

Future Orchards Business Development Group (BDG) Update

December 2015

Dear Grower or Industry personnel

Welcome to the second BDG update of the 2015/16 year. You are receiving this newsletter as a previous active contributor to the APAL Future Orchards program.

In all of these projects, we have captured the majority of the orchard data within the online database called OrchardNet (to access go to <http://www.hortwatch.com/orchardnet>). If you have received this newsletter you should already have an OrchardNet subscription but if not or you cant remember, please get in touch with us to set it up (adrian.stone@agfirst.co.nz). Remember the cost of the annual subscription is funded by the Future Orchards project so there is no cost to you other than your own time.

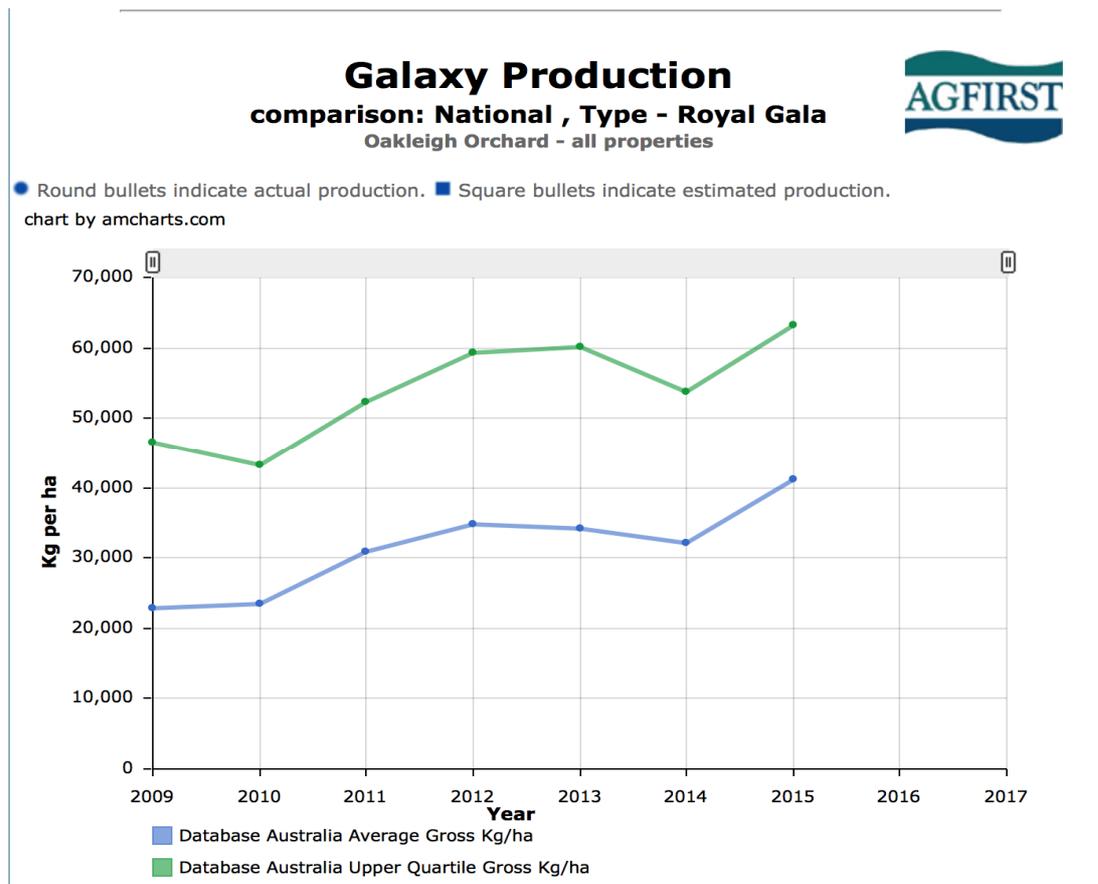
To make it clear, all growers that use OrchardNet, we refer to as the “Business Development Group”. We like to think that you’re using OrchardNet to make your orchard businesses better.

