

December 12, 2012

This will be my last entry for 2012, given that we finally started pruning, which, to me, means that 2013 has already begun.



I had planned that my last “blog” for 2012 would be about water. Mainly how ‘dry’ it was this season, even days that were foggy tended to have lower relative humidity than prior years. As ace meteorologist Erik Moldstad pointed out we met in Napa the other month, while the high temperatures were normal in August and above normal in September, degree day totals were lower due to a lack of moisture in the air. So we needed to irrigate, a lot. Above is the reservoir on February 15, 2012. Below, from a different direction, the reservoir on October 19, 2012.



Since then we’ve had plenty of rain. The reservoir is filling up and the ducks, geese and egrets seem to be quite content.



Meanwhile the conditions are perfect for wild mushrooms to grow on the property, like the *Amanita phalloides* below, commonly known as the death cap or death angel, a deadly poisonous basidiomycete fungus, so don't eat them.



Instead of writing about water and the need to irrigate, I'm going to focus on the myth of minerality in wine. What got me started was a question in the 'Master's Quiz' in the October 15, 2012 edition of the Sommelier Journal: "What is the range of mineral content in wine expressed in grams per liter?" The answer: "The mineral content of wine is between 1.5 and 4 grams per liter." The source of that factoid was an article by Dr. Jamie Goode, author of the book 'The Science of Wine' (a well written book) an English wine writer who has a PhD in plant biology, and, unusual for a scientist or a critic, seems to be willing to listen to almost anyone and let them have their fair say. (As an aside here's another mushroom which may not kill you but very likely make you sick; *Amanita muscaria*, commonly known as the fly agaric or fly amanita, a poisonous and psychoactive basidiomycete fungus, except unlike Siberia, here in California not so psychoactive.)



One person Dr. Goode interviewed was Gerd Sepp, an international consultant winemaker from Pfalz, Germany. This is what he said:

"Sepp notes that according to his reference books the mineral content of wine ranges between 1.5 and 4 grams per liter. 'It seems the soils exchange capacity of ions correlates with the mineral concentration of a wine,' he says. 'Also a cold-stabilized wine has lower potassium content than the same wine unstabilized, and it tastes different, with less flavor and perhaps even less complexity.' Even then, he adds, 'if the wine comes from slate, it still tastes of slate; it's just less intense.'"

Now before we examine the above, let me first say I agree, certain wines show 'minerality' by mouth or taste, - but not by nose (interestingly, of the 83 individual aromas, ranging from cut green grass and Earl Grey Tea to wet dog/wet wool and nail polish remover, minerality never comes up). Also, Mr. Sepp, in his, defense, did say that "residual sugar, acidity/pH, CO₂, SO₂, malolactic fermentation, and oak, for example, can enhance or reduce what we taste as minerality."

Let's begin with the claim about the 1.5 to 4 grams per liter. First problem is that such an assertion is hearsay and would be inadmissible in a court of law. He doesn't identify the books so there is no way to verify the accuracy, the meaning or the context of the statement in any way. I doubt a proper peer reviewed scholarly or scientific journal would ever accept such a statement as evidence. Now that does not mean that there aren't solids in wine or for that matter mineral water and other beverages. But they are soluble or dissolved solids. For example, a typical bottle of San Pellegrino water has, according to the label, 948 milligrams of total dissolved solids per liter (mostly bicarbonate and sodium). And there is no doubt there are solids in wine. For example, it is quite rare that all of the sugar in a wine will have been fermented into alcohol and CO₂. A wine is considered dry when the residual sugar is less than 2 grams per liter; the norm is about 1.5 grams per liter. According to Ron S. Jackson, author of Wine Science (my go to reference book) there are plenty of other solids present in a bottle of wine, including potassium (usually in warmer climate wines), sulfur (mainly from fungicides) and calcium (from unlined cement tanks). The key here is that sugar (be it sucrose, glucose, fructose or dextrose and so on) and the other items mentioned above, dissolve in water - copper, iron, chlorine and sodium and aluminum may also show up, but usually not by way of the vine roots instead it's often the result of badly maintained or unclean winery equipment.

So let's now segue into the concept that "if the wine comes from slate, it still tastes of slate..." The standard definition of a mineral is "a naturally occurring substance that is solid and stable at room temperature." I.e. it can't be dissolved in water at room temperature or below. Slate has been used as a building material, even as a roofing material, for a very long time, because it doesn't dissolve in the rain, which also explains why we don't use sugar cubes as a building material, as it does. Furthermore, I really don't believe slate or granite or most rocks have a taste that we can detect with our tongues. Hopefully one can't taste one's fork and the plate doesn't season the food.

