Part 1: Geological History of the Willamette Valley

Illustration: Willamette Valley soils map in the Reference section

Until about 12 million years ago, Western Oregon was on the floor of the Pacific Ocean. Before that, for 35 million years under the sea, it was slowly accumulating layers of marine sediment, the bedrock of the oldest soils in the Willamette Valley.

Starting about 15 million years ago, the pressure created along the coast by the collision of the Earth’s Pacific and North American Plates gradually pushed Western Oregon up out of the sea, creating the Coast Range and the intensely volcanic Cascade Mountains further inland. The Willamette Valley thus began as an ocean floor trapped between two emerging mountain ranges.

During this period of uprising, from about 15 million to 6 million years ago, rivers of lava erupting from volcanoes on the east side of the Cascades flowed down the Columbia Gorge towards the sea, covering the layers of marine sediment on the floor of the emerging Willamette Valley with layers of basalt.

The Willamette Valley continued to buckle and tilt under pressure from the ongoing coastal collisions, forming the interior hill chains that are typically tilted layers of volcanic basalt and sedimentary sandstone, such as the Dundee Hills and Eola Hills. (See Figure 2, page 3)

The next geologic activity to add to our soils was the creation of a layer of windblown silt (called Loess) on the northeast facing hills west of where Portland sits today. This started as long ago as a million years and may have continued until about 50 thousand years ago. The silts that were blown came from the valley floor in the area, but originally, they derived from the earlier basalts and sediments that had been severely weathered.

Much, much later, about 18 thousand to 15 thousand years ago, at the end of the last ice age, the melting of a glacial dam near the location of Missoula, Montana repeatedly flooded the Willamette Valley, creating a lake up to the 400-foot contour level, with only the tops of the two-tone hills sticking out, and leaving behind deep silts.

Thus we have in the Willamette Valley a complex series of soils with interesting and diverse origins:

**Marine sediments** that were laid down on the floor of the Pacific Ocean
   Examples: Willakenzie, Bellpine, Chuhulpim, Hazelair, Melbourne, Dupee

**Basalts** that originated as lava flows from eastern Oregon
   Examples: Jory, Nekia, Saum

**Windblown Loess**, silt blown up from the valley floor onto northeast-facing hillsides
   Example: Laurelwood

**Missoula Flood** deposits brought down the Columbia Gorge as the result of a repeatedly melting glacial dam
   Examples: Wapato, Woodburn, Willamette
Geology Provides the Landscape - rock layers tilted sideways

Mountains are held up by basalt.
Sandstone and siltstone underlie lower ridges and valleys.
Why are we focusing on Volcanic, Marine Sedimentary, and Windblown soils?

Much is said about how and why the Willamette Valley is the perfect place to grow Pinot noir. But once that most fundamental “long-term vineyard decision” has been made, it must be said that not every acre in the Willamette Valley is suitable for growing great Pinot noir. Indeed, most of the acres of the Willamette Valley are those deep, rich valley-floor soils brought to us all the way from Montana by the Missoula Floods at the end of the last ice age. These valley floor soils are paradise for a great diversity of crops, but they can spell trouble for Pinot noir. Pinot noir at low elevations is subject to frost damage in the spring, and in such deep soils it becomes overly vigorous, and unable to ripen its fruit properly.

In almost all cases, great Willamette Valley Pinot noir grows on rocky hillsides facing south or southeast, at least 200 feet above sea level and avoiding cooler hilltop microclimates over 800 feet. This is a common factor amongst the six new AVAs and other favorable hillside areas for viticulture within the Willamette Valley, regardless of soil types and weather patterns. As it turns out, sites that meet these qualifications are generally found on volcanic, marine sedimentary, or windblown soils, just because of the way the Valley was formed in the first place. Favorable sites with windblown soils are found especially on slopes in the northern part of the valley, especially in Washington County.

Relationship between soil types and AVAs

There is not a direct correlation between specific soil types and the six sub-appellations of the Willamette Valley, as can be clearly seen on the Willamette Valley AVA map in the Reference Section. Some have one predominant soil type; others have two or three different types. For most AVAs geographic/climatic factors are as important as soil type in defining the unique characteristics of the appellation.

