with no irrigation in such a place?

There are a few factors that led to the development of AmByth Estate as it is today. First, the most practical factor: when the Harts dug for water on their new property in Templeton, they came up short. They had enough water to support the house, but even if they wanted to irrigate grapevines, they did not have the water to do so. However, they knew they could set up a vineyard here without water—first, because their soils are calcareous clay with great water holding capacity, and second, because of Bella Luna.

Bella Luna is a dry farmed vineyard and winery just down the hill from AmByth Estate owned by Sherman Smoot and Kevin Healey. While tasting the wines in the Paso Robles area, the Harts met Sherman, tried his wines, and were inspired by the quality of his product and his farming techniques. From Bella Luna, the Harts knew not only that dry farming was a viable option in their area, but that they could produce quality grapes and wines with these techniques. When it came to designing and planting AmByth Estate, the Harts worked closely with Bella Luna and took advantage of their years of experience.

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AmByth Estate:
The Facts

- Owned by Phillip and Mary Hart
- First planted in 2004
- 20 acres of vines and olive trees. 22 acres of oak trees, gardens, and animals.
- Grow 10 winegrape varietals: Grenache, Mourvèdre, Syrah, Counoise, Tempranillo, Sangiovese, Viognier, Marsanne, Roussanne, and Grenache Blanc
- Vines are head trained
- Vine Spacing is 10 by 10 or 12 by 12 feet
- Vines are on 110R, 1103P, or their own rootstocks
- Demeter Certified Biodynamic
- Soils are calcareous clay
- Working to increased yields to 2 tons per acre
- For more information: www.ambythestate.com
There are also philosophical and economic reasons why Phillip and Mary dry farm. Dry farming is a part of the larger farming and winemaking system at AmByth Estate. They are certified organic and Demeter Certified Biodynamic. They also believe in natural winemaking and minimal intervention, and dry farming is an important part of this equation; it produces grapes of greater intensity and flavors that improve the quality of the wine. The wine is produced with native yeasts, aged in neutral oak or terra cotta pots, and produced with no sulfites. Phillip indicates that all of this, including dry farming, allows the true flavors of the grapes of AmByth Estate to be expressed in the wines.

Even though they have been farming since 2004, Phillip is quick to say that they have not yet found the official formula for dry farming AmByth Estate. They currently grow 10 grape varietals: Grenache, Mourvèdre, Syrah, Counoise, Tempranillo, Sangiovese, Viognier, Marsanne, Roussanne, and Grenache Blanc. The vines are all head trained, as this provides natural shade for the grape clusters. The vines are established without water and are spaced at either 10 by 10 feet or 12 by 12 feet. This larger spacing allows the vines to search out the water that they need for growth and to produce more fruit per vine. The spacing at the top of the hill is the largest to allow for tractor sliding as they cultivate between the vines on the slope.

Techniques for vineyard cultivation have developed since AmByth Estate was started. The Hart’s often wonder if they are doing the right thing or using the best techniques. They believe in cultivating based on need and observation. The goal is to create and support healthy soils by disturbing the soils through tillage as little as possible. If necessary, they disk twice a year. They may disk once in the spring and then let the native weeds and grasses grow, mowing down the grasses through the growing season if needed. Phillip indicates that the root systems of the vines are so deep that there is no competition between the native grasses and the vines for the water in the soils. They may disk the soils a second time in the fall after harvest and then spread the Biodynamic composts. But year-to-year this procedure will vary, and the Harts are trying to reduce tillage as much as possible to improve soil organic matter. For example, Mary indicated that in 2012, they did not disk in the spring, as they did not think the soils needed it.

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www.caff.org/programs/dryfarm/
agwaterstewards.org/index.php/practices/dry_farming/
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Phillip says that AmByth Estate has been a learning experience for them both, even down to aspects such as rootstock. Many of the vines are planted on 110R or 1103P, but as they have needed to replace vines, the Harts have been using the vine’s own rootstock. Currently, around 1/3 of the vineyard is on its own root. Phillip says that he finds these vines easier to farm, although he admits this is opening them up to the risk of phylloxera.

Frost is a concern at AmByth Estate. The Harts use double pruning techniques for frost protection. This practice involves leaving longer canes on the vines. When the frost hits, these canes protect the smaller shoots. After the threat of frost is over, they prune the vine back to two buds.

The yield goal at AmByth Estate is 2 tons an acre. Unfortunately, they have not quite reached this yet, and Phillip does think that dry farming contributes to the lower yields. But the quality of the fruit and the system and strength they see at work in the vineyard balances out their yields. Phillip recalls a three day heat wave of 115°F or hotter. Every day he worried about the grapes, as he saw the berries shrivel. But at night, as the temperatures came back down, the berries would plump back up. After the heat wave ended, they had only lost around 5% of the fruit. It is at times like that, when the Harts are reminded of the strength and resiliency of their farming system, that they know why they dry farm.