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Ten Minutes by Tractor

MORNINGTON PENINSULA

Our Vineyards

Some very exciting news for Ten Minutes By Tractor which last month concluded the purchase of the **McCutcheon Vineyard** from Andrew and Vivienne McCutcheon. The McCutcheon Vineyard has been the home for Ten Minutes By Tractor since its inception and is where our cellar door is currently located.

In addition to this we have recently extended our leasing arrangements on the Wallis Vineyard as part of the sale agreement between the Wallis and Szarbo families. This provides us with the opportunity to further develop the potential of this magnificent vineyard and secures our longer term tenure for the next 20 years.

UK

We have just shipped our second consignment of wines to the UK following the rapid sell out of our first shipment. Our recently appointed distributor in London, H & H Bancroft, is one of the UK's leading wine merchants, serving private, trade and corporate clients.

Our wines are now served in some of London's best restaurants/bars including Hunan, Glasshouse, The Square and The Wine Library as well as around the country - Gilpin Lodge (luxury hotel with Michelin starred restaurant in the Lake District), Salthouse Harbour Hotel (luxury hotel in Suffolk), Morston Hall (deluxe country house hotel on the Norfolk coast with Michelin starred restaurant), Wildebeest Arms (Norfolk gastropub) and The Shepherd and Dog (Essex gastropub).

Our wines are also available from other select wine merchants - Bacchanalia (Cambridge), Andrew Wilson Wines (Staffordshire) and City Beverage (London).

If you are in the UK (or Europe) please contact...

H and H Bancroft Wines Ltd China Wharf 29 Mill Street London SE1 2BQ T 020 7232 5450 F 020 7232 5451 www.bancroftwines.com

Winter Wine Weekend

Winter Wine Weekend is upon us again and we are looking forward to welcoming you to our cellar door where you can try all our wines and enjoy a selection of "small plates" designed to mix and match and test your abilities to combine the tastes of food and wine. The food will be prepared by **Justin Derrick** who is our guest chef for the weekend. Justin has cooked in several Melbourne and Sydney restaurants including Seven Stones, which featured in *My Restaurant Rules*.

WINTER WINE WEEKEND
10-12 June
Saturday - Red Hill
Showgrounds & Cellar Door
Sunday - Cellar Door
Monday - Cellar Door

Wines include...

2004 McCutcheon Vineyard Chardonnay & 2004 Wallis Vineyard Chardonnay

Our two wonderful single vineyard Chardonnays which so clearly demonstrate the concept of terroir as discussed in our previous newsletter.

2004 Ten Minutes By Tractor Pinot Noir The new release of what was our reserve

wine - we are not using the term anymore and it will now be known simply as Ten Minutes By Tractor (see next page).

2004 10X Pinot Noir

Our newly released gold medal winning 10X Pinot Noir.

2005 Ten Minutes By Tractor Tempranillo As always, only available at cellar door and only 63 cases made.

2005 10X Pinot Gris

Our 2005 Pinot Gris is almost sold out and this may be your last opportunity to stock

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Also of course our 10X Chardonnay, 10X Sauvignon Blanc and Sweet Allis.

As usual there will be special deals for Tractor Club members including a 15% discount on our 10X range and free delivery for those of you who cannot make it to the cellar door.

Vintage 2006 Wrap

Vineyard Manager Alan Murray

The 2006 vintage was two weeks earlier than our seven year average. We first noticed canopies filling a little earlier and flowering in the "low lands" was up to three weeks early. Up on the "hill" where things are cooler and more variable in temperature, flowering was around 10 days early. It has been an amazing experience to watch this occur and speculate on what impacts it will have on future vintages. The rapid occurrence of senescence (the process of autumnal colour in the leaves) and slightly earlier dormancy flow on from this early season and the cooler than normal lead in to winter.

Despite the early vintage we still experienced a lengthy ripening period with mild and even temperatures, which developed flavours in a very favourable fashion. Fortunately our usual 6-8 week ripening period from veraison to harvest did not change.

During the ripening period we rigorously tasted our various parcels of Pinot Noir and Chardonnay to accurately choose the perfect day to harvest.

