Around the Orchard

Newsletter of the Apple and Pear Growers Association of South Australia Inc.
in conjunction with the Cherry Growers Association of South Australia Inc
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Key Dates

25 July 2019 - MADEC Labour Information Session, 5 pm MADEC Harvest Office, 9/2-4 Cameron Road, Mt Barker

30 July 2019 - Ag Bureau AGM, 7pm Balhannah Hotel

29 July & 2 August 2019 - Future Directions of Horticulture in the Adelaide Hills Workshops

Rainfall

(*Rainfall for the month - 30 June 2019, source BOM*)
Ashton - 138.0 mm (*avg 133.5 mm*)
Birdwood - 84.2 mm (avg 98.7 mm)
Cudlee Creek, Milbrook Reservoir - 120.8 mm (*avg 110.6 mm*)
Kalangadoo - 70.4 mm (avg 86.2 mm)
Lenswood - 126.8 mm (avg 135.3 mm)
Loxton - 28.0 mm (*avg 24.8 mm*)
Prospect Hill - 120.6 mm (*avg 108.4 mm*)
Uraidla - 152.2 mm (*avg 156.8 mm*)
Woodside, Inverbrackie - 96.2 mm

Around the Orchard is published by the Apple & Pear Growers Association of South Australia and the Cherry Growers Association of South Australia

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From the Office

3% increase to minimum wages effective 1st July 2019

The Fair Work Commission in its annual wage review announced a 3% increase to minimum wages. The increase commenced on the first full pay period starting on or after 1 July 2019. The new minimum wage is $740.80 per week or $19.49 per hour.

If you are unsure of what you should be paying your employees, the Fair Work Pay Calculator is a handy tool – found at https://calculate.fairwork.gov.au/findyouraward

For the full Horticulture Award, go to http://awardviewer.fwo.gov.au/award/show/MA000028

South Australian Labour Hire Licensing Laws

Last year the SA government indicated that they were planning on repealing the South Australian labour hire licensing laws, however it has not passed through the Parliament.

Therefore all labour hire providers operating in SA must now be licensed by **1 November 2019**, with applications to be lodged by no later than 31 August 2019.

From 1 November 2019 if you engage an unlicensed labour hire provider, or provide labour hire services without being licensed, penalties may apply.

If you are using labour hire providers, please make sure that they are aware of the new requirements to ensure that you are able to source labour beyond 1 November 2019.

For more details see https://www.sa.gov.au/topics/business-and-trade/licensing/labour-hire-licence

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Input into the Future of Horticulture in the Adelaide Hills and Fleurieu

Apple & Pear Growers Association of SA and Cherry Growers Association of SA are collaborating with other horticultural industries on developing a new strategic plan for horticulture in the Adelaide Hills and Fleurieu. This project will develop a shared vision and identify critical stages for future growth and development of horticulture in the Adelaide Hills and Fleurieu Peninsula region.

This project is co-funded by the Building Better Regions Fund, RDA Adelaide Hills, Fleurieu & KI, PIRSA, Apple & Pear Growers Association of SA and the Cherry Growers Association of SA with in kind support from the Horticulture Coalition of SA and Strawberry Growers Association of SA.

Key stakeholders and contributors to horticulture in the region are invited to have input into the development of the strategy by attending a 'Future Directions' workshop and sharing your experience and ideas about future challenges and opportunities facing horticulture in the Adelaide Hills and Fleurieu region.

Future Directions Workshops
Monday 29 July 1.30pm-4pm Norton Summit – The Summit Community Centre, 1 Crescent Drive, Norton Summit
Friday 2 August 9.30am-12 noon Hahndorf – Adelaide Hills Convention Centre (145A Mount Barker Road, Hahndorf)
Friday 2 August 1.30pm – 4pm Mt. Barker – MADEC Training Room (9/2-4 Cameron Road, Mount Barker)

Please RSVP your attendance to Jeanette by Friday 26 July on 0429 990 063 or via email jeanette@innovativeinfluences.com.au

Proposed Merger Between Apple & Pear Growers Association of SA and Cherry Growers Association of SA

Over the past 12 months the Apple & Pear Growers Association of SA and Cherry Growers SA committees have been in discussions regarding a possible merger of the two organisations.

The two organisations have successfully been collaborating on a number of initiatives, such as a shared newsletter, accessing grant funding for solar pumping, joint submissions on mutual areas of concern, seeking recognition of the Mt Lofty Ranges as a Pest Free Area and driving the development of a regional strategy for horticulture in the Adelaide Hills.

Both industries have many shared interests and face common challenges and issues and the two committees have recognised that there may be potential benefits in working together as one organisation by sharing resources and speaking with a united voice.

The two organisations have now formed a working group to progress the merger discussions and develop a proposed new organisational structure to take back to the respective committees and then the broader membership base.

A key outcome they are working towards is to ensure that any change will deliver the best possible outcome to all members of both organisations and not disadvantage anyone.