- **Dundee Hills AVA** – mostly basaltic but marine sedimentary at the lower elevations on the western and northern slopes
- **Eola-Amity Hills AVA** - mostly basaltic but marine sedimentary at the lower elevations on the western and northern slopes
- **Chehalem Mountains AVA** - basaltic and marine sedimentary on the southern and western slopes; windblown on the northeastern slope
- **Yamhill-Carlton District AVA** - marine sedimentary predominant
- **Ribbon Ridge AVA** - entirely marine sedimentary
- **McMinnville AVA** - primarily marine sedimentary with some basalt and alluvium

More complete descriptions of each these six AVAs are provided at end of this section.
Part 2: The Soil Pits

“Soil is initially formed when decomposed organic material is encompassed into weathered mineral material at the earth’s surface. The climate, the organisms living in the soil, the type of parent material, the local topography and the amount of time the soil has been developing all influence the resulting soil characteristics.” Magill’s Survey of Science: Earth Science Series.

**Idealized Soil Profile**

<table>
<thead>
<tr>
<th>Soil Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizon: a layer of soil material that differs from the layers above or below in physical, chemical and biological properties.</td>
</tr>
<tr>
<td>Leaching: the dissolving out or removal of soluble materials from soil horizons by percolating water.</td>
</tr>
<tr>
<td>Sediment: rock fragments of various sizes, such as clay, silt, sand, gravel, cobbles.</td>
</tr>
<tr>
<td>Weathering: the mechanical disintegration and chemical decomposition of rocks and sediments by exposure to the elements. The parent material is broken down into many constituents such as soluble salts (leached away in older soils), clays, various oxides.</td>
</tr>
</tbody>
</table>

“O” Horizon: accumulation of fresh or partially decomposed organic material.

“A” Horizon: humus (decomposed organic material) mixed with mineral sediments.

“B” Horizon: zone of accumulation of materials transported down from higher horizons, e.g. minerals.

“C” Horizon: partially weathered parent material, unaffected by downward movement of material from above.

“D” Horizon: unweathered parent material, such as basalt, granite, sandstone or limestone.
Soil is more than just weathered rock. Whether you are looking at volcanic, marine sedimentary, or windblown soils, when you get to the “A” and “O” horizons (see figure above), soil is a living system, a community of organisms that convert nutrients from one form to another, and make them available to plants and to other soil organisms. The soil food web will be explored in more depth in the Farming for Quality workshop.

The focus of this workshop is on the physical characteristics of the soil. Soil pits at two different locations will compare the physical characteristics of soils derived from different parent rock material, and explore the effect of these characteristics on viticulture and wine style.

Questions to explore:

- How does the structure of the soil affect root penetration, drainage, moisture storage capacity, fertility, erodibility?
- Why do volcanic soils warm up later, hold moisture longer, ripen more slowly?
- Why do sedimentary soils warm up faster, dry out faster, ripen earlier?
- What are the specific farming characteristics of windblown soils?
- How does viticulture respond to these different soil characteristics?
- How does fruit development respond to these soil characteristics?

Part 3: Soil into Wine - taste the difference

The opportunity today is to try to taste whether differences in the soil type in which the grapes are grown produce distinct and consistent differences in the wines made from them. Obviously, stylistic winemaking variability, as well as vintage variation, make definitive judgments impossible with small samplings, but the thread of soils differences should still be of interest and will hopefully prompt you to further investigate the comparisons with your own tastings.

The selection process for this tasting started with a request to all 2012 OPC wineries to submit samples of Pinot noir wines made from a single soil type, either volcanic, marine sedimentary, or windblown soils (the most common soil types in Willamette Valley vineyards). The request indicated an obvious pre-disposition on the part of the workshop panelists, specifying:

Pinot noir wines from Volcanic soils -  
Usually exhibiting a style that accents the high-toned aromatics, red/blue fruits, baking spices and softer, succulent tannins of volcanic soil. Can retain good acidity even in warm years.

Pinot noir wines from Marine Sedimentary soils -  
Usually exhibiting a style showing the voluptuous blue/black fruit, earth tones, and bigger, heavier tannins that come from sedimentary soil.

Pinot noir wines from Windblown soils -  
Usually exhibiting a style that shows mixed berry fruits, exotic spices, licorice, cedar, and briary components. Can show a round, voluptuous tannin structure.
Ninety Pinot noir wines were submitted for consideration, from 39 different wineries. Fifty-five wines were submitted in the “volcanic” soil category, 35 wines were submitted in the “marine sedimentary” category, and 12 wines were submitted in the “windblown” category. The wines were separated by soil type and by vintage and then tasted blind by the workshop tasting panel.