Some flavours noted prior to picking were; lime citrus and white peach in the Wallis Chardonnay and ripe red berry and strong middle palate in the McCutcheon MV6 clone of Pinot Noir. Throughout the vineyards flavours of citrus, peach and stone fruit in the whites and anywhere from rich cherry to plum or strong red fruit, dry tannins and cashew flavour in seeds in the Pinot Noir were noted. One of the most consistent comments made in the vineyard in 2006 was about the persistence of flavour throughout.

It will be fascinating to see how this expresses itself in the bottle and what else may appear.



Brand Range

Over our next few releases you will start to see our new labels - we have updated our packaging and made some overdue improvements to our 10X labelling.

The factors that have led to these changes include...

- 4 Our decision to move completely to screw-cap from 2004.
- 4 A need to improve and update the 10X packaging so that it fully reflects the quality of the wine.
- 4 The over used term of "Reserve" in the market place and our decision to stop using this to distinguish our top label.

4 A need to settle on a single vineyard label (since 2000 we have released 10 single vineyard wines under 3 different label designs).

From time to time we release **Single Vineyard** bottlings which we believe best illustrate the unique character or terroir, of our vineyards.

For example, 2004 Ten Minutes By Tractor Wallis Vineyard Chardonnay



Pinot Noir Chardonnay

Judd

Our **Ten Minutes By Tractor** label is a selection of the best barrels that consistently reflect the quality and style that our Main Ridge vineyards are known for. Previously this selection was designated as our Reserve.

For example, **2004 Ten Minutes By Tractor Pinot Noir**



Pinot Noir Chardonnay Tempranillo

Our **10X** label is a blend of the blocks from our three vineyards which are situated 10 minutes by tractor apart on Main Ridge, one of the highest and coolest areas on the Mornington Peninsula. The characteristics of each vineyard combine to produce exceptional cool climate wines.

For example, **2004 10X Pinot Gris**



10X

Ten Minutes by Tractor

PINOT NOIR

Pinot Noir Chardonnay Pinot Gris Sauvignon Blanc



Yield

Yield is often quoted by winemakers as an indicator of quality but what lies behind the numbers and what does current research tell us about yield?

"What are 'low' and 'high' yields, and how do we measure them - per vine by weight or by acre, or hectare by volume of must or wine? Yield relates directly to stylistic and commercial objectives...optimum yield could be defined as the quantity which, by providing raw material of a particular profile, meets consumer expectations for the variety, origin and price. Extremely low yields may reflect poor vine health or seasonal abnormalities and do not necessarily heighten terroir. Pinot Noir may be more evocative of place when cropped at three tons per acre rather than eight tons per acre while Chardonnay can still express its origins at higher yields." (Bohmrich 2006)

Like terroir, discussions of yield are replete with falsehoods, dogma, misinformation, inaccuracies, old wives tales and marketing spin and yet the belief that yield and quality are inversely related has become firmly entrenched in wine folklore.

Let's get the maths out of the way first. Usually quoted yield figures – tonnes/ha or tonnes/acre (effectively equal to tons/acre) – are relatively meaningless on their own; you have to at least know the vine density. To take a ridiculous example – a yield of 1 tonne/hectare could mean 1 hectare containing 1 vine yielding 1 tonne of grapes or 100,000 vines each yielding 10 grams.

The traditional measure of yield in Europe is hectolitres/hectare (hl/ha) and since this uses a volume rather than a weight we have to convert tonnes to hectolitres (100 litres) - a reasonable average is around 650-675 litres/tonne.

Also be aware that even though producers such as ourselves strive for synchronous ripening which ensures all fruit is picked at an optimum level, vineyards can be highly variable - up to a 10 fold variation in yield has been observed within single vineyards. (Bramley & Hamilton 2004)

Vine Density

Vine density is really an historical accident. The Romans planted at 50,000 vines/ha and, after phylloxera, traditional Burgundy vine spacing of 1m x 1m (10,000 vines/ha) was based on the width required for a horse to get through (in other areas with heavier

An actual example	Density (vines/ ha)	Yield				
		hl/ ha	tonnes/ ha	tonnes/ acre	kg/ vine	~m²/ kg
Montrachet Grand Cru	10,000	44	6.77	2.74	0.68	1.47
Chablis Grand Cru	8,000	54	8.31	3.36	1.04	0.96
McCutcheon Chardonnay	2,663	53	8.20	3.30	3.10	0.97

