



Quietly Confident Perseverance

—With many thanks to Sandy and Narelle Lyon



Australian avocados are such an amazing fruit and boast a remarkable list of nutritional benefits. They are rich in vitamins (C, K, E), folate, healthy monounsaturated fats, fibre and carotenoids. Australian avocados are in demand. Year on year, Australian consumers are purchasing more avocados than ever before (over 3kg per person per year). There are many different varieties of avocados, differentiated by either their green skin or brown and black skin. Hass and Lamb Hass are the varieties that consumers are most familiar with and have been taught to associate ripeness with the dark coloured skin.

How and where are avocados grown? Does the Albany and Great Southern Region provide the environment for avocados? Sandy and Narelle Lyon invited me to visit their family owned property Willyung Farms and Mt Willyung Avocados to find out more. It's surprising to find an avocado orchard on a farm known for its Poll Sussex Stud business! But the avocados have not only diversified the family's offering to market, but have also integrated all aspects of the business into a sustainable operation.

During the early 1970s, Sandy's Father migrated from England to the Great Southern Region of Western Australia. The family has spent over 40 years on the same property operating a beef cattle feedlot, Sussex Cattle stud farm and a hay/silage contracting business. At full production, the farm has a licenced capacity of 1,000 head of cattle. Willyung Farms is contracted to Harvey Beef to supply beef to Coles supermarkets. The hay/silage contracting business requires travel around regional Western Australia (WA) as far as the Eastern Wheat Belt and beyond Albany. Sandy's Father is famous for breeding prize winning chickens, although this is just a hobby.

In 2003, the Lyons needed an additional offering, something different, to complement their cattle business because beef wasn't profitable at the time. Avocados are a tropical, rainforest plant and it was an unusual choice for the farm to diversify into an avocado orchard given the cool climate and the coastal location.

Their friends had planted avocado trees a year earlier and it seemed like a simple idea. So, the Lyons planted their first orchard in 2003 with 1,200 Hass and Lamb Hass trees. However, 'simple' is an altogether different concept to 'easy'. There were a lot of orchard management challenges to overcome before they achieved their first crop of avocados.

At the time, most of the avocados were grown in the eastern states in warmer northern climates. Although they were supported by industry experts, the Lyons had to develop their own methods and techniques to address the challenges of growing avocados in the Great Southern Region of WA. There were many issues to resolve during the process of learning and understanding how to manage and achieve a productive orchard. These included:

- The original orchard was planted with trees that weren't in prime condition. Many had to be replaced. They soon learnt to source disease free trees for optimal growth and production and to avoid spread of disease to other trees (avocados are very susceptible to phytophthora (i.e. die back). The Lyons buy their trees from Queensland, New South Wales and Kununurra where they grow and mature to fruiting more quickly. Although it is possible to grow an avocado tree from a seed it takes a long time to fruit and is more susceptible to diseases.

- Avocado trees are surface feeders and require a steady supply of water to keep their shallow root zone moist. The trees need about 150 litres a day in summer. The specific watering regime ensures the trees receive enough water for peak fruit production once the flowers have set. The orchard sources its water from a dam and natural springs which are naturally low in salt.

- Ground preparation is critical for the long-term development of the trees. They love a lot of organic matter. Sandy and Narelle compost the manure from the feedlot with the silage from their contracting business. The composting process takes about 8 weeks and the Lyons make about 2,000 tonnes each year. This compost is not only applied on the orchard, but also onto the pastures used by the feedlot, commercial breeding herd and even on the Lyon's personal vegetable gardens. Diversification to avocados has enabled the family to integrate all aspects of the business, adding value to and minimising what would otherwise be considered waste.

- Frequent dry leaf analysis and soil testing is required to understand the quantity of fertiliser and trace elements to apply each fortnight. The fruit is also dry matter tested and are picked at 23% dry matter.

- Due to the cooler climate and the very long maturing time, the trees will have two years of fruit on the trees at the same time. The current year of avocados will be ready to pick just as next year's fruit is setting. This does not occur in warmer climates, likely due to the shorter time for the fruit to ripen.

- Each variety of avocado has its own picking season. The Hass and Lamb Hass fruit ripens in October. Other varieties ripen in July. The Lyons are trialling the Fuerte variety with 50 trees in place. This is a green skin variety with a longer shape, smooth, thin skin and creamier texture and flavour. Due to the thin skin, Fuerte avocados are more difficult to pick, pack and distribute and the Lyons are still working on their technique.

The orchard started producing avocados around 2005-2006. The Lyons started selling their crop at the Albany Boatshed Markets. Soon the orchard produced too much fruit for them to handle. The process of picking, sorting, packing and getting the avocados to market for sale created additional complexity for the existing farm operation because peak avocado season coincides with peak feedlot and silage season.

The Lyons decided to build on their success as growers to become high volume producers and outsource the rest to wholesale distributors Advance Packing and Marketing Services in Manjimup. The company sells avocados from the WA growers throughout Australia and overseas into Singapore, Malaysia, United Arab Emirates, India, Japan and Indonesia.

This strategy has paid off, with the orchard improving in quantity and quality over time. By the late 2000s, the Lyons knew that they had overcome all the hurdles of establishing an avocado orchard and planted the second block of trees. The younger trees have the advantage of better management and have almost out-performed the original plot in tree size and productivity. Even the smaller trees in the second block are producing as many avocados as the original trees planted over a decade ago.

This year's crop produced a total of 32 bins, or 16 tonnes of avocados, about 2.6 tonnes per hectare, but this is nowhere near peak production. The Lyons aim to produce 20 tonnes per hectare from their current 6 hectare orchard. They also have plans to expand their orchard, recently planting 300 new trees with another 600 trees scheduled for late 2016. Sandy has a grand vision of a 2500 tree orchard and is slowly working towards this goal.

Given their quietly confident perseverance and clever approach to diversification and integration, the Lyons will surely achieve this over the next few years. Find out more about Willyung Farms on their website www.willyungfarms.com.au

