FARM MANAGEMENT PLAN

For 390 Inverloch-Outtrim Road, Outtrim
Grand Crew Gippsland Pty. Ltd.

Prepared by Dean Roberts

Overview

Our long-term vision for the property is to provide an intensive (commercial) viticultural foundation which is supported by (non-commercial) integrated stocking and food crops. We desire to improve the fertility, structure and biological diversity of the soil and increase its ability to capture, store and cycle nutrients and water. This will increase and maximise its potential for productivity and sustainability.

Current & Previous Use

The property is located in an area used traditionally for beef/dairy production including annual cutting for silage/hay. It has been farmed for beef for the last 10 years at least, prior to this it was a dairy farm. It is currently in transition as we establish new dividing fences, shelterbelts and orchard. We are currently concentrating on getting the structure of the property amenable to a planned viticultural enterprise.

The property is in need of the establishment of shelterbelts, would benefit from the application of lime, shows poor soil structure in areas heavily trafficked by stock and is partially exposed to strong winds.

Soil

The property is located in an area which is represented by the Leongatha South (Ls) Soil mapping unit as determined by Sargeant, I and Imhof, M. Major Agricultural Soils of West Gippsland - as published on the Victorian Resources Online website:

"Apart from soils in drainage depressions (Component 4), the surface soils range from very dark grey silty clay loams or sandy loams. The surface overlies a light grey or light brownish grey similarly textured subsurface soil at about 20 cm which develops yellowish brown mottles with depth. Below the bleached zone the subsoils are quite variable. It is convenient to separate the soils into three components (Components 1, 2 & 3) on the basis of subsoil differences…"

Our property conforms to the description of Component 2:

"Below the bleached zone, at about 40 to 50 cm, the subsoil changes clearly to a light brownish grey, mottled with yellowish brown light clay to sandy clay. Mottled light brownish grey and yellowish brown medium to sandy clays occur from about 80 cm. Soft rock may occur below 1.5 m depth."

The soil displays an acidic pH and dries out considerably in summer.

The soils are adequate for viticulture and have been successfully utilised by at least 4 other local vineyards.

Aspect & Topography

The property is located on a saddle of land which avoids the seasonal flooding immediately to the
south. The slope is amenable to drainage of free water away from our property into the neighbouring flood zone. The slope is very gentle towards the East and North-East.

The aspect and topography are amenable to viticulture.

**Wind Management**

We intend to establish a series of wind breaks, utilising native and some non-native species. We have already commenced planting to the south of our house and will continue to do so over the coming seasons. So far we have used local species of Wattle, Banksia, Paperbark and Casuarina.

We will also erect a light-permeable screen on the windward side of the most exposed row of every block of vines. This will afford some wind protection to the vines and enable faster establishment.

**Vineyard Plan**

We intend on planting the vineyard in stages. Vines rarely produce crop until the third year after planting but require a great deal of labour for no financial return in this time. Planting in stages therefore spreads the risk and the cost of establishing the vineyard. Vineyards can be wiped out by a bad season early in their life, or thrive during a good season. To maximise the chances of survival we plan to stagger the plantings over several years. This also gives us a chance to evaluate different training/planting protocols (which will include mulching, watering, training and weeding by hand).

**Trellising**

We will be adopting the VSP (Vertical Shoot Positioning) style of vine trellising, which consists of a fruiting wire and two pairs of moveable foliage wires. These wires will be attached to standard treated pine posts. The rows will be spaced 1.6m apart (the minimum to allow small tractor access), and the vines will be spaced 80cm apart. Blocks of ~1000 vines gives easy harvest calculation and tracking of yield over time (1000 vines x 1 kg fruit / vine = 1 tonne of fruit). Each ‘Stage’ of our vineyard will consist of 1 block of ~1000 vines. These blocks will typically be 16 rows (64m x 26m), but towards the east of the property would be more like 10 rows (80x16m).