The Montrachet and Chablis numbers are averages, source BIVB; McCutcheon data from the very good 2004 vintage, a long term average for McCutcheon is closer to 5 tonnes/ha

or harder soils, spacing up to 2-3 meters was dictated by the width of an oxen team). Standard practice in California was 3.6m x 2.4m (12ft x 8ft, 1,120 vines/ha), based on a UC Davis recommendation and the space needed for a tractor. Our own vineyards range from 1.5m x 2.2m (2,964 vines/ha) to 2.0m x 3.0m (1,643 vines/ha). But is one of these better than any other?

How Low Is Low?

Recent research by the CSIRO concluded that "the often reported comments re the negative relationships between yield and quality are at best tenuous and not supported by detailed scientific study." (Clingeleffer, Petrie et al 2005)

"For any given site, the optimum yields are likely to vary with canopy management system, climatic conditions, amount of irrigation, pruning level, variety and planting density."

Clingeleffer, Petrie et al 2005

In a comprehensive, scientific analysis of Cabernet Sauvignon over three vintages, research found "wines made from vines pruned to low bud numbers (hence 'low yield') were higher in veggie aroma and flavor, bell pepper aroma, bitterness and astringency than 'high-yield' wines. Conversely, the wines made from vines pruned to high bud numbers were higher in red/black berry aroma, jam aroma, fresh fruit aroma and fruity flavor than low-yield wines." (Chapman, Matthews et al 2004) This research suggests that reducing yield by pruning decreases desirable aromas and flavours, reducing yield by deficit irrigation increases desirable aromas and flavours and reducing yield by summer cluster thinning has little effect. What is interesting is that the method used to achieve low yields appears to be more important than the low yields themselves - in a similar vein, recent research on Pinot Noir in Tasmania found that "Higher yields may not preclude high quality wine, provided the higher yield is as a result of increased bunch number...and not bunch size." (Heazlewood 2005)

As long ago as 1983, research suggested that undercropping was as bad as overcropping. "The effects of overcropping have been reported to delay maturity and to reduce acidity, quality grade, vine size and wood maturity. It has been hypothesized that reduction in crop level could benefit the grape quality by accelerating maturity and improving wine quality. Other experiments have indicated a rather wide range of crop, in the intermediate crop level, has a relatively small effect on composition or quality of the must or wine. However, very low crops or very high crops caused adverse quality. Some of the obvious effects are lowered color, lowered acidity, lowered pH and lesser quality with a very high overcrop. In an undercropping situation, acids, nitrogen compounds and salts accumulate in the grapes, and the wines made are unbalanced in flavor." (Ough & Nagaoka 1983)

There is no question that to achieve high quality, low yields are necessary, however, several questions remain...

- 4 What is low for a particular vineyard/varietal mix?
- 4 How low does one have to go (or what is the upper limit of low) for a particular quality?
- 4 How is low yield best achieved and at what stage of the vintage cycle?

Our own average yields over the past 6 years show an interesting combination of vintage effects and viticultural decisions with 2002 the obvious anomaly. Vintage 2002 has been described by Langtons as, "Cold, wet windy weather over spring contributed to very poor fruit set. After a cool summer, warm autumn conditions prevailed. This was a very difficult season with very low - if not negligible - yields. Some very good wines were made. Economically the worst season in almost forty years." The impact of 2002 rolled over to 2003, which also had poor weather at flowering; 2004, a very good vintage almost saw a sigh of relief from the vines which went into overdrive and back up to levels seen in 2001. In 2005 and again in

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2006, both great vintages, we made the decision to reduce yields from 2004 levels.

Quality right throughout this period has been very high - for example, Halliday scores between 2001 and 2003 (he is yet to review the more recent wines) average 92 for both Chardonnay and Pinot Noir, our 2003 10X Pinot Noir won best Pinot Noir of show at the 2004 Le Concours des Vins du Victoria, our 2004 McCutcheon Chardonnay best white wine of show at the 2005 Le Concours des Vins du Victoria, our 2004 10X Pinot Noir won gold at the 2006 Cool Climate Wine Show. We are certainly extremely happy with our 2005 wines and 2006 also looks excellent at this very early stage (owner Martin Spedding has just finished vintage with Richard McIntyre; all the wines are now in barrel).

