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# TANUNDA HILL VINEYARD

## SUMMER REPORT

**February 2007**



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*the specialists in vineyard management*

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## Executive Summary

The start of the 06/07 season has been dominated by the severe drought conditions that have been felt across the majority of the southern parts of Australia. As to be expected conditions in the Barossa have been significantly warmer and drier than long term averages. The most significant impact on the vineyard has come in the form of severe water restrictions applied to all Murray River water used for irrigation in South Australia.

As the BIL scheme relies predominantly on Murray River water, these restrictions have applied to the Tanunda Hill Vineyard along with all other BIL irrigators in the Barossa. The pressure on irrigation and fertiliser programs has been intensive given the lack of rainfall. On the flip side pest and disease and weed control have been made easier with the dry conditions. Despite devastating frosts being recorded in many regions (including the Barossa) there has been no frost damage at THV. The 2007 season is proving to be extremely challenging, however the management program continues to focus on improving the vineyard's overall potential on an ongoing basis.



Evaluating a new three row sprayer with a view to introducing this technology to the vineyard in 2008.

## Canopy Management

The pruning program was completed as planned. The cost of the FY07 component was higher than budgeted, but was mainly a phasing issue. Despite the dry conditions most blocks demonstrated relatively strong sucker growth this year. This unwanted growth was removed by hand.

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Vine growth progressed quickly this season with most blocks running approximately 3 weeks ahead of last year. With a strong focus on irrigation and fertiliser application (both through fertigation and foliar application) the vine canopies at THV have developed extremely well given the dry conditions.

Vine training was carried out on all blocks containing replants or any young vines. This activity was primarily focussed on Stage 2.

Shoot thinning was carried out on all Viognier and Petit Verdot blocks.

Strong winds once again hit the vineyard in November. This had some impact on flowering, with CAS and TEM appearing to be the most noticeably affected.

There were no frost events recorded.

## **Soil Management**

To reduce moisture competition in mid row, cover crops were spayed out with herbicide in late winter. The growth of the cover crops had been disappointing however it was not thought wise to persevere with them given the lack of rainfall.

Winter weed growth was below normal levels so herbicide spraying activities were scaled back accordingly. The lack of suitable weather conditions dictated that the pre-emergent herbicides were dropped from the regular program.

The evaluation of the mounding in Block 19 has showed a positive response with good vine growth evident in these areas. The mounding program will continue in FY08.

The dry conditions have made spraying the Convolvulus somewhat easier this year, however it will remain an ongoing component of the work program.

## **Irrigation/Water Supply**

Irrigation has been a major and ongoing activity throughout the first half of the season. With soil moisture levels coming into spring at extremely low levels, pre bud burst irrigations were carried out across the vineyard.

All irrigation filters have been acid cleaned and dripper discharge rates tested across the vineyard. All outputs were within design parameters. Internal investigation of the drippers showed that some sediment is becoming evident in the lines and chemical flushing is currently being investigated.

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Poor inflows into the Murray Darling River system catchments caused significant water restrictions to be applied to all Murray River irrigation allocations. A 40% restriction (allowing 60% of allocation to be used) was put in place by the State Government for the 06/07 season.

Flow restrictions enforced by SA Water applied to the BIL scheme up to the end of November. The resultant low flows made it impossible to maintain high water levels in the dams during this period. Although pumping was not significantly affected it highlighted how quickly the reserves can be depleted under high demand situations.

Approximately 300ML had been applied to the vineyard up to the end of December.

Additional water has been purchased to ensure the vineyard has adequate supplies to finish the season.

## **Buildings/Property**

The manager's house required some electrical repairs after poor wiring was found.

The dry soil conditions have caused significant cracking to the walls in the workers cottage. Professional advice will be sort given the extent of the cracks. The lino floor in the kitchen and back porch area has worn through in the high traffic areas and is scheduled to be relaced in the New Year.

The concrete floor in the workshop has also suffered some significant movement. The bay that contains the floor pit has cracked badly and has become an OH&S risk. Repairs will include removing this section of the floor and replacing it. The floor pit will be filled in at the same time. Although not a budgeted activity it is essential that it be repaired ASAP.

The loading bay and vineyard road adjacent to Dahlenberg Rd has been top dressed with rubble as per the scheduled maintenance program.

## **Pest and Disease Control**

There have been no major pest or disease issues reported during the reporting period.

Regular scheduled pest and disease monitoring activities are still being carried out.

There were some large numbers of Mediterranean Snails moving up the vine trunks however they have not caused any damage. The inclusion of Copper in the regular fungicide program has kept the numbers in check.

To highlight the extent of the drought conditions some of the weather data from the THV weather station has been presented below alongside data collected from Rosedale which is located approximately 6 km South West of the vineyard.