Next issue, potassium and cold-stabilization: According to Ron S. Jackson, when we cold-stabilize a wine we chill the wine down to "promote the formation and precipitation of salt crystals," mainly potassium bitartrate, "and then filter to remove them." In the process of removing the tartrates we are removing some potassium. However, according to Winemaker David Munksgard a wine that has been cold-stabilized and filtered will taste different than one that hasn't, but not because we have reduced the amount of potassium, but because we have removed a salt (according to David the wine actually tastes better after cold-stabilization). So why do we cold-stabilize our Chardonnays and Sparklings, besides making them taste better? Simply put, consumers don't like to see tartarate crystals, and nor do I. As for our Sparklings, if crystals form before disgorging we'll lose many a gallon, and corks bursting in air and wine spilling all over the patron is not a good way to preserve our brand, at least not in restaurants. Clearly the loss of potassium is immaterial, nor have I ever heard of anyone adding potassium to improve wine flavors.

So why does this whole 'myth' bother me? I'm not worried some young sommelier is going to ask me how many grams per liter of minerals are in our Chardonnays. We are not going to stop cold-stabilizing our wines. What worries me is the debate has become so absurd that a Burgundy 'expert' Jasper Morris, MW was willing to say for the record, "scientific fundamentalists are denying that we [as in those who are convinced minerality comes from the soil] are right, but don't provide any certainty in the other direction." At this point all I can ask is who is the fundamentalist?

There is a simple explanation for why solubility is necessary, it comes down to one word, osmosis, how can a non-soluble thing pass between plant cell walls? So I can be giving and just say that the true believers like Messrs. Sepp and Morris are victims of cognitive dissonance and cascade, or perhaps they are old fashioned and can't escape from aberglaupe (it was in the O.E.D. and now it's not, quite the scandal), or maybe, they are of the same ilk as Creationists, in any case, not good.

To finish up the year, a dead juvenile yet 'old' coot (I photograph what I come across, this one was by our Thomas Rd. Vineyard) and a chance to quote from Joseph Heller's *Catch 22* (the movie):



Yossarian: He was very old.

Luciana: But he was a boy.

Yossarian: Well, he died. You don't get any older than that.

October 25, 2012



It has been awhile since I've updated the 'blog.' One excuse is that I've been busy harvesting and the like. Another excuse is that we are now using Facebook and other tools to keep people informed what's happening here at Iron Horse, which allows me to post my photos with very little effort. Mainly, though, I've been lazy. I also don't like repeating myself, which is what happens over time when one is a grape grower. There is a fairly predictable cycle, vines go dormant, we get bud break, shoots grow, then bloom, set, veraison, harvest and so on, year after year.

But with crush over, and our replant almost finished, I've had time to look back at what turned out to be a very intense 36 days (August 30 to October 4). While the cycle may be the same year after year, the results vary, some times dramatically. Simply put, for the first time since 2007, I felt like we were growing grapes as opposed to growing grapevines. I confess I have no idea why 2012 was so good. Some have described it as a 'text book year.' But as David Munksgard said, "they revise textbooks every three years." All I know is was warm when we wanted it to be warm, at set but was it very dry growing season. Even when it was 'foggy' it was dry. We used a lot of water. Still, not only did we have more fruit; we had more fruit suitable for still Pinot Noir, 16 separate lots, 6,500 cases worth, as compared to just 2,500 cases in 2011. The fruit looked beautiful, and, I confess, as much as I love Sparkling and Chardonnay, Pinot is much more fun to photograph.



Early during the Pinot harvest when the crop was manageable, David Munksgard was able to ferment some of the smaller lots in Macro Bins (4'x4'x2.5' plastic bins that hold about a half ton of grapes, that we usually pick into). First we de-stemmed the grapes and then pumped them, skins and all, into the bins, adding some dry ice to keep the must cool and to create an aura of mystery.



Besides making the cellar smell great the bins allowed us to 'punch' down the cap as often as anyone wanted to, increasing contact with the skins, hence more flavor and color extraction.



Later as winery space was limited larger lots were fermented in tanks. But, time permitting David had the guys pump over the cap at least five times daily, again to increase contact with the skins. Please note the intense color.



