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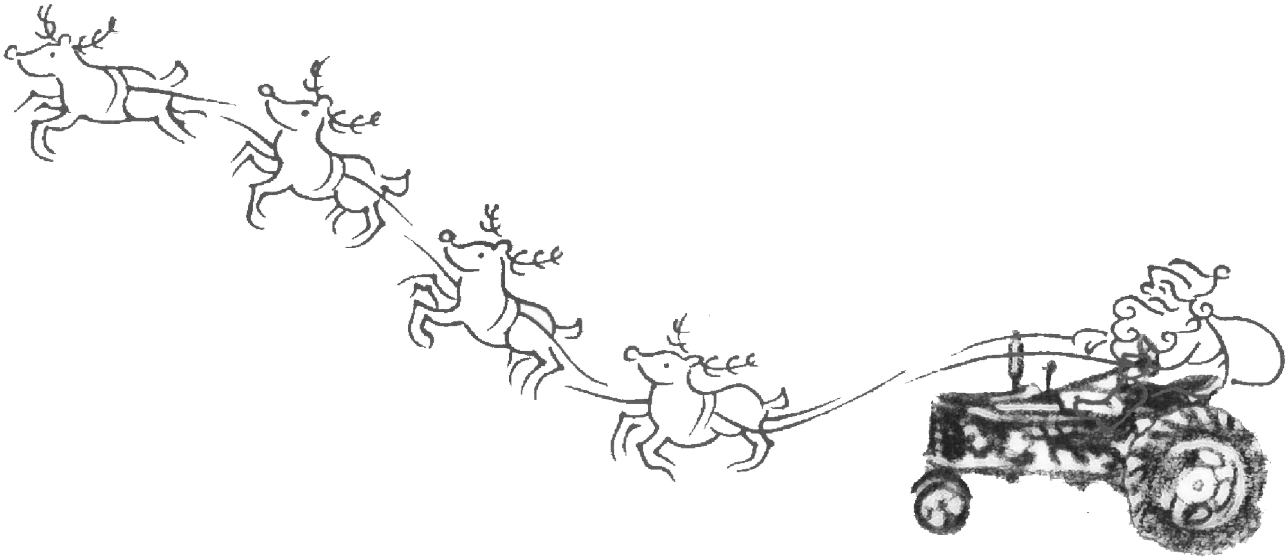
Ten Minutes by Tractor
MORNINGTON PENINSULA

Season's Greetings from the team at Ten Minutes By Tractor



Summer At Ten Minutes By Tractor...

Summer, which for us on the Peninsula effectively means 27 December to Australia Day on the 26 January, is rapidly approaching and we are looking forward to welcoming many of you to our cellar door and restaurant.

Chef Stuart Bell has just put the finishing touches to our summer menu and Restaurant Manager Clayton Hiskins has selected new wines for our extensive by the glass list, designed to match the menu.

The new menus are on our website (www.tenminutesbytractor.com.au).

January is an extraordinarily busy time on the Mornington Peninsula and we strongly recommend you make reservations whenever possible—please call us on 03 5989 6080 as soon as you have made your plans.

Cellar Door

- Closed Christmas and Boxing Days and New Years Day
- Otherwise open daily from 11-5

Restaurant

- Closed Christmas and Boxing Days and New Years Day

Our January hours are...

- Lunch Daily 12 noon-3pm
- Dinner Tuesday-Saturday 6:30pm-late

...and this continues through to Sunday 23 January.

We are open for lunch on Monday 24, Tuesday 25 and Wednesday 26 (Australia Day) and then revert to normal hours...

- Lunch Wednesday-Sunday 12 noon-3pm
- Dinner Thursday-Saturday 6:30pm-late

Tractor Terrace

Throughout January our Tractor Terrace will also be open daily from 12 noon-9pm (Sunday & Monday until 6pm); food, including antipasto and cheese platters, will be available from 3pm-6pm.