The working group welcome and encourage any feedback that you may have on this proposal, both in terms of the opportunities that it may present as well as any concerns that you may have. It is important that all concerns of members are heard and taken into account early in the process.

Rationale for change

Fruit growers within the Adelaide Hills are facing some very real and shared challenges. The sustainable future of fruit production in the Adelaide Hills requires leadership, vision, investment and collaboration for it to remain viable into the future.

While generally performing well above their weight, Apple and Pear Growers Association SA and Cherry Growers SA as individual organisations, have somewhat limited capacity to drive and influence change, and as relatively small organisations, their voice and level of influence is also relatively small.

Both organisations have insufficient resources to deliver on the goals and outcomes captured within their respective strategic plans. They rely on time and input from volunteers to function as well as a part-time CEO. Growers and industry representatives are extremely busy in their own businesses, and while committee members are largely passionate and willing to be involved, they are also limited in how much of their own time they can commit to industry.

The two organisations face many of the same issues and challenges, yet there is duplication of resourcing across the two, with two sets of memberships, committee structures, insurances, AGMs and general meetings.

Bringing together the two organisations could potentially reduce duplication, reduce costs and also share the volunteer load across a wider pool of growers.

A stronger single organisation could potentially have greater capacity to tap into new funding sources, attract competitive grant funding and provide greater value to its members. Having a single voice could also create a greater capacity to influence at all levels of government. Governments are increasingly looking to a single and united voice to inform their decision-making process.

Discussions to date have identified the following potential advantages and challenges in merging the two organisations.

Advantages	Challenges
Greater influencing capacity at all levels of government	Potential loss of identity by individual groups and/or members
Greater capacity to attract funding	Managing differences in equity of the two organisations and how funds are managed
Shared resources, reducing adminstrative burden, duplication and costs	Developing a fair membership structure
Improved opportunities for collaboration, capacity building and information sharing between industries	Managing any potential competing interests between advocacy priorities of the two crop types
Improved capacity to attract high calibre people into leadership roles	Ensuring that crop specific issues are addressed at least as well as they are now
Become the "go-to" group for horticulture in the region	Not becoming too generalised and losing specific focus
	Managing differences in priorities and focus between membership groups
	Ensuring an exit strategy is in place if things aren't working

Next Steps

From here, the two organisations will sign a Memorandum of Understanding which details how they will work together on the proposed merger. Due diligence will be undertaken to identify current membership structures, assets, liabilities and commitments of each organisation.

This information will be considered in conjunction with all identified challenges and opportunities by the working group to develop a proposed new organisational structure. The working group will then present this proposed new structure back to each committee for feedback and input.

If a proposed structure can be agreed upon by both committees, then a draft set of rules will be drawn up and once both committees agree on the draft set of rules, they and the proposed new structure will then be circulated to the members for consultation and feedback.

Feedback will be taken on board at all stages prior to a final draft being developed. If both committees endorse the final draft set of rules and proposed new structure, then the proposed merger and formation of a new entity will be presented to the members for vote.

It is envisaged that this process is likely to take a number of months. Progress will be communicated regularly through this period and the working group will welcome any input throughout the process. If at any stage either of the organisations wish to opt out of discussions or pause the merger process, then this can occur and nothing is binding until at least 75% of members of each organisationagree to a merger proposal at a formal General Meeting.

How can you have your say?

The working group welcome and encourage feedback and input on the proposed merger from industry and members. It is important to ensure that all concerns are heard so that the right structure can be developed and any potential issues addressed early, ensuring that any change, if it occurs, is beneficial to all.

To have input into the proposed merger, you can complete a short survey at the following links:

Apple & Pear Growers - https://www.surveymonkey.com/r/5W6F2RP

Cherry Growers - https://www.surveymonkey.com/r/5JC59KS

You can also speak with APGASA President Ashley Green on 0418 826 300, CGASA President Nick Noske on 0418 998 991 or contact Susie Green at sgreen@apgasa.com or 0417 451 999.

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Cherry Export Workshop

This year's natioanl Cherry Export Workshop was held in Canberra on 18th & 19th June. It covered a diverse range of topics relating to export, including a review of the past season, industry and market insights, case studies from citrus and table grape industries, update on systems approaches, export registration process, training, industrial relations and compliance, activities to support trade, logistics, cold chain and end point treatments.

The 2018/19 season saw strong growth in exports in both volume and value from the previous season, with very good opportunities for premium quality fruit. This was the first full season of trade for mainland cherries into China under the new Methyl Bromide fumigation protocol, with many positive outcomes and approximately 50% of fruit exported from Australia going into the Chinese market.

Growers must be accredited for export to protocol markets, which for mainland cherries are China, Taiwan, Thailand and Vietnam. Both farms and packhouses need to be accredited if the importing country requires it, and properties must meet the relevant standards and any importing country requirements. Growers must also be registered for export through CGA and have attended the Cherry Export Workshop.