During the selection process, the panelists were overheard using these words to describe the wines they tasted:

- **Volcanic soil wines:** “lush” “tea notes” “pure” “sweet” “pretty” “succulent” “soft” “candy” “mixed berry”

- **Marine Sedimentary soil wines:** “bold” “chewy” “big tannin” “black pepper” “spicy” “truffle” “licorice” “black fruit.”

- **Windblown soil wines:** “blueberries” “licorice” “plum” “briary” “chocolate cherries” “spices” “expansive, round tannins”

Wines that seemed untypical of their soil type were rejected, even though some of them were much admired. The two “most typical” wines from each soil type were selected by consensus, one from each current vintage (2009 and 2010) in each soil category.

**Questions to investigate and discuss:**

- Are there consistent similarities among wines from the same soil type?
- If yes, how can those similarities be described?
- Are there significant differences between wines from the same soil type but from different AVAs - e.g. volcanic soils in the Dundee Hills vs. volcanic soils in the Eola Hills?
- Are wines that express site characteristics more interesting than those that don’t?
**Appendix: Willamette Valley Sub-AVAs**
[Descriptions provided by winemakers from each AVA, independently]

**Dundee Hills**
The first grapes in the Willamette Valley were planted in the Dundee Hills. It remains the most densely planted locale in the valley and state. Within the 6,500 acres of this almost exclusively basaltic land mass that runs north-south and overlooks the Willamette River to the south and the Chehalem Valley to the north, and which rises to 1,067 feet in elevation, more than 1,250 acres of grapes are planted on approximately 50 vineyards. It is approximately 30 miles to the southwest of Portland and 40 miles east of the Pacific Ocean, with protection from the ocean climate provided by the higher Coast Range of mountains.

Dundee Hills soils are reddish, silt, clay, loam soils derived from Columbia River basalt flows and, as such, are easily decomposed to provide moderately rich, deep, and good water-holding soils. Soils and climate differentiate this AVA. The hillside planting regions above 200 feet provide good water and air drainage, good frost protection, moderate fertility, and moderate temperatures for adequate ripening, but with acid retention.

Pinot noir from this AVA is characteristically red to black fruited, with raspberry to black cherry ranges, offering earth, truffle, cola, and perfume aromatics and flavors, with light spices and a core of sweetness on the palate.

**Eola-Amity Hills**
The name of this AVA is derived from a ridge of hills adjacent to the Willamette River. The ridge is actually composed of the Eola Hills, straddling the 45th latitude on the southern end, and the Amity Hills on the northern spur. The proposed minimum elevation for the AVA is 200 feet.

Two of the predominant influences on the characteristics of wines from the Eola Hills are shallow soils and the Van Duzer corridor. The soils of the Eola Hills contain volcanic basalt from ancient lava flows. The basalt is combined with a preponderance of marine sedimentary rocks and/or alluvial deposits. These soils: Nekia, Woodburn, and Steiwer, are generally much shallower and rockier relative to most other Oregon AVAs. These shallow well-drained soils tend to produce smaller grapes with greater concentration.

The Van Duzer Corridor essentially provides a break in the Coast Range that allows cool ocean winds to flow dropping temperatures dramatically, especially during late summer afternoons. These late afternoon and evening breezes help provide the cool nights that keep acids firm and are essential for optimal ripening.

The wines tend to be bigger, more full-bodied wines. The fruit components tend toward blackberry, black cherry, and plum contrasted with raspberry, strawberry, and cherry flavors, which may predominate in wines from deeper soils. The mineral content of the terroir is often present both on the nose and on the palate. The wines often display considerable focus and clarity of fruit. They also favor primary fruit character over spice, tending toward the darker black fruit spectrum (black cherries and blueberries). Compared to other North Willamette Valley regions, the wines often exhibit brighter acidity and firmer structure, along with considerable longevity, this is due to the cooling effect of the Van Duzer Corridor. Wines from lower elevations tend to lean more toward plum and bramble fruit, showing slightly more secondary flavors such as earthy, mineral and spice/herbal tones (e.g. white pepper and dried flowers).
Chehalem Mountains
The Chehalem Mountains AVA is a single uplifted landmass southwest of Portland in the northern Willamette Valley, extending 20 miles in length and 5 miles in breadth. These mountains stretch from the town of Wilsonville in the southeast, snake between Sherwood and Newberg, and reach almost to Forest Grove in the northwest. They include several discrete spurs, mountains, and ridges, such as Ribbon Ridge and Parrett Mountain. The highest point within the Willamette Valley is the Chehalem Mountains’ Bald Peak, at 1,633 feet, which effects weather for the AVA and helps to distinguish it from the adjoining grape-growing hillsides and surrounding lowlands, less appropriate for grape growing.