We will be planting a mix of proven varieties/clones (Chardonnay/Pinot Noir) and one or two less common varieties (i.e., Grüner Veltliner). Initially, we will plant Pinot Noir. Pinot Noir is very responsive to site-specific conditions and allows us to evaluate the pros and cons of the site.

**Management & Harvest**

Management of our vineyard will be hands-on. Among the jobs that will be conducted by hand are: Pruning, De-suckering, Shoot-thinning, Shoot-positioning, Leaf-plucking, Hedging, Fruit-thinning and Harvest. In addition the standard tractor jobs occur: Slashing, Spraying Fungicide, Netting.

**Winery Volumes**

All of our wines will be produced on-site. Initially the winery will only process fruit grown at our Mardan vineyard. Annual harvest from this property is in the order of ~3-6 tonnes. This will produce approximately 2-4.2kL of wine.

Each stage of the vineyard planted at Outtrim will yield approximately 0.5-1.5 tonnes of fruit, or 0.4-1.2kL of wine.

When mature, the nine blocks would therefore yield 4.5-12 tonnes.
We would normally expect this to be 50-75% of our total production (we also expect a slightly lower yield per vine from Outtrim compared to Mardan).

Aside from fruit from our own vineyard at Mardan, the manufacture of off-site grapes would be limited to exceptionally poor seasons where the only option was to buy fruit from other local growers.

Bottled wine will be stored at the winery where space allows. Overflow will be stored at an off-site wine storage facility in Drouin. We envisage having space for approximately 8 pallets of finished wine. This equates to about 4.6kL of bottled wine. The need to store wine is obviously dependant on sales demand. Ideally the warehouse is empty!

Winery Process

The winery process varies dependant on the wine style. Broadly, there are 3 types of process:

Red - Grapes are harvested, de-stemmed and fermented in open-top fermenters of 0.5-1.5 tonne size. After fermentation, the wine spends 2-3 weeks ‘on skins’ (solids are left in contact with liquid to extract further flavour/tannin). The liquid portion is then pumped off the solids into a tank. The solids are pressed to extract the last of the liquid and added to the tank. The solids are composted (on-site) and used as mulch the following year. The liquid (wine!) is now pumped into oak barrels and left to mature for 10-12 months. The wined is then racked, blended and bottled.

White - Grapes are harvested and pressed to extract the juice. The grape solids remaining are either composted or fed to stock (there is no alcohol in them). The juice is fermented in either oak barrels or tanks. After fermentation it is stored in oak or tanks for 6-12 months depending on wine style. It is blended and may be fined or filtered if necessary. It is the bottled.

Sparkling - Grapes are harvested, pressed, fermented and matured as White Wine. Prior to bottling, the wine has sugar/yeast/fining agents added. This results in a secondary ‘bottle’ fermentation which produces about 1% alcohol. The bottles are then stored ‘on lees’ for 3-5 years. After this time they are left upside down for a period so that all the solids/lees accumulate in the neck of the bottle. The bottles then undergo ‘disgorgement’, where the necks are frozen, seals removed (to remove solids), then they are topped up with a ‘dosage’ liqueur. The dosage may contain sugar, old wine, new wine and certain fining agents. The bottles are then corked/labelled and are ready for consumption.

Wine styles such as Rosé or Nouveau are simply variants on the Red Wine process, favouring less time on skins and earlier bottling.

Wine Style

Close-planting (vines spaced 1m or less) restricts the yield per vine and results in a concentration of flavour and associated increase in perceived quality. South Gippsland is well situated to produce super-premium Pinot Noir and Chardonnay, but is climatically unsuitable to produce large-scale, cheap wine. As an industry we generally play to our strengths - small scale, intensively farmed, high labour input, high quality wines. There is a strong and growing market for the wines of ‘small-producers’, wines that are ‘different’ and show a ‘sense of place’. This is the market that we aim to place our brands in.

