

October 19, 2007

Since we finished harvest so long ago, I've had some free time, hence many words.

The guys have been busy laying out Upper A, Lower A and Train House B.



First we plant flags, then straws (about 14,000 or so), then pencil rods, then highway posts and end posts, finish with some wattle (about 2,625 feet worth) and straw and we're ready for next year to put in irrigation and maybe even some vines. Train House B and Upper A were not my favorite blocks, but now I'm feeling really good about them.

In the meantime autumn is making its progress through the vineyards, as in C1 and P2 (Thomas Rd.) below:



I find it scary how much fruit was left on the vines (not ours) to be picked well into October. It was as if winemakers are scared to be accused of picking too early, a kind of game of 'hang-time-chicken.' My point being, is that all the vines need are a few really cold mornings (and we got some) to get the message it's time to shut down, that the next week was going to be warm and beautiful doesn't matter, as vines don't read weather forecasts, i.e., no more physiological maturity.

As a way to finish up the 2006-07 on-line journal and deal with my 'issues,' a few random musings and opportune quotes:

"ASSERTION: The lower the grape yield the better the wine. TRUTH: Most vines have an ideal yield below which the quality of the grapes does not improve." "The bottom line: Yields should be based on sound viticulture, not marketing."

Eric Asimov, The Pour: Taking a Closer Look at Wine's Conventional Wisdom, He also wrote, "no-oak is an alternative style, but not necessarily a better one," and "big is fine if you drink wine as a cocktail; not so good with food." To which I say, amen. Next...

"When a group of people agree on something, that doesn't always mean they are right." Diet and Fat: A Severe Case of Mistaken Consensus, By John Tierney, New York Times, October 9, 2007. As he noted:

"The notion that fatty foods shorten your life began as a hypothesis based on dubious assumptions and data; when scientists tried to confirm it they failed repeatedly. The evidence against Haagen-Dazs was nothing like the evidence against Marlboros.

It may seem bizarre that a surgeon general could go so wrong. After all, wasn't it his job to express the scientific consensus? But that was the problem. Dr. Koop was expressing the consensus. He, like the architects of the federal "food pyramid" telling Americans what to eat, went wrong by listening to everyone else. He was caught in what social scientists call a cascade."

'Cascade,' along with cognitive dissonance (a psychological term describing the uncomfortable tension that may result from having two conflicting thoughts at the same time, or from engaging in behavior that conflicts with one's beliefs, or from experiencing apparently conflicting phenomena – I got that from Wikipedia) go a long way to explain so many silly fads, bad science and some terrible even tragic decisions. It turns out it's okay to eat meat, we don't need to drink eight glasses of water every day and Saddam Hussein didn't have weapons of mass destruction and we weren't hailed as liberators. Who knew?

Here's another story that caught my attention:

Taipei - Hundreds of thousands of earthworms appeared in a Taiwan vineyard, prompting the owner to consult an expert out of fear that a strong earthquake might be coming soon, a newspaper said on Monday. Wu, who bought the vineyard 40 years ago, said he has never seen so many earthworms in his vineyard before and estimated there were 200 to 300 kilograms of them. Seeing the large numbers of earthworms Wu feared that a major quake might be coming because worms and snakes are known to come to the surface when disturbed by seismic activity. Wu consulted a farm expert who said the earthworms crawled out because his vineyards were flooded when Typhoon Krosa hit Taiwan on October 5. Wu's worry about an upcoming strong earthquake eased when it was pointed out that another vineyard near Hu's house has not been invaded by earthworms because it was not flooded during the typhoon's passage.

What does all of the above have to do with growing winegrapes at Iron Horse? Well actually tons. The question is how do we make decisions. Based upon whatever is the latest marketing mantra, or the musings of a German philosopher (say, Karl Marx), or local yore or even religion? Or how about simply what makes the best wine? That is what works for me. Just go to <http://www.ironhorsevineyards.com/accolades/> and see how we're doing. Hence my penultimate quote, the brilliant Dan Berger (Dan Berger's Vintage Experiences, Volume XII, Issue 29, September 6, 2007):

"When I'm asked to discuss the best wineries in America, Iron Horse of Green Valley in Sonoma County comes to mind, and one reason is an adherence to style. Take the Chardonnays. They are so distinctive as to define what the grape can do when crafted to work with food. In a recent commentary I gave as high an accolade as I can give for an Iron Horse Chardonnay, the 2005 "Rued Clone." Now I have seen three more Chardonnays from wine maker David Munksgard that show the same style. There is no formulaic wine making here. Each wine is handled based on what comes out of the vineyard, but usually Chardonnays avoid malolactic fermentations. Munksgard said he would do ML when the grapes called for that technique."

Last quote a Ludwig Wittgenstein parenthetical from Part II of his Philosophical Investigations – I always have a copy handy, along with his Tractatus Logico - Philosophicus: “(A dog cannot be a hypocrite, but neither can he be sincere.)” Who can argue with that? Still, the last big event, the Corral Club harvest party is done, and we’re dancing.



October 5, 2007

It is fall. The vines know it, at least here at Iron Horse, others are still picking.



Still we’re busy laying out Upper A, Lower A and Train-house B and ‘single shooting’ the field grafts in C - hard to imagine that it was only three months since the vines were grafted...



but not so busy we can't multi task.



So we enjoy the last melons of the season...



and the tomatoes...



and of course the fish.



and start thinking about other things, things like clones.

Clones

I think clones are really important. I think that when someone says that older vines are better than younger vines (or vice versa), particularly here in Green Valley, that person is really commenting on which clones he or she prefers. There are those who don't think that way. I think they are wrong. For Chardonnay, I prefer the older heritage clones (or selections) such as the Old Wente, Stoney Hill and Rued (Blocks, L, M, O and P) as compared to Clone 4 (Thomas Road), popular in the early nineties, and the Dijon Chardonnay Clones popular in the late nineties. For Pinot Noir the last decade the buzz was all about Dijon Clones, and I admit I like the more recent ones such as 667, 777 and 828, but I still like Pomard 5 (Q is mainly Pomard 4), as well as 'heritage' clones like Swan and Calera (which is why H and J will be field grafted next year with, go on guess... yup, 667, 777, 828, Pomard 5, Swan and Calera).

Some months ago, before harvest I thought I'd track down the origins of the "Rued Clone." I did some on-line research, read some books, spoke with Al Steele of the Dutton Ranch Company, Daniel Roberts and Bob Demple who planted O Block (the source of our Rued Clone Chardonnay) way back when. In the end I learned three things, first I'm not cut out to be an historian (I lack tenacity, or I'm easily distracted, that and cocktail napkins may be convenient but are not best way to keep notes) and second there is no "Rued Clone," instead there's a "Rued Selection." A selection in the sense that the block is not made up of a single clone, vine after vine, but a collection or 'selection' of clones. This explains why when walking through an old block there will be variations in the size and taste of the individual berries. Some may even have what David calls the 'wow effect,' such that a single berry will explode with flavor in your mouth, while others don't have that same effect. Curiously these separate 'clones' will show up often in groups of five or six vines. That is because we collect buds in sixes, as seen below in the cuttings in the box of one of the grafters.



But why a 'selection?' In the old days, we collected bud wood from our colleagues, now we collect bud wood from our colleagues but with a big difference as discussed below. In between we got whatever was available in the catalog. Back in the 70's and 80's it would take around 200 vines to get enough buds to graft all of O and not all those vines were the same clone, they just came from the same vineyard, the Rued Vineyard, owned by Mr. Rued on Graton Road - who got his vines way back when from the Emmoloo McClain Nursery and then things get fuzzy, mainly because I wrote my notes on a cocktail napkin and then used it for its intended purpose.