Farm requirements include registering export blocks with CGA, providing accurate maps of blocks and boundaries, maintaining orchard hygeine measures, implementing orchard monitoring (crop monitor) and IPM field control procedures, following management systems for pests of quarantine concern for China in the protocol and a documented traceability system. Registered farms are audited by the Department of Agriculture and Water Resources.

The CGA export manual has been updated to include the latest relevant information for exporters. For queries regarding Registrations, Apps & Audits, contact Charlotte at export@cherrygrowers.org.au.

Future Orchards® Winter Orchard Walk

The focus on this round of orchards walks was "Resilience to Future Climate."

Dean Rainman from Ag First NZ gave an overview of a number of factors that may impact on apple and pear production in a changing climate, including impacts of winter chill, use of dormancy breakers and other strategies for managing drawn-out flowering, the use of netting as a management tool and the impact on bees under net.

The impacts of low winter chill include delayed foliage development and extended flowering period. Delayed foliage development can reduce fruit size, fruit set and yield. It can also increase the risk of sunburn, russett and biennial bearing. An extended flowering period can increase variability of fruit size and maturity and increase harvest costs.

Dormancy breakers can be useful for managing impacts of low chill. Considerations for dormancy breakers include chill portions to ensure correct timing, along with varietal and rootstock differences. Trees also require heat to wake them up. Dormancy breakers can be risky to use when trees are already under stress or if used too close to oil applications. It is also important to ensure that the sprayer is calibrated correctly.

Other strategies for managing drawn out flowering including getting the right winter bud load, growing calm trees, ensuring good autumn N status, along with chemical thinning later flowers and hand thinning early.

Dean ran through a multitude of benefits of netting to manage apples and pears in a warming climate. Air temperatures under net are similar to outside, but fruit temperatures can be significantly cooler as the net diffuses light. Fruit temperatures can be up to 4-5^{o}C cooler under net than outside net. It is important to note that fruit doesn't respire as much as leaves, so tends to getting hotter.

Lowered light intensity has the following positive impacts:

- Reduced sunburn risk through reduced fruit surface temperatures
- Reduced soil water deletion, improving water use efficiency,

- but also reducing sunburn risk (stressed trees are up to 7^{o}C hotter and therefore more susceptible to sunburn)
- Increased Photosynthetic efficiency, due to lowered leaf surface temperature and leaves able to continue to function close to optimal, reduced mid-day stomatal closure, improved tree growth and improved fruit size

Netting also reduces wind speed, resulting in less wind rub damage and higher packouts. Netting can also impact on pollination. To manage bees under net, the following options can be considered:

- ensure adequate space between the tops of trees and net
- introduce bees at 20% full bloom
- include reference points within the blocks for navigation
- use retractable netting

Ross Wilson then gave an update on the PIPS2 project. Some of the key elements of the projects include:

- Release of *Mastrus ridens* for codling moth control. There have been 2 releases in SA, but so far researchers have not been able to prove beyond reasonable doubt that a population has been successfully established in Australia.
- Biennial bearing in apple. There is a strong correlation between crop load and return bloom, which is more pronounced in varieties prone to biennial bearing. Crop load is also related to fruit colour.
- Tree Nutrition in Apple. Nitrogen has the highest impact when applied in spring, with most of the nitrogen in the tree in dormancy coming from other natural sources. Spring fertiliser contributes to fruit N and storage N, but the value of a post-harvest application is questionable, with it mostly going to storage.
- Profitable Pears. The 3 ha trial orchard looks at planting systems, rootstocks and cultivars, and fruit colour. Highest yields across all systems were on Quince A rootstock.

Paul James finished the presentation sessions with a review of local trials looking at management strategies on young trees. Further information on the trial outcomes can be obtained from Paul.

An orchard walk was then undertaken on Flavell's Lenswood orchard, followed by BBQ tea.

Hailstorms - Lessons Learnt

The Apple & Pear Growers Association of SA received funding from SAFECOM through the National Disaster Resilience Program to capture some of the key learnings from the hailstorms of the past two years. There are several components of the project, which aims to help support both growers and industry associations cope with future disasters that may impact on the industry.

Industry Response Plan

We have firstly developed an Industry Disaster Response Plan for the Association, which lays out a road map for what roles the Association can and should play in the event of a disaster, based on the learnings of the past 2 years. This is to ensure thatany management team of the Association into the future has the ools to effectively coordinate the South Australian apple and pear industry response to a disaster or emergency. As part of this, the methodology that was used to undertake the hail damage assessments has also been recorded and written up for future reference.

Review of netting performance

We reviewed the damage assessment data for orchard blocks that were under net to determine whether there were any differences in performance of netting types in reducing hail damage.

A report on key findings has been circulated to South Australian growers and is available on request, however the following conclusions can be drawn based on the limited data pool that we had to hand.

