By the time you’re reading this, the end of harvest is likely to be well within your sights. Whilst a well-deserved rest is probably at the forefront of many of your minds I thought I’d take the opportunity in this newsletter to highlight some of the ‘next steps’ from here, and how you can utilise OrchardNet to assist you in planning next year’s crop.

Setting your target croploads and putting a plan in place now can be a very useful to ensure your winter pruning (and thinning activities) are going to meet your goals for the 2019 crop.

To keep things simple this newsletter will be divided into three broad themes that we’ll continue to build on into the future:

1. Evaluate
2. Plan
3. Implement

Before we jump into setting the plan for next season it is important to reflect on this season’s harvest (where were your issues? What worked well?) to ensure that your plan is going to meet your requirements/challenges.

The majority of this newsletter is focused on entering your production data into OrchardNet and using it to look at how things went and start planning how you want things to be in 2019.

If you’ve forgotten your OrchardNet login then go to the website and click the ‘Lost your password?’ link.

[http://www.orchardnet.co.nz](http://www.orchardnet.co.nz)

Don’t have an OrchardNet account?

Please contact your local FLA or a member of the AgFirst team (see details on the last page of this newsletter) if after trying the demo you would like to give it a go.

### Entering data into OrchardNet

#### Evaluating the 2018 season

#### Setting up the 2019 crop

#### Implementing the plan
Step 1: Evaluate - Entering data into OrchardNet

Once you’ve logged into your OrchardNet account you should see your orchard(s) blocks in front of you. If you haven’t set up your blocks (or have more to add) then getting in contact with the AgFirst team to get everything setup correctly is going to be a pre-cursor to the below.

Now is the perfect time to start reflecting on this year’s crop and planning for next year’s (even though taking a break is probably at the forefront of your mind). Getting your production (bins picked), packout and fruit size into OrchardNet can help you with setting up your 2019 crop.

Check your block details
Before you start entering your data it’s important to ensure you’ve got your orchard blocks set up correctly. Ensure planted area, variety, tree age (planting year) and row spacings are all correct.

If you need to edit this data and aren’t too sure as to how to do it; look to the left-hand side of the page for the User Manual icon.

Enter the details for that block (ensure you’ve got a number in every box) and then click enter.

No packout or fruit weight?
If your fruit is in storage you may need to rely on estimated packouts and fruit weights to put into OrchardNet.

Generally speaking, something is better than nothing so put in your best estimates and you can update them later through the same process.

Choose a sensible estimated packout (a previous year or if you’ve had a portion of this year’s crop packed) and a reasonable fruit weight.

Make a note of it
If you’ve utilised an estimated packout and fruit size I’d encourage you to make a note of it under that block in OrchardNet.

You can add a note by scrolling to the bottom of an individual block’s page in OrchardNet and clicking the relevant year (in this case 2018). While you’re there I’d also suggest typing in a few comments from harvest to highlight successes or challenges within that block for this season.

Once you have this data in you’ll be able to use the benchmarking tools outlined in the last issue of this newsletter.


If you haven’t entered historical data (and you have it), I’d suggest at least adding the 2017 crop results as well. It’s incredibly useful to look at your two last crops (especially if the block has a biennial tendency) when constructing your targets for next year.

After clicking the reports icon; “Production by year or tree age” and “Block analysis” are great tools to assist you in summarising and evaluating your block performance.

Once you have this year’s production in and identified what did and didn’t work you can shift your attention forward into planning your 2019 crop.

Advanced users: Bulk data entry
When putting your data into OrchardNet there is also the option of utilizing the ‘bulk data entry’ tool to speed things up.

Click the pencil icon: 🖋️

If you are going to use this tool I suggest reading the manual’s notes on how to do so.

Generally, I’d suggest going through each block individually unless you have the relevant data ready and you’re quite familiar with the system.
Step 2: Plan - Setting your targets for 2019

Now that you’ve established what did and didn’t work in 2018 (and hopefully also looked at your historical results) you can start putting a plan in place for 2019.

Setting a target
Some questions to ask yourself when setting up targets:

- Do you want to carry more or less crop than the block did last year?
- Can you lift your fruit quality (packout) by altering your cropload?

After you’ve thought about your goals for your blocks in 2019 it’s time to set a target.

The simplest method to do this may be to print out the “Annual Crop Summary” or even the “Winter pruning report” and write your targets next to your 2018 actual results.

This way you’ll have all of your results on one sheet of paper and then can quickly enter the numbers you have determined.

Entering your target values
In OrchardNet you can do this by entering a “Production Estimate”

Using the same process as previously:

- Click add a new year next to “Block season details” (add 2019)
- Scroll down to “Production Estimate”
- Click “2019”

Depending on how you think about your production per block it may be simpler to use the tonnes/ha rather than bins feature this time. (see image to right).

After evaluating your performance in 2018 (and in previous years) it’s time to set up your 2019 targets. Keep it realistic and ensure your target fruit size fits in with the markets your aiming for and the cropload you want. Remember that fruit size and cropload are related.
Step 3: Implement - Putting the plan into action

Start thinking forward to pruning and thinning and how you’re going to reach your goals.

- How much wood do you need to take out when pruning?
- Does the block have biennial tendencies?
- Can you implement early intervention to help break the cycle?

Ensure your pruning is meeting your goals for fruit quality and also your cropload.

“Bud counting” to assist with pruning

Bud counting is a way of getting an early insight into your potential crop for next year but does require a different way of approaching your pruning (and yes, if you utilise it fully you will have to count the number of buds on at least a few trees per hectare; which does take quite a bit of time)

If you want to try ‘bud counting’ to help you set your cropload, you’re going to need to enter a little bit more data into OrchardNet.

