



**Marsiglio Wine**

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## Meet the Winemakers - South Africa 1

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We put your questions to producers in South Africa. Here we have the responses from Anthony Hamilton Russell, owner of Hamilton Russell in the Hemel-En-Aarde Valley and Matthew Copling, Winemaker at Vondeling Wines in Paardeberg. There will be more to follow from South Africa.

The depth of insight here should be helpful to Master of Wine Students. The winemakers have provided lots of examples that you can use.

### **Anthony Hamilton Russell, Hamilton Russell, Hemel-En- Aarde Valley**

#### ***How did you set up your winery? What were your biggest challenges to overcome?***

My father Tim Hamilton Russell purchased 170 hectares of undeveloped land in the Hemel-en-Aarde Valley on which to develop Hamilton Russell Vineyards in 1975.

His biggest challenges were:

1. overcoming the legal hurdles in place at the time, preventing making wine in new areas without a production quota.
2. Sourcing plant material of high quality – and finding Chardonnay, which was not available in the country at that time.
3. Finding high quality vineyard management staff.
4. Dealing with all the unknowns of a new area for viticulture.

I took over Hamilton Russell Vineyards in 1991 (its 10<sup>th</sup> vintage) and purchased it from the family in 1994. My main challenges were:

1. Reorganising staffing – getting better people.

2. Financing re-planting with better clones, growth towards higher profitability and the building of a barrel maturation cellar.
3. Switching from making many wines to focusing on 1 Pinot noir and 1 Chardonnay.
4. Building international sales once sanctions were lifted in 1992.

***What have you planted and what wines do you make?***

I replanted the entire property over time, to focus on Pinot noir and Chardonnay only – with an emphasis on new (at the time) Dijon clones.

We make a single Estate grown and made Pinot noir and a single Estate grown and made Chardonnay from the 52 clay and iron-rich hectares (our “monopole”) on the property my research showed to be best suited to the more classic expression we aimed at.

***What do you consider your biggest commercial surprise so far?***

Significant growth and a degree of financial success, despite the numerous obstacles so well known to wine producers – particularly in South Africa.

I read that only 15% of South African producers just about break-even, while only 4% make profit deemed acceptable for the risks taken.

***Are there any projects that you wished had been more successful?***

Many. For example, our massal selection programme has yet to produce any interesting Hamilton Russell Vineyards clone. Our programme to air-dry our own French oak on the property proved financially impractical.

**Viticulture**

***What is the biggest disease pressure for you? How do you combat this?***

Downy Mildew. We farm organically, so no systemic chemicals are used. We control downy with a Trichoderma fungus which targets and kills it. A good fungus to kill a bad fungus.

We do the same thing for Grey-rot and Oidium – with different Trichoderma strains.

***Are there any soil nutrients excessive or deficient in your vineyard? If so, how do you manage this?***

We have high acidity in our clay-rich soils which is corrected at the time of preparing a vineyard with lime addition. We apply subsequent regular small amounts of lime to maintain an optimal soil pH.

For nitrogen we add organic chicken manure where necessary and maintain a permanent presence of nitrogen fixing plants within the vineyard rows.

We watch the calcium/magnesium ratio carefully and adjust where necessary. This has a bearing on a vines' ability to access other nutrients.

We feed good fungi into the soil through the irrigation system. This also enhances a vine's ability to access soil nutrients.

We measure soil carbon content – a general measure of soil health, along with fungus species diversity and other soil microbial diversity. The right cover crops have a significant bearing on these measurements.

***Do you cultivate your vineyard with irrigation or dry-farming? What steps have you taken to limit the water footprint of your vineyards?***

We install irrigation in all vineyards as an insurance against excessive stress should we not get rain at the right times. In addition, the most effective (and cost-effective) way to feed a vine is through a well-designed irrigation system. Tractor use and labour is reduced, along with soil compaction.

All water we have on the property is gathered off our own property and its run-off after rain. We are below the catchment area for our nearby village, so what we don't use runs out to sea. It is important to realise that water used is not all lost – a lot goes back into the atmosphere.

Even in our driest years we get more rain than London. 750 mm versus 600 mm. In a normal year we get 825 mm. We measure soil moisture content at different depths with probes placed around the vineyards, to ensure that we don't waste our water – even though we have plenty.

***How will climate change affect your choice of cultivar/rootstock, particularly those producing cool climate wines? Any particular vineyards that you feel will be affected? What are your plans for them?***

Looking at our longer-term data, we have generally become cooler and wetter. Our strongly maritime climate gives us a degree of buffering against global change. The direction of flow of the cooling Benguela current is not expected to change.