1. All types of netting provided some benefit in reducing both the occurrence and severity of damage to fruit in both hailstorms. Damage levels under net were different between hail storms, with more damage under net in 2018 than in 2017. The effectiveness of netting in excluding hail is dependent on the type of hail and accompanying weather conditions.
2. Quad netting (16mm and 20mm) installed on flat top trellis structures was generally not as effective as rice hail netting installed on trellis release systems in reducing the amount of hail damage, particularly in the 2018 hailstorm.
3. Smaller hole sizes in netting appeared to reduce the amount of damage from fine rice hail.
4. To select the appropriate netting type and trellis system, other factors such as structural loading, light interception and cost-benefit also need to be taken into account.

Quantifying impact of hailstorms on industry

Another component of the project still underway is to measure and quantify the final and total impact of the 2017 hailstorm on the industry. This is to validate the initial forecasts of economic

impact based on the damage assessments carried out and is very important to help underpin advocacy for future industry support. We are asking pack houses to assist with this process and provide pack out information for the 2018 harvest. All information will be kept strictly confidential and pack house support is essential for this activity.

Grower Case Studies - Lessons Learnt from Hailstorms

Four apple growers who undertook different management approaches after the hailstorms were interviewed to gain their insight into key learnings from the hailstorm. They share their stories below.

Paul Mason of SR & SM Mason, Lenswood

How did your business initially respond to the first hail event in October 2017? What was your approach?

The storm came through on Sunday evening and the first thing we did as a family and a business is meet up Monday morning to discuss what we'd seen and have a closer look at the orchard. We had completed most of our chemical thinning program and were pretty happy with the results so far.

We decided we needed to collect some samples and do some assessments to allow us to make decisions on management strategies that were based on fact and not just emotion. We collected around 100 bunches at random from each block and assessed them for estimated packout. If packout was likely to be below 70% we decided we needed to do everything we could to remove as much crop as quickly and cheaply as possible. The samples estimated our average packout to be in the vicinity of 40%.

The first decision made was to add a full rate of carbaryl in the tank with the fungicide cover spray which was due at that time. We then followed that up with heavy applications of ethephon on all blocks that would not meet an acceptable packout based on our assessments.

The other critical decision we made was to focus our efforts on reducing labour costs in the orchard as much as possible for the season (thinning and picking) but not to cut any corners in terms of looking after the trees. We continued to irrigate and fertilise as normal and kept up our pest and disease management programs. We also reduced our post-harvest costs by not storing, grading and packing fruit from blocks where it wasn't going to be up to standard.

As soon as we realised the extent of the hail damage we also decided not to plant any new orchard that season but we did push more old orchard out as planned and instead rested the ground.

Finally, we also made an important decision to divert our own resources and effort into purchasing and erecting more permanent net. We were planning to do 4ha that season but ended up doing around 8ha. This did require approaching the bank for additional financial support.

What influenced your decision making and were you able to reach a consensus around these decisions as a Management Team?

Our business has a strong culture and philosophy of growing only quality fruit. Therefore it was clear from the assessments that we could not achieve this outcome in this growing season. So the decision was relatively easy to reach consensus on. We've all been brought up the same way with the same philosophy so the decisions that had to be made were fairly obvious to us.

How did you manage the emotion around the decisions you made at the time?

Making the decisions was less emotional than actually executing them. The hardest part was driving through the orchard with a heap of ethephon (mainly), knowing that once it was sprayed the crop was doomed, even if it remained on the tree. We also knew that this management decision would have potential further effects and implications in subsequent seasons in terms of return bloom and biennial bearing.

What other information did you use to help with those decisions?

We chatted to other growers in those early stages and attended industry gatherings to try to get a feeling for what other grower's strategies were. We also consulted through our broader network.

How did the decisions that you made effect and influence your growing season and the following season?

The whole aim of our strategy was to make the decision to effectively drop the crop, but then try to carry on managing the orchard as normal. These decisions put us under more immediate pressure financially, but we were looking at it with a long-term view.

What was the final outcome of those decisions?

In the end we only grew around one third of our normal crop. The ethephon applications significantly reduced the vegetative growth of the trees but also negatively impacted on the quality of the fruit that remained. We expected both of these responses. We then grew a very big crop in 2018. We are confident that we will have a decent crop next year looking at resting spurs, but time will tell. The pears responded very strongly to the ethephon application and almost completely dropped their crop.

The decisions we made initially were based on the fact that our business was in a position where it could sustain a year of very low returns, as long as we cut costs. We were able to invest further in net with assistance from our bank but we feel that the economic outcome was almost best case considering the situation.

Packouts were as expected and generally probably worse given the impact of the ethephon applications. However, what was left of the Galas probably packed out better than we expected.

In hindsight, would you have done things differently?

We are comfortable with the decisions that we made at the time. In hindsight we would've not gone as hard on the Galas as they didn't show the damage as much as some other varieties such as Pink Lady and Grannys and we would've got some return on them.

What were the best decisions that you made?

Turning our attention to erecting more net, even with the additional financial cost to the business. We are now pretty much "self-insured" now with all of our "new" orchard netted and feel that we have managed our risk of significant hail damage in the future.

How did the 2018 event differ from 2017 in terms of impact on your business?

