



# Tunnel Hill Vineyard

## P&D Monitoring Report 2020-21

### Block 1 Merlot

<b>Date</b>	<b><u>Pest, Disease &amp; Nutrition</u></b>	<b><u>Soil, Irrigation, Sward</u></b>
03/11/2020	<b>Powdery Mildew</b>	<b>Soil Moisture / Cracks</b>
<b>Monitored by:</b>	0	Wet
Brenton Willsmore	<b>Downy Mildew (oil spots or active infection)</b>	<b>Recent Irrigation / Precipitation</b>
<b><u>Vine Growth / Canopy &amp; Crop</u></b>	0	Rained on weekend
<b>EL Stage</b>	<b>Downy Mildew (old infection)</b>	<b>Irrigation System (Leaks, blocked emitters etc.)</b>
7	0	Drip line and wire is very loose , needs straining and jiffy clipped to wire to get off the ground
<b>Tip Growth</b>	<b>Diaporthe</b>	<b>Weed Growth (vine rows)</b>
Fresh	0	Yes , in the process of undervine spraying
<b>Canopy Height (av. - cm)</b>	<b>Phomopsis</b>	<b>Weed Growth (mid rows)</b>
40	0	Cape weed
<b>Canopy Width (av. - cm)</b>	<b>Botrytis (leaf)</b>	<b>Sward Length (rows / headlands)</b>
30	0	60 cm
<b>Canopy Density (thinning requirements)</b>	<b>Botrytis (bunch)</b>	<b>Notes / Other</b>
Well spaced , no thinning needed	0	Drip line and wire needs attention to get it off the ground to stop ants blocking drippers and for even watering
<b>Crown Density (thinning requirements)</b>	<b>Mites</b>	
Even	0	
<b>Leaf Colour</b>	<b>Snails</b>	
Deep green	<1	
<b>Canopy Lifting</b>	<b>Scale (adults)</b>	
Catch wire will be needed	0	
<b>Leaf Loss (shading or stress)</b>	<b>Scale (eggs)</b>	
No , vines healthy	0	
<b>Watershoot Growth</b>	<b>Scale (crawlers)</b>	
Yes , needs removing	0	
<b>Fruit / Inflorescence Density, Overcropping</b>	<b>LBAM (webbing / moths / eggs / caterpillars)</b>	<b><u>Trellis, General Vineyard</u></b>
Average 2 bunches per shoot , even crop so far	Clean	<b>Broken Posts (intermediate, strainers)</b>
<b>Inflorescence / Bunch Condition &amp; Size</b>	<b>Weevils</b>	Broken posts have been removed but not replaced, 2 Strainers needed in this block
Healthy inflorescence	0	<b>Broken Wires</b>
<b>Frost damage</b>	<b>Eutypa</b>	Foliage wires have been repaired
Nil	0	<b>General Block Condition</b>
<b>Cold damage</b>	<b>Nutrient Deficiency / Toxicity</b>	Two rows on the westerly side need attention as trees have overgrown rows and cannot be accessed ,several vines are feral
Nil	No ,vines look healthy	
<b>Notes / Other</b>		



