

## **A time for change.....Shaun Witchell**

My name is Shaun Witchell. I am in a partnership with my mother and father in a 32 Ha apple orchard in Southern Victoria in a place called Labertouche in West Gippsland. I am a 4<sup>th</sup> generation orchardist and up until 4 years ago I was fortunate enough to work with both my dad and grandfather, which is becoming a very rare thing in farming.

We grow, pack and market our fruit. I named the title of my speech 'a time to change' because change is the only certainty in fruit growing. Fruit growing always has been adapting to change and always will be... Changes in varieties, growing techniques, weather, pest and disease pressures and the list goes on...

The two changes that I would like to concentrate on today are that of changes that we can consciously make and plan for and those that are forced upon us. Our small family business has had both of these occur over the previous 3 years or so.

The biggest change in our business has been future orchards. Future orchards has been the biggest catalyst for change in our growing region since I have been actively involved on our orchard. The changes that we have implemented since the introduction of this program have changed our business dramatically.

I think the biggest changes that we have taken on is a change of mindset, we are now making more informed business decisions by benchmarking our entire operation, from measuring tree growth, fruit growth, better monitoring of growing costs, including labour, fertiliser use, chemical usage and measuring block performances, gone are the days of doing the jobs you need to do each year and expecting to make a comfortable living, we are all business men and we need to think accordingly.

In 2006 we started the move towards high density plantings, we were quite late in doing this but because like many Australian growers we were making a reasonable living doing what we were doing, without looking to future threats too much. We planted a 2.2 Ha block of gala and Rosy glow at 4.25\*1.5m, we also had approximately 500 trees left over at the end of this so we planted .25Ha of this at 4.25\*.75m.

Prior to doing this planting we had not spent enough time looking around to see what was best practises thus we made a lot of mistakes, obviously the tree density in this block is not sufficient, we used 10 foot posts, which are too short and are currently being replaced. However in saying this I think that this prior to the commencement of future orchards was a very short coming of a lot of us Australian growers.

This block for us was a huge learning curve, we implemented a fertigation program, we moved away from the old school of thought of leaving the trees to fend for themselves to harden them up for the first couple of years of their orchard life. In this block we managed to achieve an average of 14m whole tree growth in the 1<sup>st</sup>

leaf, and to say that this opened our eyes up to possibilities is a huge understatement! This block has achieved 10 tons 2<sup>nd</sup> leaf 24 ton 3<sup>rd</sup> leaf, which is definitely not world beating but considering where we have come from in the past it is respectable.

The interesting thing in this block is that in the .25Ha where we doubled the trees up to the 4.25\*.75m spacing giving us a density of 3172 trees to the Ha we were able to achieve 33ton/Ha 2<sup>nd</sup> leaf and 55 ton/Ha 3<sup>rd</sup> leaf. Now this I believe is competitive with world best practise. This information provided us with a stepping stone to move that little bit closer to worlds best practise.

2007 we planted 3.6Ha of Rosy glow and gala again, with a little bit of knowledge we had gained we chose to plant this block at 3.5\*1m giving us a tree density of 2857/Ha, this was our first true go at using a dwarfing stock, previously using M26 this year we planted B9 with the gala. We achieved reasonable growth results again with central leader extension averaging 740mm. This block has just finished it's 2<sup>nd</sup> leaf and all the fruit was removed to encourage the filling of the canopy. This block was originally to be trained to the spindle type growing systems, but we were visiting an orchard in December of the first leaf and saw a 2d system and it made a lot of sense to us. So this block has been grown to a modified 2d type system. Because of the 3.5m row spacing we could not make this a true 2d system without sacrificing yield. We have a 6 wire trellis with laterals taped down giving us 12 laterals with 4 laterals coming out into the row on each side to give us a total of 20 branches when we have finished the tree.