Then before fermentation was completed (somewhere between 90% and 95%) we pressed off the juice from the skins and let the fermentation finish in barrels. Even the pumace looked good.



If I learned anything this year from David, is that the hardest part about making Pinot Noir is determining when and where to pick. The great advantage we have at Iron Horse is that we are estate bottled so we can move the picking crew around to where it is needed. Granted, it did make for some long and tiring days.



In a number of cases we had to pick single blocks on multiple days. For example, in one block, I-Block, 6.1 tons were picked from the middle portion for Sparkling on September 2, and on the 5th, we passed through the East facing rows that had not yet been harvested 'dropping' an additional half of ton which we saved for Sparkling - we call it 'short shooting', if a shoot is

less than 12" it shouldn't have any clusters, between 12" and 16" only one cluster, over 16" no more than two clusters. On the 19th we picked 6.2 tons from the lower-west facing rows, on the 28th picked 4.2 tons from the lower-east facing rows and picked the last 1.8 tons from the upper-east facing rows of October 1. Now David wasn't being a prima donna. Sure, it would have been a heck of a lot easier to pick all 18.8 tons in one day, but the grapes simply weren't ripening uniformly. For example on September 19, the upper-East facing vines brix was 22.3, upper-west facing 22.8, lower-east 23.2, lower-west 23.7. That is a lot of variation in a block that is only 6.5 acres.



Going forward, lack of uniformity in ripening in the replanted blocks should be less of a problem. Yet, we had to pick 4.4 tons from the South and Southeast vines in H5 (planted in 2007-8) on the 28th, and then the remaining 19.6 tons on October 4 and 5.



In the end I feel pretty confident that all of the work and effort by, what I am sure is the best crew in Sonoma County, was worth it. For my part, I mainly had to get up very early (before sunrise, I hate that) and be watchful (or at least appear to be awake and watchful) so all credit for what is bound to be the best Pinot Noirs we'll have ever made at Iron Horse goes to the crew for their hard work and David for his skill at determining when to pick.

I might add, not only were the grapes pretty this year. So were the tomatoes.



July 11, 2012

Dosage Trials, or why I love my job...

We've just released the 2008 Wedding Cuvée, but before we could do that we went down to the lower lab and got to work on the perfect dosage. For those who don't know what is meant by the term 'dosage' below the shot of David Munksgard, hard at work, are samplings of definitions:



"Dosage French. Addition of a mixture of sugar, syrup, grape concentrate and/or brandy to Champagne or sparkling wines before recorking. Corrects the sweetness in the final product." **Exploring Wine.**

Dosage, the small quantity of aged wine or brandy, usually sweetened, added to sparkling wine immediately after disgorging." **Wine Science, Principles and Applications.**

Luckily it's not that simple, which is why there are eight flutes that had to be tasted that day - okay, nine, including the 2007 Wedding Cuvée. To many, as the above definitions seem to imply, dosage is mainly a function of sweetness, a choice between say Brut Extra (under 6 grams per liter or .6%), Brut (12 grams per liter or 1.2% or less), Extra Dry (over 12 grams and less than 20 or 2%), and so on. Reality is much more complex. While I believe the true character of a sparkling wine will be determined by the wine itself, mainly based on the blend before second fermentation, the actual vintage and time on the yeast in the bottle (longer generally is better), dosage, the last step before putting in the cork, enables a producer to adjust a wine to taste closer to the house style (our 'house' style is not to have a specific house style, instead we try to showcase the vineyards and the vintage and to make sure each cuvée is at its best), hide flaws (we never have flaws) and even give some age to a wine (we usually don't need to do that either), as far as I can tell our approach is quite distinctive which I'll try to explain - I really should have David write this, but he's busy).

By the time we were done we each smelled and tasted at least 35 flutes of our 2008 Iron Horse Vineyards Wedding Cuvée (85% Pinot Noir, 15% Chardonnay – before the addition of the dosage, 100% estate grown and already three years on the yeast in the bottle, I should have mentioned that earlier) over four days representing 23 variations (some were repeats). Looking back over our tasting sheets and notes I figured we had five 'variables' we needed to sort through (others may have more):

1. **Sweetness or Residual Sugar (RS).** On day one we agreed no more than 4 mils of LEX (more on that below), for a final RS of about .39%. In terms of sweetness, barely perceptible. This didn't surprise us. Starting with the 2005 vintage, the first with Daniel Roberts and the use of precision viticulture and with more Dijon Clone Pinot Noir in the mix, we've noticed the wines really didn't need as much sugar as they did in the past. But that doesn't mean they don't need dosage. (Note; we use cane sugar, some use beet sugar, personally to me it shouldn't make any difference, refined sugar is refined sugar.)