Which explains the third thing I learned, Rued Selection vineyards, such as O Block, are soon going to be extinct. So you ask, "why is not possible to recreate O Block?" The answer is rootstocks. In O Block we used the now infamous AXR, which other than a single, but fatal flaw (its not resistant to phylloxera), is a great rootstock. In particular it is great at masking various viruses and other problems. Now we're using low vigor rootstocks, Riparia, 420A and 3309C. They (the rootstocks) may be certified as 'clean,' but if the grafted bud is in anyway 'unclean' we'll soon see it and feel it. Which explains why we can't take cuttings from O Block no matter how much we love it and instead use buds from known sources. So in C Block we used Hyde-Old Wente (its Old Wente, but from Larry Hyde's Carneros vineyards) and Z Clone. The Z is derived from a Rued Selection vineyard - or at least one with similar flavors, but not from Green Valley, instead Sonoma Mountain, possibly from a vineyard owned by, I think, Jim Katon, who probably got his vines from somebody else who earlier got vines from Wente in Livermore, which is where most of the 'heritage' Chardonnay clones came from by way of the University of Montpellier nursery, which was visited by a Wente in 1912, and from there the trail goes cold, except we know Chardonnay clones came from Burgundy and maybe the source was Chablis, which explains the "Muscat" tone in Rued Selection vineyards, but that is just conjecture (possibly because if Mr. Wente did take notes on the cuttings he brought back, he too used a cocktail napkin which explains why we know so little). Mainly, though, the "Z" was started as a cutting from only one vine (using a process known as 'microshoot tip tissue culture,' the famed Deborah Golino, at Daniel Roberts' request, was able to end up with clean bud wood), which means all of the vines are now a single clone and thus not a selection. Which means that as the Rued Selection vineyards age and are replanted they may be replanted with Z Clone, and so will not be the same as before. I'm hoping this is good.

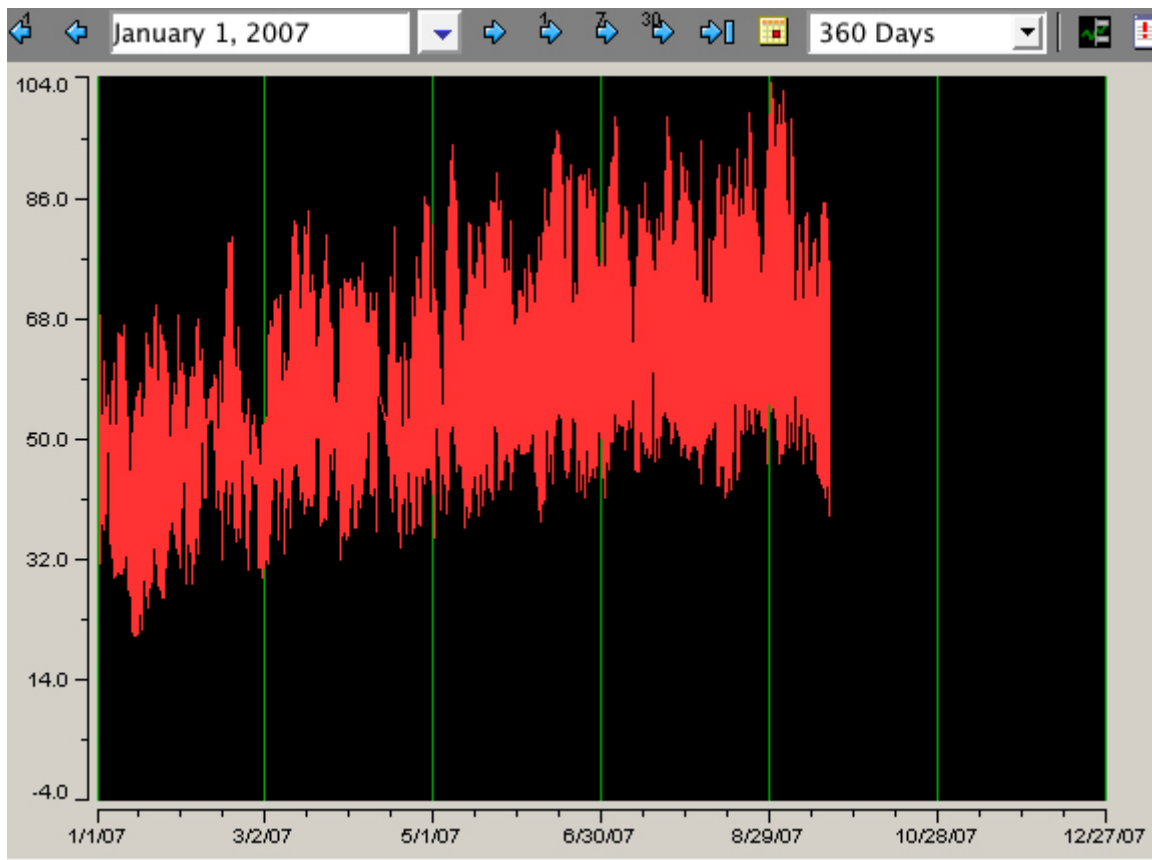
Almost forgot, here's a link to Justine's blog: <http://theunderbelly.wordpress.com/>

September 19, 2007



Harvest is over, and while the fruit was clean and the flavors are great (I mean really great, even lots just finishing up primary fermentation have flavors that are simply extraordinary – good job David), the fact is the yield is very much down. The cause of this good news- bad news is, according to almost anyone who knows, the weather. As I look back at the season a number of things concerning the weather have struck me as significant when trying to understand why vintage 2007 is what it is as compared to say 2006 (big and great) or 2004 (small but decent).

First let us consider why the weather is such an important factor in both quantity and quality. I believe it begins with a very simple premise; vines do not need to produce grapes every year, we need them to produce grapes every year. Vines just need to grow shoots, leaves and roots, and only when the conditions are right they'll produce grapes. What is fascinating is how a single bud from a Hyde-Old Wente Chardonnay shoot, when grafted unto the trunk of a particular rootstock can grow over time into yet another Hyde-Old Wente Chardonnay vine. However, when to grow a shoot, or a leaf, or a lateral or a tendril, or even an inflorescence all depends on outside stimuli. Some of which we supply, by pruning and otherwise training vines, trellising, adding water, shoot thinning and positioning, etc. Mainly though, the most significant source of stimuli, or so it seems to me, is the weather, and what can be frustrating, or great, is that every year is different. Below is the temperature chart from January 1 2007. If it was a roller coaster I'd be too scared to ride.



A warm early spring led to early bud-break. However cool weather during bloom resulted in an uneven set and shatter. Finally summer was relatively mild. Here's how Erik Moldstad described August:

"Temperatures were a few degrees below long term averages with comfortable readings most of the month. The only heat wave was from the 28th through the 30th when temperatures in most areas pushed above 100 degrees. The northern areas saw a couple more hot days on the 3rd and 4th. Otherwise it was an uneventful month as weak high pressure kept temperatures near or below seasonal averages most of the time."

Add, very little fog in August and only 4 inches of rain in all of March, April and May, no wonder the vines weren't interested in making grapes. The lack of heat (energy) and water (material) means less photosynthates. By way of illustration, here's a cluster of clone 4 Chardonnay from Thomas Road this year:



Compare it to last year:



Trust me, David's hand isn't any bigger than Victor's.

It is also possible the cold snap last January and the fact that we had two fairly decent harvests back to back may also have affected overall fruitfulness. Apparently, the inflorescences that will eventually become grapes start to form some 15 months before harvest (i.e. June 2006). But mainly the weather seems to be to blame and not me. As Dr. Peter May - one of Australia's eminent viticultural researchers - concluded in his book, Flowering and Fruitset in Grapevines, "no reliable method has yet been devised to ameliorate the effects of unfavorable weather conditions by viticultural methods.