It is the geography and climate that largely differentiate this AVA from others; that notwithstanding, the variety of soils within the AVA helps to play host to different grape varieties. Soils on the southern and western slopes are basaltic (including Saum and Jory) and marine sedimentary (including Melbourne and Willakenzie). Soils on the north face of the mountains are windblown Loess (Laurelwood). Inappropriate heavier alluvial soils are largely excluded from the AVA by virtue of its minimum elevation of 200 feet.

Within the almost 70,000 acres of this AVA are over 1,100 acres of grapes grown in more than 80 vineyards, and 15 or so wineries. The Ribbon Ridge AVA is a sub-AVA of the Chehalem Mountains.

A wide range of Pinot noir can be produced in this AVA, from more lightly red-fruitied, elegant and balanced stylings, to black-fruitied, briery, earthy, and highly structured wines carrying brown spice and wood notes, plus most gradations in-between.

Yamhill-Carlton District
North of McMinnville the land slowly rises to the hamlets of Carlton and Yamhill. Low ridges surround the two communities in a horseshoe shape. The free-flowing North Yamhill River courses through the center of a lush patchwork quilt of nurseries, grain fields, and orchards. The neatly combed benchlands and hillsides of the Yamhill-Carlton District are home to some of the finest Pinot noir vineyards in the world.

Historically nourished by forestry and farming, this area is rapidly emerging as a global center of Pinot noir production. This pastoral corner of Oregon’s northern Willamette Valley creates a unique set of growing conditions. The Coast Range to the west soars to nearly 3,500 feet (1,200m) establishing a rain shadow over the entire district. Additional protection is afforded by Chehalem Mountain to the north and the Dundee Hills to the east.

The coarse-grained, ancient marine sediments native to the area are the oldest soils in the valley. These soils drain quickly, establishing a natural deficit-irrigation effect. Thus, the vines stop vegetative growth earlier here than elsewhere, leading to more complete ripening, even in cooler growing seasons. This allows Pinot noir to develop deep ruby colors and broad, silky tannins. The mouth-filling wines exude powerful fruit aromas of raspberry, blackberry, and black cherries complexed by minerality reminiscent of pipe tobacco, espresso, clove, and dark chocolate and accented by scents of rose, violet, lavender, and sweet wood smoke. These are alluring, complex, supple gems of Pinot noir to sip and savor.

McMinnville District
The McMinnville AVA sits due west of Yamhill County’s wine country home, the city of McMinnville. It extends approximately 20 miles south-southwest toward the mouth of the Van Duzer Corridor, Oregon’s lowest Coast Range pass to the Pacific Ocean. The AVA is a blend of geo-climatic factors that make it unique among Yamhill County’s AVAs. Specifically, the appellation encompasses the land above 200 feet and below 1,000 feet in elevation on the east and southeast slopes of these foothills of the Coast Range Mountains. Geologically, this region is dramatically different in soil profile from other winegrowing areas in Yamhill County. The soils are primarily uplifted marine sedimentary loams and silts, with alluvial overlays. Beneath is a base of the uplifting basalt. Clay and silt loams average 20–40
inches in depth before reaching harder rock and compressed sediments, shot with basalt pebbles and stone. The uniqueness of the soils for winegrowing is in the 20–40 inch depth.

Climatically, this AVA is, again, in its own class. These primarily east and south facing slopes sit in a protected weather shadow of the Coast Range Mountains. Rainfall is lower (33 inches annually) than sites only 12 to 20 miles to the east. The foothills also provide protection from chilling winds in the unstable air conditions of spring and fall. Winegrowers also have the option of placing vineyards on more southerly facing sites to take advantage of the drying winds from the Van Duzer Corridor. Presently, there are approximately 600 acres planted in the AVA. Of greatest note are the flavor qualities of the Pinot noir wines from this area. Unlike the wines from hillsides to the east, the Pinot noir from these soils are highly pigmented, with a strong backbone of tannin and acidity and a massive palate of black fruit and earthy flavors.