Block Productive Performance

When entering production data we encourage you to enter the blocks previous 2 years production and then enter an estimate for 2016.

Analysis of the production data within OrchardNet has shown good improvements in Australian productivity over time as shown in Figures 1 and 2 below.

Figure 1 AU Gala Productivity (gross kg/ha)

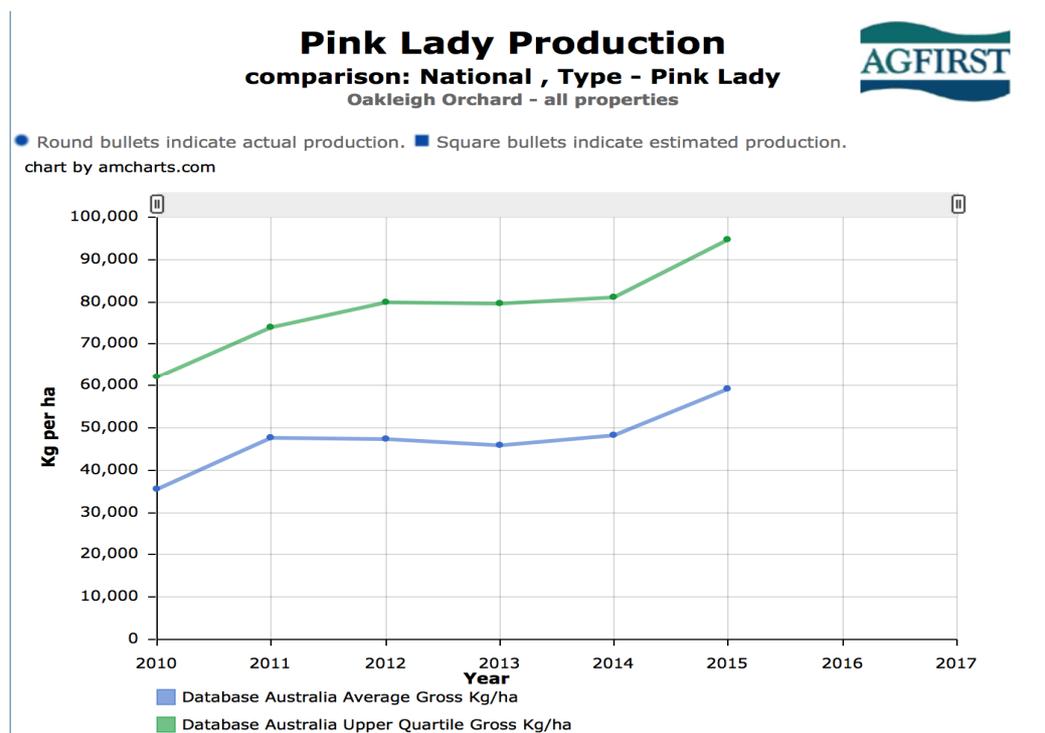


Since 2009 Royal Gala productivity of all blocks that have been monitored has increased from 24t/ha to be currently averaging 35 t/ha for all tree ages. The 2015 harvest is showing just over 41t/ha, 77% Class 1 with 147 blocks in the database.

The average mature yield of Gala is currently 40 tonnes per ha with the Upper Quartile averaging 63 t/ha.

Where do your blocks sit in comparison?

Figure 2 AU Cripps Pink productivity (gross kg/ha)



A similar trend is showing with Pink Lady types with production during the period 2011-2014 averaging just under 50 t/ha. The 2015 Australian average is up 25%, currently sitting at 60t/ha, 75% Class 1 (136 blocks) with the upper quartile averaging over 90t/ha. This is a massive increase, it will be interesting to see if this changes as more and more growers enter their 2015 crop result. The average mature yield of Australian Cripps Pink types is 58t/ha with the UQ average being 92 t/ha.

OrchardNet can plot your blocks performance against the regional and national average by year and by tree age. It will also help you define the “sweet spot” where each of your blocks are optimized to make maximum profit.