Still it does taste great, and the juice is beautiful. Here's the Brut Rosé and some de-stemmed Rued Clone Chardonnay (eventually David Munksgard will explain in his 'blog' what he was doing, as it does look pretty mysterious):



Another benefit of a light harvest is that we can really focus on the picking, i.e. 'precision harvesting.' Here's David and the intern, Kristy Melton showing their focus (synchronized Warrior Pose):



Precision harvesting isn't quite 'no grape left behind,' but pretty close. For example in P7 we did three passes. First we went out with buckets and removed the 'wings' or 'shoulders' - the extra little cluster on the left below.



The brix, TA and pH of the wings were the same as the primary clusters, but there was noticeably less color. By removing them the Pinot from P7 should be much better, and by not dropping them on the ground we'll have an extra 100 cases or so of Rosé de Pinot Noir, hooray. Then, David had us pick the portions of P7 that are in swales three days later than the 'upper' portions. What's more we didn't pick on Sundays and were able to take off all three days of the Labor Day weekend, and did I not mention what we got tastes great?

More Critters

As far as I can tell this is the first time we've seen American White Pelicans.



Best yet is watching them fly in formation.



August 20, 2007



Harvest has begun. We started early Thursday, August 16, because the grapes were ready and the forecast was for cool morning temperatures and fog. It was cool (around 50°F) but no fog. As we climbed up to the top of I block at 6:20 am (very early for me as I am quite diurnal, i.e. I need daylight to wake up) master winemaker David Munksgard asked, "so where's the fog?" I replied, "so much for precision farming." To make matters worse we'll have already had to pick on a Saturday and not on a Monday. As I said, "so much for precision farming."

The grapes are looking great and tasting great, we're just not getting a lot of them (to date we're down 40%+ from last year), most likely due to the shatter problems earlier this year during bloom, and overall it seems the 'berry weight' is down (Daniel Roberts attributes that to the generally 'cooler' days we've had this season, which means the grapes haven't bulked up). I know it's not my fault, but I can't seem to not wonder, was there something else I could have done. In the meantime what we've picked so far from I, K, G & E is going to make a great Brut Rosé to be enjoyed in 2011. Still Pinot Noir is a brat.

In B South the guys had to pick in fields of Queen Anne's Lace or Wild Carrots.



Apparently it's a natural contraceptive, but we won't tell the guys even though it is effective as it's inconsistent. Still, if the gophers, rabbits and the deer were to eat them then maybe there would be less of them in the vineyard. It seems not.



Meanwhile, leading up to harvest we've been busy. Ripping Train house B, with Art-the-Ripper (Jack was otherwise engaged, I know if you have to explain a joke...):



Tasting blackberries in P6:



While in P6, P7 & Q we have been removing green fruit, wings and fruit going on shoots that are too short. Basically the goal is to remove the grapes we don't want now to make picking and field sorting a lot easier. As I said above, Pinot Noir is a brat. And we're digging holes in E, I'll explain what we're doing later, just accept the idea of a vineyard where on one side, the morning side, Pinot Noir, and on the afternoon side, Pinot Blanc, or viticulture with an attitude. Still, it's a very nice hole.



Oh, and buying a pig at the fair. I didn't so much pick the pig, as I did pick the kid (Alexander Holland – age 9), still we get the bacon from the pig, who was (before becoming bacon) Special Junior Champion. He weighed 240 pounds and I paid 10 times market rate, but look how happy Alexander is, and I also got a hat.



Now I admit that with all the turmoil in the markets, at least I get to deal with real stuff, like grapes, deer, blackberries, Queen Anne's lace, ripping, pigs and even holes (holes are real, just a different kind of real). So perhaps I'm wrong to complain like I did above. Many years ago I too thought of starting a hedge fund, it had a name: the Sterling Hedged Investment Trust, and an investment plan: "the acronym says it all." Yet, I didn't. Instead I get to watch cormorants playing with an egret.



July 20, 2007



What you see above is the start of veraison in I Block, which means we could be harvesting Pinot Noir for Sparkling by the end of August, sooner if it gets hot. Overall things are looking pretty good, we're just about done with shoot positioning. What we said way back in January, "prune right and the suckering and shoot thinning will be easier, shoot thin right and the shoot positioning will be easier and shoot position right and removing laterals and tunneling will be easier," is true, the vines are looking great. However, as Daniel Roberts predicted, the long cool set (about 17 days from 100% bloom to full set this year compared to 8 days last year) led to uneven berry size within the clusters, or 'hens and chicks.' Below on the left is Old Wente Chardonnay in L Block, on the right Pinot Noir in N Block:



I guess I need to stop taking these developments so personally. I mean it's not like I can control the weather, but I just hate not being able to do something. Still, we're about to move on from getting a crop to the next phase, how can we improve upon the flavors. Hopefully the berries will mature uniformly. More to the point I know David Munksgard will do a great job. So we make lots of Brut Rosé, it could be worse.

We're also 'topping' the bench grafts in C.



Here are the instructions on how to top:

1. Only top a vine if it is 12" above the fruit wire.
2. Remove the carton.
3. Cut at the fruit wire (be sure it is at 30").
4. Remove and carefully clean all leaves and buds (please do not cut into the trunk) below the irrigation wire.
5. If the trunk is strong (at least as big as your largest finger, you know which one it is) leave 4 shoots (or laterals), if weaker 3, maybe only 2, okay if one shoot is right at the fruit wire) try not to have shoots more than 6" below the fruit wire.
6. Remove all other shoots, leaves, however, are okay.
7. If necessary tie the trunk to the pencil rod, please no bends or curves.
8. Check the graft-union is above the dirt and is not buried.

We may get a decent crop next year.

What is truly gratifying is to see how well the replant is going. For example in C, the trunks and the internodes among the Bench grafts are perfect, mainly by not watering. To quote Daniel Roberts: "When water stress is more severe, there can be a reduction in the uptake of CO₂ along with a reduction in the translocation rate of photosynthates from the leaves to the fruit." Q.E.D. Less water = tighter internodes, which means shorter gaps between what will eventually be canes and spurs and a good healthy trunk.

Critters:

He may look noble but this is a critter, a pest (and luckily in someone else's field).



Here's another pest (and it's in H Block, our field).



I remember reading an article in *Revue Viticole Champenoise* number of years ago, "La Lute Contre les Lapins," or the "Struggle Against the Rabbits," in which they studied the best ways to stop rabbits eating the vines:

fencing, repellents and hunting. The conclusion; fences work best, although for the more traditional growers who preferred hunting, they included a recipe for Rabbit in a Champagne Sauce.

We mainly rely on milk cartons, but I was curious as to what our biodynamic friends are doing. Here's from Wikipedia:

Since Steiner viewed the full moon, Venus and Mercury as cosmic powers influencing the fertility of plants, the biodynamic techniques for pest control involves blocking the fertility influence from said planets on different pests. Steiner dictates that this is achieved in different ways for pests and weeds: Pests such as insects or field mice (*Apodemus*) have more complex processes associated with them, depending on what pest is to be targeted. For example field mice are to be countered by deploying ashes prepared from field mice skin when Venus is in the Scorpius constellation.

I assume the treatments are the same for deer, rabbits and gophers as it is for field mice. The hard part has to be to remember to keep enough deer, rabbit and gopher skins around to incinerate on that one night a year there's a full moon and Venus is in Scorpio. Perhaps one needs to start collecting skins now. If you want to mark your calendar, Venus enters Scorpio December 5, and then leaves for Sagittarius on the 30th, so the Full Beaver Moon on November 24 is no good, leaving only the Full Cold Moon on the 23rd of December for burning your skins to a cinder. As for me, I'll trust the milk cartons, deer fencing and for the gophers, local hunters, like Red Tail Hawks, snakes like this one near my home (sorry David):



and my cat, seen here resting after a long hard day but still vigilant:



June 20, 2007

At last summer. Summer in Green Valley, one day you're too hot and the next too cold. According to our meteorologist Erik Moldstad: "There are no strong indicators that anything unusual will develop this summer. As a result we can expect a typical summer with dry weather and the usual fluctuations in temperature." Specifically, as he wrote on June 19: "The only changes day to day will be the amount of marine air over the area during the morning hours. Today with more marine air in place temperatures will be several degrees cooler than yesterday. Indications are temperatures will be slightly warmer tomorrow with a little less marine air in the morning...." ('Marine air' is the technical way to say 'fog.')