# Tunnel Hill Vineyard

## P&D Monitoring Report 2020-21

Water shoots will need removing from the crown down

**Beneficials**  
Spiders / lady bugs  
**Pest & Disease Notes / Other**  
Merlot looks good

and are a haven for disease to develop

Image



Image



Image



# Tunnel Hill Vineyard P&D Monitoring Report 2020-21



Image



Image

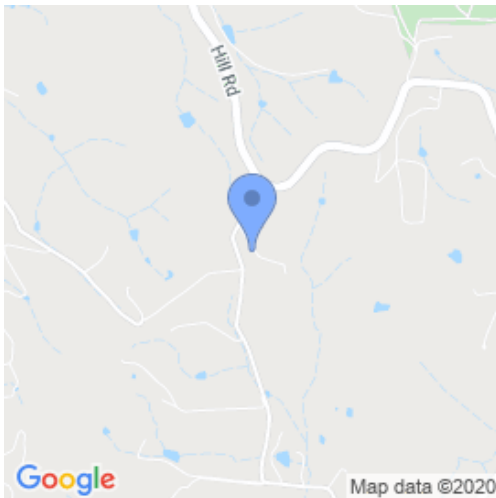


GPS Location



# Tunnel Hill Vineyard

## P&D Monitoring Report 2020-21



### Block 2 Cabernet Sauvignon

**Date**

03/11/2020

**Monitored by:**

Brenton Willsmore

**Vine Growth / Canopy & Crop**

**EL Stage**

16

**Tip Growth**

Fresh ,good

**Canopy Height (av. - cm)**

50

**Canopy Width (av. - cm)**

40

**Canopy Density (thinning requirements)**

Shoots Evenly spaced

**Crown Density (thinning requirements)**

Slightly crowded should be ok

**Leaf Colour**

Deep green

**Canopy Lifting**

Catch wires in approx 2 weeks

**Leaf Loss (shading or stress)**

**Pest, Disease & Nutrition**

**Powdery Mildew**

0

**Downy Mildew (oil spots or active infection)**

0

**Downy Mildew (old infection)**

0

**Diaporthe**

0

**Phomopsis**

0

**Botrytis (leaf)**

0

**Botrytis (bunch)**

0

**Mites**

0

**Snails**

<1

**Scale (adults)**

<1

**Soil, Irrigation, Sward**

**Soil Moisture / Cracks**

Good

**Recent Irrigation / Precipitation**

Rained last week

**Irrigation System (Leaks, blocked emitters etc.)**

Drip line and wire needs to be strained up off the ground.

**Weed Growth (vine rows)**

In the process of Undervine spraying

**Weed Growth (mid rows)**

Cape weed midrow mixed in with grasses

**Sward Length (rows / headlands)**

60 cm

**Notes / Other**

I want to leave the mid rows high in this block to dry the soil out a bit.

**Trellis, General Vineyard**

**Broken Posts (intermediate, strainers)**



# Tunnel Hill Vineyard P&D Monitoring Report 2020-21

Nil

**Watershoot Growth**

Yes , Hand clean up from the crown down may be required

**Fruit / Inflorescence Density, Overcropping**

Well evenly spaced fruit, not over cropped

**Inflorescence / Bunch Condition & Size**

Inflorescence average size and healthy

**Frost damage**

Nil

**Cold damage**

Nil

**Notes / Other**

As this block is going to Treasury (Penfolds ) , A water shoot hand clean up would be advised.

**Scale (eggs)**

<1

**Scale (crawlers)**

0

**LBAM (webbing / moths / eggs / caterpillars)**

Nil

**Weevils**

0

**Eutypa**

0

**Nutrient Deficiency / Toxicity**

No

**Beneficials**

Spiders

**Pest & Disease Notes / Other**

Clean canopy

Broken posts removed but not replaced, strainer needs replacing

**Broken Wires**

Foliage wires have been repaired

**General Block Condition**

Cab sav looks good, Dripline needs attention . It needs to be strained and off the ground so ants don't block the emitters and we get a even watering pattern undervine

**Notes / Other**

As this is a Treasury (Penfolds)block . The irrigation needs attention if we are to grow a grade fruit.

Image



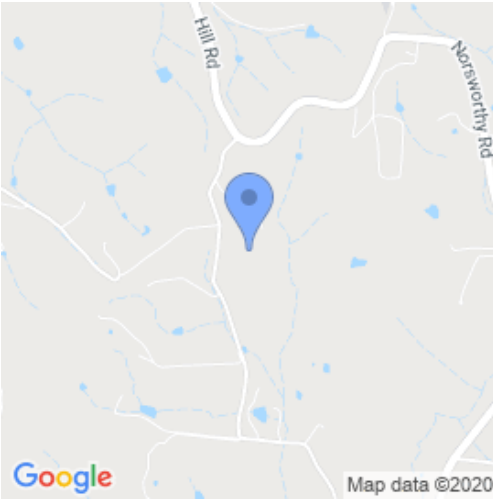
Image



# Tunnel Hill Vineyard P&D Monitoring Report 2020-21



GPS Location



## Block 3 Sangiovese

**Date**

03/11/2020

**Monitored by:**

Brenton Willsmore

**Vine Growth / Canopy & Crop**

**Pest, Disease & Nutrition**

Powdery Mildew

0

Downy Mildew (oil spots or active infection)