The biggest difference is that the fruit was more advanced and we had no chemical thinners at our disposal. We had gone hard with the

chemical thinners knowing that we were in for a big crop after the events of the previous year, but any future thinning would need to be done by hand. We effectively had no choice but to grow it all, so we focused on reducing labour as much as possible by sending through crews quickly.

The damage was also much less consistent. At one property it was worse than last year while on another there wasn't much damage at all. The damage to the fruit also presented differently in 2018. There were just as many or even more marks in some cases but not as many "warts" generally. Having an extra 8ha of net also helped significantly.

Did you make any different decisions based on your experience from the year before?

The scenarios were different, but we were probably a little bit more prepared. When the hail event was forecast we made significant effort to put out all of the hail net that we had on hand, including throw-over hail net.

What advice would you give to others faced with similar decisions?

Make a decision the best you can at the time based on the information at hand and stick by it. You may make some wrong decisions but you could only do your best at the time. In particular I would recommend that growers don't react by cutting inputs. By keeping up our nutrition, water and pest and disease programs we gave ourselves the best chance to carry a big crop through to market the following year.

Ashley Green & Michael Booth of SE Green & Sons, Lenswood & Birdwood

How did your business initially respond to the first hail event in 2017? What was your approach?

First of all we had to pick ourselves up off the ground as we were initially in shock. We then headed out into the orchard and had a good look around to try to understand the extent and the level of impact on an individual block basis. We continued to conduct visual assessments of all blocks over the first few days.

We also talked to others, some of whom were planning to spray the crop off. There was some opinion within our business that we should consider that option. Initially we wrote some blocks off.

Next we did some assessments where we stripped whole trees and sorted fruit into three categories. We felt that if the assessments indicated a minimum packout of 50% we would continue to grow the crop for fresh market. Our approach was that if the baseline was a juice return of $100/bin maximum, we were willing to invest in the crop within the additional return that we thought we could get from the fresh market. Eg. if we thought we could get $200/bin, we were willing to spend up to $100/bin to give ourselves a chance of an improved return.

On the better blocks we continued with our secondary chemical thinning program with the aim being to do minimal hand thinning. The worse blocks we just aimed to strip pick for juice. In the end we decided not to spray any blocks off. We considered all options for trying to repair/ improve skin finish such as 6,BA and Cytolin applications and applied to a significant number of blocks.

What influenced your decision making and were you able to reach a consensus around these decisions as a Management Team?

We based our decisions on whether or not we could add value to the crop. We used our experience and knowledge of the local markets to try to judge what the market value of fruit and juice would be in light of the widespread damage. What would the crop look like after hand thinning? Would the investment in that labour add enough additional value to the end product?

We always had the following season in mind. Therefore we knew we had to keep growing the crop as we normally would in terms of irrigation, fertiliser and pest & disease management. We knew that if we reduced inputs or didn't carry out normal management practices such as thinning and pruning, it would impact negatively on us later.

At times it wasn't easy to reach a consensus as a management team but we had a clear plan and pushed forward based on the confidence in our decisions.

How did you manage the emotion around the decisions you made at the time?

We sat down constantly to review and discuss at the end of every day, usually over a beer. The decisions were fluid and we adjusted our actions as we went along in response to what we were seeing and any new information. We remained calm and tried to take emotion out of our decisions as much as possible.

The emotional toll was significant in terms of wanting to keep all permanent staff employed. Keeping those staff was of utmost important to us – even if we didn't make a cent and took a hit financially. We have a good group of staff and the impact of having to rebuild the following year without them would've been significant. Those decisions were really made from an emotional perspective, rather than purely financial.

What other information did you use to help with those decisions?

We consulted everybody in our network including external consultants and local agronomists. We also used the industry generated assessments but mostly our gut-feel and experience. Our market and industry knowledge, primarily due to participation in industry groups gave us confidence to believe that there would be some local market for damaged fruit.

How did the decisions that you made affect and influence your growing season and the following season?

Because we elected to mostly continue to grow the crop and retain all of our staff, it has been pretty much business as usual. Some returns for late season fruit ended up being excellent so some of those decisions we made paid off financially.

It continued to place us under significant financial pressure, but we feel in the scenario of drastic action in terms of crop removal, we would've been worse off financially. The crop load was pretty much unaffected because we completed our chemical thinning program as planned and still did what hand thinning we could justify on those blocks we were expecting better returns from. As a result there was no impact on return bloom in 2018.

What was the final outcome of those decisions?

We feel that we nailed it and were very happy with the decisions that we made. We're still unsure whether the application of skin stetch agents helped, but it felt better to be doing something rather than nothing.

We were unable to economically utilise the Lenswood Coop facilities to pre-size off the tree and store which would've helped us immensely, but it is something that should seriously be looked at in the future. Investment back into the local industry through reducing post-harvest costs would allow growers to pack and store more fruit for the fresh market and recover sooner.

An outstanding cherry season that year also contributed significantly to help carry the business through. We made an active decision to focus on cherries and invest in them to help improve returns.