2. **Liquor D'Expedition or LEX.** You can't just add sugar to a bottle of sparkling wine. It will froth over. The sugar has to be dissolved first and the big decision is in what. Normally we take some of the sparkling wine blends, such as the Blanc de Blancs (100% Chardonnay), Special (50% Chardonnay and 50% Pinot Noir), Brut (75% Pinot Noir and 25% Chardonnay) and Blanc de Noirs (85% Pinot Noir and 15% Chardonnay) pre-second fermentation, and make a 'simple syrup,' roughly half sugar half wine. How much LEX is added will determine the RS. But which LEX will also make a difference. A Blanc de Blancs LEX will have less impact than a Special LEX as the Special LEX will have some Pinot Noir. First we were able to narrow our choices to Blanc de Blancs LEX and the Special LEX, and then settled on a blend of the two (i.e. 2 mils of each, meaning just one half of a mil more of Pinot Noir out of 750 mils, and yes one can taste the difference).
3. **Still Wine.** Some times we add still wine to the LEX, either Pinot Noir, or Chardonnay – I don't remember ever doing both. The particular Chardonnay or Pinot Noir clone can also be significant. Adding Pinot Noir will add a little more color, but it also adds a touch more of the Pinot character (think, earth tones) we're looking for in a Blanc de Noirs. One issue is how much; our choices were 0, 2 and 4 mils. We chose 2 mils. Another way of increasing the amount of wine is to change the composition of the LEX, instead of using a LEX that is roughly half wine, half sugar, we use a quarter sugar (roughly) and the rest wine and double the amount to get the same RS. For the 2007 Brut Rosé we've experimented with an even lower ration of sugar to wine. For example, to get a .39% RS David would use 22 mils as compared to 4 mils.
4. **SP08.** This element is unique to Iron Horse, I think. The problem was that back in January 2008 when David put together the 2007 Wedding Cuvée blend he added some of the Pinot Noir juice that had been allowed to macerate on the skins which normally was used only in our Brut Rosé. A year later when time came to blend the 2008 we forgot. Hence it was a bit of a surprise when it came time to do the dosage trials for the 2007, the color was quite different, in a good way, as was the wine. So we wanted to keep the color and the added Pinot Noir character for 2008, 2009 and 2010. To accomplish that made up a special lot of pre-second fermentation maceration (i.e. cold soak) Pinot Noir, a very tasty intensely colored low alcohol (about 11%) Rosé of Pinot Noir, known as SP08 (Sparkling Pinot, Lot 8). SP08 not only added color and bouquet, it also helped to refine the wine, give an added sense of elegance and complexity. We had settled on adding either 26 or 28 mils and ended up splitting the difference and using 27 mils.
5. **SO2.** Let's be perfectly clear, we have no problem using SO2, Sulfur Dioxide. I'm not saying you can't make a sparkling wine 'naturally,' but it is extremely hard, remember the second fermentation happens in the bottle, so you can't monitor and adjust like you can in a tank or a barrel, so the chances of sending out a bad bottle are extremely high, with no assurance that the good bottles are any better. SO2 is normally used as anti-oxidant and anti-microbial treatment, so if we're looking at a bottle that will be held for awhile before sale and consumption we want to add more, and, if safe to do, we have been known to skip adding SO2. Curiously, SO2 even in very small amounts can affect color (if you add too much) and flavor, so in the end we decided 15ppm (as in parts per million – imagine many zeroes after the decimal point) as opposed to 30ppm. Again, even though the differential is miniscule (0.0015% of the contents of the bottle) you can see and taste the difference.

The end result of all our 'hard work' was a particularly expressive and elegant Blanc de Noirs with a perfect 'Rose Petal' color from what seemed to us a very challenging year. 2008 was, at best erratic, it was hot, cold, mild, hot, cold and hot again. So we're pretty happy.



June 12, 2012

Much has happened since the last post, or much has happened to the vines. The inflorescences have gone from calyptras,



To full bloom,



To settings (i.e. grapes).



