### What is the current AU apple market?

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Apple Volume (tonnes)</td>
<td>295,060</td>
<td>308,298</td>
<td>298,726</td>
</tr>
<tr>
<td></td>
<td>C1 Apple Volume (tonnes)</td>
<td>215,764</td>
<td>216,771</td>
<td>214,819</td>
</tr>
<tr>
<td></td>
<td>C1 %</td>
<td>73%</td>
<td>70%</td>
<td>72%</td>
</tr>
<tr>
<td></td>
<td>Export C1 apple volume (tonnes)</td>
<td>3,605</td>
<td>4,969</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td>Export %</td>
<td>1.5%</td>
<td>2.2%</td>
<td></td>
</tr>
</tbody>
</table>
Apple and Pear Consumption by Country

<table>
<thead>
<tr>
<th>Country</th>
<th>Pieces per person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>50</td>
</tr>
<tr>
<td>NZ</td>
<td>70</td>
</tr>
<tr>
<td>Germany</td>
<td>90</td>
</tr>
</tbody>
</table>
What does quality mean to the consumer?

- Good Texture (crunchy & consistent)
- Juicy
- A range of flavours, (sweetness & or acidity)
- Healthy
- Safe
- Fruit that looks great (on the shelf and in the bowl)
- The appropriate fruit size
How does the grower measure quality?

- Premium variety
- High Class 1 recovery
- High pressure, and brix
- Good colour
- Able to be picked at SPI 2-4 (6 point scale)
- Optimum fruit size
What is Fruit Quality

“Fruit Quality is a mindset, a culture, an act of continual improvement. A desire and ability to deliver a great product to the consumer every time”
What is Fruit Quality

“Fruit Quality is a mindset, a culture, an act of continual improvement. A desire and ability to deliver a great product to the consumer every time”
Australian COG survey

- What's stopping Australian fruit being a great eat every time?
- What is preventing Class 1 packout being higher?
“Poor returns are driving a cost cutting mentality.”

“Just aiming to meet the minimum standard doesn’t mean a happy consumer?”

“All the consumer wants is a crunchy, juicy apple!”

“Australian consumption of apples and pears is falling year on year!”

“If we grow so we can sell cheap, will we sell more? No”

“No one wants to eat a soft apple yet our industry has them for sale 365 days of the year!”

“Pink Lady has been forgiving but now with 40% of the crop as Pinks its getting harder.”

“Pale, soft, bruised and greasy apples are too easy to find!”

“We have to change!”
What prevents AU apples and pears being a great eat every time?

- Inconsistency
- Under and over mature
- Range from starchy with no flavor or juice, to mealy and soft
- Early season fruit that sets the scene is often poor quality
- Product often looks tired not fresh
What is preventing AU “Gala” being a great eat every time?

• Early season fruit from hot climates is of poor quality ~ consumers are turned off right from the start
• As climates become hotter, Gala quality drops
• Immature early season fruit
• Over mature floury soft fruit late in the season
How do we improve quality?
Lift consumption!
Generate sustainable profitability!
Improving Quality No 1

To ensure every apple is a good apple, requires the entire supply chain to:
1. agree,
2. implement,
3. and control standards “discipline”
Who sets the standards?

Legislated Standards
EG Pome West (Firmness > 6.5 kg, SPI > 3/6, Brix > 11.8% for Gala, 11.0% GS and 13.0% for Pinks)

Supermarket standards

Coles
Woolworths
Fruit West Co-operative Ltd.
Aldi
Company Standards
Variety Standards
Genetics for Quality

- Rosy Glow vs Cripps Pink
- Buckeye and Galaxy vs Royal Gala
- Aztec vs std Fuji
- Jazz, Envy, Smitten, Ambrosia,
- Kanzi
- Rockit
- Etc, etc
What can you do now-
Prune for Quality
Sunlight + Quality Buds = Quality Fruit
Prune for Quality

- Harvest light to produce quality fruit
- Key to quality fruit is attention to detail
- Constant monitoring
Don’t skimp on pruning

- Can increase costs later on
- Delay colour, size and storage quality
- Quality pruning can add value
  2013 FO trial +$18,000/ha
Simple pruning rules have many benefits

- Produce calm trees able to grow higher yields of better quality fruit,
- Easy to learn,
- Easy to transfer across most varieties,
- Sustainable and get easier overtime.
- Easy to monitor
Keep pruning rules simple, memorable & repeatable

• Aim for calmer tree
• Start with the end in mind.
  – Visualise how the tree will respond
Keep pruning rules simple, memorable & repeatable

- Remove 3 strongest branches
- Remove all 6 o’clock shoots & buds
- Remove 12 o’clock shoots
  - Maybe leave short shoots (snip length)
- Branches long and skinny
- No shortening
- Count buds
Big cuts - Difficult to grow replacement branch below a big branch
“Toilet seat” cut above big branch often produces good replacement

Done well (expect 8/10 cuts to grow good replacement shoot)
Bad branch cutting selection
Loss of yield significant - Why?
What's missing -
What's missing - **BUDS**
Break bad habits early – SHORTENING?

Calm trees best, use all the tools
Simple pruned branch- can we do more?
First robotically picked apple in NZ

Thank you