**Soil, Irrigation, Sward**

Soil Moisture / Cracks

Wet

Recent Irrigation / Precipitation

Rain last week



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<b>EL Stage</b>	0	<b>Irrigation System (Leaks, blocked emitters etc.)</b>
16	<b>Downy Mildew (old infection)</b>	Drip lines need straining to get them off the ground
<b>Tip Growth</b>	0	<b>Weed Growth (vine rows)</b>
Fresh	<b>Diaporthe</b>	Have commenced undervine spraying
<b>Canopy Height (av. - cm)</b>	0	<b>Weed Growth (mid rows)</b>
70	<b>Phomopsis</b>	Yes
<b>Canopy Width (av. - cm)</b>	0	<b>Sward Length (rows / headlands)</b>
40	<b>Botrytis (leaf)</b>	800 mm
<b>Canopy Density (thinning requirements)</b>	0	<b><u>Trellis, General Vineyard</u></b>
No	<b>Botrytis (bunch)</b>	<b>Broken Posts (intermediate, strainers)</b>
<b>Crown Density (thinning requirements)</b>	0	Broken posts removed but not replaced.
No	<b>Mites</b>	<b>Broken Wires</b>
<b>Leaf Colour</b>	0	Foliage wire have been repaired
Medium green	<b>Snails</b>	<b>General Block Condition</b>
<b>Canopy Lifting</b>	<1	There is intermittent eutypa throughout the block .
Lift wires will be needed	<b>Scale (adults)</b>	Blackberry bushes undervine need to be removed/ sprayed out.
<b>Leaf Loss (shading or stress)</b>	<1	
No	<b>Scale (eggs)</b>	
<b>Watershoot Growth</b>	0	
Yes	<b>Scale (crawlers)</b>	
<b>Fruit / Inflorescence Density, Overcropping</b>	0	
Good	<b>LBAM (webbing / moths / eggs / caterpillars)</b>	
<b>Inflorescence / Bunch Condition &amp; Size</b>	None found	
Large healthy inflorescence	<b>Weevils</b>	
<b>Frost damage</b>	0	
No	<b>Eutypa</b>	
<b>Cold damage</b>	1	
No	<b>Nutrient Deficiency / Toxicity</b>	
	Flag shoots visible from vines with eutypa	
	<b>Beneficials</b>	
	Yes	
	<b>Pest &amp; Disease Notes / Other</b>	
	Healthy canopy apart from the eutypa	