Christmas/New Year Opening Times

Date	Fri 24/12	Sat 25/12	Sun 26/12	Mon 27/12	Tue 28/12	Wed 29/12	Thu 30/12	Fri 31/12	Sat 1/1	Sun 2/1
Cellar Door	Open	Closed	Closed	Open	Open	Open	Open	Open	Closed	Open
Restaurant	Lunch	Closed	Closed	Lunch	Lunch & Dinner	Lunch & Dinner	Lunch & Dinner	Lunch	Closed	Lunch & Dinner

In This Issue...

Vineyard

Alan Murray—Vineyard Manager

Winter, spring and early summer 2010 have been testing to say the least. While we welcomed the rainfall, which filled dams and flushed the water table, it kept the temperature below average and slowed our season right down!

Melbourne saw its highest October rainfall since 1975 and by 25 November had passed its annual average rainfall for the first time in 14 years. 2010 will be the wettest year since 1992.

The rainfall has been due to a strong *La Niña* which has seen a sequence of rainfall events draw down tropical moisture from north of Australia.

This has had two dramatic effects...

- Our latest ever budburst and flowering
- A major outbreak of Downy Mildew

The former we can do nothing about—but it would be nice if we got some drier weather in summer and one of our long, mild autumns.

The latter has been contained by an extensive spray program which has forced the team to spray twice and in some instances three times more than any other previous season. This is due to the regular occurrence of Downy Mildew (*Plasmorpa Viticola*) infection periods while the vines are in rapid growth mode making it all but impossible to protect the leaves from infection as they expand and grow.

Typically our only control method is to spray to prevent fungal spores attaching themselves and causing an outbreak but as each leaf expands during growth this creates unprotected surfaces for spores to become attached. The only control is to keep spraying to maintain adequate cover and reduce further infection.

Without doubt this is the most challenging season we have ever faced.

We are in the final stages of flowering which appears to be signalling average yields. Flowering is tracking similarly to our pre drought years which is a very interesting note, this vintage may just provide the conditions for perfect flavour development in the fruit which would be very welcome.

Father And Child

A Long, Long Story

Genetics, hereditary, DNA, genes, clones, mutation...not necessarily words that leap to front of mind when drinking wine and yet to us, and particularly in respect to Pinot Noir, this subject is of much interest.

Genetics (from the Greek *genesis*, meaning *origin*) is the science of genes, hereditary and variation in living organisms. This is certainly not the place for a treatise on genetics (completely leaving aside our inability to provide such information), and we ask the indulgence of those who know this stuff!

The grapes we are ultimately interested in are from the Family *Vitaceae*, the Genus *Vitis* and the Species *Vitis Vinifera*. Two Subspecies exist – *Vitis Vinifera Sativa* (from the Latin meaning "cultivated") and *Vitis Vinifera Sylvestris* (from the Latin meaning "of the forest", ie wild). The distinction between these two subspecies may simply be because the morphological distinctions which define them (leaf shape, seed size and shape, bunch size and so on) is the result of domestication over a long period of time rather than through geographical isolation (This 2006). Indeed some do not treat both as subspecies, rather that *Sylvestris* is a subspecies of *Sativa* (Aradhya 2003).

Nevertheless the two forms exist today and while the wild version is now rare it is still found throughout Europe, central Asia and north Africa and is assumed to be the ancestor of current *Vinifera* cultivars. Domestication saw dramatic changes including bigger bunch size and a change from plants having separate sexes (*dioecious*) to becoming hermaphrodites but it is not known whether these changes were brought about over time by natural or human selection or quickly by

Christmas Suggestions...

Ten Minutes By Tractor offers a range of options for Christmas gifts and wines for the holidays.

- **Wines**
  A reminder of our wines currently on release...