More to the point the grapes are at 'pea stage.' meaning that we are done with bloom and they have set. Below is Chardonnay from L. Overall the Chardonnay is looking very nice, the Pinot seems a bit looser, which might be good, or not, too early to tell.



We've finished shoot thinning and suckering and are now on phase 3, shoot positioning and, time permitting, clearing out laterals and inside leaves (but only on the morning side). Here are two vines in L that clearly demonstrate the difference between before and after:



This is what it looks like inside a finished vine, note good filtered light as well as clear airflow.



We have also been 'feeding' the vines. Here are Daniel Roberts' quick recommendations based on his analysis of our 'petioles' (he was rushing to go to Prague, Paris & Budapest – hope you had a great trip Daniel):

Petiole P levels sufficient in all blocks
But lowest in block G which has been so each season.
For other blocks tested petiole P high and higher than bloom 2006.
To ensure adequate P for cluster development in block G,
Apply 2-2- lbs/acre of 12-61-0 to all of block G.
Petiole K only deficient in block E,
Apply immediately 2-2 gals/acre of 0-0-30
At 5 day intervals starting as soon as possible.
Petiole Mg low in block I-1 and P2 to these blocks
Apply 1 quart/acre foliar magnesium as soon as possible.

Ah the poetry.

In the meantime here's a new friend I found in B South, while I was checking on the progress in C (thanks for the camera Terry), there was a fence between us (okay I also stayed in the car):



Not far away the guys were working single shooting the bench grafts.



We've started the field grafts in C as well. It's a real pleasure to watch professionals at work. It seems the key is not just skill with the knife and wrapping the tape just right to expose the bud yet protect the wound, the really hard part is holding the bud in one's mouth, without dropping or swallowing it, while cutting etc.



We've also ripped Upper and Lower A. Note the winged tine, which pushes the dirt up and then over the rip, instead of down and away. Already in C we are seeing the benefit to ripping just in the row (as opposed to cross-ripping) and using the winged tine as the roots are doing exactly as they are supposed to.



Terroir, a quick discussion

"The idea that one can taste the earth in a wine is appealing, a welcome link to nature and place in a delocalized world; it has also become a rallying cry in an increasingly sharp debate over the direction of modern

winemaking. The trouble is, it's not true." So wrote Harold McGee and Daniel Patterson the New York Times on May 6, 2007.

Let me make one thing totally clear: Harold McGee is always right. I've met him and fell in love (man love), I've read and re-read On Food and Cooking, both the original 1984 and the revised and updated 2004 editions. His chart on page 60 of the new edition lays out with perfect clarity how many familiar cheeses are made ranging from fresh firm Queso Fresco to low-moisture-aged-years-press-firmly hard Sbrinz. He is brilliant, take for example his conclusion: "If rocks were the key to the flavor of 'somewhereness,' then it would be simple to counterfeit terroir with a few mineral saltshakers. But the essence of wine is more elusive than that, and far richer."

There is no doubt that P6 on Thomas Rd. makes a better Pinot than P7. More to the point, however, the first 33 rows of P6 are not as good for still wine as the last 33 rows. The difference between the three lay not in the soil, the clones, climate, or for that manner the training (although P6 was trained different than P7), the difference seems to be in variations in the slope, which seem to affect the amount and intensity of the sunlight on the vines.

So let us move on and away from "Terroir" as the be all and end all and instead embrace the numerous factors that make Iron Horse such a great place to make wine.

Up there with moving on and away, here's Justine graduating with Honors from Dartmouth College, June 10, 2007, in the rain. I'm very proud of her.



In the mean time the reservoir goslings are almost as big as their parents. So it goes.



May 22, 2003

It is spring, and the young goslings, American born, so legal, swim happily on our reservoir with their Canadian parents - clearly undocumented (and yet how can we split up a family? hopefully Congress will pass immigration reform and soon).



Spring is a time for cherries, home grown Bing Cherries...



and Shad Roe at K&L Bistro in Sebastopol. It was yummy.



(Name me another on-line journal with such awesome food shots. I have special food setting on my new Leica V-Lux 1, thank you Terry.) We've just finished suckering and shoot selection. Note how the two Ramiros are working together as a team. They are in P7 where the Pinot trained on a lyre so very difficult to work alone.



Mainly spring is bloom time. The vines start out slow, just a few signs that things are happening, like on the 10th of May...



and then by the 21st:



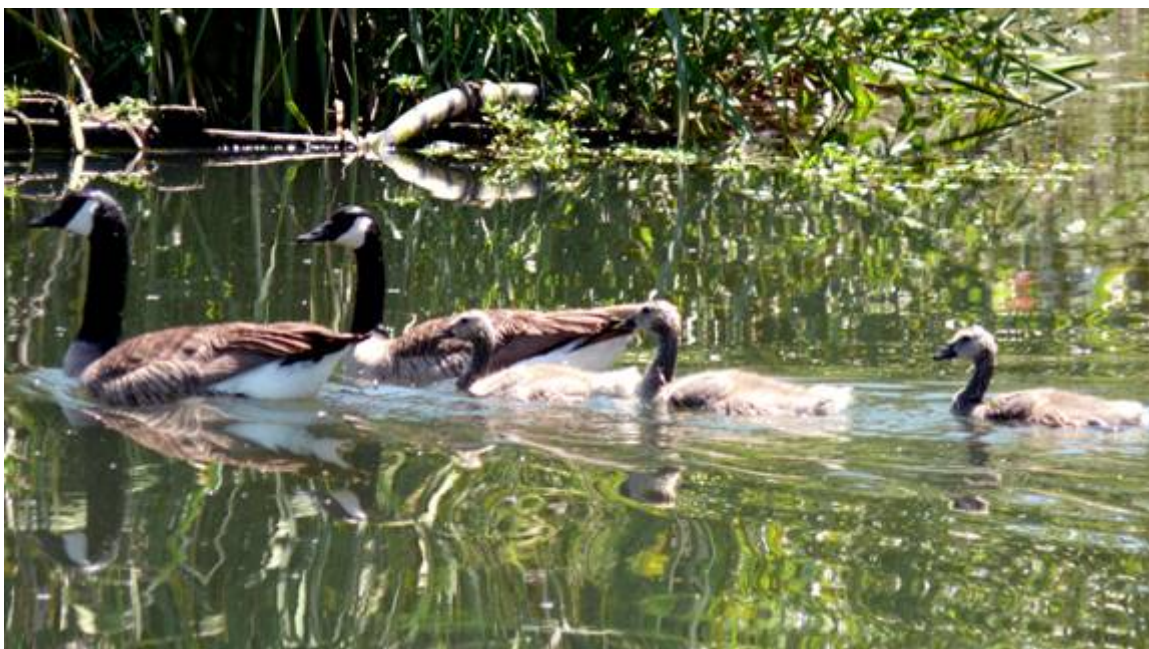
The problem with bloom is that it is a period in the vine's seasonal development when things can go seriously wrong simply because it was hot, then it was cold, then maybe some lingering fog and then hot again, which is how it's been the last two weeks. I saw the first signs of bloom on March 8, and we should be at 100% by the 24th and hopefully done with set (or pea stage) by mid-June. Still we've seen bunch stem



necrosis...
and botrytis...