Image



# Tunnel Hill Vineyard P&D Monitoring Report 2020-21



Image



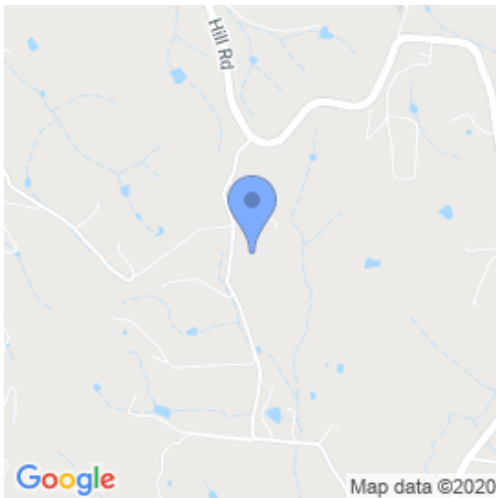
GPS Location





# Tunnel Hill Vineyard

## P&D Monitoring Report 2020-21



### Block 4a Cabernet Sauvignon

<b>Date</b>	<b><u>Pest, Disease &amp; Nutrition</u></b>	<b><u>Soil, Irrigation, Sward</u></b>
03/11/2020	<b>Powdery Mildew</b>	<b>Soil Moisture / Cracks</b>
<b>Monitored by:</b>	0	Wet
Brenton Willsmore	<b>Downy Mildew (oil spots or active infection)</b>	<b>Recent Irrigation / Precipitation</b>
<b><u>Vine Growth / Canopy &amp; Crop</u></b>	0	Recent rain
<b>EL Stage</b>	<b>Downy Mildew (old infection)</b>	<b>Irrigation System (Leaks, blocked emitters etc.)</b>
16	0	Drip lines need straining to keep off ground
<b>Tip Growth</b>	<b>Diaporthe</b>	<b>Weed Growth (vine rows)</b>
Fresh	0	Yes
<b>Canopy Height (av. - cm)</b>	<b>Phomopsis</b>	<b>Weed Growth (mid rows)</b>
40	0	Minimal
<b>Canopy Width (av. - cm)</b>	<b>Botrytis (leaf)</b>	<b>Sward Length (rows / headlands)</b>
30	0	40 cm
<b>Canopy Density (thinning requirements)</b>	<b>Botrytis (bunch)</b>	<b><u>Trellis, General Vineyard</u></b>
No	0	<b>Broken Posts (intermediate, strainers)</b>
<b>Crown Density (thinning requirements)</b>	<b>Mites</b>	Broken posts removed but not replaced
Not needed	0	<b>Broken Wires</b>
<b>Leaf Colour</b>	<b>Snails</b>	Foliage wires repaired
Deep green	<1	
<b>Canopy Lifting</b>	<b>Scale (adults)</b>	
Lift wires required	<1	
<b>Leaf Loss (shading or stress)</b>		



# Tunnel Hill Vineyard

## P&D Monitoring Report 2020-21

No	Scale (eggs)
Watershoot Growth	0
No	Scale (crawlers)
Fruit / Inflorescence Density, Overcropping	0
No	LBAM (webbing / moths / eggs / caterpillars)
Inflorescence / Bunch Condition & Size	None seen
Good , average size	Weevils
Frost damage	0
No	Eutypa
Cold damage	0
No	Nutrient Deficiency / Toxicity
	Canopy looks healthy

### Block 4b Shiraz

<b>Date</b>	<b><u>Pest, Disease &amp; Nutrition</u></b>	<b><u>Soil, Irrigation, Sward</u></b>
03/11/2020	<b>Powdery Mildew</b>	<b>Soil Moisture / Cracks</b>
<b>Monitored by:</b>	0	Wet
Brenton Willsmore	<b>Downy Mildew (oil spots or active infection)</b>	<b>Recent Irrigation / Precipitation</b>
<b><u>Vine Growth / Canopy &amp; Crop</u></b>	0	Recent rain
<b>EL Stage</b>	<b>Downy Mildew (old infection)</b>	<b>Irrigation System (Leaks, blocked emitters etc.)</b>
16	0	Dripline needs straining up off ground to stop emitters blocking and for even watering
<b>Tip Growth</b>	<b>Diaporthe</b>	<b>Weed Growth (vine rows)</b>
Fresh	0	Yes
<b>Canopy Height (av. - cm)</b>	<b>Phomopsis</b>	<b>Weed Growth (mid rows)</b>
60	0	Cape weed mixed with grasses
<b>Canopy Width (av. - cm)</b>	<b>Botrytis (leaf)</b>	<b>Sward Length (rows / headlands)</b>
40	0	40
<b>Canopy Density (thinning requirements)</b>	<b>Botrytis (bunch)</b>	<b>Notes / Other</b>
No	0	
<b>Crown Density (thinning requirements)</b>	<b>Mites</b>	
No		



# Tunnel Hill Vineyard

## P&D Monitoring Report 2020-21

Leaf Colour	0	This block is going to Treasury ( Penfolds) so drip lines need attention. <b><u>Trellis, General Vineyard</u></b> Broken Posts (intermediate, strainers) Broken posts removed but not replaced Broken Wires Foliage wires repaired
Med green	Snails	
Canopy Lifting	<1	
Will need lift wires up to stop canopy rolling	Scale (adults)	
Leaf Loss (shading or stress)	<1	
No	Scale (eggs)	
Watershoot Growth	0	
Yes	Scale (crawlers)	
Fruit / Inflorescence Density, Overcropping	LBAM (webbing / moths / eggs / caterpillars)	
No	None visible	
Inflorescence / Bunch Condition & Size	Weevils	
Good , average size bunches	0	
Frost damage	No	
No	Eutypa	
Cold damage	0	
No		

