

MINDFUL WINEMAKING

& THE SIJNN ECO-SYSTEM

INTRODUCTION

As creative people we dislike the idea of adhering to a set of rules and the administrative burden that goes with organic and biodynamic wine. We have great respect for producers that follow biodynamic principles and we have studied it quite a bit and attended short courses by Nicholas Jolly and Monty Waldin, but we do have some reservations. One can choose a life without aspirins or antibiotics, but many of us would not be alive today if it were not for the assistance of modern science. Why should we deny our vineyard that advantage?

You could describe our approach as near organic, sustainable, regenerative, eco-friendly or something along those lines. We simply try to work as closely with nature as possible. Modern science actually assists in allowing us to produce our wines as naturally as possible, while being guided by traditional virtues and knowledge. We feel that you cannot make fine wine without having respect for nature - it's a pre-requisite in the production process.

So, what do we do exactly?

NURTURING THE SOIL

We apply very little and, in most years, no chemical fertilizer. Our soils are an incredible mix of rolled stones and schist (85% stone) and 15km from the southern oceans, buffeted by sea breezes and a dry Mediterranean climate with an average 350mm rainfall a year. In our initial soil preparation, we applied some calcitic lime (a natural limestone mined nearby) and some gypsum to reduce any soil salinity as well as phosphate (organic and chemical form) to a depth of 1m. Readily available cow manure with a high organic content was broadcast on top to assist the cover crop and boost microbial life. Every 5 years or so we do soil analysis and add maintenance lime, gypsum, and phosphate if necessary. Every season we add our own compost that we produce from grape skins, garden refuse etc. as well as manure. We mostly use chicken manure, which is high in nitrogen relative to potassium, as well as cow manure, which is more readily available.

WEED CONTROL

We add mulch that we get from farmers in the surrounding areas from their wheat and canola harvests. We gently pack the mulch around each vine to suppress any weed growth. We also plough the work rows with a harrow once or twice a season and the rolled stones with very little soil in between them form a kind of stone mulch.

OUR VINES

We carefully selected drought resistant, hardy vines that are able to adapt to the environment and that produce high quality wine regardless of their global status. Chenin Blanc, Assyrtiko, Verdelho, Touriga Nacional, Tinta Amarella, Grenache and Tempranillo to name a few.

We have used only virus free high quality, low yielding mix of clones for each variety, grafted onto a number of different drought resistant rootstocks such as R110, R99, Ruggeri 140 and Paulsen 1103.

CANOPY MANAGEMENT

Our vines are all grown as bush vines (gobelet or head-trained) in double rows 1,2m x 1,5m, along with a 3,3m wide tractor row. Quite a low vine density of less than 3000 vines / ha, allowing a lot of soil space per vine so that they can thrive without too much supplementary water. Our yields are generally an incredibly low 3 tons / ha. We aim for about 5 arms per vine with two buds at the end of each arm with each bud producing 2 bunches if we're lucky. In theory 20 bunches per vine, but in practice about 10 to 12 bunches due to wind and other environmental factors.

We pay a lot of attention to our first suckering (removing unwanted shoots), which ensures that only the shoots we want to develop with bunches on are allowed to grow at the expense of the others. This makes subsequent suckering operations a lot easier and therefore the overall canopy management and spray requirements for the season easier too. It allows the whole canopy and particularly the bunch zone to have ample dappled light, which is critical for flavor development and achieving phenolic ripeness, as well as making disease and pest control that much easier.

We have very moderate growth due to the stony soils and low rainfall, so a dense canopy is seldom a problem. This allows us to do an early tipping when the shoots are about 1/2m long, sending out 2 or 3 additional shoots and reducing the possibility of wind damage. The aim is to have a 3/4m long shoot with a few side shoots with altogether about 22 leaves ripening two bunches of grapes, all in a well aerated canopy of bright, dappled light.

DISEASE CONTROL

Downy Mildew:

It only requires 10mm rain and a temp. above 10C over a period of 24 hours to initiate the onset of downy mildew. It takes a further week for secondary infection to take place and if left unchecked can destroy the season's growth and crop. As we're in a low rainfall area, downy mildew doesn't pose much of a problem in most years. In an organic or biodynamic system, copper is the only really effective solution to the threat of downy mildew. We only do two copper sprays around mid-season and when required. We usually prefer to start off the growing season with a systemic spray, like Folpan, while the shoots are short, and we only need small volumes sprayed with a backpack. During the rest of the season, including the last spray, we use a soft contact fungicide, which also has a short withholding period of 2 weeks (unlike copper). However, we always allow at least 4 weeks from our last spray until the start of harvest.