These trees will be coming into their 3<sup>rd</sup> leaf this growing season and we have determined crop loads for these trees now. The gala which still require some more vegetative growth to fill the space will have an average of 70 pieces, to an average of 180 grams will give us a crop of approximately 35 ton/Ha, while the Rosy glow which are on m26 will require a lot higher crop load to try to reduce vegetive growth, with the majority of these trees requiring less than 300mm to reach the desired height of 3.7m. I believe these trees we can hang an average of 105 apples per trees giving us an approximate tonnage of somewhere between 55-60 tons/ Ha.

Now with this type of result I believe that we are getting closer to 'worlds best practise.' With these types of new systems with these crop loads we believe that we can achieve a positive cash flow within 5 years of establishing blocks on current market prices. 2008 saw us planting another block, this time a smaller block of red Jonathon. This block is only 1.6 Ha, Jonnies for us have been our most profitable line over the last few years. We are planting our most profitable lines, not what we think we can achieve the biggest yields nor are we only chasing glamour strains of commodity varieties, we believe for a small orchard to be profitable it is important to have a few niche marketing opportunities and jonnies have certainly been a great asset to us.

This block was also planted to the modified 2d training system on M9-T337. This block has also achieved quite reasonable growth rates with an average of 750mm central leader extension and most of the trees filling the first 4 wires. If we can achieve half of our finished tree structure within the first growing season and have it completed by the end of the 3<sup>rd</sup> leaf then we consider this to be a good result. We believe that this modified 2 d system that we have planted to the last couple of years to be superior to the spindle system because of the simplicity of the system as well as it being able to lend itself to full mechanisation into the future. Within the next couple of years we plan to invest in a platform machine to perform all duties that we have previously used ladders to perform, this means that the high cost of sending guys up a ladder will be completely eliminated.

Looking to the future, we plan on planting a block of true 2d next year, we are planning to close our row spacing into 2.5m\*1.2m. This system will have a higher capital expenditure to establish the block but will be cheaper to train. We believe that into the future spending more capital on establishing a block can greatly reduce our labour input every season, reducing our growing costs per unit of fruit produced. Our business currently has a 5 year plan in place to transition completely to modern high density systems. We believe that this is the only way forward to compete on a truly global market place. We currently have 30 year old vase shape granny and golden blocks, producing 70-80 tons per Ha of good quality target sized fruit which have made us good money in the past but when you look at the cost of producing fruit on these old dinosaurs, I'm not sure that we would be able to compete.

We started to use hailmesh in our orchard 14-15 years ago over grannies and goldens, we believe that hailmesh is a must have over all varieties now! On these modern orchard systems that we have been implementing that have been developed largely in Europe and other lower light level growing conditions, sunburn can be an absolute disaster in our climate. Now there are 2 ways of solving this problem, do we go back to planting more vigorous trees to produce more leaf to shade fruit from radiant heat, thus reducing sunburn but having the higher production costs associated with excessive vigour and poorer fruit quality, or do we change our microclimate to more simulate the conditions where these systems were developed? We believe the latter to be our best option, we currently incorporate our hail mesh structure in with our trellising systems so that from the minute we plant a block of trees we have it hail mesh ready.

To go another step forward we plan to install evaporative cooling through all these blocks to further enable us to control our environment. I know that water is a HUGE issue here in Australia, and it certainly has become an issue on our farm as well but we believe that we are financially in front in picking a crop with minimal sun burn damage off less acreage than having more orchard with not enough water to evaporative cool. In our climate we would probably only have to cool for a maximum of 14 days a season so really it is not a lot of water anyway.

Another big change that has occurred over the past 3 years or so is our desire to seek out world best practise, we have invested somewhere between \$40-50,000 in overseas travel. I was lucky enough to have the opportunity to spend 3 weeks working on an orchard in the south of France in 2007, which enabled me to study the 'solaxe' growing system used extensively in France, following that I spent a week in the south Tyrol valley in northern Italy.