Ribbon Ridge
Ribbon Ridge is a very regular spur of ocean sediment uplift off the northwest end of the Chehalem Mountains, comprised of a relatively uniform five square miles (3,350 acres) of land in a breadloaf-like shape. In excess of 300 acres within 15 vineyards are currently planted on the ridge. The AVA is distinguished by uniform ocean sedimentary soils and a geography that shows that it is protected climatically by the larger and taller landmasses surrounding it. Paucity of aquifers forces many vineyards to be dry farmed. The AVA’s elevation minimum is 200 feet, with its highest point 683 feet.

Pinot noir characteristics from Ribbon Ridge include predominantly black fruit (black cherry, blackberry, and black currant), moderate to high structure sometimes bordering on rustic, good acidity especially in higher elevations, and good extraction. Wines contain fine tannins, a range of brown and wood spices, fresh-turned earth and chocolate dependent on vintage. Wines are thought to ultimately age very well.
SOIL INTO WINE

Digging Deeper into Oregon Pinot Noir

Moderator and Presenters

Moderator

Jesse Lange

Jesse is a second generation winemaker and winegrower working at his family’s 25 (!) year-old, 60-acre estate in the heart of the Dundee Hills. Jesse had his start in viticulture by assisting his parents, Don and Wendy, in planting (read: pounding posts and weeding) the original 8 acres of Lange Estate in 1988. Jesse's formal enology and viticulture training occurred at New Zealand's Lincoln University while on student exchange from Oregon State in 1999. Jesse also spent two years under winemaker Bruce McGuire at Santa Barbara winery. He enjoys serving his industry and community by participating on the Board of Directors for Oregon Pinot Camp, the Willamette Valley Winegrowers Association, and as former President of the Dundee Hills Winegrowers Association. He enjoys fly-fishing for steelhead, trying not to die during triathlons, running with his Golden Retriever Maggie, and just about everything else halfway athletic and fully outdoors.

Presenters

Melissa Burr

Melissa is a native Oregonian. After attaining a science degree at PSU she changed her career path from medicine to winemaking, taking courses at Chemeketa and OSU. She worked several years at local wineries before joining Stoller Vineyards as winemaker in 2003. She had a part in helping to design the Stoller winery, the first LEED certified (Leadership in Energy and Environmental Design) winery in the US. Melissa strives make the best wines possible and enjoys the experience each vintage has to offer.

Ted Casteel

Ted Casteel is the co-owner, founder, and vineyard manager of Bethel Heights Vineyard in the Eola Hills. He has been active in all of Oregon’s key viticulture activities, including chairing the winegrape sessions of The Oregon Horticulture Society, the Grapevine Improvement and Research Committees of the Oregon Wine Advisory Board, the Chemeketa Community College Viticulture Program, the Oregon Winegrape Growers’ Guide, and co-founding the LIVE program in Oregon. He was chairman of the Oregon Wine Advisory Board from 1994–1996 and from 2002–2003, and helped found the Oregon Wine Board. Ted currently serves on the Technical Committee of the Oregon Wine Research Institute, and chairs its Policy Board.
Mike Hallock
Geologist and winemaker Mike Hallock is the founder of Carabella Vineyard, located on the southeast flank of Parrett Mountain. After a graduate degree in climatology and 25 years as a consulting geologist, he did obligatory coursework at UC Davis and became a winemaker in Colorado (really!). Twelve years of vineyard site study resulted in the planting of the 49-acre vineyard in 1996; the final 9 acres were planted in 2007. Primary focus at Carabella is Pinot noir. Most of the vineyard is devoted to individual blocks featuring seven different clones designed to bring complexity to a site driven blend. Two blocks of Dijon 76 Chardonnay and two clones of Pinot gris also have a devoted following. The gypsy winemaking life of commuting from Colorado for crush ended in 2002 when Mike and his family relocated to Oregon to concentrate full-time on the vineyard and wines of Carabella. The wines are created in shared winery space near the vineyard.

