

## Winegrowing Philosophy

We believe great wines come from great sites, and in our hearts those vineyards are “star-fields,” places where grapes develop the optimal balance of aroma, flavor and texture. Discovering and managing these vineyards is our passion. Coaxing the full expression of vibrant fruit and flavor from the grapes is our obsession.

### It starts with mountain terrain

Our vines are planted on hillsides covered by rocky, volcanic shales, called Mariposa loams. Due to the abundant rainfall at Starfield (35”- 40”), minerals like Calcium and Magnesium are leached out of the root zone, and small amounts of silicic acid form in the presence of water, which all combine to make the soils acidic, ranging from 4.8 - 5.5 pH. This low pH restricts mineral transport into the vines – creating vine stress similar to that created by limestone in high pH soils around Paso Robles and Burgundy. That limits vine growth and vigor, and results in small berries with more intense varietal character, color and tannin -- perfect for winemaking.

### Impact of high altitude

El Dorado is the highest elevation AVA in California. Starfield is planted at 2,400 ft., and that elevation is a key to our wine quality. It affects our vineyard in three ways:

1. Temperate climate. Elevation cools the vineyard in the summer, making our high temperatures 8-10° cooler than the Sacramento Valley floor. Our daytime highs in July and August are typically around 88-92°F, providing temperate growing conditions that are ideal for Rhone, Italian and Spanish varieties.
2. Delayed ripening. Elevation delays the start of the growing season. Spring weather in El Dorado is cool and rainy, pushing budbreak 5-6 weeks later than in Napa and Sonoma, and delaying flowering and fruit maturity. That pushes the harvest later, when temperatures are more moderate, preserving acidity making the wines bright and aromatic.
3. High-energy sunlight. Elevation exposes the vines to more high energy sunlight, which thickens the grape skins, increasing flavor precursors, and enhancing the color and tannin structure of the wines. There’s 12-20% more UV light at the higher elevations of El Dorado, compared to most California coastal vineyards raising the levels of flavanols and fruity esters in the wines. The increased esters give El Dorado wines their vibrant fruit and floral characters.

### Vineyard layout is critical

We planted the vineyard in small blocks - about 1.4 acres per block. We have 22 small blocks that provide the best opportunity to ripen and harvest all the grapes at optimal maturity. Row orientation for most of the reds is 26° east of north, which assures all of the clusters are evenly protected from summer heat, and clusters on both sides of the trellis get equally ripe. Finally, we use an 18” crossarm, which allows the canes to serve as ‘sunbrellas’ which cools the clusters preserving the vibrant fruit character.

Each variety is planted to take advantage of slope, soil and microclimate. Grenache is at the top of the hill. Mourvedre is near the top, facing south. Syrah facing north. All our Rhone white varieties face east. Tempranillo faces north in the coolest part of the vineyard.

### Climate-Friendly Mediterranean Varieties

Knowing that climate change would impact our new El Dorado vineyards, we planted only Mediterranean varieties. We selected red grapes with distinctive varietal flavors, an ability to retain acidity, excellent color and tannin, and a proven ability to make great wine – based on wines that we had actually tasted\*\*\*. For white grapes we chose varieties with exceptional aromatics, an ability to retain acidity, and the same proven ability to make great wine. We tasted wines worldwide over many years that helped develop our approach to making distinctive wines.

Our final selections were influenced by the work of Glen McGourty, UCCE Viticulture and Plant Advisor in Mendocino, who

grew and made wine from most of these Mediterranean varieties over a period of years. A monthlong visit to the northern and southern Rhone, gave us the confidence to plant these varieties in El Dorado. They're relatively rare in California: Our white varieties represent just 2% of the total white winegrape acreage in California, while our red varieties represent just 16% of the red winegrape acreage.

### Many varieties for blending

We blend to achieve distinctive flavors, textures and aromas, using 16 varieties in the estate vineyard. Blending is ideal for Rhone varieties. We never blend exactly the same way, since each growing season is different. Having many varieties gives us the opportunity to create a broad range of wines each year. We're always exploring subtle changes to a blend. It's one reason that our rhone-style red blend, The Miner's Inch, has evolved to include some white grapes in most years for sake of aroma and texture.

### We spend our summers developing vine balance

Every year we work hard to get the vines in balance. We intensively shoot thin, leaf thin, cluster thin, and carefully prune all summer to make sure the canopy supports just the right amount of fruit, and the clusters are exposed to the right amount of sun. While we believe some vine stress creates higher quality fruit, we also make sure our vines are well-nourished and healthy post-harvest as fall approaches. Maintaining vine balance is one of the most intense and difficult parts of winegrowing.

### We focus on sustainability

After all the care taken to plant the vineyard, we make sure it's sustainable. To ensure the Starfield vineyards last decades, we farm with a permanent native cover crop, which we mow instead of disc, to preserve soil and provide habitat for native insects. We leave buffers of Ponderosa pine forest which provide habitat for Great northern owls, red-tailed hawks and peregrine falcons that help reduce populations of rodents. We've installed over 60 bluebird boxes around the vineyard, where western bluebirds and tree swallows nest.

We subscribe to Fish Friendly Farming principles, as much of the runoff from the vineyard flows into our ponds, where we maintain healthy stocks of bass, bluegill, Sacramento perch and western pond turtles. Since fish are sensitive to environmental damage, we vet all our cultural practices to make sure they are safe for fish.

Along all vineyard borders, we've planted barriers of native wild roses, service berries, mock orange, ceanothus, and many other plants and trees to ensure that water percolates through natural vegetation before entering local creeks.