All of the above are Pinot Noir, Pomard 5, H4 Block – field grafted in 2008.

The weather has been perfect for bloom and set. Warm, but not too warm, and, curiously, no fog, cool mornings yes, but no fog. So far we've had no shatter or Pinot Leaf Curl (both the result, it is thought, of cooler weather disrupting the nitrogen cycle). Before everyone gets too excited, let me point out that if things are going right, that just means that there that many more things that can still go wrong. That and we are a bit short handed, like everyone else we seem to not have enough experienced and able people – damn our lack of an effective immigration policy

So now some quotes from what I think is the best food publication available, David Chang's (of Momofuko fame) Lucky Peach:

"[T]he goal of cooking isn't understanding or manipulation for its own sake. It's deliciousness, and there's more to deliciousness than molecules." Harold McGee, writing in Issue 3, Lucky Peach.

"A chef will claim to cook with 'love,' a proclamation that I, as a judge [of Top Chef], often found worrying, summoning, as it did, possibilities that the contestant had rubbed his knob around the sauce." Anthony Bourdain, writing in Issue 3, Lucky Peach.

The first quote is relevant to what we are doing here at Iron Horse, as it is my strongly held belief, that in that the end, what is most important, is what is in the bottle. How does it taste? Do you like it? As a result, we are not wedded to any particular philosophy or recipe. For example, below is an exceptionally tasty Miyagi oyster from Tomales Bay, selected and shucked by the Oyster Girls.



When I get to eat an oyster like the one above (which tasted as good as it looked), I could care less about considerations like sustainability, seasonality (I ate it in an 'r'less month) and food miles. At Per Se Thomas Keller gets his oysters from Maine, not Long Island, because they taste better, and given what he charges they better taste better.

The quote from Anthony Bourdain is also equally apt. Whether we are consumed with our passion, our love and any other emotional state is also irrelevant. The reality is that growing grapes for fine wine requires hard work. Not the kind of 'work' I do, such as writing 'blog' posts and dose trials. (Below 2008 Wedding Cuvée, round 2 of 4, rounds - by the time we're done we'll probably have had to taste 30 flutes, as in work, work, and work.)



I mean real work, out in the heat, shoot thinning, positioning and tying or clipping shoots, as needed, tens of thousands of vines, or laying out miles of wire and drip hose and inserting about 20,000 emitters.



It's the hard work of our people that make all the difference. That and a lot of luck, so, we take nothing for granted.



May 4, 2012

I realize it has been awhile since my last post, but I've been busy. When I write busy, I mean busy doing what I do here, which mainly involves watching. Specifically, watching the vines now that they are waking up, starting with fuzzy q-tip in late March and early April...



Next, green tip...



Rosette...



Leaf separation...



And now we have actual growing shoots with multiple leaves and clear inflorescences (future flowers and hopefully, grapes).



I'm also watching the guys do the great work they are doing. Now that we've finished pruning (yes, I wrote 'we,' as I too prune) they've been busy (I mean 'they,' I'm really dangerous with a shovel, at least with pruning shears I can only hurt

myself and the vines) first they uncover the Chardonnay and Pinot Noir vines planted April 2011 and grafted September 2011, cut off the tops, the rootstock leaves (on an angle) so only the grafted bud or shoot is showing.



They then protect the fragile shoots with milk cartons (or in our case, orange juice cartons) and pack dirt around the cartons to keep moisture in and rabbits and other pests out.



Once they were done with that, they began planting 17,300 vines (1616C rootstock) in M1, L and O, meaning they have to dig 17,300 holes and then fill them back up.



They are working very hard, as are the bees, be it in the lavender that has come out earlier than expected...



Or an allium flower (a relative of garlic and onions, very pretty, except for the smell).



March 16, 2012

I want to correct an error in my last post, which, I know, was a long time ago, and had to do with malo-lactic fermentation, this is how David Munksgard describes what is happening, and as he is the winemaker here he'll get no argument from me (even if I used many more interesting words like 'substrates'):

"Naturally occurring in grapes (in order of dominance) are tartaric acid, malic acid and citric acid. These acids carry over into the juice and resultant wine. During malo-lactic, lactic acid bacteria decomposes (ferments) malic acid into a softer (less acidic) lactic acid."

Now for the intended post, all about water and rain...



