Future Orchards “Business Development Group” (BDG) Update
January 2015

Prepared by Ross Wilson Agfirst

Dear Grower or Industry personnel

We have been very busy!

Over the past 2 months there has been a real buzz of activity within the BDG. Lots of pomefruit data has been collected and fruit size monitoring is going at full pace.

Welcome to the second BDG update of the 2014/15 year. You are receiving this newsletter as an active contributor to APAL Future Orchards™ program or more recently the “Pomefruit Data Project”. Both projects are funded through your APAL levy and HIA.

Through these two projects, Agfirst have captured a significant volume of 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 can’t remember your details, 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 projects so there is no cost to you other than your own time.

HIA Pomefruit Data Project

One component of this new project was to complete a crop estimate for the 2015 crop. Our fundamental methodology was to set up a grower panel that could supply their actual crops of 2013 and 2014 and estimate their crop for 2015. We then analysed that data by state and nationally to make relative adjustments to historical crops.

We originally set out to ensure our panel was a minimum of 10% of the planted area of Australia. Through the hard work of our “on the ground” Front Line Advisory (FLA) team and a lot of goodwill on the growers behalf, we have smashed our target, collecting data from 2500 ha right across Australia. With the national planted area estimated to be 12,900 ha, that amounts to just under 20% by land area. That makes for a very strong database which now makes it useful for a number of purposes.

The crop estimate has been delivered to APAL thanks to all your help, on time, and we hope with accuracy. APAL will control the release of the inaugural crop estimate report and ensure that it serves the industry well.

The data that you provided also has other uses. You can benchmark your own data by region, by variety, by year, by tree age, knowing that the database is robust.
Case Study demonstrating how you can use OrchardNet

Matt McMahon, Batlow Field Services manager is right into crop monitoring and with Matt’s permission we’ll show you how you can use the OrchardNet databases to your own advantage.

The Batlow Coop have two blocks of Rosy Glow on their Vanzella property, VA02RG planted on M26 at 2857 trees per ha and VA12 planted on M9 at 1905 trees per ha. Matt has been a user of OrchardNet for a number of years across all the Coop blocks so when we asked him to enter the 2015 estimate for the Pomefruit Data Project, it was a simple process. Matt has also been monitoring fruit size on this block for the past 4 seasons so is not only able to use the Orchardnet benchmarks but is also able to compare this year with the blocks own performance in previous years.

The first question Matt wants to know is “how does the productivity of these blocks compare to the district average and to the national average by year and by tree age”. To do that he jumps into the block on Orchardnet and runs two reports (“Production by Year” and “Production by Tree Age”). Matt can choose to benchmark against the regional average which is Batlow, or the State average (NSW) or the National average. In this case we’ll only show the National averages.

Figure 1 below shows Vanzella compared to the national average by year. Here we can see both blocks are yielding at 60-70 tonne per ha, half way between the national average and the upper quartile. Not a bad result but room for improvement. The national average is showing a steady increase, hitting 50t/ha for the Pink Lady group in 2014. That’s off all ages all hectares. We can tell you the Pink Lady area in 2014 in the database is 650 ha (21% of the Australian total).
Figure 2 shows Matt the production by tree age. Here it’s interesting to note that the M9 block has outperformed the M26 block significantly. In the first 5 years, the M9 block picked 161 tonne per ha cf the M26 at 95 tonne per ha. This is probably due to the M9 block being virgin land and the M26 block being replant non-sterilised land. The other take home messages are:

- Both blocks had a slow start but now exceed the national average
- The massive 80t/ha in year 4 for VA12 was probably too much as it dropped significantly in year 5.
- National average production for mature Pink Lady is 57 t/ha, however upper quartile blocks are achieving 80-90 t/ha
- National tree age profile, shows it taking 10 years to reach full production on average.
Vanzella fruit size progress
To check progress on fruit sizing on Block 12, Matt can run the fruit size report that compares his block to the Batlow average, national average, previous readings of VA12 and a target line. Figure 4 below shows this year is looking to have large fruit size. Current monitoring is well above the national average, well above last year, well above the 186 gm target line but sitting on the Batlow Pink Lady average. This information tells Matt he’s in for large fruit size this year off this block, possibly a 200gm average. He can factor that into his crop estimate and consider techniques to manage size, possibly down in this case. One obvious solution is to increase the crop load next year closer to 80-90t/ha.

We hope this case study demonstrates how your participation in the BDG can help you manage your business as well as contributing to valuable industry knowledge.
National Fruit size Predictions
With APAL’s permission we attach below one of the tables from the recently completed crop estimate. This shows the January forecast of likely fruit size in 2015 by variety. It includes the grower panel forecast and the forecast based on all the fruit size monitoring. Almost for every variety except Pink Lady the predictions are that fruit size will be up on last year. We think that’ll bring a smile to most growers and marketers.
Table 1 National fruit size history and 2015 forecast

<table>
<thead>
<tr>
<th>Variety</th>
<th>Grower panel average fruit size (gms)</th>
<th>Fruit Size monitoring 2015 Forecast (gms)</th>
<th>Forecast average count based on grower panel (12.5 kg carton)</th>
<th>Forecast average count based on fruit size monitoring (12.5 kg carton)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2013</td>
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<td>2015F</td>
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<td>Royal Gala</td>
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<td>Pink Lady</td>
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To be able to participate with any of the projects discussed or to get orchardnet working for you, please either contact our OrchardNet administrator (Adrian.stone@agfirst.co.nz) or contact your local Front Line Advisor (details below)

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AgFirst would like to take this chance to wish you a successful harvest in 2015 with continued good pomefruit growing conditions.