### Block 5a Sauvignon Blanc

<b>Date</b>	<b><u>Pest, Disease &amp; Nutrition</u></b>	<b><u>Soil, Irrigation, Sward</u></b>
03/11/2020	<b>Powdery Mildew</b>	<b>Soil Moisture / Cracks</b>
<b>Monitored by:</b>	0	Very wet ,neighbour's dam overflows through block, This block will need some drainage earthworks done.
Brenton Willsmore	<b>Downy Mildew (oil spots or active infection)</b>	<b>Recent Irrigation / Precipitation</b>
<b><u>Vine Growth / Canopy &amp; Crop</u></b>	0	Recent rain
<b>EL Stage</b>	<b>Downy Mildew (old infection)</b>	<b>Weed Growth (vine rows)</b>
15	0	Yes
<b>Tip Growth</b>	<b>Diaporthe</b>	<b>Weed Growth (mid rows)</b>
Fresh	0	Yes
<b>Canopy Height (av. - cm)</b>	<b>Phomopsis</b>	<b>Sward Length (rows / headlands)</b>
30	0	
<b>Canopy Width (av. - cm)</b>	<b>Botrytis (leaf)</b>	
20		



# Tunnel Hill Vineyard

## P&D Monitoring Report 2020-21

Canopy Density (thinning requirements)	0	60 cm
A dense canopy , will monitor	<b>Botrytis (bunch)</b>	<b><u>Trellis, General Vineyard</u></b>
Crown Density (thinning requirements)	0	<b>Broken Posts (intermediate, strainers)</b>
TBA Will monitor	Mites	Yes, to be removed, too wet to get through at the moment
Leaf Colour	0	<b>Broken Wires</b>
Deep green	<b>Snails</b>	Foliage wires been repaired
Canopy Lifting	1	
Yes VSP	<b>Scale (adults)</b>	
Leaf Loss (shading or stress)	0	
No	<b>Scale (eggs)</b>	
Watershoot Growth	0	
Yes	<b>Scale (crawlers)</b>	
Fruit / Inflorescence Density, Overcropping	0	
No	<b>LBAM (webbing / moths / eggs / caterpillars)</b>	
Inflorescence / Bunch Condition & Size	None seen	
Good condition, lots of shoots with only one bunch	<b>Weevils</b>	
Frost damage	0	
No	<b>Eutypa</b>	
Cold damage	0	
No	<b>Pest &amp; Disease Notes / Other</b>	
	This is a very wet block , waterlogged at the moment , watch snail movement.	

### Blocks 5b & 5c Shiraz

Date  
03/11/2020  
Monitored by:  
Brenton Willsmore  
**Vine Growth / Canopy & Crop**  
EL Stage

**Pest, Disease & Nutrition**  
Powdery Mildew  
0  
Downy Mildew (oil spots or active infection)  
0

**Soil, Irrigation, Sward**  
Soil Moisture / Cracks  
Very wet  
Recent Irrigation / Precipitation  
Recent rain  
Weed Growth (vine rows)



# Tunnel Hill Vineyard

## P&D Monitoring Report 2020-21

12	Downy Mildew (old infection)	Undervine spray needed
Tip Growth	0	Weed Growth (mid rows)
Good/ Fresh tips	Diaporthe	Yes
Canopy Height (av. - cm)	0	Sward Length (rows / headlands)
20	Phomopsis	60
Canopy Width (av. - cm)	0	Notes / Other
10	Botrytis (leaf)	Block is too wet to Undervine
Canopy Density (thinning requirements)	0	spray or slash at the moment
No	Botrytis (bunch)	<b><u>Trellis, General Vineyard</u></b>
Crown Density (thinning requirements)	0	Broken Posts (intermediate, strainers)
No	Mites	Yes , to be removed when block
Leaf Colour	0	dries out
Mid green	Snails	Broken Wires
Canopy Lifting	<1	Foliage wires been repaired
No	Scale (adults)	General Block Condition
Leaf Loss (shading or stress)	0	Block is water logged and very
No	Scale (eggs)	boggy. Only just accessible with
Watershoot Growth	0	tractor . Drainage on this block
Water shoots removed whilst	Scale (crawlers)	needs to be addressed.
training vines	0	
Fruit / Inflorescence Density, Overcropping	LBAM (webbing / moths / eggs /	
Even	caterpillars)	
Inflorescence / Bunch Condition & Size	None sited	
Average size for young vines ,	Weevils	
Healthy	0	
Frost damage	Eutypa	
No	0	
Cold damage		
No		