Fruit sizing

Last year the number of blocks using the fruit sizing component alone reached 400 which meant that district and national averages were very robust and made for good comparisons. This year the organized growers are already on the case with currently 211 blocks being actively fruit sized. We want to try and reach 500 blocks this year so please get on board and use the service.

In the following two figures (Figure 3&4) we show the national averages of the 2 biggest volume varieties, Gala and Pink Lady YTD. Data for both varieties shows fruit size very similar to 2015, and larger than 2013 or 2014. A good spring is obviously paying dividends.

Figure 3 AU Gala fruit Size DAFB

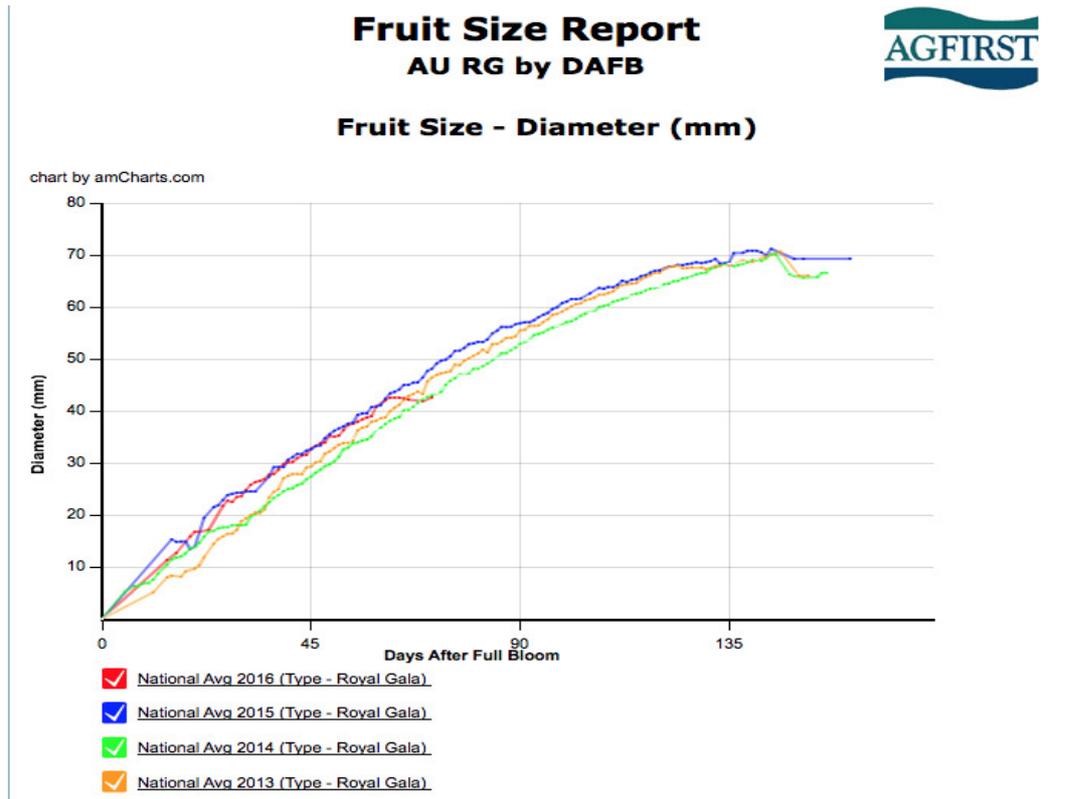
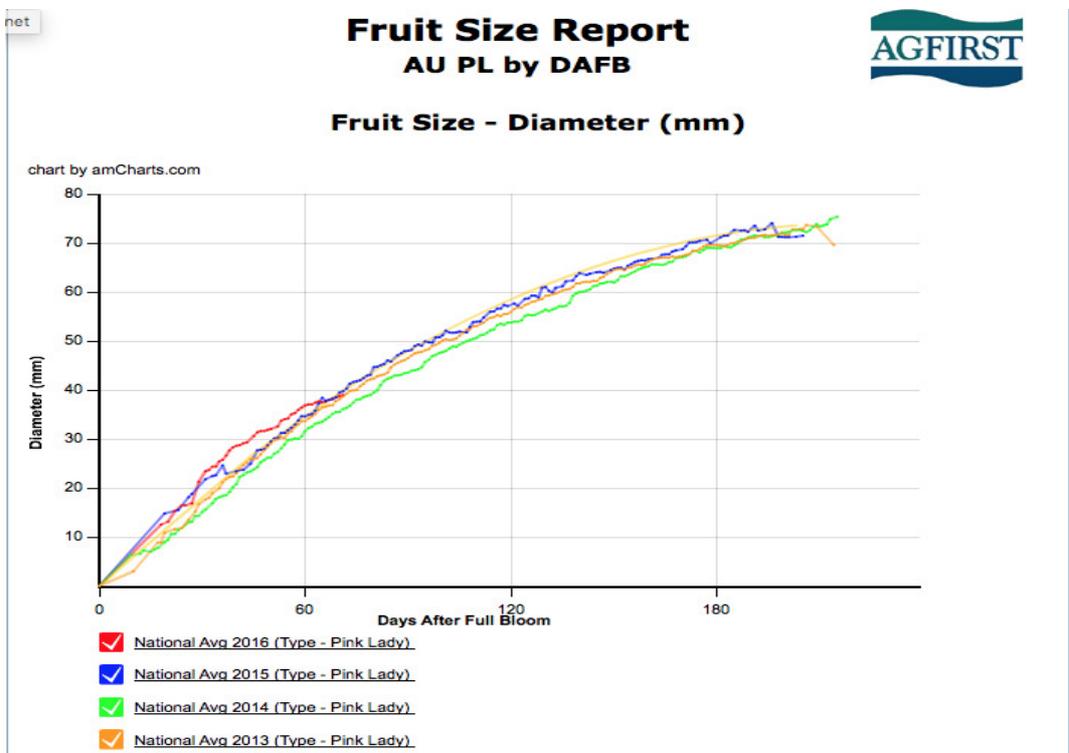


