

Maximizing the Use of OrchardNet ~ Part 2: Financial Components

OrchardNet has been designed so that the grower can make good informed decisions based on simple data collection and thereafter the ability to run clear informative reports. In Part 1 of this article series we discussed how to use the production components of OrchardNet. In this article we demonstrate the use of the financial functions.



This article takes you through a step by step process of how to enter the financial data into OrchardNet and then harness its power. This article supports the Online Manual which can be found on the left hand toolbar of the OrchardNet site. Look for the purple question mark. It's a must read if you're serious about OrchardNet..

We will use the Australian Demo site to illustrate the system, so as your reading this it may pay to open it up. Go to <http://www.hortwatch.com/orchardnet/>, enter the User Name : AUGrower and Password : Cobber.

Step 1: Block Setups

For the financial reports to run, you must first have entered the Block details, and basic production data as described in Article 1. If you want to plan your financials going forward, it is also important to have entered your production estimates for the year in advance.

Step 2 Block Cost Input

OrchardNet designers have used the KISS (Keep it simple stupid) theory and have therefore only required users to enter 5 key block costs: pruning, thinning, harvesting, other expenses and the management fee.

The definitions of each expense category are listed in the online manual. Although OrchardNet doesn't benchmark costs at this stage it will do so in the future, therefore it's important that we all try and enter data consistently. You know the acronym RTM ~ Read the Manual

Pruning and Thinning are the total wage costs per tree. Harvesting is the total wage cost including QC and tractor driving per picked kg. Management fee is the paid cost of management wages per ha and Other Expense is everything else. Some growers who have elaborate cost breakdown systems can enter

unique “other expenses” per block. Most growers however don’t try and break down these costs per block and hence will enter the average figure from their business per ha. If you can’t calculate your own cost use the industry average which is available through the Future Orchards “Orchard Business Analysis”. In 2011 it was \$18000 per ha.

All costs and returns are to be entered GST exclusive.

The figure below shows the Block Costs of the Demo sites : Pink Lady block

Block Cost Details:						
X	Year	Pruning?	Thinning?	Harvesting?	Other expenses?	Management Fee?
X	2013	1.50	2.50	0.120	18000	2000
X	2012	1.50	2.50	0.150	18000	2000
X	2011	1.75	1.50	0.120	17000	1800
X	2010	1.50	0.00	0.130	17000	1800
X	2009	0.75	0.50	0.120	17000	1800
X	2008	1.50	0.00	0.100	17000	1800
X	2007	0.45	0.25	0.110	17000	1800
X	2006	1.50	0.00	0.100	17000	1800
X	2005	2.00	0.00	0.080	17000	1800

Figure 1 Demo Orchard ~ Pink Lady Shed Costs

Step 3 Post Harvest Costs

Post Harvest Costs should cover all your costs beyond the farm gate to get your crop packed, stored, Smartfesh™ treated and transported to market. You have three options, you can

1. enter your costs or each block
2. enter company post harvest default costs that will apply to all blocks (RTM to find out how to enter data at a company level)
3. do nothing, in which case the industry average post harvest costs will be used.

OrchardNet is set up to enter 4 post harvest cost categories, freight (orchard to packhouse), Packing, Packaging and Coolstorage. For the full definitions please RTM. Freight and packing are a dollar figure per picked kg. Packaging and Coolstorage are entered per Class 1 kg. That may not be perfect for your business. On many Australian businesses we have worked for, the post harvest costs are reported per bin or per picked kg. In this case you will just enter the figure into Packing and not packaging or coolstorage as is the case on the demo site. Here, the per bin cost is \$208/400 kg bin or 52c/kg.

Existing Post-Harvest Costs								
Edit	Year	Crop	Growing Method	Confirmed/ Estimate	Freight [?]	Packing [?]	Packaging [?]	Coolstorage [?]
<input type="checkbox"/>	Pipfruit	2013	Conventional	Confirmed	0.020	0.520	0.000	0.000
<input type="checkbox"/>	Pipfruit	2012	Conventional	Confirmed	0.020	0.520	0.000	0.000
<input type="checkbox"/>	Pipfruit	2011	Conventional	Confirmed	0.020	0.520	0.000	0.000

Figure 2 Post Harvest Costs for the Demo Orchard

Step 4. Enter returns.

To enter returns go to the Block Returns data entry section. All figures are per kg and are entered net of commissions. In the example below in 2011, our demo orchardists received \$29.64 per 12 kg Class 1 box. He then paid a 15% marketing commission giving him a net return of \$25.20. That is equivalent to \$2.10 per kg.