2009 10X Sauvignon Blanc
90 James Halliday
"a complex style made with food in mind"

2009 10X Chardonnay
93 Tyson Stelzer
"poised and delicately perfumed"

2009 10X Pinot Noir
97 James Halliday Top 100 2010
"has that x factor of top pinot"

2008 Wallis Chardonnay
96 James Halliday
"the palate takes the wine to another level"

2008 McCutcheon Chardonnay
95 James Halliday
"the most complex of the chardonnays"

2008 Judd Pinot Noir
94 James Halliday
"a graceful and fluid palate"

2008 McCutcheon Pinot Noir
94 James Halliday
"intense and long palate achieved with apparent ease"

2008 Wallis Pinot Noir
95 James Halliday
"particularly elegant and long"

- **Olive oil / Verjus**
  Our olive oil and verjus make perfect vinaigrette as well as perfect Christmas gifts.
- **Gifts**
  If you would like to give or send someone any of these products as a gift please let us know—we will ensure it is sent to the recipient with your personal message.
- **Gift Vouchers**
  Alternatively, purchase a gift voucher, redeemable either for wine or in our restaurant. Nominate the amount and we will send it to the recipient.
- **Ordering**
  Options...
  - Complete the order form enclosed with this newsletter
  - Download the order form from our web site www.tenminutesbytractor.com.au
  - Email us at info@tenminutesbytractor.com.au
  - Call us on 03 5989 6455

mutation; nor is it clear where and when it first occurred.

The thousands of *Vitis Vinifera* cultivars in existence today are thought to have originated by several mechanisms...

- domestication of wild vines
- spontaneous crosses between wild vines and cultivated varieties
- crosses between cultivated varieties (spontaneous until the last two centuries, when controlled crosses have been made)

Some definitions...

Chimera is a single organism composed of two genetically different types of tissue
Phenotypes are the observed properties of an organism
Genome is an organism's entire hereditary information encoded in DNA
Mutations are caused by changes in the DNA sequence of the genome
Hybrids are the offspring produced by breeding plants of different species
Crosses are the offspring produced by breeding plants of the same species
Clones are the offspring produced by vegetative propagation of a single parent plant and vary genetically solely through mutations

The oldest evidence of wine production so far discovered is in what is now northern Iran dating back to 5400-5000 BC (University of Pennsylvania Museum). However, seeds of *Sativa* grapes from around 6000 BC have been found in Georgia and Turkey and Western Europe and, from the Bronze Age, in France (say ~1000 BC). From these "primo-domestication" sites, grapes spread around the Mediterranean and then expanded into inland Europe via the Romans and their main trade routes (rivers Rhine, Rhone, Loire, Seine, Danube, Garonne and so on). Recent DNA analysis suggests there were at least two "domestication events", one in the Near East and one in Western Europe, perhaps Spain (Arroyo-García 2006, Aradhya 2003).

Vitis Vinifera is particularly adaptable; it is *heterozygous* which basically means that its genes "can be dealt and recombined as easily as if they were a pack of cards" (Robinson 1986). Most cultivars grown today were selected centuries ago from spontaneous crosses and then propagated vegetatively but until relatively recently most of their origins remained shrouded in obscurity. It is likely that, in particular, the Romans understood the benefits of breeding and vines which produced better or more grapes would have been prized and propagated.

A vast amount of detail on Roman agriculture was recorded by, among others, Lucius Columella (AD 4-70) who after a career in the army took up farming and wrote his 12 volume *De Re Rustica* ("On Farming"). It makes fascinating reading (the main chapters on viticulture can be found at the links listed below under *De Re Rustica*).

This shows clearly that the Romans understood and practiced grafting, quicksets (grown from cuttings planted directly in the ground) and layering and that they chose carefully...

> ...it is not enough merely that the mother vine from which the cuttings are sought should be prolific, but a more discriminating method must be employed, that they may be taken from those parts of her body which are both generative and especially fruitful.

And they also understood that "nature herself has decreed that the offspring shall resemble the mother".

Varieties are generally referred to by their geographical origin...

> The Aminean varieties...are said to provide wines of more or less true taste and to surpass all others in flavour.
>
> The Nomentan vines follow close after the Amineans in excellence of wine.
>
> The Eugenians endure a cold, dewy ground and climate very well as long as they remain on the Alban hills...The same is true of the Allobrogian vines: the agreeableness of their wines is affected by a change of region.