Under the “Metrics” heading (scroll down the page for an individual block) you’ll want to enter **pickout %** and **buds required per fruit** value.

The **pickout %** is the number of fruit you’ll get out of the block once you’ve set your cropload (e.g. fruit drop in hot weather)

The **buds required per fruit** is a way of estimating the number of set fruit per total buds (both floral and vegetative). This varies by variety, block and region.

Whilst these metrics are best determined through knowing the block and maybe even a little bit of trial and error I’ve given some sample numbers in the table on this page. Remember that these are examples and might not be the correct values to apply to your situation.

Now that you’ve entered these new metrics (bud:fruit ratio, pickout %), target/estimate for 2019 (including a fruit weight) and you have an accurate number of trees per hectare (when you ensured your block details are correct) OrchardNet can now calculate the number of fruit you require to reach your goals as well as a number of buds to achieve that target.

As with the benchmarking reports the winter pruning report can be found when you click the reports icon.

Scroll down to “Winter Pruning” and click show report (not “go” as this is used for audit purposes after pruning). Hopefully you’ll have a screen similar to the below image.

You can do this for both individual blocks, or if you’re on the home screen for your orchard (where the list of your blocks are when you log-in) all your blocks for which you have entered data will show up.

At this point you can then start counting the number of buds on trees to see how close to your target you are. This data can also be recorded as both pre-prune (monitor) and post-prune (actual) in the metrics area of OrchardNet.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Buds required per fruit</th>
<th>Pickout %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gala</td>
<td>1.5</td>
<td>90%</td>
</tr>
<tr>
<td>Fuji</td>
<td>2.5</td>
<td>85%</td>
</tr>
<tr>
<td>Pink Lady</td>
<td>1.8</td>
<td>90%</td>
</tr>
<tr>
<td>Granny Smith</td>
<td>2.0</td>
<td>90%</td>
</tr>
</tbody>
</table>
Interested in trying OrchardNet within your business?

OrchardNet takes some perseverance and may require a different way of thinking to what you’re used to.

If you’re not too sure how-to login to OrchardNet, enter data, add blocks or you just need a few extra pointers don’t be afraid to get in contact with your local Front-Line Advisor (FLA), the OrchardNet Administrator (adrian.stone@agfirst.co.nz) or a member of the AgFirst team.

<table>
<thead>
<tr>
<th>STATE</th>
<th>CONSULTANT</th>
<th>EMAIL</th>
<th>PHONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>OrchardNet Administrator</td>
<td>Adrian Stone</td>
<td><a href="mailto:adrian.stone@agfirst.co.nz">adrian.stone@agfirst.co.nz</a></td>
<td>+64 6 872 7074</td>
</tr>
<tr>
<td>AgFirst (NZ)</td>
<td>Ross Wilson</td>
<td><a href="mailto:ross.wilson@agfirst.co.nz">ross.wilson@agfirst.co.nz</a></td>
<td>+64 27 449 0775</td>
</tr>
<tr>
<td>AgFirst (NZ)</td>
<td>Craig Hornblow</td>
<td><a href="mailto:craig.hornblow@agfirst.co.nz">craig.hornblow@agfirst.co.nz</a></td>
<td>+64 27 436 8441</td>
</tr>
<tr>
<td>AgFirst (NZ)</td>
<td>Steve Spark</td>
<td><a href="mailto:sspark@agfirst.co.nz">sspark@agfirst.co.nz</a></td>
<td>+64 27 437 2344</td>
</tr>
<tr>
<td>AgFirst (NZ)</td>
<td>Jonathan Brookes</td>
<td><a href="mailto:jonathan.brookes@agfirst.co.nz">jonathan.brookes@agfirst.co.nz</a></td>
<td>+64 27 208 8750</td>
</tr>
<tr>
<td>AgFirst (NZ)</td>
<td>Nic Finger</td>
<td><a href="mailto:nic.finger@agfirst.co.nz">nic.finger@agfirst.co.nz</a></td>
<td>+64 27 221 4835</td>
</tr>
<tr>
<td>FLA North Victoria</td>
<td>Michael Crisera</td>
<td><a href="mailto:growerservices@fgv.com.au">growerservices@fgv.com.au</a></td>
<td>+61 448 288 253</td>
</tr>
<tr>
<td>FLA South Victoria</td>
<td>Angus Crawford</td>
<td><a href="mailto:acrawford@apal.org.au">acrawford@apal.org.au</a></td>
<td>+61 427 111 852</td>
</tr>
<tr>
<td>FLA New South Wales</td>
<td>Kevin Dodds</td>
<td><a href="mailto:kevin.dodds@dpi.nsw.gov.au">kevin.dodds@dpi.nsw.gov.au</a></td>
<td>+61 427 918 315</td>
</tr>
<tr>
<td>FLA Tasmania</td>
<td>Sophie Folder</td>
<td><a href="mailto:sophiefolder@internode.on.net">sophiefolder@internode.on.net</a></td>
<td>+61 439 247 172</td>
</tr>
<tr>
<td>FLA Queensland</td>
<td>Stephen Tancred</td>
<td><a href="mailto:stephen@orchardservices.com.au">stephen@orchardservices.com.au</a></td>
<td>+61 407 762 888</td>
</tr>
<tr>
<td>FLA Western Australia</td>
<td>Susie Murphy-White</td>
<td><a href="mailto:susiemurphywhite@gmail.com">susiemurphywhite@gmail.com</a></td>
<td>+61 429 413 420</td>
</tr>
<tr>
<td>FLA South Australia</td>
<td>Paul James</td>
<td><a href="mailto:paul@lenswoodcoop.com.au">paul@lenswoodcoop.com.au</a></td>
<td>+61 419 826 956</td>
</tr>
</tbody>
</table>