As for what is going on, well there are a number of explanations as detailed below in an e-mail we received from our new intern Kristy Melton using some close-up shots I was able to take with my new camera (thanks Terry) which were e-mailed to Kristy and the U.C. Davis experts: Hi Laurence and David, After talking with the viticulture people here, they had some comments on your problem. First, the suggestion of changing soil/ambient temperatures, nitrogen availability and Botrytis occurrence all together seems unlikely. They did jokingly suggest you try throwing a bunch of dry ice on the ground to cool the soil back down until the ambient temperature rises :) There is an issue with inflorescence necrosis in Pinot noir that is caused by an ammonium imbalance, which I wonder if your consultant might have been suggesting. Here's the abstract from the only paper that has ever looked at early bunch stem necrosis. <http://www.ajevonline.org/cgi/content/abstract/47/2/173> Let me know if you want the full article, as I will have to get it from the school library. With the Phomopsis spots we saw in Block G, there is likely a Botrytis/Phomopsis issue getting into the rachis and causing problems. However, since there are dead spots at the top of some of the clusters but not yet the bottom, it seems strange that they would be clogging up the vascular tissue and killing in that unusual pattern. If you see more symptoms like those on this website, plus the normal Botrytis appearance <http://ohioline.osu.edu/hyg-fact/3000/3031.html> then that idea could be confirmed. Ultimately, it may be that you have different problems in different areas. For example, Block G may have these pathogens, but the block behind the winery may have shade/ammonia issues. They really couldn't provide any more help unless they saw the whole vineyard site. Hopefully it doesn't progress any more. Basically what we have is shatter, a dreaded term this time of year. Even without shatter a long cool bloom can adversely affect the uniformity of maturity we so desperately want. We'll have to wait and see if that will also be a problem this year. The point being is that the quality of the set, affects the quality of the whole year, and not just the quantity as I used to think, and that 'quality' is totally dependent on the weather during a relatively short period during the growing season, so much for terroir. Still, I hate to end on such a down note. See how much the goslings have grown in just two weeks!



Also, look at how the 3309C has been growing in H!



April 25, 2007



There she is, the new tractor with the new mower, which as you can see is Perfect, it says so right on it:



What you don't see is that it (the mower) was originally destined for Screaming Eagle, but their rows are 6' and our rows are 7' and the mower, which is from Holland is two meters wide, which is about 6' 5", reason why we should be teaching the metric system. We also got a new yellow disc and a new 300 Gallon sprayer, which means we can cover six acres without having to stop and refill, and it's narrow too. Check out the fine mist.



What's Happening in the Vineyard?

The vines are growing. We are seeing beautiful shoot growth as well as excellent future flowers and hopefully grapes, just like the ones below in O Block, the source of our beautiful Rued Clone Chardonnay.



The main task now is shoot thinning and suckering, as demonstrated by David Munksgard's hands below:



Suckering is not as therapeutic as pruning but is still quite pleasurable. Basically we check every position to make sure we have no more than the right number of shoots and carefully push off with the thumb those we don't want. For example, it is not unusual to have two shoots coming out of a single bud, which isn't good, so we'll choose the smaller of the two. The end result is better growth and fruitfulness for the shoots still on the vine. This is particularly important for older vines that face a whole host of problems associated with old age, as well as the younger vines that are still maturing. It is also a way to deal with this year's problem, Barnes' Syndrome, or stunted shoots mainly due to the dry and cold weather we're experiencing (the vines aren't able to draw in the necessary amount of nutrients, in humans it's called thoracalaryngopelvic dysplasia, and is much more serious, which leads me to wonder if Kevin the Pest Control Advisor may not have gotten the name wrong, still he's doing a great job), by removing unnecessary competition. Where I'm going with this is that at this stage we are primarily in a protection mode, be it protecting the shoots from frost, deer, a large number of little pests and plant nutritional deficits, which is the perfect segue into my next heading.

Why We Aren't Organic at Iron Horse

Let me be blunt: Growing wine grapes in Green Valley of Russian River Valley is neither native nor natural. There is a native vine, *Vitis californica*, and while it may be the basis for some rootstocks it is clear that the grapes, while edible are sour and totally unsuited for wine. Instead we grow Pinot Noir and Chardonnay, from France, using rootstocks that may have originated in the United States but were perfected in Europe. Even our cover crops are not native. As for natural, the amount of man-made material that goes into the planting of a vineyard is staggering. For example, the replant at Iron Horse alone will require around 400 miles of wire, the flight distance between Santa Rosa and Los Angeles; over 90,000 pencil rods, thousands of highway posts and hundreds of end posts; more than 50 miles of drip hose and miles of PVC pipes for irrigation and frost protection, all preferably before we've even stuck a stick in the ground. This is how it has been for centuries, perhaps not with PVC and metal but with stone or wooden walls and pergolas and arbors. Let us also accept that the original rootstock and bud-wood, if certified, or at least clearly free of disease was not organically grown.

So what does it mean to be 'organic?' Generally, no synthetic materials are allowed, so why is being organic so hard? Three points: 1. A prohibition of synthetics (read Roundup and certain pesticides) does not mean the grapes and the resulting wine will actually taste better. If anything it could taste worse. If it rains or even some fog shows up, and then for about five days the temperature ranges from 70°F to 85°F for about six hours each day (just what we'd expect in Green Valley most of the summer season, finger on cheek time) we have to deal with powdery mildew. We use micronized-dry-flowable sulfur, which is organic, it works on contact to kill powdery mildew, only we can't pick for another two weeks, which can lead to problems. There are other organic products we can use such as stilet oil (a highly refined mineral oil, i.e. paraffin or baby oil), however, to be truly effective it is best to add a surfactant, which is synthetic and thus not organic, and effective is important. 2. A prohibition of

synthetics costs more, I mean a lot more, and does not reduce one's carbon footprint. We could give up Roundup, as there is an alternative. We can cultivate, and hopefully over time we'll be able phase out using Roundup or least use less. We can even get an attachment to the new fine tractor to do the cultivation. Except that we're talking about \$400.00 more per acre, and that's before tractor diesel. Instead of suckering the vines we'd have just about enough time for weed control. This would negatively affect our search for better flavors. 3. Grapes are not tomatoes, grapevines are perennial, and tomatoes are annual. One of the key tricks to organic farming is crop rotation. If some blight that affects tomatoes arises, well plow them in and plant rutabaga. This means that organic farming isn't sustainable over time with grapes. Take phosphorus, without it vines will lose the ability to develop roots and have serious problems flowering. There is an organic alternative, Bat Guano, but it is really hard to apply, expensive and inconsistent. Our particular problem is that phosphorus is not naturally occurring in Gold Ridge soils, so we need accept the fact that we need to use synthetic fertilizers or see the crop fall off and worse see the grapes tasting mediocre. Addendum: Why we aren't biodynamic. Biodynamics is a religion, founded by a creationist (curiously not anti-Semitic and actually anti-Nazi), theosophist believer in the lost continent of Lemuria with Butlerist tendencies. If we're to follow a religion, then why not be Kosher, the Torah is much, much older. Or how about the Koran (also older than Rudolph Steiner), except we'd be out of business, more to the point, I have enough trouble dealing with people now I have to worry about offending gnomes and fairies? Not a good bet.

The problem in the end is how are decisions made. To be organic is to accept a number of artificial choices. A problem compounded with Biodynamics. It is possible to be organic, but when dealing with Pinot Noir and Chardonnay in Green Valley it is very, very hard, unlike say Cabernet Sauvignon in Dry Creek or the Alexander Valley. My hope is that first we strive to grow grapes that taste great, that we do it in a way that is safe to all of us and our people but is effective, and last, we do it in a way that respects the long term health of the land.

So maybe I've written too much, to finish, one of my babies in H Block starting to emerge from its mound.



March 22, 2007



It has been one beautiful day after another and if wasn't for fact that the Republicans lacked a modicum of an energy conservation plan other than prolong Daylight Savings, I'd actually be happy. Instead I feel like I've gone to Denver (except Denver is one hour later). Still it does make it easier to get up at dawn and see Mt. St. Helena and C Block covered with a gentle blanket of our Green Valley Fog.