The same logic applies to Class 2 and proves grade fruit.

Block Returns:				
X	Year	Class 1 return	Class 2 Return	Process return
X	2013	1.800	0.500	0.100
X	2012	1.800	0.500	0.100
X	2011	2.100	0.750	0.150
X	2010	2.500	1.000	0.050
X	2009	2.250	0.500	0.050
X	2008	2.240	1.060	0.100
X	2007	3.000	0.800	0.080
X	2006	2.240	1.060	0.100
X	2005	2.240	1.060	0.100

Figure 3 Pink Lady Shed Returns

Step 5: OrchardNet is dynamic

Many growers using OrchardNet don't enter data until the full picture is known which in our opinion is too late to be able to use it as a good management tool. As soon as your crop is harvested enter all the data you do know and take a good guess at the rest. As the packing season and marketing season unfolds, update the data and the final outcome will become more and more accurate.

At the start of the winter, enter your forecast for next years crop and the returns and costs you're budgeting on. Update them as the season unfolds. This will mean the system is being used proactively rather than reactively.

Step 6 Accessing the Reports

Once the base data is in, you can run the first series of reports. All reports can be accessed by clicking on the graph icon.

All reports can be accessed at a Block, Property or Company level. To run the reports just for the block, click on the Graph icon when you're in the Block page. To access them at a company level, click the graph icon at the company page.



Step 6 Run the Block Profit Reports

After clicking the graph icon, the first report on the list is called "Block Profit" (see Figure 4). You can select the display unit as either TCE or kgs and choose to view just actual results or "actuals and forecasts". Pages per block refers to how many years you want to view. One page includes 3 years, 2 pages, six years and so on.

Pink Lady Shed Reporting Options

Block Profit Options
[View report description](#)

Display unit <input checked="" type="radio"/> kg <input type="radio"/> tce (18.1 kg)	Report Type <input checked="" type="radio"/> Actual history only <input type="radio"/> Include forecasts	Pages per block <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> All
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Figure 4 Block profit report setup

I've selected kgs, include forecast and 1 page per block. The report I can now access is shown in Figure 5 below. This report shows a vast amount of information of the block including, production, packout and financials per tree, per gross kg, class 1 kg and per ha.

Some of the conclusions that can be drawn from this report are now discussed. This block can produce fruit at approx \$1.05/gross kg and \$1.30 per Class 1 kg, and can therefore be internationally competitive. Note that in 2012 when the packout dropped the cost per kg has risen to \$1.68 per Class 1 kg, this trend needs to be reversed. This grower made great money of this block in 2011 but is well back in 2012 due to a poorer packout and lower returns. His 2012 forecast shows that at a lower gross yield and better packout, the block will do OK even with lower returns than were achieved in earlier years. Now he/she has some good numbers to actively manage that block to a good sustainable financial result.