While we may bill ourselves as the “drink of optimists,” when it comes to growing grapes, though we may hope for the best, my job is to prepare for the worst. My reality is that just because we want things to occur, such as the right amount of rain at the right times, that does not make it so. Nor can I depend on the past to provide guidance for today.

So here's the problem this year, although it is raining as I type - we recorded just under 4.23 inches on the 13th - rain totals are still well below 'normal.' What's worse is that as the soil is at full capacity (granted that is good) it doesn't take much rain for the creek to flood, as was the case January 21 through January 24, and the 13th through the 15th of March.



After just a few inches we are dealing with torrents flowing through our culverts directly into the creek. Just because we need the rain doesn't mean I have to enjoy it.



When it's not raining it has been beautiful, meaning that we're probably going to see bud break earlier than usual, possible as much as ten days to two weeks earlier. Already I'm seeing 'fuzzy Q-tip' buds in a couple of blocks. This is not what I'd prefer. While a long growing season can be good, I think a later start is better.



First, an early spring, combined with a drought, raises our risk many more clear (as in cloudless) and windless nights, the two conditions necessary to have a frost event. Second, it might be cooler during differentiation, flowering and set, reducing

our yields. So we have had to adjust our pruning schedule to fit the situation - mainly Chardonnay before Pinot Noir as Chardonnay tends to waken a bit slower.



To make things harder this year our ability to deal with frost events are limited by two regulatory problems, first, the California Air Quality Control Board has decreed we can't run our diesel pumps more than 100 hours a year. We normally would expect to run them about 60 to 65 hours, including our irrigation needs, but six extra nights isn't much of a cushion

The next issue is, of course, this being the West, water; while we may use every 'passive' means to protect our crop (for example, bare earth is warmer, hence we use Roundup - meaning we value more protecting and saving endangered species than we do promoting a 'philosophy', take that biodynamic types). Recently the California State Water Resources Control Board, mainly to protect salmon and steelhead trout in the Russian River and its tributaries, including our Green Valley Creek, have effectively banned the diversion of water during frost season, in the absence of a WDMP, a Water Demand Management Program.

So I've actually gone back, looked at our licenses, checked out the numbers and while I'm comfortable that we have been in compliance with all of the various rules we needed to follow in the past, with proper management we'll be just fine going forward. First consider the sources of our water, actually there's only one source and that's annual rainfall, so instead let's consider how we harvest the rain. We have a very nice reservoir that holds, possibly, things change over the decades, 45 acre-feet (an acre-foot is just short of 325,000 gallons). So assuming it's surface area is about six acres, every foot of rain means six acre-feet of water. There's also run off, drainage from G Block, water from the winery's storm drains (as well as 'grey water' from the winery) and we get just over 20 acre-feet a year (and can get an additional 20 acre-feet if we ask) of advanced treated wastewater from the Forestville Water District. As a result, our reservoir is already nice and full.



So we're good for at least 10 (possibly 12) nights of frost protection. But we don't want to have an empty reservoir come June and 12 nights may not be enough, so we have to tap another source, the Creek. But, it's a limited right. First, we can take no more than 86 acre-feet during the season (November to June) at a rate of less than 5 cubic feet per second (cfs, or 2,245 gal/min) meaning that in the course of an ordinary work day we can replenish what we may have used the night before to protect our grapes, but that assumes that there is enough water in the creek for both us and the fish. From November 1 to November 30 we have to have a flow of at least .5 cfs, from December 31 to March 31 10 cfs and from April 1 to June 1, 1.0 cfs before we can pump from the creek. (After June 1, no diversions.) We can tell if there's enough flow by checking what is basically a ruler next to the bridge. If we need a 10 cfs bypass then we can only draw if the level is over 3' 10", if only 1 cfs, then 1'8" is fine. Luckily I have an app on my iPhone to work it all out. So far everything looks fine.

So we'll deal with the drought, we'll deal with the flooding and we'll even deal with squirrels with attitude.



January 12, 2012



I realize that it has been some time since my last post. It's not that nothing has been happening it's just that nothing 'novel' has happened – granted, no appreciable rain in December with morning temperatures below 30F and afternoon temperatures over 65F is novel, even scary, but too hard to quantify at this time, after all, it may start raining like crazy next week. And, truth be told, after so many years of posts, writing about pruning can be a bit boring, even for me. So in between checking on the pruning and tying - the guys are doing great – taking the occasional artsy photos like the one's scattered through this posting, I've been catching up on my reading, in particular re-learning chemistry (it has been awhile, it turns out there's a lot more to it than what I was taught in the early seventies) and learning all about soil science (specifically "Soil for Fine Wines" by Robert E. White, Oxford Press, 2003) with the idea of trying to understand what is happening underground, in the plant and in the wine.