The problem with this beautiful weather is that the vines think (or sense) it's okay to wake up. So it's a good thing we're done with pruning and tying. First the buds begin to swell, just like the Pinot below in P6 (note the wound is 'weeping'), followed by Q-Tip and Popcorn...





and boom, we've got bud break. Now we start watching the weather, because we need to protect the buds, leaves and young shoots from frost as well as deer and all sorts of other issues, which I'll deal with next month.

Other Exciting Developments

H and J are no longer stake farms, we're actually putting in vines, so now they are stick farms (actually all you can see for now are tens of thousands of mounds of dirt). Below is the legendary Jaime Robledo (way back in '85 he worked on planting the Corral Vineyard, L, M, N and O) preparing the dormant rootstock (or sticks with roots) for planting in J.



Buying a Tractor: Part II

Here's one of our older tractors mowing L early in the morning. We mow, not because David Munksgard has hay fever issues, but to help reduce the risk from frost damage. Bare earth is a few degrees warmer than mown cover crop, and mown cover crop is warmer by a degree plus than un-mown cover crop. That extra degree can make all the difference if the system fails.



I need to make a small confession. Getting a new tractor is more than just a necessity – and it is a necessity. It turns out that some time in the reasonably near future I shall be eligible for membership in the AARP, i.e. I turn 50. Now many men at this time in their lives need a big party, others an exotic and challenging locale, like Nepal. A normal reaction is a new car, preferably a fast sporty car (with a fast sporty blond in the passenger seat). Me I just want a tractor that will work in our new vineyards – but why not a fast sporty tractor? Because apparently it just doesn't work that way.

When our tractor salesman called and I told him how much I really wanted the really cool and very red Antonio Carrero (see last month's 'blog' below) he may not have sighed out loud, but definitely inside there was a whopper. Instead John O'Gorman suggested he come out and look at the place and then he'd make a recommendation. Which turned out to be a slightly used Kubota M8200 Narrow, and just to be sure, even though it was a tad wet he trailored one over for a test drive. Here's Daniel trying it out.



Definitely not sexy, but more than enough horsepower, 73, dependable as a summer day is long, and, as Joy pointed out, the same orange as the rest of our tractors. Also, the price is right, I was able to also get a new disc, sprayer and mower/chopper. I particularly pleased with the mower/chopper it's a Perfect, I could have saved some money by falling back on a Rears, but you have to aim for a Perfect. We've had one now for about 25 years and it only needed to be serviced once, that was after we tried to chop steel pipe. We take delivery next week, I'm so excited.

Below, planting 420A rootstock:



February 22, 2007

First a quick note about the weather, last month I complained it was cold. Now if I were writing this earlier, I'd complain it's been too dry, but as I start writing (it now being February 9), I shall complain that it is too wet – yes the bridge is yet again underwater and access here limited. A meteorologist put it so well: We were experiencing a mild El Nino, that means rainfall could be above average, below average or even average, and that can vary month to month. As he concluded, climate is what is recorded, weather is what we experience. In January we got a paltry 0.53". Contrast with the 7th through the 12th of February's 8.11". Still we're less than normal, whatever that, by which I refer to the word "normal," is. Probably the most galling is having a weather station that lets us know it's raining simply by going on line (and even then only in fifteen minute intervals) except that our internet access doesn't work in the rain, something to do with "line of sight" and the joys of country living. Fact is we need rain; I just don't like it when it's raining.

This month the weather has been all over the place, the high for 17th was 79°F while on the 22nd we had an inch of rain, plus hail and snow on Mt. St. Helena. Meanwhile the quince is in full bloom, so is the acacia, the daffodils are exploding all around us.



Which means we need to prepare for an early spring (possibly three weeks early, and maybe even a dry year. We need to get all of the pruning done before the buds start to swell (and are easy to knock off), but not prune those blocks that are susceptible to frost damage too soon (dry usually means more frost because there are fewer clouds), and still do it right. Below is Daniel Roberts on a more normal winter type day showing us how we need to prune B Block.



Buying a Tractor: Part I

Like it or not, we need a new tractor. In the old days we spaced our vines 10' x 6' (10 being the row width, apparently the rule is width first). So we bought some big ones (relatively speaking of course, in Iowa they'd probably think of our old tractors as lawn mowers). Now all the new plantings are 7 x 4 for Chardonnay and 7 x 3 for Pinot Noir. Why? Well, according to my new favorite viticulture book, *Viticulture and Environment*, by John Gladstones (I believe there's only one of him, so the plural can only be a misdirection, or a family thing, I'll leave the imprecation of the preceding to your imagination, and before his tome was awarded "Special Distinction in Viticulture, by the Office International de la Vigne et du Vin in 1994, he was probably best known as Australia's leading expert on lupins) in cool climates close spacing makes a whole lot of sense, and if you have already visited the Iron Horse Vineyards website and/or the Green Valley website, you will know, we are in a cool climate. To quote: "But whatever the practical constraints on row and vine spacing, one overriding principle remains. That is, the basic unit of the vineyard is the individual shoot," amen Brother (or Brothers) Gladstones. So we have more vines and much less room to work, hence we need a narrower tractor as we still have to do the work and we've more to do as we have more vines and more ground, because there are more rows per acre, to cover.

Before setting out to purchase said tractor I felt it necessary to review: What does a tractor do? So I went to my trusty (it's raining so no web access, see above) dictionary, specifically the Thin Paper Webster's Collegiate Dictionary, Fifth Edition, the largest abridgment of Webster's New International Dictionary, Second Edition, G. & C. Merriam Co., Publishers, Springfield, Mass, USA, 1946 (which is curious as it is inscribed to my Father, for his 16th birthday "*With love and affection Aunt Celia, Uncle Meyer and definitely Glenda October 25, 1945*"). Definition b "an automotive vehicle used for drawing or hauling something, as a vehicle, plow, harrow or reaper" seemed to fit the picture, it did not hurt that there was also an engraving of a farm tractor.

The definition was consistent with my experience; we use tractors to strip spray, pull choppers & mowers, seed, disc, spray, if needed hedge, scrape, be a bull dozer or front loader, pull bin trailers at harvest and even pull other tractors, trucks and operation managers out of the mud....see the photo I took on a really bad day early in 2006 below, first a crawler got stuck (and when a crawler gets stuck it really gets stuck) then a second tractor got stuck trying to free the crawler, and luckily third one was a charm, although we did have one more tractor in reserve in case we wanted to set a record.



During the October rains in 2006 we used our tractors with empty sprayers to blow the water off the grapes. To sum up: Tractors do many important things. The specifications then are three: 1. Fit in a seven-foot row; 2.

Sufficient horsepower to do all of the above (at least 50 hp); and 3. We can afford it. By the way, we also need a new sprayer, mower and disc.

One other issue; compaction. A problem with narrow rows is that repeated passes with a wheeled tractor can compact the soil right above the roots. This, I am told, is bad. Actually I don't need to be told I have seen what compaction in the wrong place can do. The solution is a crawler, but crawlers are slow, hard to operate and are limited in the uses compared to wheeled tractors. Also, when a crawler gets stuck, it gets stuck (see above photo). Last issue, tractor envy, as my Daughter would say "and you know what I mean." Phrased another way, damn you Kenny Chesney. Now I have to worry if my wife thinks my tractor is sexy.

So off we (that'll be top gun winemaker Dave Munksgard and I, he's focused on corks and riddlers, me tractors and sprayers) go to the Unified Symposium in Sacramento to see the wares. First stop the best, sexiest, coolest crawler around, the Yanmar T80 with rubber tracks, great in the wet, no compaction. I mean is that cool or what, and it even has a steering wheel, which is a big deal for a crawler.



So as we're looking around we ask ourselves, could there be anything, better, sexier and cooler? The answers: Presenting from Grosjean (that's French for Big John) René Viticole, the Caval 3X-Tracks, Over-Row Ultra-Light. What can be better than two hyphens in one name? This is from the brochure:

"A GLOBAL SOLUTION. The new CAVAL 3xTracks proposes you a global solution to farming the vine and helps to combat against the disappearance of the macrobiotic life in the soil. Also prevents erosion, due to heavy tractors between rows during farming season."