In hindsight, would you have done things differently?

We wouldn't have done anything differently and believe that the decisions that we made at the time returned us the best results. We knew we couldn't expect to get every single decision right, but we feel our approach was spot on.

What were the best decisions that you made?

Our mantra held up – try to find every extra dollar that we could, whilst minimising our spend outside of essential inputs. Spraying the crop off wasn't the right option for us. Once you write a block off you lose all potential and no ability to cover your costs.

How did the 2018 event differ from 2017 in terms of impact on your business?

In 2018 the hail impact wasn't as bad. We feel we were hit harder than most in 2017, but on average we were impacted less in 2018. Having said that, some blocks actually suffered worse damage than 2017. We didn't need to do the same detailed level of inspection and assessment as we were comfortable with what we needed to do based on our experience and the timing of this event. Decisions were much more clear cut because we had less options – all varieties were past the stage where they would respond to chemical thinning of any sort.

However, we were under significant financial pressure with hail damaged fruit still in the shed that was yet to be sold which carried a significant financial and emotional toll. In that sense, 2018 was actually much harder to deal with emotionally than 2017.

Did you make any different decisions based on your experience from the year before?

We used the same approach as last year, but we left some blocks heavier this year, knowing that the end result was a larger quantity of good fruit (same percentage of a larger volume). This carries some risk with impact on return bloom which we will have to wait and see the result of, but we were willing to take those risks under the circumstance.

Due to the increased financial pressures we couldn't spend as much money on labour and effectively halved our thinning budget. We also started thinning too late after hail because in hindsight we took too long to decide what to do. This was because of the difficult financial position the business was in at the time.

That then ran into the heat of January which delayed things further and continued on to February/March which was far too late as it almost got to the stage of field grading prior to picking. In hindsight we would've started earlier, even given the limited budget we were working with.

What advice would you give to others faced with similar decisions to yours?

Back yourself in. Listen to others, collect as much information as you can but then make your decisions based on the facts at hand removing as much emotion as you can. Make the decision that's best for your own business, not just because your neighbour is doing it.

We strongly recommend the approach of assessing what is the potential value of your crop with hail damage and then alter input and management costs without limiting the potential value of the fruit that you have.

Jody Schultz of Appelinna Hills, Forest Range

How did your business initially respond to the hail event in 2017? What was your approach?

Like everybody else we looked around on Monday morning and it looked pretty bad. There were a lot of unknowns about what the hail marks on the fruit would look like at harvest. Fortunately, we hadn't had much experience in recent years and the hardest bit was predicting what portion of fruit would be saleable.

Initially we feared it was a total write-off. We looked at all blocks in the early days following the storm and found that most blocks were damaged significantly. However, we felt that we needed to wait a few more days before making an assessment on the full impact.

In the end we decided to make the best of what we had and grow the crop pretty much as normal. We decided to write-off the worst blocks (high level of damage to low return varieties/blocks) and attempted to thin them as hard as we could with chemical thinners.

Other than in those blocks, we didn't do any more secondary chemical thinning as we didn't want to remove any undamaged fruit. Ideally, we wanted to selectively remove this fruit by hand instead, even though we weren't sure we'd be able to do that cost-effectively.

What influenced your decision making and were you able to reach a consensus around these decisions as a Management Team?

Having our own direct markets, we couldn't afford to sit out of the market for 12 months so we had to decide whether we thought a reasonable portion of the fruit would be saleable. Because the damage was so widespread across our district we felt that everyone would be in the same boat so we hoped that the local market could sustain a proportion of damaged fruit.

We talked to our key customers in the early days to get some feedback. Most were willing to work with us depending on what decisions were going to be made and what the fruit actually looked like at harvest. However, we were all concerned about what other competitors would do – especially supermarkets. If they started sourcing un-marked fruit from interstate, we'd be forced to do the same which would make things very difficult. As a management team it wasn't too difficult to reach a consensus on our approach. We really didn't have too many options and thought we needed to do everything we could to continue to supply our customers with the same local fruit they are accustomed to, albeit with a level of hail damage.

How did you manage the emotion around the decisions you made at the time?

Disappointment was the first emotion to deal with as the crop was setup nicely prior to the hail and we were looking forward to a good season. We'd gone a long while without a hail storm and we were well aware of that so we were prepared financially. We had decided not to erect very much permanent netting which meant that the business was in a sound position and could sustain a year like this. Even after two years of hail damage, we're still not sure if we'd erect permanent net just for hail. However, there are many other advantages to netting such as protection from birds, bats and sunburn to warrant the investment.

What other information did you use to help with those decisions?

We did some assessments ourselves to help backup decisions that we made. In some instances we counted whole limbs and sorted fruit into categories to get an idea on potential packout. We also used the district assessment data to help validate our decisions.

We talked to other local growers and compared notes both individually but also at the various meetings that were held around the time. We found that it was clear that the new generation growers in the district had pretty much no experience dealing with hail and were guessing like we were. There was some experience amongst the older growers which we tried to take notice of. Some of the best information came from net suppliers, particularly one based in Orange who had seen and experienced lots of hail damage over the years and knew more than

most how fruit would end up looking in the bin.