I think the biggest thing to come out of this experience was seeing 18,000Ha of orchard in south Tyrol, which was basically all the same. These guys have developed a system that suits their growing conditions and which they believe achieves good yield and good quality and have standardised it over the whole northern Italy fruit growing industry. In Australia I believe this will come with time after we have more experience with high density systems, because we have just started down this road it is yet to be proven which system is the absolute best for our conditions.

I have also been to Nelson twice in the last 3 years with the southern vic monitor block guys from future orchards. This has been very interesting because the first time we went over there we were all a little bit over awed by the orchards but when we went back in January this year we could see that what we are achieving with our new blocks we are catching up.

My dad has also done quite a bit of travelling over the past few years, going on the apal trip to Europe last year, and after being home from that for 3 or 4 weeks he did a flying visit across to the US for 6 days, visiting quote '2 of the best orchards he has seen anywhere in the world' I have seen the video from this trip and it is amazing what these guys are doing. Having said all that, overseas travel isn't the be all and end all, there are guys here who are doing as good a job or better as anywhere else in the world, for instance the best orchard I have been able to see is less than an hours drive from our place.

I use the term 'worlds best practise' a lot, I believe that we always need to be aware of that concept with every thing we do. With the threat of imports we need to be proactive. There was an article in American good fruit grower last year that said to be world competitive the American industry had to be in the top 30% of world producers with the costs associated with their inputs. We have higher fuel, fertiliser and labour costs here so where do we need to be to be world competitive?

All those changes I have talked about are changes that we can choose to adopt, but more important than those are changes that are thrust upon us. These changes are varied, increased costs of production are changes we have to adapt to every season, fertiliser prices last season was a great example of this.. Variety changes are also a big change that we constantly have to adapt to as well as sports within certain varieties. OHS is an ever changing issue for us all as well...

Our business has just been through a massive change that was forced on us on Feb 7. We were impacted severely by the black Saturday bushfires. We lost 50% of our

crop, 40% of our hail mesh, 25% of our orchard has had to be removed because it was burnt so severely. We lost our packing and storage complex, a lot of machinery, 8 Massey Ferguson tractors that we used to tow bin trailers with and a lot more irreplaceable things that have been acquired over 100 years of growing fruit. This was a massive kick in the guts. If it wasn't for people in the industry being around and supporting us so much I'm not sure where we would be right now.

We had guys from Gippsland fruit growers, which I am honoured to be president of, arrange replacement tools within a week of the fire, they also organised a working bee to resurrect trellis in our new blocks which was damaged in the fire, they had 20 or so growers from around the district turned up to our place to help, and by all reports they had to knock another 20 guys back. Graeme Fleming rang me within days to offer free replacement of young trees for fire affected blocks, even though they were also very severely affected by the fires at their Taggerty property, also Brendon Francis from Tahune fields did likewise. Nick Sanders from Smart Fresh, Smart Freshed a lot of our fruit for free this growing season, we have had suppliers of cool store doors from Europe offer us discounts for new cool store doors because they heard about the fires over there, Peter Cochrane from the VFF rang with the offer of the lend of tractors.

We had so many phone calls after the fires to offer help and to see how we were going, that it was quite humbling. We are in such a great industry, and I feel very privileged to be a part of it. I quite often think that with guys like this in this industry we can face whatever challenges are thrown at us in the future. However we also had Kevin Rudd, Tony Burke (federal ag minister) Joe Helper, state ag minister, and they came and told us how sorry they were for our loss and that we would rebuild together, well none of this has happened. Which re-iterates the fact that we as farmers need to stick up for ourselves and face challenges, because unlike a lot of our European colleagues, we can not rely on our governments to provide assistance when we are in need, even in circumstances beyond our control.

In conclusion I would like to say that, in the industry we face changes day to day year to year and change is something that we all need to embrace not to be scared of. I think that at the moment it is a very exciting time in the industry, we have a lot of great growers doing some great things. So let's all embrace the 'time for change.'  
Thankyou for your time