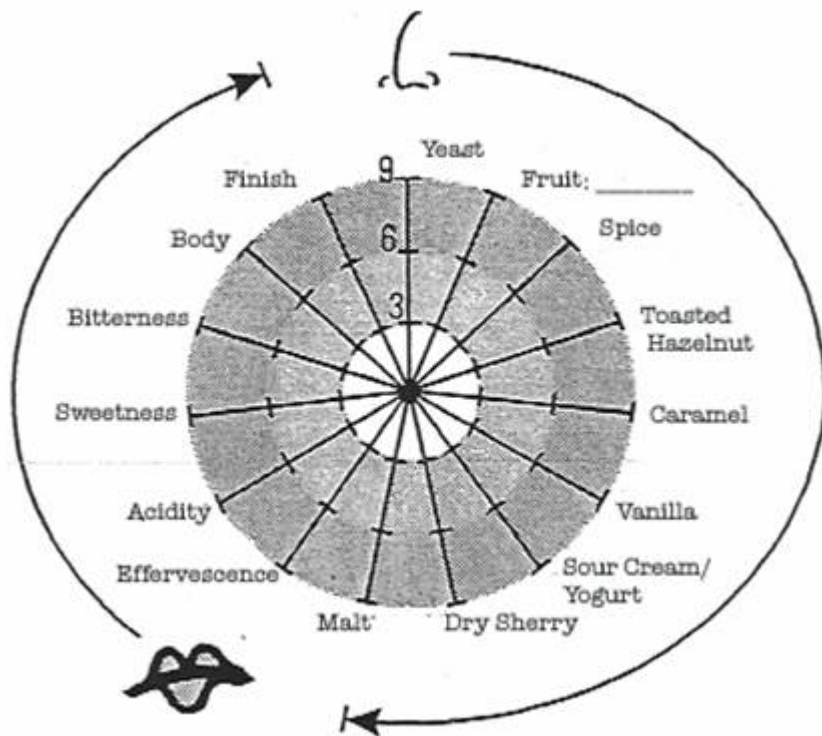
As I am unable to find a photo I will have to describe it,.. Think of a large, but delicate, yellow space bug type vehicle with two small tracks in the rear and a little wheel in the front below a cockpit with no visible motor or means of propulsion, with all kinds of attachments that just screams out: **"Highly Functional & Diversified, Increase Performance and Productivity, Environmental Friendly, Safety Performance, Economic: weck consuming, Comfortable of use."** I welcome anyone who can resist buying a piece of equipment that is both consuming and comfortable of use at the same time.

However, I must get back to reality. The budget allows me only one new tractor, and it has to be able to perform all of the functions listed above, and be affordable. The Yanmar and the Caval simply won't do. So off we amble (for those with the need for a sound track I suggest the promenade from Mussorgsky's Pictures at an Exhibition, only instead of paintings, visualize tractors and fermenters and other wine type production stuff). And I see it. Ferrari red, articulated (although not a feature we need), low profile and it has a first name and a Detroit Diesel engine. I have fallen in love. It's name, Antonio Carraro



16 forward speeds and 16 reverse speeds, i.e. the same whether coming or going. The seat and controls turn around, and check out the hat. Not since the DeTomaso Pantera has there been such an exciting combination of Italian style with American muscle. My mind is made up. I get the sales rep's card and I actually call him. I'm going to buy a tractor. Only it turns out not the fun sexy-sixteen speed number with a great hat. Just as a tease it's orange. More details will have to wait to next month.

An aside: David Munksgard and I recently attended a seminar on Wine Sensory Analysis (on St. Valentine's Day, so romantic). I will wait until later to bore every one with the details except that they didn't have an aroma wheel/tasting sheet for Sparklings, so we had to create one. Here's an attempt. Comments and suggestions for improvements are welcome. For example, at Joy's request I changed "vegemite" to "yeast."

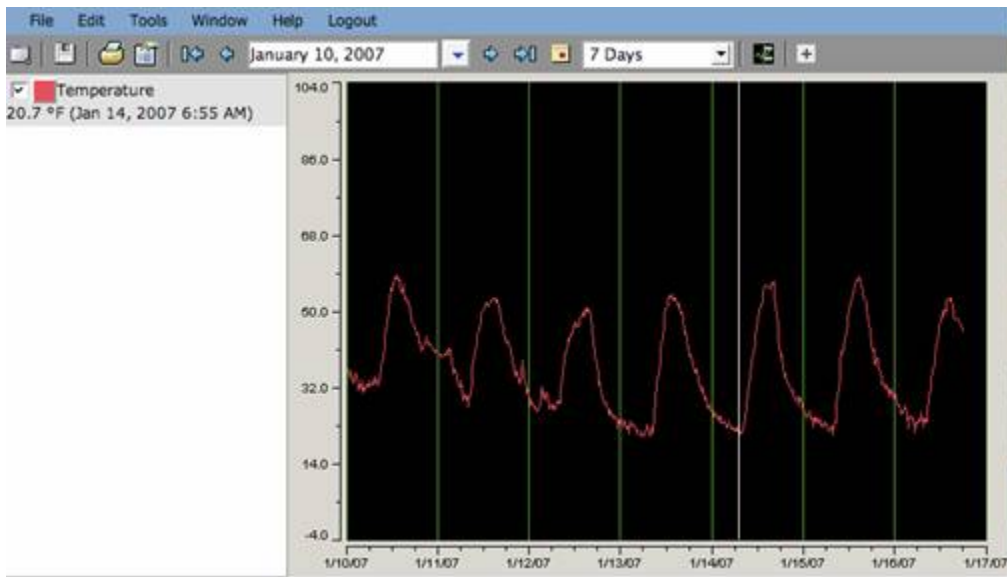


January 22, 2007



It's been cold, at least by our standards, cold. Cold enough to freeze and burst pipes, but not cold enough to harm the vines.

Here's our temperature chart for the coldest days so far (note the low of 20.7°F):



We may have lost this year's citrus and gone without showers (and other inconveniences I won't detail), but others have had it a lot worse, and compared to the 104.6° on July 23, 2006, I prefer 20.7°. Still our blood oranges make for great mimosas...they shall be missed.



That's Ramiro cane pruning in G above, and to the right, his hat.

As is obvious even if it is cold it is still pruning season. If there is one task that really makes all the difference in any given year it is how the vines are pruned. A mistake can take years to repair, done right however, and we save ourselves a lot of work during the rest of the year.

We are continuing the very intense, vine-by-vine, row-by-row, block-by-block approach we first started in 2005. (For a description of "precision pruning" go to pages 28 and 29 of my 2006 ramblings and photos, a/k/a my "blog," available as a single PDF file by clicking on Antonio, above to the left.) Now that we are into year three of the "precision farming" revolution we can really see the results. Except for the younger 21st century blocks such as I, K, B North, B South, G and C, where the vines still need to be trained, the rebuilding seems to have been accomplished.

This year we've been able to focus more on technique, both in terms of quality and safety. As for quality, a good example is Q. From Q we get some of David Munksgard's (that's his gloved hand at the end, there is no therapy more effective than pruning – so long as one is doing it right) favorite Pinot Noir, but from a farming point of view it's an odd duck. Originally planted 10x4, the lower 11 rows with Pomard 4, the upper 11, Geisenheimer, some years later we decided to interplant every four feet with Pomard 4. Now the spacing is 4x10, and instead of horizontal cordon trained vines we have what could maybe be described as vertical cordons. The problem is that the "newer vines" were planted in soil that was functionally un-ripped. The result being smaller vines which is fine except that it's every other vine - so much for uniformity. But by carefully looking at the vines before cutting and counting positions and shoots we can get close to a semblance of uniformity. As for safety everyone starts with stretches and warm-up exercises in the morning. We all have new clippers and when we finish a row we clean them. The work is easier and hopefully we're not spreading diseases and the like. Gloves and safety glasses are "de rigueur." The result is not just fewer and hopefully no injuries, but also better pruning and by harvest, better grapes meaning better wines.