How did the decisions that you made affect and influence your growing season and the following season?

Our primary focus was on ensuring that we didn't compromise our crop in the following year. Therefore, we continued to manage the orchard as normal in terms of pest and disease management, nutrition, irrigation, pruning etc. Hand thinning was not much different to normal apart from taking more care not to remove undamaged fruit. This increased cost was offset by the money we didn't spend in blocks that we wrote off.

What was the final outcome of those decisions?

The 2017 crop packed out and returned better than expected. Fruit definitely turned out better than we initially feared. Ethephon was the most effective thinner for crop removal. It didn't remove the crop completely but reduced it significantly and made it easier to manage. The return bloom in those blocks was strong as expected, but we don't think that it was excessive. If anything, it probably helped to even the blocks up – especially Gala. We don't believe that there were any negative impacts from the management decisions that we made.

In hindsight, would you have done things differently?

We probably wouldn't have tipped any blocks off. Enough of that fruit might have still been marketable, even though it looked to be a total write-off at the time. Our decisions around certain varieties would've been different. Knowing what we know now, the red coloured varieties hid the hail damage better and we would've definitely continued to grow all of them. The yellow/green varieties (eg. Granny Smith, Golden Delicious) fared much worse than we hoped. It was definitely the right decision to keep growing the crop. The fruit sold okay and the market was actually expecting worse damage. So it was good to lower expectations upfront and prepare the market.

Consumers seemed to keep buying. The Hailstorm Heroes campaign helped to create consumer awareness even though it didn't necessarily deliver much of a return for us directly.

What were the best decisions that you made and would definitely do again?

To keep growing the crop and remain optimistic was the best decision we made.

How did the 2018 event differ from 2017 in terms of impact on your business?

The 2018 storm was different. It was much more variable. The better blocks were better and the most affected blocks were worse than the year before. So far this year we're probably finding that we're getting slightly better packouts at this time compared to last year. The financial impact has been much worse because it has compounded the impact of 2017, even though the damage was overall less.

In terms of the emotional toll, initially it was heavier because we'd just finished selling the 2017 crop and had put that behind us and were ready to move on to a new season with new hope. However, once we were able to come to terms with it, knowing how the first year ended up and how we managed to get through gave us more confidence to carry on and sell the crop again.

Because the timing of the storm was later, we had no chemical options at our disposal and had to continue on as normal again. We knew that we would have to be very focused and smart with our hand thinning, but it took longer to be able to make decisions and resulted in somewhat of a delay. Initial instructions to thinners were don't put any good ones on the ground. But that proved very hard to advise and manage with thinning gangs and therefore very difficult and expensive to execute.

Initially there was a clear difference in the level of damage on each side of the tree. We attempted to manage each side of the tree differently on some blocks in terms of thinning and picking but in the end it didn't work.

Did you make any different decisions based on your experience from the year before?

We knew it was achievable to make a crop out of it and the experience from the previous year made the decision making easier. We knew we'd still get enough good fruit into the bins, but we had to manage the costs associated with that. But it was much more of an educated guess compared to the year before.

What advice would you give to others faced with similar decisions to yours?

Have a thorough look at the crop and the business before making any decisions. Don't rush into it. It's hard to know at the time what the outcome will be, so advice is to remain optimistic.

Graham Mason and Noel Mason of AG & HC Mason, Forest Range

How did your business initially respond to the hail event in 2017? What was your approach?

First of all we went out and had a good look around the orchard. We had never seen that extent of damage before so trying to determine what the damage would look like at harvest was a difficult thing. The decisions evolved over the first few days as we got a better handle on the level of damage and spoke to others. We had to make some decisions early though, as we had a massive crop and hadn't finished our secondary thinning program.

We tried to find a balance between having enough crop left to be able to selectively hand thin through and dropping as much badly damaged fruit as possible. A strong focus was placed on next year and not wanting any actions from this season having a negative impact on the following crop.

We did some assessments of our own a little bit later on by picking fruit on a whole branch and putting into categories. However we were a little different to most others who focused on the outcome in the packing shed. We focused our assessments on what impact we thought we could have with our hand thinning program to improve packouts.

What influenced your decision making and were you able to reach a consensus around these decisions as a Management Team?

Our decisions were based primarily on ensuring we had the best return crop we could next year but making the best of what we could with this year's crop. There was no problem reaching a consensus. We all knew there was no point carrying a massive crop this year, but we were also able to take an optimistic view of what we had left and make the best of the crop we had. This strategy came at quite a risk though as we could've spent a lot more money on the crop than what it was worth.

How did you manage the emotion around the decisions you made at the time?

We are fortunate to farm in partnership with several family members so there were others around to help carry the load. At the time of the event we were able to quickly process it and decide there wasn't much you could do about it. As the season progressed it was a bit harder to deal with it due to the uncertainty over whether the fruit in storage would be worth anything.