### Block 6 Merlot

Date

Pest, Disease & Nutrition

Soil, Irrigation, Sward



# Tunnel Hill Vineyard

## P&D Monitoring Report 2020-21

04/11/2020

Monitored by:

Brenton Willsmore

### Vine Growth / Canopy & Crop

EL Stage

7

Tip Growth

Fresh

Canopy Height (av. - cm)

30

Canopy Width (av. - cm)

20

Canopy Density (thinning requirements)

No

Crown Density (thinning requirements)

No

Leaf Colour

Mid green

Canopy Lifting

Yes

Leaf Loss (shading or stress)

No

Watershoot Growth

Yes

Fruit / Inflorescence Density, Overcropping

Ok

Inflorescence / Bunch Condition & Size

Healthy

Frost damage

No

Cold damage

No

Powdery Mildew

0

Downy Mildew (oil spots or active infection)

0

Downy Mildew (old infection)

0

Diaporthe

0

Phomopsis

0

Botrytis (leaf)

0

Botrytis (bunch)

0

Mites

0

Snails

<1

Scale (adults)

0

Scale (eggs)

0

Scale (crawlers)

0

LBAM (webbing / moths / eggs / caterpillars)

None seen

Weevils

0

Eutypa

<1

Soil Moisture / Cracks

Wet

Recent Irrigation / Precipitation

Recent rain

Weed Growth (vine rows)

Yes

Weed Growth (mid rows)

Yes

Sward Length (rows / headlands)

60 cm

### Trellis, General Vineyard

Broken Posts (intermediate, strainers)

Broken posts removed

Broken Wires

Foliage wires repaired



# Tunnel Hill Vineyard

## P&D Monitoring Report 2020-21

### Blocks 7, 8 & 9 Pinot Noir

<b>Date</b>	<b><u>Pest, Disease &amp; Nutrition</u></b>	<b><u>Soil, Irrigation, Sward</u></b>
04/11/2020	<b>Powdery Mildew</b>	<b>Soil Moisture / Cracks</b>
<b>Monitored by:</b>	0	Wet
Brenton Willsmore	<b>Downy Mildew (oil spots or active infection)</b>	<b>Recent Irrigation / Precipitation</b>
<b><u>Vine Growth / Canopy &amp; Crop</u></b>	0	Recent rain
<b>EL Stage</b>	<b>Downy Mildew (old infection)</b>	<b>Weed Growth (vine rows)</b>
16	0	Yes
<b>Tip Growth</b>	<b>Diaporthe</b>	<b>Weed Growth (mid rows)</b>
Fresh	0	Some broad leaf
<b>Canopy Height (av. - cm)</b>	<b>Phomopsis</b>	<b>Sward Length (rows / headlands)</b>
60	0	60 cm
<b>Canopy Width (av. - cm)</b>	<b>Botrytis (leaf)</b>	<b><u>Trellis, General Vineyard</u></b>
40	0	<b>Broken Posts (intermediate, strainers)</b>
<b>Canopy Density (thinning requirements)</b>	<b>Botrytis (bunch)</b>	Broken posts removed
Very thick dense canopy	0	<b>Broken Wires</b>
<b>Crown Density (thinning requirements)</b>	<b>Mites</b>	Foliage wires repaired
Thick	0	<b>General Block Condition</b>
<b>Leaf Colour</b>	<b>Snails</b>	Trellising good condition
Deep green	<1	
<b>Canopy Lifting</b>	<b>Scale (adults)</b>	
Yes	0	
<b>Leaf Loss (shading or stress)</b>	<b>Scale (eggs)</b>	
No	0	
<b>Watershoot Growth</b>	<b>Scale (crawlers)</b>	
Yes	0	
<b>Fruit / Inflorescence Density, Overcropping</b>	<b>LBAM (webbing / moths / eggs / caterpillars)</b>	
Not overcropped	None seen	
<b>Inflorescence / Bunch Condition &amp; Size</b>	<b>Weevils</b>	
Good condition, small inflorescence	0	
<b>Frost damage</b>	<b>Eutypa</b>	
No	1	
<b>Cold damage</b>	<b>Pest &amp; Disease Notes / Other</b>	
No	Intermittent eutypa throughout Pinot Blocks	



# Tunnel Hill Vineyard P&D Monitoring Report 2020-21

Image