Figure 4AU Pink Lady fruit size DAFB



How do your blocks compare? Rather than try and interpret these graphs why don't you get on board? We'd love to see as many growers as possible using the service.

When you do monitor your fruit size and compare it against national and regional trends, if you see a problem with growth rate you can do something about it. Possibilities from here on in include:

- If you haven't thinned Pinks yet you should do it ASAP and maybe lower your fruit number targets if your size is behind.
- If you have already thinned but size is not looking good, consider a second thin in January.
- Look at water and fertiliser inputs. Are they enough to drive performance?
- Consider the use of Retain to extend your growing season.
- Get your marketing team ready for smaller fruit size.
- Make the call whether you will go for short, medium or long-term storage and ensure you have the colour and maturity parameters to fit.

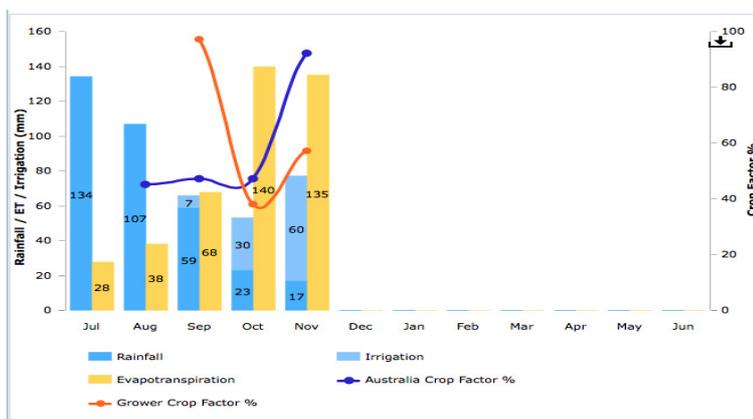
Water Centre

As mentioned in one of our recent OrchardNet newsletters the Water Centre in OrchardNet has recently been upgraded with several key horticultural weather stations close to pomefruit growing regions being available to download ET and rainfall data automatically.

We encourage users to make sure that the correct weather station is assigned to each property. Once this is done, try entering your irrigation details to be able to run the various reports that track your water use against all others in the database.

