Ochard Walk Notes - Listen to the experts!

Prepared by Peter Sanders, Three Bridges Orchard, Yarra Valley, Victoria
Focus Orchard grower

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Jesse Reader can take the blame/credit for this talk. They have hit rock bottom to have Colonels brother as guest speaker. However I will try to convey the knowledge we picked up from “listening to the experts”.

Listening doesn't necessarily mean implementing, all the time. Most times you find you have to travel to get the best transfer of information or import the speakers from overseas.

Below are some of the successes we have achieved in our orchard business.

1. For our business the type of tree we wanted was unavailable (Knip boom) so we had to grow our own with the help of an expert Ari Vandenberg from Verbeek nursery in Holland. See nursery notes!

We can now confidently grow a tree that is approx. 2 m tall and has 10-15 useful feathers. We have a number of Pink Lady blocks that have achieved a commercial crop in their first year of planting which we credit largely to our ability to plant a well-feathered tree.

Figure 1 Newly planted trees
2. Fumigation trials at our orchard showed that chloropicrin fumigation is still the best way to minimize Specific Apple Replant Disorder (SARD). Plant Mate at 10g/tree combined with chloropicrin sterilisation, resulted in additional growth hence this combination is one of our current replant tools. See notes on the trial that was conducted on our orchard.

3. We have also increased our fertilizer/water inputs to overcome the transplant shock of the 2 yr old tree. We have the balance right for Pink Lady, but Kanzi is still a challenge. We have been using 160 units/ha of N with only average shoot growth being achieved. We think we need to increase N inputs.

4. Trellis requires good screw anchors, with up to 14 wires per row. With 10m bays plus the top of the pole is tied to the hail net structure we soon found 1 wire at 15m bays wasn’t enough once we grew over 30t/ha.

Figure 2 Trellis design and strength are critical
5. Russet was a problem in our Fuji and Gala a few years ago. One of the main changes we made was to go back to using Polyram over the russet sensitive period and up to 4 weeks AFB. We have gone back to 2 X water volume although I am not sure if that is a good thing! No calcium sprays are applied during 4 weeks AFB. We are trying to avoid using any spray products that have the potential to russet. We have also gone away from using a lot of Dormex as this was tending to push our bloom into periods of unfavorable weather which van aggravate russett.
6. In 2012~13 we suffered very light fruit set in our Pink Lady. We worked through the potential causes of the problem and have made several changes. To overcome light fruit set in Pink Lady during the cold/ wet/ cloudy 2012 spring we have changed the bee supplier, planted more pollinators (now one every 10m). But we still struggle to set early king bloom at the bottom wire. This is something Ross Wilson reinforced to minimize risk! Even though it worked in previous years. It’s the 1 in 5 /10 years challenge like hail/ irrigation/ russet/ pollination. To minimise risk you put net up/ build dams/ careful with sprays/ get more bees. We were also pruning to 1 bud per fruit which worked in many years but we were convinced that it carried risk. We have moved our target out to 1.5 buds per fruit. These changes are mostly low cost but with potential huge gains
Figure 6 We need to do everything we can to maximise pollination

Figure 7 Pink Lady pruned to 1.5 buds per fruit
7. Every 1~2 years we do a 5 year projection of each variety x ha x tonnes. This gives us an indication of the logistics ahead without any surprises. Never has this plan been completely accurate over the 5 years, which is why we need to review it every year. This means every one has a clearer direction of where the business is going. In the past five years we have replaced all Golden Delicious and Red Delicious with Pink Lady strains. Currently Fuji is being replaced with Kanzi. In the future poor Pink Lady blocks and Gala blocks below 30t/ ha will be replanted. For our business to make a decision it is not just gut feeling, it is based on strong 4 year data of yield, profit, costs and returns.

8. Small soft Gala has been a problem for us, so with some expert advice, Ross Wilson went through the main points to focus on. Better autumn management using more water and higher levels of nutrition, delay bloom by not using Dormex, increase Regalis x 2, better nutrition, bees @2 hives ha pollination, BA as the main chemical thinner, thin to singles, Retain 1-2 applications. The 2014 crop has bigger fruit, firmer fruit and higher tonnes per ha. No primary thinners were used due to bad weather, delayed autumn urea last season light in crop still had small fruit.
9. The 2 brothers and I get along 95% of the time. We normally discuss business at smoko, sometimes smoko goes for 2hrs. We should sit down more often formally I guess, to discuss spraying/ packing/ picking. Its hard to have a set day and time. The direction we go is generally driven by the returns/ ha. We
made good money when YV fruits marketed direct to Coles, now we have to do better at packout per ha to compensate for this to change. That is $ of 1st class per ha, this is the key piece of data. 2nd class/ juice; you can’t even recover cost out laid.

10. Data collected can be a pain to collect, but one rainy day it can clear up any unanswered questions you might have about a variety/ block/ system/ trial. We have our workers fill out their time sheets according to hours/ block, so that picking/ pruning (summer/ winter) thinning trellis & others. At the end of the season we have $ / HA 4 years AV return – (current labour costs $/ HA + shed costs) = net profit/loss @ HA.

11. Finally I would suggest anybody wanting to continue in fruit growing should visit the best orchard I have been to: Auvils orchard in Washington State. Contact Chris Peters/Del Fiegel. A couple of hours there will make a lasting impression.

Figure 11 Were not perfect

Thankyou