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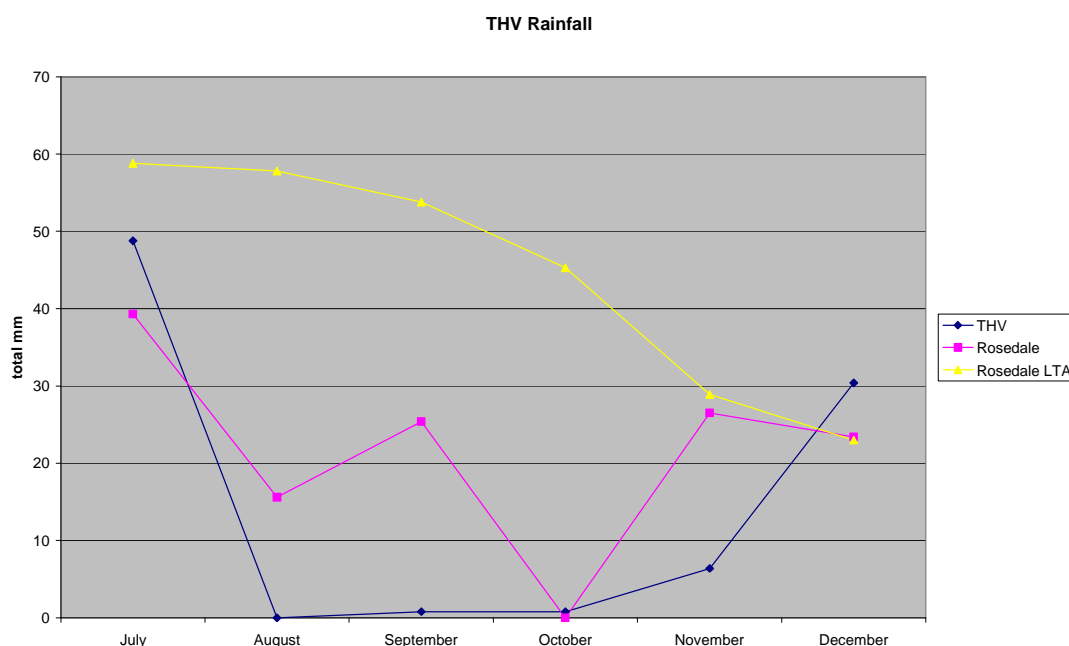
## Climate

Rainfall during the reporting period was as follows;

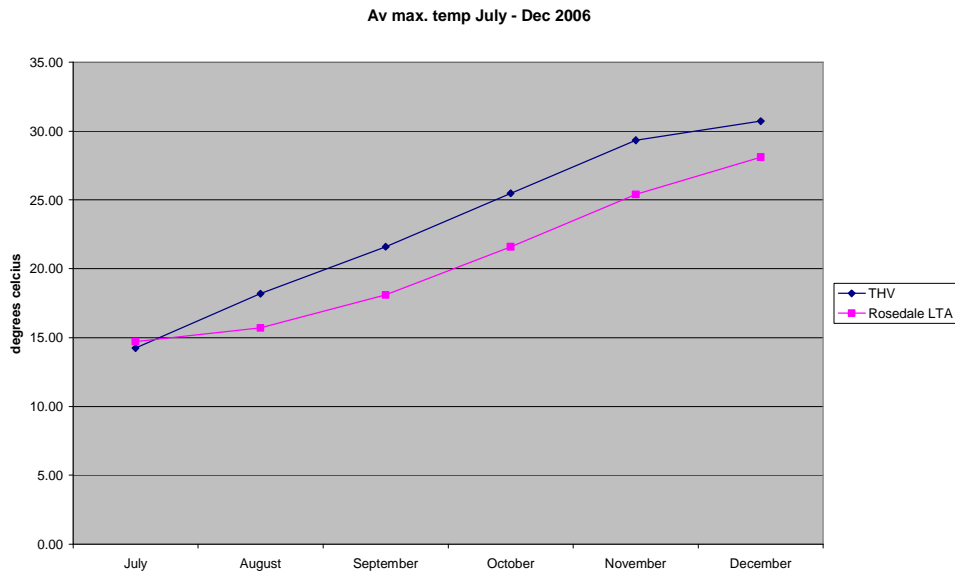
	<b>THV</b>	<b>Rosedale</b>	<b>Rosedale LTA</b>
<b>July</b>	48.8	39.3	58.8
<b>August</b>	0	15.6	57.8
<b>September</b>	0.8	25.4	53.8
<b>October</b>	0.8	0	45.3
<b>November</b>	6.4	26.5	28.9
<b>December</b>	30.4	23.4	23
	<b>87.2</b>	<b>130.2</b>	<b>267.6</b>

The variance in the THV rainfall compared with Rosedale highlights that the rainfall experience to date has been very patchy and not consistent with prolonged period of wet weather.

The main point to note is the significant reduction in rainfall in 2006 compared to the Long Term Average (LTA).



In conjunction with the low rainfall the average temperatures have been well above the LTA's. One of the major impacts of this is the significant increase in evaporation rates and the moisture requirements of the vines.



## Health, Safety and Environment (HSE)

There have been no major issues to report during the reporting period. There were two minor injuries reported on the vineyard. The drainage tanks at the chemical mixing area were pumped out by Cleanaway. Chemical testing of the silt showed no chemical residue issues. The annual HACCP audit was conducted in December with the vineyard receiving a Double A rating.

## Financial

As at the end on November the YTD vineyard operating costs are running approx \$771 over budget. As mentioned earlier additional labour costs were incurred as part of the phasing of the pruning program, however these have been off set by savings in the herbicide program (no pre-emergent applied).

## 2007

The major activity looming in the second half of the year is of course vintage. As a result of the persistent drought conditions yields are expected to be well below average. This is expected to be the trend across all grape growing regions. Water management continues to be a high priority with a focus not only on finishing off the current season but planning for 2008 as well. Despite the tough conditions the vineyard is in excellent condition and is well positioned to deliver what should be a good quality vintage albeit low in volume.

**Matt Alexander**  
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