Oakleigh Orchard
Figure 5 Oakleigh Water use 2016

Effective rainfall per hr = sprinkler or emitter output (l/hr) / sprinkler spacing m². Eg sprinkler applying 35l/hr spaced at 5m * 2.0 m. application rate = 35/(5*2)= 3.5 mm per hr. Calculate the hours the irrigation ran in the month and enter the total mm of irrigation into OrchardNet. Eg system ran for 6 hrs per week * 4 weeks = 8*4*3.5= 84mm irrigation.



The Oakleigh Orchard Monthly water use report shows rainfall very low this spring and high ET.

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Annual Total
Grower			7	30	60								97
Irrigation													340
Rainfall	134	107	59	23	17								409
Evapotranspiration	28	38	68	140	135								
Crop Factor %			97	38	57								

Rob has been irrigation to about 50% of ET to slow tree vigour and conserve water for later in the summer.

Conversely Stanthorpe has had a good spring rainfall wise with good rain in the month of November as can be seen from the analysis of Volpato Focus Orchard in Fig 6 over.

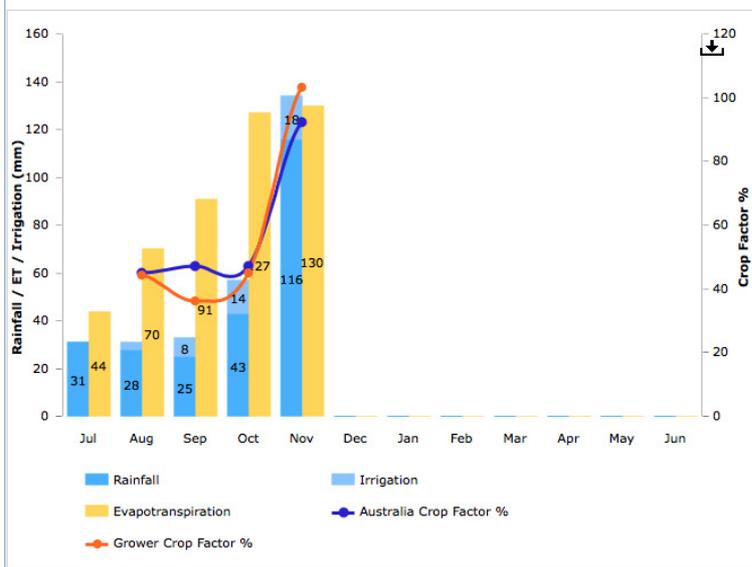
Volpato Orchard
Focus Blocks
A
9 Acre - Pink Lady

Monthly Water Use 2016

9 Acre - Pink Lady
comparison: Australia, Apple



Weather Station is Applethorpe



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Annual Total
Grower													
Irrigation		3	8	14	18								43
Rainfall	31	28	25	43	116								243
Evapotranspiration	44	70	91	127	130								462
Crop Factor %	44	36	45	103									

Get on board, give it a go.

To be able to participate with any of the projects discussed please either contact our OrchardNet administrator (Adrian.stone@agfirst.co.nz) or contact your local Front Line Advisor (details below)

VIC (Northern and Southern): Veronique Froelich, fido@fgv.com.au, 0418 379746 or Peter Bursac, ido@fgv.com.au (03) 5825 3700

NSW (Batlow and Orange): Kevin Dodds, kevin.dodds@dpi.nsw.gov.au 0427918315

QLD: Stephen Tancred, stephen@orchardservices.com.au, 0407 762 888

WA: Susie Murphy-White, susiemurphywhite@gmail.com, 0429 413 420

SA: Paul James, paul@lenswoodcoop.com.au, 0419826956

TAS: Ian Cover, office@fruitgrowerstas.com.au, 0409 849 155

TAS: Sophie Folder, sophiefolder@internode.on.net

AgFirst would like to take this chance to wish you all a very Merry Christmas and a bountiful 2016 harvest.

Regards

Ross Wilson
AGFIRST
Horticultural Consultant