The difference between a warm year for us (with lovely wines) and the projected increases from global warming over time is not meaningful.

We have no plans for changing our varieties or rootstocks because of global warming.

Any changes we make are in pursuit of better Pinot noir and Chardonnay – not a response to climate change.

## **Vinification and bottling**

***Do you inoculate yeast all the time? Or do you use wild yeast?***

If we inoculate it is with yeast raised organically, where they ferment more slowly and create a better mouthfeel. They are generally better at getting nutrients from the must and are less likely to create the off-odours - chemically raised yeasts can do this when they run out of the nutrients.

We allow a significant percentage of our ferments to begin fermentation spontaneously – and depending on how this goes, we may or may not add a known organic yeast.

We use a significant amount of an endemic yeast we isolated in our vineyard in 1993 – the best of 8 we found. It has now been made available to the world under the name “Savage”. It seems it may be a new species of wine yeast.

***How many days does it take to complete fermentation for each white and red? Can you tell us more about the temperature fluctuations and your control? Have there been particular vintages where you had to dramatically change the winemaking to counter any issues/yield?***

The changes aren't dramatic, but each year, winemaking behaviour is tailored to the character, strengths and challenges of the year.

Some ferments are long, such as seen in 2019, and some are shorter – sometimes by design and sometimes not.

For Pinot Noir 2 weeks to 2 ½ weeks would be long and 1 week would be short. Chardonnay can ferment for much longer in the barrel and seldom takes as little as a week

We don't like the Pinot noir ferments to go above 30 Centigrade.

3. What kinds of fining agents do you use for your white/red wines? Any particular reason for the choice? Do you use any animal protein fining agents? If so, do you feel under growing pressure to move to synthetic proteins, given the increase in vegan/vegetarian consumers? Have you researched the use of plant based proteins, such as pea/potato/soya for fining?

All our wines are now vegan. We don't fine our Pinot Noir and our Chardonnay is fined with a plant based product, not a fish protein (Isinglass) as in the past.

We noticed a growing number of restaurants in the US asking for vegan friendly wines, and we can deliver this easily without compromising quality.

***Increase in annual temperature may see wines deficient in natural acidity – how will you look to combat this?***

See my above response to global warming.

Low yields and not picking over-ripe help to maintain healthy, low pH and high acids at harvest.

***Do you use heavier/thicker glass bottles for your premium wines? If so, is this to adhere to consumer perception?***

Our bottles are quite heavy. It is an aesthetic issue. We don't like the seriously heavy bottles, but don't like the lightweight ones much either. Currently the aesthetic benefits of our bottles outweigh the negatives. This may well change – and the UK market seems to be the most sensitive to the bottle weight issue – wanting them as light as possible.

***Bulk shipment of wines is a very environmentally friendly in comparison to shipping cases, do you use bulk transport for any of your wines? If not, would you consider this in the future?***

No we won't consider bulk shipments. We like to bottle in our cellar. It is a quality control issue.

## **Commercial**

***Can you please give us a brief breakdown of your markets and where you sell most of your wine?***

All our wine is sold on tight allocation, so where we sell is a strategic decision designed to achieve maximum worldwide brand value. It is not just a reflection of demand. We sell in over 55 countries.

South Africa is our largest market – around 40% - with the US and UK making up another approximately 30%. Europe and the rest of the world account for the rest.

***Have you personally experienced the growth in wine tourism to SA? What are your thoughts on a potential reduction in long-haul flights?***

Yes – dramatically over my 30 years.

I think more carbon-friendly jets will precede a significant drop-off in people's willingness to take long-haul flights.

We have not built our business around wine tourism.

***Where do you consider the future of SA wines to be heading?***

Onwards and upwards. Smaller volumes of cheap-and-cheerful varietal wines sold on price and more better and better wines expressive of origin and varietally suited to the appellation.

## **Matthew Copling, Winemaker at Vondeling Wines, Paardeberg**

### ***How did you set up your winery? What were your biggest challenges to overcome?***

I've been fortunate to have designed and constructed two cellars in the past. The greatest challenge is finding someone who has more money than they need. At that point you have two options: be small and nimble, which doesn't trigger a lot of environmental push back and other legislative red tape (if you go this way you can outsource a lot of services and materials, which limits your liability, improves your cashflow and offers greater choice). Alternatively go as big as you can so that all the administrative and management cost are spread over a greater volumes, bringing your cost per litres down. **THERE IS NO MIDDLE GROUND BETWEEN THESE TWO OPTIONS.**

### ***What have you planted and what wines do you make?***

These days, by selecting clones, trellising and irrigation, you can grow most grapes in most regions. Again you need to choose between something you're passionate about (it helps to be compelling when you try to sell something) or choose something for which there is an established demand and get into the scrum.