It would seem that we can probably increase yields slightly from current levels (2005 and 2006), vintage conditions permitting, perhaps to around 6 tonnes/ha for Chardonnay and 5 tonnes/ha for Pinot Noir without loss of quality – we will continue to seek the sweet spot, the point of balance.

Balance

Balance is the key, however, as with everything to do with vineyards it is a journey. Yields are not only subject to current and previous vintage variation (water stress is an obvious factor that impacts on yield) but to our own viticultural practices - how and when we prune, irrigate (if at all), shoot thin, leaf pluck, bunch thin and so on.

But it all comes back to balance. "If there is a single truth it is the concept of a vine in balance: one in which the ratio of roots, canes, leaves and grapes is correct. There is increasing awareness that this can be achieved in very different ways. The vines may be small, with either no trellis at all or with only the simplest support. For vines grown like this the density of planting will usually be very high - perhaps 8,000 to 10,000 vines per hectare. Or the vines may

Ten Minutes By Tractor Yields 12 4.9 10 4.0 3.2 Fonnes/ha 2.4 4 1.6 2 0.8 0.0 0 2001 2002 2003 2004 2005 2006 Chardonnay (average all wines) --- Pinot Noir (average all wines)

be very large, supported by an elaborate trellis, widely spaced at a density of 1,500 vines per hectare. In either system, high-quality grapes or poor ones can result, but that will depend on the skill of the wine-grower." (Halliday & Johnson 1994)

"The only difference between vineyards that are managed for icon and/or ultra premium wines on the one hand, and standard and/or distilling wine on the other hand, is that the relevant balances lie on different levels."

(Archer & Hunter 2004)

Building on these statements, perhaps we should consider a whole new way of evaluating yield. "In a series of field experiments using canopy management and trellising treatments, a wide range of leaf area/crop weight and crop yield/pruning weight ratios were investigated to determine how much leaf area was required to fully ripen several grape cultivars. The results found that about 0.8 to 1.2 m² leaf area per kg fruit was needed to mature fruit trained to single-canopy trellis systems and 0.5 to 0.8 m²/kg for vines trained to divided-canopy trellis systems...Vines that fell within the ranges of these indices were considered well balanced and capable of

fully ripening their crop as well as producing high-quality wines." (Kliewer & Dokoozlian 2005)

So, maybe a better, and more comparable, measure of yield is square metre of leaf area/kg of fruit - this would certainly go some way to explaining the difference between the kg/vine figures from smaller Burgundy vines compared to our own larger Scott-Henry or VSP trained vines (see table on previous page). Theoretically, the advantage of having greater density is to reduce the yield per vine, but again that figure in isolation is meaningless without reference to the plant that is supporting and growing the grapes. Our Scott Henry vines have a leaf area of around 3m2 whereas those in Burgundy are closer to 1m² therefore our vines can, according to the leaf area/kg of fruit ratio, support three times the weight of fruit without loss of balance or quality (see table previous page).

Like quoting a yield of 1 tonne/acre, quoting a yield of 1 kg/vine requires context; neither figure is of much value on its own.

Let's leave the last word to wine writer and Master of Wine Jancis Robinson "Am I mistaken or is wine's purpose to be drunk? More and more I find wines are so strong that I can only sip them if I am to avoid a terrible hangover. But what I enjoy about wine is its taste, with food. I want more mouthfuls of the stuff, not fewer. Stronger wine means less of it - not something that pleases me, anyway. So what is to be done? Is there any way of slowing grapes' accumulation of sugar in high temperatures to allow physiological ripening more of a chance to be concurrent? I have never claimed any practical expertise as a vinegrower or winemaker. My role is entirely parasitical. But I am not the only one to wonder whether the fashion for smaller and smaller crop levels is not partly to blame. The fewer grapes a vine is required to ripen, the faster it will ripen them. Perhaps the current vogue for crop-thinning, simply hacking off bunches halfway through the season, may have gone too far?" (www.jancisrobinson.com).