They also understood variations within these varieties—"woolly", "twin"—and talk of varieties from Greece and Gaul but Columella makes the point...

> ...all countries and almost all separate districts of those countries have their peculiar types of vines, which they designate according to their own fashion; some vine-stocks also have changed their names along with the places where they are grown; and some, as I said above, have so far departed from their peculiar character, through a change of place, as to be unrecognizable. And so in our own Italy, not to speak of the whole far-flung world, neighbouring peoples disagree in the names of vines, and their designations vary.

By the time we reach the Middle Ages though, following the fall of the Roman Empire, we move into more familiar territory and begin to hear about grapes we can recognise.

Ampelography, the identification and classification of grapevines, was informal until Pierre Galet introduced a structured approach which considered the shape and contours of the leaves, the characteristics of growing shoots, shoot tips, petioles, the sex of the flowers, the shape of the grape clusters, and the colour, size and pips of the grapes themselves. In 1952 he published *Ampélographie Pratique* detailing 9600 varieties.

In the 1980s Professor Gerhardt Alleweldt of the Geilweilerhof Institute estimated more than 14,000 accessions (a sample of a plant variety collected at a specific location and time) of *Vitis*, most being *Vitis Vinifera* (Cipriani 2010). Of these, only a few hundred at most are cultivated for wine and of

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these Robinson (1986) only regards nine as "classic"—Cabernet Sauvignon, Pinot Noir, Syrah, Merlot, Riesling, Chardonnay, Semillon, Sauvignon Blanc and Chenin Blanc; Clarke (2001) adds Grenache, Gewüztraminer, Muscat, Nebbiolo, Sangiovese, Tempranillo, Viognier and Zinfandel for a total of 17—and another 27 are regarded as "major" (Clarke lists 15 as "major").

The "DNA Illumination"

By the time we reached the 1990s we believed we had a good understanding of grape varieties and where many of the major varieties originated. Or at least there were very strong theories. But then along came Carole Meredith who started turning much of the accepted wisdom on its head.

Meredith, who had a doctorate in plant genetics, was a professor in the Department of Viticulture & Enology at UC Davis and pioneered the use of DNA typing to differentiate *Vitis vinifera* varieties and to clarify their parentage, which gives insight into the varieties' history and place of origin.

The first surprise came in 1996 when Meredith and her team established the parentage of Cabernet Sauvignon, the first application of such techniques—its parents were Sauvignon Blanc and Cabernet Franc (Bowers & Meredith 1997). But not only was the noble Cabernet Sauvignon the child of grapes regarded as inferior, it had no illustrious and ancient heritage and was a relative newcomer—an accidental cross made only around 600 years ago.

Other discoveries followed including...

- Petite Sirah (confirmed as Durif) is the offspring of Peloursin and Syrah
- Zinfandel (confirmed as Primitivo and Crljenak Kastelanski) is the parent of Plavic Mali
- Syrah is the offspring of Dureza and Mondeuse Blanche

And now other researchers have joined in and the assumptions of the past are being continually challenged and the history of *Vitis Vinifera* rewritten. See for example Cipriani (2010) and Vouillamoz (2006) who uncovered a 3° connection between Pinot Noir and Syrah—Pinot is most likely Syrah's great grandfather.

Pinot Noir

Which leads to our main interest, Pinot Noir, which is regarded as an "archaic" cultivar with the name first recorded in the 14th century (This 2006, Levadoux 1956, Regner 2000). Regner explains...

> The origin of the Pinots is not clear. Because of morphological characteristics, the relationship to wild types (*Vitis sylvestris*) is assumed. Another hypothesis claims that Pinots were spread by the Romans and are identical to *Vitis Allobrogica*. The Carolinger king Karl III brought the variety 'Clavner' (old spelling for Klevner) from the Burgundy region to the area surrounding Lake Constance in 884. The first description of *'Pynoz'* (old spelling for Pinot) was probably that of Eustache Deschamps in the 14th century.