Cellar Door Sales

Initially Cellar-Door sales will consist of wine produced by ourselves which is sourced 100% off-site from our vineyard at Mardan. It will take a minimum of 4 years before any wine produced on-site at Outtrim would be available for sale. As stated above, final volumes of a mature vineyard on-site would swing production in favour of Outtrim about 50-75%.
Machinery & Sheds
The existing machinery shed will be utilised for storage of tractor and implements (sprayer/slasher/forks). Access to the vineyard would be on the main driveway through the cellar carpark and into the north-west corner of the vineyard.

Staffing & Access
The vineyard will be staffed by Dean and Dayna Roberts 80% of the time. Additional staff would use the cellar door parking and access the vineyard from the north-west corner.
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Pinot Noir
Stage 1
~1000 vines

Pinot Noir
Stage 2
~1000 vines

Pinot Noir
Stage 3
~1000 vines

Gamay
Stage 4
~1000 vines

Chardonnay
Stage 5
~1000 vines

Chardonnay
Stage 6
~1000 vines

Grüner
Weltliner
Stage 7
~1000 vines

Grüner
Weltliner
Stage 8
~1000 vines

Grüner
Weltliner
Stage 9
~1000 vines

Sheep Paddock
Proposed Development - Response to Policies
by Dean Roberts
(On behalf of Grand Crew Gippsland Pty. Ltd.)

12.01-2S Native Vegetation Management

The objective of this part of the Planning Policy Framework is to ensure that there is no net loss to biodiversity as the result of the removal, destruction or lopping of native vegetation. Our proposal goes a step further in it’s planned addition to the amount of native vegetation on the property in the form of native shelterbelts.

14.01-1S Protection of Agricultural Land

The objective of this part of the Planning Policy Framework is to protect the state’s agricultural base by preserving productive farmland. The proposed development offers a way to maintain a very small agricultural property in an intensive way. A property of this size (6.25 acres) is of limited use to a beef or dairy farmer, but can be used very productively to produce wine-grapes. We believe our proposal increases the potential productivity of the property.

14.01-2S Sustainable Agricultural Land Use

The proposed development is consistent with the strategies aimed at ensuring sustainable agricultural land use. It is a development which embraces diversification and value-adding of agriculture through effective agricultural production, processing and farm-related retailing. The proposed development embraces the potential for climate change to affect agriculture in the region. Lower rainfall and increased temperature can positively affect viticulture in this region (though varietal selection may need to adapt).

17.01-1R Diversified Economy - Gippsland

The proposed development is consistent with the strategy to support production and processing facilities that add value to local agricultural products.

21 Municipal Strategic Statement
21.01-5 The Vision

The proposed development fits with the Vision of the Municipal Strategic Statement where it concerns Economic Development as we believe it is an innovative and sustainable rural activity which contributes to a diversified rural economy. It supports the economic viability of local and regional produce, and promotes sustainable land management practices. The proposed development is a response to tourism market demand.

Where it concerns the Environment, the proposed development promotes biodiversity through integrated poly-culture and the establishment of native shelterbelts which will encourage native fauna. South Gippsland has been earmarked as potentially benefitting from Climate Change (where viticulture is concerned; due to a decrease in rainfall and increase in temperature), so this development would be responsive to it’s effects.

21.03-4 Tourism
Objective 3
Strategy 3.5

The proposed development would encourage the establishment of tourist, recreational activities, value-added primary produce sales and tastings, which are dependent on agricultural activities.
22.06 Non Agricultural Uses in the Farming Zone

The proposed development is consistent with this Planning Scheme Clause as a vineyard/winery is directly related to agriculture and future agricultural opportunities. It does not adversely impact agricultural land and it builds on the economic base of the Shire. Grape production is a form of primary production and the sale of wine is, in effect, the sale of a value-added primary product. It is a product that aids in drawing tourism to the Shire. 22.06-3 Policy states that it is policy to encourage tourism facilities in association with, or that complements, agriculture such as wine tasting and farm gate sales.

22.07-3 Policy

The proposed development is supported by the land use policy in the Rural Activity Zone as it a use which complements agriculture such as wine tasting.