### ***What do you consider your biggest commercial surprise so far?***

That so few people drink decent shiraz.

### ***Are there any projects that you wished had been more successful?***

Shiraz

## **Viticulture**

### ***What is the biggest disease pressure for you? How do you combat this?***

We have a relatively dry climate, so most diseases are naturally less common. We have an established vineyard team and they know where the problem spots are - we act preventatively.

### ***Are there any soil nutrients that are excessive or deficient in your vineyard? If so, how do you manage this?***

None of our soils are marginal and we've got a large area to choose from. Any soil adjustments required are minimal and done during soil preparation when planting. We are on a 20 year renewal cycle.

### ***Do you cultivate your vineyard with irrigation or dry-farming? What steps have you taken to limit the water footprint of your vineyards?***

We have supportive drip irrigation to avoid stress in the vineyards. We have soil probes to measure water content, so that water is only applied when the vines absolutely need it.

### ***Climate Change – how will this affect your choice of cultivar/rootstock, particularly those producing cool climate wines? Any particular vineyards that you feel will be affected? What are your plans for them?***

If you're after premium wines you need to respect that we're probably getting warmer. Cool climate wines won't work in our area and we have moved those grapes into a lower price point where their quality is acceptable. We're following a regeneration strategy that will see us playing to our strengths. It's also the safest/cheapest most sustainable long term strategy.

## **Vinification and bottling**

### ***Do you inoculate yeast all the time? Or do you use wild yeast?***

In our larger, commercial cellar we inoculate for fast, safe, predictable ferments with ready-for-market flavour profile. In our boutique we pre-chill the grapes, don't add sulphur and when destemming the bunches we don't crush the berries. This is to protect the juice and

maintain healthy wild yeast populations. The process is slower, less predictable, but produces a wine better suited to barrel aging and cellaring.

***How many days does it take to complete fermentation for each white and red? Can you tell us more about the temperature fluctuations and your control? Have there been particular vintages where you had to dramatically change the winemaking to counter any issues/yield?***

If the grapes have green tannin we tend to ferment cooler, with less mixing and a shorter time on the skins to extract less harshness (colour and body are blended in from better grapes). Fermentation takes 1-3 weeks depending on the temp and yeasts population. Cool ferments = fruity. Warm ferments increase glycerol levels, are fuller and have more structure but less fruit.

***What kinds of fining agents do you use for your white/red wines? Any particular reason for the choice? Do you use any animal protein fining agents? If so, do you feel under growing pressure to move to synthetic proteins, given the increase in vegan/vegetarian consumers? Have you researched the use of plant based proteins, such as pea/potato/soya for fining?***

Very very little if possible. Some charcoal on rose to stabilise the colour. Some vegetable protein on the reds to soften harsh tannins. We are fully Vegetarian friendly and say so proudly on our labels. Obviously bentonite is also needed to remove unstable proteins.

***Increase in annual temperature may see wines deficient in natural acidity – how will you look to combat this?***

Moderate irrigation and tartaric additions are common

***Do you use heavier/thicker glass bottles for your premium wines? If so, is this to adhere to consumer perception?***

*I do and I don't like it, but consumers have come to expect it.*

***Bulk shipment of wines is a very environmentally friendly in comparison to shipping cases, do you use bulk transport for any of your wines? If not, would you consider this in the future?***

In an economy rife with unemployment shipping bulk costs jobs locally. Best option is to sell locally.

We should be using plastic recyclable bottles. Small, light collapsible and doesn't take much energy to make. Sir David Attenborough is sadly incorrect on this subject. Modern research has established that the correct plastic has a carbon foot print even lower than cardboard, but again public perception is key to sales.

## **Commercial**

***Can you please give us a brief breakdown of your markets and where you sell most of your wine?***

UK (35%), South Africa (30%), Europe (20%), Africa (10%), Asia and USA (5%)

***Have you personally experienced the growth in wine tourism to SA?***

Yes

***What are your thoughts on a potential reduction in long-haul flights?***

Stay longer

***Where do you consider the future of SA wines to be heading?***

Medium sized operations being consolidated and legacy farms bought up by bigger groups. Amount of niche producers remain, but come and go.