The fact that everyone else in the district seemed to be affected more or less to the same degree made it easier to deal with. Social gatherings that were organised by industry and other local businesses helped both initially and right the way through the season as it was a chance to talk with other growers. Those efforts were very much appreciated.

What other information did you use to help with those decisions?

There was a lot of negative information out there, many of it more or less encouraging growers to abandon their crops rather than encouraging growers to try to salvage what they could from their crops. Therefore, we found we generally relied on our own gut feel. We felt at the time that we were very much on our own with the decision to continue to grow the crop.

We talked to other growers that we knew interstate who'd had some experience with hail damage and picked their brains. Local knowledge within our family business from the previous generation was of limited value because their hail experience was at a different time when markets were very different. But generally, the advice was that you would still pick a lot of good fruit. That led to some optimism.

How did the decisions that you made affect and influence your growing season and the following season?

There was no change because we effectively didn't do anything differently.

What was the final outcome of those decisions?

The outcome was actually probably better than we expected. Packouts were still disappointing due to the heavy impact of the hail, but

financially we ended up better than we thought we might. There were no agronomic impacts as we didn't do anything differently; return bloom was good in 2018.

The total crop we grew was down a little bit, but the biggest impact that year on volume was actually due to the birds. At least 10t/ha of Rosy Glow was eaten by lorikeets. In hindsight we wouldn't have done anything differently.

What were the best decisions that you made and would definitely do again?

Maintaining the balance of the trees and keeping in mind return bloom. As a result our return bloom was unaffected.

How did the 2018 event differ from 2017 in terms of impact on your business?

Initially it looked similar or maybe even worse than 2017. The main difference between the two events was that the storm in 2018 was three weeks later. Whilst the damage at the time of the storm looked worse, at harvest time the fruit actually looked better and was less impacted in the bin.

Second time round we knew exactly what we needed to do and just carried on growing our crop as normal the same as the year before. Emotionally it was probably a bit harder deal with though. We'd started hand thinning and could see bruised fruit. We had a week or so to wait to see what it looked like. That time lag delayed our decisions a little and made hand thinning a bit harder.

We haven't packed much fruit yet, but early signs are that pack outs seem a little bit better – maybe 10% but still well below what we would normally expect. Prices at the time of harvest were terrible so we decided to store and hope that prices improve. Fortunately, we could manage with the reduced cash flow.

Did you make any different decisions based on your experience from the year before?

We did exactly the same thing as the year before. We had already started putting up net with the first netting going up in 2017. We were glad we hadn't done a lot as some of the damage we saw under net in 2017 looked unacceptable and allowed us to looked at different net types for better protection from hail. Most net was planned to be erected mainly for exclusion of birds and bats.

What advice would you give to others faced with similar decisions to yours?

You have to go out and have a really good look at your fruit. Every hailstorm is different. Whatever decision you make should be made to suit your own business and circumstances. Don't be influenced too much by other people as it might not be the right advice for you. You know your own business and orchard better than anyone else so trust your instincts.

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Is your Forklift Licence Valid and Compliant?

Under the Work Health and Safety Act of 2012, to operate a forklift you must have a Licence to Perform High Risk Work.

Strict penalties apply to the individual and Person Conducting a Business or Undertaking (PCBU) for an individual or employee driving a forklift without a valid licence.

Growers and workers should be aware that older style tickets and Certificates of Competency (pre-High Risk Work) have expired and are no longer valid. Arrangements for a national licensing system came into effect on 1 September 2010. If you undertook forlkift training prior to September 2010 and did not convert to a High Risk Work Licence when the new laws came into effect, then your old licence will no longer be valid.

The current licence format is a small plastic card with photo identification (similar to a driver's licence) with a list of all the classes of high risk work that the holder is authorised to perform. Unlike older style tickets and Certificates of competency, these Licences require renewal every 5 years.

Photo by ELEVATE

If you hold an older style ticket or certificate of competency, you will need to be trained and assessed for a High Risk Work Licence.

To check if your High Risk Work Licence is valid, or those of your workers, you should check that the licence:

- has not expired
- includes the relevant classes
- has the correct photo and name of the worker

You can also use Safework SA High Risk Validation tool at https://bit.ly/2xWyUkI.

If it is a valid South Australian issued licence, the results will include the Expiry Date and the Classes of work.

To obtain a Licence to Perform High Risk Work you must undertake training. Training for a forklift licence must be undertaken by a Registered Training Organisation (RTO). To find a Registered Training Organisation go to https://training.gov.au.

Once you have completed your training you will be assessed by an Assessor who is accredited with Safework. If you successfully complete the assessment your Accredited Assessor will provide you with a Notice of Satisfactory Assessment and a Tax Invoice. Your licence must then be paid for within 60 days of the assessment at a Service SA Customer Service Centre.

If your licence is due for renewal, you can renew it online within 12 months of expiry date. If you do not renew your licence within 12 months you will need to complete the qualification before you can apply again.

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