Powdery Mildew:

Regardless of the weather and in almost every grape growing region powdery mildew needs to be controlled. It may appear dry in Malgas, but we're close to the coast and the air is quite humid throughout the growing season. However, it's not as tricky as downy mildew. Regular Sulphur sprays are effective, inexpensive and acceptable in bio-dynamic and organic systems.

Wood rotting diseases like Eutypa or Dead Arm:

We only prune in good weather and spray Trichoderma (a beneficial fungus) on the pruning wounds to reduce ingress of wood rotting pathogens. The early season sprays of Folman also provide some protection, but it is a global problem which is starting to draw a little more attention as there doesn't seem to be any really effective remedies. Many old vineyards have more gaps than vines, contributing to their low yields.

PEST CONTROL

WE DO NOT USE ANY PESTICIDES. We don't have much of a problem with pests, probably due to our soft spray program and the fact that we have small 5-6 ha vineyard blocks surrounded by a natural environment, as well as being 40km from the nearest other vineyard. Snails can be a problem in the wetter years, but we have a team of ducks that patrol the vineyards and keep things under control.

IRRIGATION

We have a single irrigation line for two rows, halving our piping requirements. We use micro-jets due to the need to spread the water over our incredible stony soils. A few vintages - like 2014 - we don't need to water at all and some - like the drought years of 2016, 2017, and 2018 - we can't water enough as we only have a very limited supply in mid-summer. Along with most viticulturists, I believe the considered use of irrigation can enhance quality, just as much as it can of course dilute quality. In fact, the amount of water we do add is so little it shouldn't really be called irrigation at all. However, even a small amount of water at version (when the grapes change color) can make a real positive quality difference. In general, we increase the annual rainfall by 50 to 75mm in most seasons.

SOLAR POWER

We have a substantial solar power system on the roof of the winery that provides about half of our entire electricity usage on average throughout the year. (Winery, irrigation pumps, domestic use etc.) Although quite an initial investment, it is really quite a saving and we'll consider extending it as our requirements grow.

BIODIVERSITY & CONSERVATION EASEMENT PROGRAMME

We work closely with the Overberg Renosterveld Conservation Trust to protect the approx. 30 hectares natural vegetation that we have on the property. We have signed a Conservation Easement, which is effectively a servitude included in the Title Deeds of the farm ensuring ongoing protection beyond current ownership.

"Aside from the science of biodiversity loss, conserving your land has as much to do with your belief. A belief that you choose to leave a world behind for your children that you are proud of."

FERMENTATION & MATURATION

WE HAVE NEVER ADDED A COMMERCIAL YEAST TO OUR WINES since our first vintage in 2007. It may be that one day we have to for some reason but so far, we've managed without, and I believe it adds to the style and character of Sijnn wines. We add a small amount (usually in the region of 25ppm) of sulphur at the start of fermentation, which helps with reducing bacterial spoilage and oxidation, as well as selecting the more beneficial yeasts for the fermentation. Sulphur levels are kept to a minimum and by the time the wine is bottled, usually between 50 to 100ppm, a little more than permitted with organic wine (up to 50ppm, depending on which organic association). In general, nothing else is added, except bentonite (a natural clay substance) to some of the white wine barrels as needed for protein stability. WE DON'T HAVE A PUMP in the cellar but move the wine using gravity or compressed air.

BOTTLING AND PACKAGING

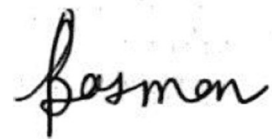
We do all our bottling on site by gravity, as well as all labeling and packaging, mostly by hand with modest low-tech equipment.

It is difficult to put a label on what we do, but as a small, dedicated team striving to make the best possible wine on an incredible site of rolled stones and schist in Malgas with the lightest footprint, we hope that some knowledge of our procedures, from an environmental point of view, adds to the enjoyment of our wines!



DAVID TRAFFORD

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Winemaker