Eustache Deschamps (1346–1406) was a medieval French poet credited with inventing the *ballade* form. His *ballade*, written in 1394, *"De la verdure des vins"* reminisces about Burgundian wines...

Helas! Ou sont les vins especiaulx, Vins de Beaune qui ont tel renommee, Vins de Poitou, de Rin aux granz tonneaulx, Vins de Tournuz, de ***pynos*** *ceste annee, Vins d' Irancy, d' Aussonne et la contree, Qui estoient de mon corps medicin?*

Hocquigny (2004) agrees...

> 'Pinot' is thought to be one of the most ancient cultivar groups. 'Pinot' cultivars show primitive morphological characteristics analogous to those of the wild type *V. Vinifera subsp. silvestris*, and are thus considered "archaic" cultivars.

Meredith (2003) suggests Columella (see above) knew of the variety growing in Burgundy when the Romans arrived there about 2000 years ago.

According to Haeger (2004) the most widely cited mention of Pinot by name is in one of the *actes* of Philip the Bold, one of the Dukes of Burgundy, in 1375 when he ordered the shipment of "vermilion pinot wine" to Flanders.

Other pointers to Pinot's antiquity are that its parents have not [yet] been found and that it has numerous progeny. This is where it gets interesting because Pinot Noir is in fact the father of Chardonnay; the mother is the little known and unwanted Gouais Blanc. Before we look into this further let's look briefly at the Pinot family.

The DNA profiles of Pinot Gris and Pinot Blanc are identical to Pinot Noir. This (2006) puts it technically...

> Pinot Noir is the original variety with a black berry, Pinot Gris is the grey berry form, thought to be a chimera with a mutation for berry colour in one cell layer, and Pinot Blanc is the white berry form, thought to have the mutation in both cell layers.

Regner (2000) goes further...

> The Pinot group consists of genuine Pinots (Pinot noir, Pinot gris, Pinot blanc), the Pinot noir mutant Samtrot, genotypes with slightly differing phenotypes such as Schwarzriesling (Müllerrebe, Pinot Meunier), Blauer Arbst and irregularly designated Pinots such as Saint Laurent, Teinturier, Auxerrois, Chardonnay, and others.

Pinot Noir's Liaisons With Gouais Blanc

The Vitis International Variety Catalogue (www.vivc.de) lists the prime name of Gouais Blanc as Heunisch Weiss originating in Austria though the Croatians also claim it as Štajerska Belina. Regardless, it was widely grown in north east France in the Middle Ages—Pinot was grown by the nobility and church on the best sites, Gouais by the peasants on poor sites.

Where it gets really interesting is the number of children belonging to Pinot Noir and/or Gouais Blanc and the number of siblings Chardonnay has (Bowers 2000).

Although we know that *Vitis Vinifera Sativa* is hermaphroditic, ie it has both *staminate* (male, pollen-producing) and *carpellate* (female, ovule-producing) parts, in the case of crossing between two cultivars one has to act as dad and one as mum; and, of course, the roles can be reversed!

In most cases known so far, Pinot Noir has been dad (Aligoté, Auxerrois, Bachet Noir, Chardonnay, Franc Noir de la Haute Saone, Gamay Noir, Melon, Romorantin, Sacy) but in others Pinot Noir has been mum (Aubin Vert, Knipperlé, Roublot).

Meredith (2003) asks why these two are the parents of so many and says it's...

> ...because they arose from completely unrelated original wild populations. It's a classic example of heterosis – of genetically dissimilar parents producing very fit and adaptable offspring.

And so the journey continues however "the 'Holy Grail' of reconstructing the whole pedigree of all major cultivars is almost certainly unachievable, mainly because most missing links might now be extinct" (Vouillamoz 2006).

In our next newsletter we will look more closely at clones—an area of great interest to Pinotphiles.