Alex Sokol Blosser
Alex Sokol Blosser, son of Sokol Blosser’s founders Susan Sokol Blosser and Bill Blosser, grew up working in the family vineyards and winery. After starting college in Texas, he realized his heart lay back on the family farm, so he returned to Oregon to finish his college degree and acquire more wine industry experience. In 1998, after working in neighboring vineyards and with a Portland wine wholesaler, Alex started full time at Sokol Blosser, simultaneously working for the president, his mom Susan, while earning his MBA degree. When he achieved his MBA, Alex became Vice President of Sales at Sokol Blosser. In addition to his sales duties, Alex takes time every year to work harvest, and also oversees vineyard and winemaking activities. Now a Co-President with his sister Alison, Alex actively participates in the Oregon wine industry, including spearheading the project to develop six new American Viticultural Areas in the northern Willamette Valley, and he is currently President Emeritus of the Board of the Willamette Valley Wineries Association. Alex has twin boys, Nikolas and Avery.

Tony Soter
Native Oregonians, Tony and Michelle Soter, established Soter Vineyards in 1997 following Tony’s distinguished career as consulting winemaker, organic farmer and founder of Etude in Napa. Today, the Soters own and operate Mineral Springs Ranch – a 245-acre property in the Yamhill-Carlton AVA of the Willamette Valley. Their aim is to establish a multifaceted, certified sustainable property that will persist for generations and serve as a haven for producing world-class Pinot noir and sparkling wine. Just 32 acres are planted to vine here, with the remaining acreage devoted to grazing land for sheep, habitat for native wildlife and a multitude of existing crops in addition to winery operations.

Estate production totals nearly 3,000 cases including the namesake Mineral Springs Ranch Pinot noir and the rare and delicious Brut Rosé. The North Valley label features regional Pinot noir, Rosé and Chardonnay sourced from sustainably farmed sites in the Willamette Valley. And in the fall of 2012, Tony and Michelle bring the Planet Oregon brand to the broader market, as a beacon for quality in winegrowing and their dedication to bringing responsibly farmed, deliciously coiffable Pinot noir to a larger audience at a price everyone can appreciate.

The Soters have enjoyed a long history in the wine industry but are happy and grateful that this chapter is in Oregon.
Sam Tannahill
Sam got his start in the wine business at Wally’s Wines in LA. Very quickly he realized retail (and LA) was not for him and after an around-the-world trip ended up working at Domaine de L’Arlot in Burgundy for the 1993 and 1994 vintages. During those years he also attended the University de Dijon and earned a post-graduate degree in winemaking. He reentered the wine industry in the United States working with Ted Lemon at Littorai, but in 1995 moved to Oregon as winemaker at Archery Summit. In 2002 he moved in a different direction and founded A to Z Wineworks with his wife, Cheryl Francis, and Bill and Deb Hatcher. A to Z quickly became Oregon’s fastest growing winery and in 2007 purchased REX HILL winery. Currently A to Z Wineworks produces 190,000 cases and REX HILL 10,000 cases. Sam and Cheryl also own Francis Tannahill – a tiny winery and biodynamic vineyard founded in 2001. Sam also serves as the Chairman Emeritus of the Oregon Wine Board, President Emeritus of the Oregon Winegrowers Association and is a board member of the Oregon Wine Research Institute. Sam and Cheryl are the proud parents of three future winemakers, their 9-year-old son, Theo, their 7-year-old son, Oliver and their 4-year-old daughter, Stella.

Chad Vargas
Chad got his start in agriculture working on his father's research farm in Jerome, Idaho, where he learned to setup randomized block design experiments on various row crops. He obtained a B.S. in Crop Science from the University of Idaho and an M.S. in Plant Pathology from Texas A&M University. He was able to set up a joint project between Texas A&M and the Pierce’s Disease Task Force at UC Davis for his M.S. work, which led to a move to California in 2000. After completing his degree, Chad took a job conducting efficacy research with UC Davis, continuing his research of testing potential treatments for Pierce’s Disease. In 2003, he accepted a Pest Control Advisor position with Crop Care Associates in Yountville, California where he gave general viticulture and pest management recommendations to winegrowers located in Monterey, Sonoma, and Napa Counties. In 2005, Kendall Jackson Estates offered him a chance to work as a viticulture and pest management consultant on 1,500 acres between Sonoma and Napa. In the fall of 2006, Chad began talking with David Adelsheim about his need for a viticulturist. He currently holds the job of Vineyard Manager and Viticulturist for Adelsheim Vineyard.