L Block, the "Long Rows"

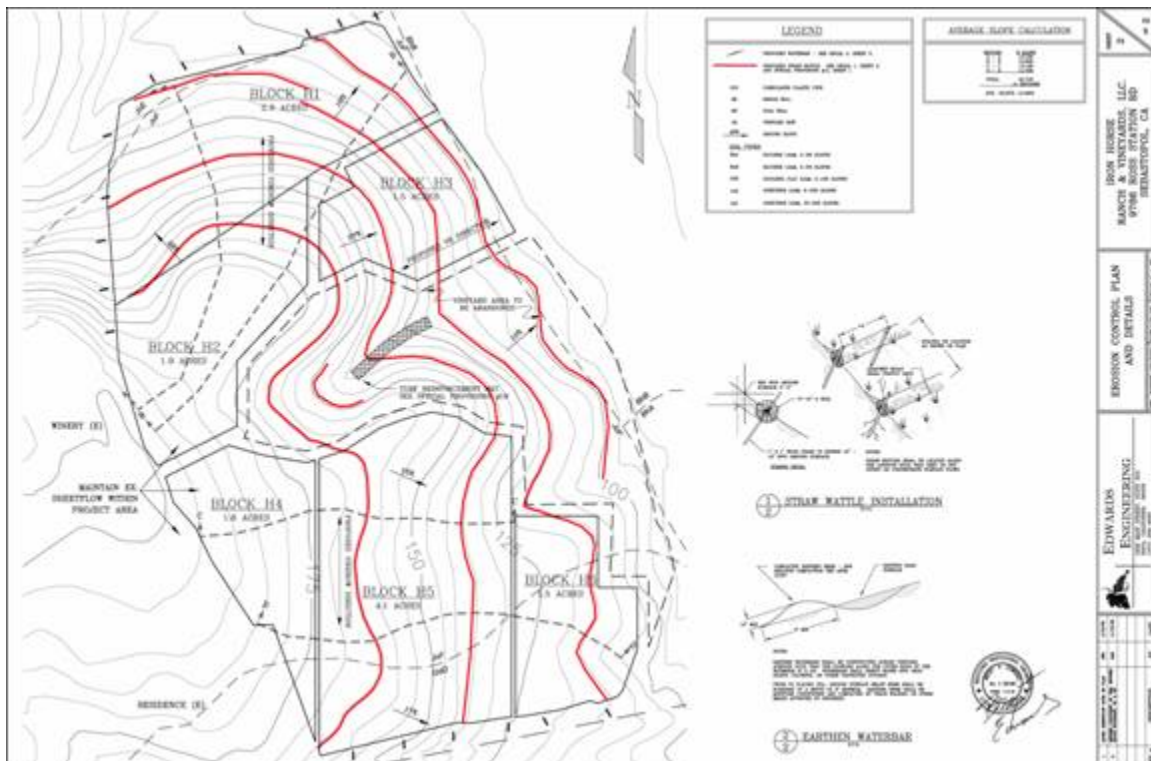
A quick note: Autumn has been stunning. Then a fantastic Thanksgiving, followed by a quick sampling of the vintage and all I can say is, we are very happy. Still for my purposes 2006 is over, and if all goes well we will have

saved my 2006 ramblings and photos a/k/a my “blog,” as a single PDF file to the left below Antonio (or you can click on Antonio, either way works). It seems I’m using up too much space.

November 27, 2006 update on the replant:



These are the last of the original vines planted for Rodney Strong at Iron Horse, way back in 1971. After only six hours a pile of ashes. In fact the piles burned too hot and too fast so we couldn't get close enough to make smores. But let us not dwell on the past and instead look to the future.



Above is the latest plan for H (note, the acreage numbers are wrong, but that's okay.) The red lines represent about 6,500 feet of wattle, which the guys call chorizo at about \$20.00 for every 25 feet, then add \$12,000 plus of straw and water bars, if I have learnt anything it's that erosion control is not cheap. Look on the right for the yellow utility vehicle, which I call the 'Yuv' Machine (as in "feel the yuv"), in both photos, man what a great machine, it could handle easily 6 bales and goes anywhere on the property, except for one or two places where I've managed to get it stuck.



All of the straw was spread by hand, many hands. I forgot above, add 170 feet of TRM, turf reinforcement material, otherwise known as blankets, and the site was finally winterized, on time on November 15:



Before and during winterization 41,000 pencil rods and 7,350 highway posts had to be placed. The rods are for the vines (every vine gets one, we will never again plant vines on highway posts) while the posts are for the wire (each one checked for proper height and straightness). There's still much to do: End posts, irrigation, frost protection, wire (lots of wire), and, of course plant the vines – next year – then field graft, the year after.

But first a field inspection under the county's Vineyard Erosion & Sediment Control Ordinance. So how did we fare? Drum roll please: Plan Conformance. Look closely and under remarks - "Excellent erosion control." This is the kind of praise I live for.

San Jose County
Certificate of Inspection
Vineyard Erosion & Sediment Control Ordinance
 Sonoma County Agricultural Commissioner's Office
 Lisa Corvita, Agricultural Commissioner/Sealer
 133 Aviation Blvd., Suite 110
 Santa Rosa, CA 95403
 Phone (707) 565-2371 Fax (707) 565-3850

Project Address: 9786 Ross Station Rd
 Owner: Iron Horse Ranch
 Agent: _____
 Temporary Plan: _____
 Final Plan: _____
 Engineer Post-Construction Plan Compliance Letter: _____
 Project Completed by Deadline (New 1st - New Development, New 12th - Replants): _____

Erosion & Sediment Control			
Requirements	Compliance		
	Yes	No	N/A
1. Cover Crop	<input checked="" type="checkbox"/>		
2. Mulch	<input checked="" type="checkbox"/>		
3. Filter Rolls	<input checked="" type="checkbox"/>		
4. Silt Fencing		<input checked="" type="checkbox"/>	
5. V-Ditches			<input checked="" type="checkbox"/>
6. Bare Spotting	<input checked="" type="checkbox"/>		
7. Seeding	<input checked="" type="checkbox"/>		
8. Other			
9. Other			

Drainage			
Requirements	Compliance		
	Yes	No	N/A
10. Drain Pipes			<input checked="" type="checkbox"/>
11. Inlets			<input checked="" type="checkbox"/>
12. Outlets			<input checked="" type="checkbox"/>
13. Sediment Basins			<input checked="" type="checkbox"/>
14. Water Bars	<input checked="" type="checkbox"/>		
15. Check Dams			<input checked="" type="checkbox"/>
16. Stream Bank Erosion			<input checked="" type="checkbox"/>
17. Other			
18. Other			

Remarks: (Include description of all non-compliances)
Excellent erosion control

PLAN CONFORMANCE: ☒ Yes ☐ No

If a "No" is checked above, you may be in violation of Article V of Chapter 30 of the Sonoma County Code (Sonoma County Vineyard Erosion and Sediment Control Ordinance). Any person who violates or knowingly permits violation of any provision of Article V of Chapter 30 of the Sonoma County Code shall be guilty of a misdemeanor, punishable by a fine not exceeding \$1,000 or 90 imprisonment for a term not exceeding six months, or by both. In addition, any person who violates or knowingly permits violation of any provision of Article V of Chapter 30 of the Sonoma County Code may be subject to civil penalties of up to \$1,000 per day for each day or person thereof that the violation continues.

Received by: _____ Date: 11/27/06
 Inspected by: Carl Lewis _____
 Original County First copy: Inspector Second Copy: Person/Person Inspected

So we're smiling.