2013 Forecast		2012 Actual				2011 Actual						
Tree number	1667	Age:	1667	Age:	1667	Age:	1667	Age:	1667	Age:	1667	Age:
Area (ha)	0.800	11 yrs	0.800	10 yrs	0.800	10 yrs	0.800	9 yrs	0.800	9 yrs	0.800	9 yrs
Density (trees/ha)	2,084		2,084		2,084		2,084		2,084		2,084	
Yield	Kg /tree	Gross Kg/ha	Class 1 Kg/ha	Tonnes /ha	Kg /tree	Gross Kg/ha	Class 1 Kg/ha	Tonnes /ha	Kg /tree	Gross Kg/ha	Class 1 Kg/ha	Tonnes /ha
Gross yield	33.6	70,000	56,000	70.0	36.0	75,000	43,750	75.0	33.6	70,000	56,250	70.0
Submitted to Packhouse	100%				83%				100%			
Recovery and Returns	Class 1	Class 2	Process		Class 1	Class 2	Process		Class 1	Class 2	Process	
Packouts	80%	9%	11%		58%	8%	33%		80%	10%	10%	
Returns	\$1.80	\$0.50	\$0.10		\$1.80	\$0.50	\$0.10		\$2.10	\$0.75	\$0.15	
Average Fruit Wt (g)	180				170				181			
Direct Financial Result	\$/Tree	\$/Gross Kg	\$/C1 Kg	\$/Ha	\$/Tree	\$/Gross Kg	\$/C1 Kg	\$/Ha	\$/Tree	\$/Gross Kg	\$/C1 Kg	\$/Ha
INCOME	50.25	1.50	1.87	104,700	40.49	1.13	1.93	84,375	59.69	1.78	2.21	124,388
Packing	17.47	0.52	0.65	36,400	15.60	0.43	0.74	32,500	17.47	0.52	0.65	36,400
Packaging	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0
Coolstorage	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0
Freight	0.67	0.02	0.03	1,400	0.72	0.02	0.03	1,500	0.67	0.02	0.02	1,400
Total post harvest costs	18.14	0.54	0.68	37,800	16.32	0.45	0.78	34,000	18.14	0.54	0.67	37,800
ORCHARD GATE INCOME	32.11	0.96	1.19	66,900	24.18	0.67	1.15	50,375	41.55	1.24	1.54	86,588
Prune	1.50	0.04	0.06	3,126	1.50	0.04	0.07	3,126	1.75	0.05	0.06	3,647
Thin	2.50	0.07	0.09	5,209	2.50	0.07	0.12	5,209	1.50	0.04	0.06	3,126
Harvest	4.03	0.12	0.15	8,400	5.40	0.15	0.26	11,250	4.03	0.12	0.15	8,400
Other orchard exp	8.64	0.26	0.32	18,000	8.64	0.24	0.41	18,000	8.16	0.24	0.30	17,000
Management fee	0.96	0.03	0.04	2,000	0.96	0.03	0.05	2,000	0.86	0.03	0.03	1,800
Total orchard expenses	17.63	0.52	0.66	36,735	19.00	0.53	0.90	39,585	16.30	0.49	0.60	33,972
TOTAL EXPENDITURE	35.77	1.06	1.33	74,535	35.31	0.98	1.68	73,585	34.44	1.03	1.28	71,772
PROFIT	14.48	0.43	0.54	30,165	5.18	0.14	0.25	10,790	25.25	0.75	0.94	52,615

Figure 5 Pink Lady Shed Block profit

Step 7 Block Profit Summary

This report places the summary result of all blocks on the one page, which makes it easy to see which blocks are performing annually and over time. It can also calculate the overall profitability of different properties within large orchard businesses.

To access this report go to the company page and click on the graph icon. Then go to "Block Profit Summary Options" where you can choose to look at "actuals only" or "include forecasts".

In Figure 6 below we have run the report for the Demo orchard including the 2013 forecast. The orchard is expecting a profit of \$156,000 in 2012 and we can see where exactly that profit is being generated. The Rosy Glow house block is the star performer and on the other hand, the Red Chief are making a loss. Not only has the Red Chief made a loss in 2012 but also 2011 and is forecasting another loss in 2013. We think the best way to prune the Red Chief is with one chainsaw cut at about knee height.

Block Profit Summary



Blockname	2013			2012			2011			3 Yr Avg (per ha)	6 Yr Avg (per ha)
	Area	\$/ha	Total	Area	\$/ha	Total	Area	\$/ha	Total		
Home Block	7.85	14,482	113,681	7.85	19,903	156,236	7.85	23,117	181,465	19,167	18,328
Granny	0.49	18,563	9,096	0.49	31,678	15,522	0.49	6,145	3,011	18,795	14,720
Pink Lady Shed	0.80	30,165	24,132	0.80	10,790	8,632	0.80	52,615	42,092	31,190	54,031
Rosy Glow House	1.37	52,147	71,441	1.37	53,854	73,779	1.37	54,145	74,179	53,382	42,713
Red Chief	0.99	-2,772	-2,744	0.99	-6,104	-6,043	0.99	-4,292	-4,249	-4,389	3,948
Galaxy Shed	1.10	6,826	7,509	1.10	13,968	15,365	1.10	24,669	27,136	15,154	13,078
R Gala early block	3.10	1,370	4,247	3.10	15,800	48,981	3.10	12,676	39,296	9,949	3,642
Company Totals	7.85	14,482	113,681	7.85	19,903	156,236	7.85	23,117	181,465	19,167	18,328

Figure 6 Block profit Summary

The overall orchard profit forecast for 2013 (\$113,000) is also well back on 2011 (\$181,000) and 2012 (\$156,000) which may mean Cobber's holiday that year will have to be to the Gold Coast rather than to Europe.

Summary

Hopefully this article has shown you the benefit of entering some basic financial data and the power that gives you to drive your orchard business where you want to go.

Until next time, may you have plentiful harvests and your markets pay fair money for your product.

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