



Cain Vineyard, Spring Mountain, circa 2009; photograph by Olaf Beckmann

Wine Growing

Take sunlight, add water, and you have wine. It is so simple, yet, at the same time, it is infinitely complex. As everyone knows, it all begins in the vineyard. The beauty and fascination that wine can offer are integral to its beginnings in nature. Vineyard work is one of the most highly developed forms of interplay between human beings and nature. Undoubtedly, the most compelling wines are born in the vineyard. And not just any vineyard, but always a specific vineyard: the result of years of cultivation and discovery. Our quest at Cain, and that of all of our true friends in wine, must be to seek out the sources of individuality of each vineyard with which we work.

The Cain Vineyard

Varying in elevation from 1,400 to 2,100 feet (450–675 meters), our vineyard clings to the sides of a bowl, sited spectacularly, and improbably, along the crest of the Mayacamas Range. The vineyard overlooks the Napa Valley and Saint Helena from the most south-western corner of the Spring Mountain District. Here, the soils are almost exclusively of sedimentary (as opposed to volcanic) origin. Formed from decaying sandstone and shale, they contain significant amounts of clay, which holds on to water and nutrients, releasing them only very slowly. These soils contain little potassium and significant amounts of calcium and magnesium, resulting in low fertility.

The slopes tend to be fairly steep, so the soils are thin and water-holding capacity is limited, and most of the rainfall goes to run-off, down into the valley. The exposures can be significant, ranging through all the points of the compass, giving the extraordinary diversity that contributes to the complexity of the

Cain Five. With our five grape varieties and the natural variation within our vineyard, harvest usually lasts about six weeks. The first grapes to ripen are usually east-facing Merlot, and the last picked are often some northwest-facing Cabernet Franc.

The weather up here is completely different from that down in the valley. As one might expect, it's generally cooler throughout most of the year. For example, when it snows anywhere in Napa county, it snows at Cain—which it does nearly every year. But, even though it's generally cooler up at Cain, the mornings can be warmer than in St. Helena. Especially when there's no wind and it's a clear, cloudless night sky, the coldest air will settle onto the floor of the valley and the warmer air will rise. So, even though we're more likely to have snow in the winter, we're less likely to experience the spring frosts of the valley floor. During the crucial months of August and September, when our grapes are developing all of their aromas and flavors, we will often awaken to find the Napa Valley filled with a blanket of clouds, while our vines are "flying" above the clouds in the light of the morning sun.

One other notable feature of the Cain Vineyard is that it consists of small areas surrounded by forest. We suspect that the trees—oak, madrone, bay laurel, and Douglas fir—contribute to the unique aromatic signature of the Cain Five. Just to stand on our mountain and to inhale the scented air reminds one that this place is like no other—and you can taste it in the wine.

Following the harvest of 1995, we began the lengthy task of selectively replanting our vineyard, piece by piece, lest it would ultimately fail due to phylloxera. As of the end of 2009, we had 95% of our vines on roots that can live with phylloxera. In the course of the replanting, we greatly increased the vine density, changed the pruning and trellising methods, experimented with many new (new to this site) rootstocks and varietal selections, as well as improved our drainage and irrigation systems. As arduous as the original vineyard development had to have been, at that point it seemed that we had put just as much work into its redevelopment. While in every case we always thought that we were improving our vineyard, in some cases, through our replanting, we may have learned what not to do in the Cain Vineyard. We see our vineyard in constant evolution.

Replanting After the Glass Fire

Though many vines were lost to the 2020 Glass Fire, enough stalwart survivors persisted to remind us why we tend the vineyard on this difficult mountain! We have a lot of baby vines in the ground now— Ashley Anderson-Bennett, Cain's vineyard manager, and her team have planted tens of thousands of vines—and our focus is on developing a really extensive root system rather than producing grapes right away. This third major replanting of our vineyards has given us the opportunity to "interview" many grape varietals and clones to see if they are a good fit with the terrain of our Spring Mountain site. This is a case of more than recovery because it gives us a chance to reimagine the vineyard as we've known it, but without exactly recreating what it was. This effort represents a rebirth of all that is Cain, planting the fruit that will go into our classic blend and be recognizable to all who know Cain.

Our Growers

Since 1994, we have sought growers with promising sites in the Napa Valley who share our commitment to learning how to work with their vines to ripen the best possible fruit and to create the most satisfying wines. Today, we are still working with some of the same vines that we first got to know in the mid-1990s. In many cases, we have been working in the same vineyard rows for more than ten years now. All the same, almost every year, we say goodbye to something and begin to get to know a new patch of vines.

The site is the determining factor, but, without the care and attention of the grower, nothing can be achieved.

The Key Factors

Soil: The space in which the vine roots live is unseen and inaccessible, and yet it is the most fundamental determining factor in our wines. Because the soil can be seen only when we dig a hole (a "soil pit"), in which some of the roots are destroyed, the soil remains the most mysterious aspect of viticulture. For us at Cain, it is the area of greatest interest. This much we know: The soil is far more than an inert support for the vines. It acts like a sponge, selectively releasing water and nutrients during the course of the growing season. A good vineyard soil holds a significant reserve, but it maintains a scarce availability. More importantly, a good vineyard soil is alive. Bacteria, fungi, nematodes, worms, and bugs all contribute to the complex ecology of the soil, and the vine roots themselves play an active role in engaging and creating this ecology. Thus, while we may know the soil chemistry of a site, we will need many years of patient farming to achieve the optimum balance between a vine and its soil. Most importantly, without soil, we have nothing; therefore, development and preservation of the health of the soil and the preservation of the soil itself (think erosion control) are fundamental.

Exposure: Wherever there is a slope or natural air drainage, the exposure will determine how the heat of the sun is captured and retained. This, in turn, will affect how the vines grow and how the grapes ripen.

Climate: There has been much ado, in the New World, of the effects of climate on the quality of wine grapes. And it's true that the best wines come from grapes that ripen naturally and progressively under moderate conditions—generally near the natural end of their growing cycle. If it's too hot, sugar may accumulate, acid may fall, and color may disappear before other qualities (for example: aroma or tannin) reach ripeness. If it's too cold, the grapes may hang forever, struggle to get ripe, or not even achieve ripeness at all. Each variety has its own requirements.

Water: Fine wines develop under conditions where water is a limiting factor. Some is almost always available—enough to support vine growth in the spring, and enough to allow leaf transpiration during the summer, but not too much, so that the vine can stop growing and ripen its fruit. In the north coast, although it almost never rains in the summer, a vine obtains most of its water from natural soil reserves accumulated during the winter rains. Selective irrigation during the summer and fall is applied as a supplement to meet the vine's needs to ripen the best quality of fruit.

Viticulture: During the past twenty years, much has been learned (or relearned) about classical viticultural methods. Today, a great deal of attention is given to the choice of rootstock, variety, selection and clone, vine spacing, row direction, vine height, trellising scheme, cover crop, soil nutrition, irrigation methodology, and so on. Every detail makes a difference; and the cumulative effect of many of these choices can have a definitive impact on the ability to ripen grapes appropriately for making fine wine.