Take malolactic fermentation; simply put, it raises the pH and lowers perceived acidity, and while we prefer not to use ML in our Sparklings and Chardonnays, we definitely use it in our Pinots. Physically, all what is happening is that lactic acid bacteria are decomposing the malic acid present in the berries at harvest, causing a limited release of CO₂, which changes the malic acid to lactic acid, this would explain the change in perceived acidity, but even more is going on, all sorts of substrates are metabolized and by-products are produced, and to make things harder, the substrates and byproducts will vary depending upon which lactic acid bacteria are involved and numerous other factors, including pH and free SO₂. (Note also, the higher the pH the more a wine is microbially unstable.)



What I haven't been reading (although perhaps I should - nah) are two relatively new books, "Authentic Wines" by Jamie Goode and Sam Harrup, MS, and Alice Feiring's book, "Naked Wine."

Both are proponents of 'natural winemaking,' in effect a continuation of a movement which I see as an effort to return winemaking and wine growing back to the early 19th Century (as is the case with biodynamics) - as in alchemy as opposed to chemistry, and who needs GPS when you've got astrology. The problem is that, certain influential people such as wine writers, critics, sommeliers, retailers and winery owners pay attention and often buy into the story. For example this is what Eric Azimov wrote on December 13, 2011 in the New York Times:

"The rise of natural wines over the last five years has provoked one of the most contentious and useful debates in recent wine history. Though it is a fringe movement, with little organization or no goal other than producing and enjoying its own wines with as little winemaking intervention as possible, the power of its ideas has proved highly influential in the fine-wine industry."



So why do people do it? Deborah Lauter, writing for the Los Angeles Times last December, quoted one French 'natural winemaker' as saying, "when you make something naturally, it has a magic to it."

Luckily Ms. Lauter, a special correspondent and not solely a wine writer, realized that 'magic' is not without cost:

"The phrase 'natural wines' is widely criticized as being vague, but it roughly refers to wines that include very low doses, or none, of the hundreds of chemicals and natural additives permitted in conventional French grape-growing and winemaking. The additives correct mistakes and kill bacteria, necessary for mass consumption... The difference between "natural" and conventional wines can at times be startling to unfamiliar taste buds. Natural wines are generally considered more fruity, and a lot riskier (and more expensive) to produce. They can easily turn to vinegar, and no chemical pesticides or fertilizers are permitted to save struggling crops from disease or bad weather."



I've said this before and I'm saying it again, growing grapes in Green Valley is neither native nor *natural*. The *Vitis Vinifera Sylvestris* cultivars we are growing (as in Pinot Noir and Chardonnay) are hermaphroditic, heterozygous, hybrids (at least in the case of Chardonnay which is a cross of Pinot Noir and Gouais), self pollinating, easily propagated plants with transposons (selfish jumping genes, particularly so with Pinot Noir), planted on hybrid rootstock originally from North America (*Vitis Vinifera Sylvestris* is from Western Europe), i.e., the results of millennia of human, and not natural, selection. Nor were they developed to grow in Green Valley. Pinot Noir and Chardonnay were not bred to be resistant to frost (a problem in Green Valley), nor are they resistant to mildew and phylloxera, because they didn't have to be, at least not until the 19th Century when, sadly, the two were brought inadvertently to Europe from North America.

Magic may seem better, but we are judged not by how we make our wines but by how they taste. By way of analogy, to get to our barrel storage cellars from our fermentation cellar you have to go down a steep hill. Let's say we decided to improve our carbon footprint by rolling the barrels down the hill. Chances are we'd lose many barrels and the surviving wines wouldn't taste any better - which means we can't charge more for the ones that did survive the drop. Same problem exists with 'natural winemaking.' I may not be a winemaker, but I do know that, as Prof. Ronald S. Jackson so succinctly noted: "In-bottle malolactic fermentation is undesirable. It can generate clouding, petillance (from the released carbon dioxide trapped in the bottle), and be the source of off odors." A little SO₂ added at just the right times and perhaps a rough filtration can go a long way to make sure that every bottle of Iron Horse you open hasn't gone bad, and while that may not be 'natural,' to me that's good.

