Flagship Farmers

David & Nick Allen

Mortlake, Victoria, Australia

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We have always taken a long-term view of our business and the natural environment we work and live in. The family has farmed here at Boorook for over 100 years, and we’re planning on being here for the next 100.

David Allen
Owner, Boorook Farm

Introduction to Australian production

With a total area of 7,617,930km^2 (2,941,300m^2), Australia is the largest country in Oceania and the sixth largest country in the world. In 2017, it had a population of 24.6 million people.

Approximately 57% of Australian farms include beef cattle, making it the most widespread agricultural commodity in the country. As of 2018, the Australian cattle herd was approximately 26.4 million head, across 41,800 farms and stations (ABS Agricultural Commodities, 2016-2017). Beef production systems in northern and southern Australia vary considerably due to the climatic conditions that influence farm productivity and the selection of cattle genetics.

Victoria is a state in the southeast corner of the country and is one of Australia's smaller mainland states. The number of beef cattle in Victoria has fluctuated between two and four million over the past 30 years, with the average beef farm size increasing from under 300 hectares in the 1960s to over 340 hectares in 2012.

6th

Largest country in the world

26.2m

Cattle, 2% of global herd (2016)

2nd

Largest supplier of beef to McDonald's

Flagship Farmers

Introduction to Boorook Farm

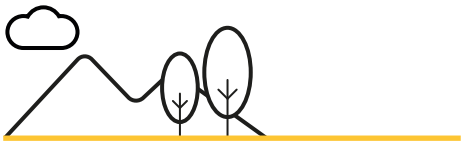
Boorook Farm is located in southern Victoria, in the heart of the third largest volcanic plain in the world. Thanks to the coastal climate, it is more temperate than other parts of Australia.

The reasonably high levels of winter rainfall, followed by warm summers provide ideal conditions for growing grass and cattle.

Boorook Farm has served as home and business to the Allen family for four generations. David's grandfather purchased the farm in 1906, and David took over the management of the farm from his father in 1976.

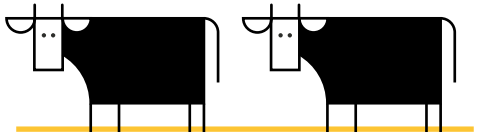
Currently, two families live on the farm; David and his wife, Sandy, live in one home, while their son, Nick, his wife, Sophie, and their two young children live in another. Two generations of the Allen family have always worked and lived together on the farm. Nick and Sophie hope their children, Jack and Charlotte, will be the fifth generation to take on the farm.

The farm covers 4,760 acres, running a herd of 800 Angus x Murray Grey x Stabilizer suckler cows, with 200 replacement heifers and 900 prime (finishing) cattle.The farm also has 7,000 Merino sheep which produce high quality wool for the textile industry.



4,760

Acres of land



800

Suckler cows

900

prime/finishing cattle

7,000

Merino sheep

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Succession planning is a hugely important part of any farming operation. We can’t predict the future but we can prepare for it. So setting up the next generation to be farmers and managers of the business is critical, but it’s also important to help and assist other siblings who don’t want to be farmers. We’ve had a good example set by my grandfather doing this with my father, and then my father doing the same with my brother and I.

David Allen
Owner, Boorook Farm

Overview of Boorook Farm

The farm has been producing grass-fed cattle to the market for many years now. The focus on optimizing pasture productivity and growing cattle as efficiently as possible has provided the opportunity to sell their animals to a branded beef program. This focuses on selling high quality, grass fed beef sourced from southern Australia.

Rotational grazing is the cornerstone of the Allen's pasture management strategy. The system improves grassland productivity, avoids the debilitating effects of overgrazing and improves livestock growth rates. To ensure the effective management of this system, good fencing, free access to good quality drinking water and moving livestock at the right time onto fresh pasture are key factors in its success.

To improve cattle production and efficiency, David and Nick have selected cattle genetics that offer improved performance via more efficient feed conversion and weight gain. The current maternal line is 40% Angus, 40% Murray Grey (a polled beef bred that was developed in the upper Murray River valley) and 20% Stabilizer (a composite breed of Red Angus, Simmental and Gelbvieh). Research being undertaken by the Stabilizer breed around Net Feed Efficiency was a reason to include this genetic line, and all the breeds used in the maternal line are polled. The Allen's use a combination of artificial insemination (AI) and natural service across the cows and heifers. Angus genetics are currently being used to AI heifers at 13 months of age as this minimizes any problems at calving.

David and Nick have planted thousands of trees on the farm, also replacing Cyprus and some of the Old English varieties with natives, such as Eucalyptus, Wattle and Casuarina species. In total, there are currently 224 acres of trees planted on the farm, providing shade for cattle, as well as habitats for birds and wildlife.

Core Values and Goals:

- **Continue to grow the business in a manner that is economically and environmentally feasible**
- **Protect and develop the land and farm business to increase its value for the next generation**
- **Implement practices that protect native grasslands, wetlands, riparian areas and water resources**
- **Collaborate with other farmers to share knowledge, resources, and to stabilize income**

David & Nick Allen — Boorook Farm Sustainability Objectives

Environment

- Implement environmental programs to protect local habitats and water resources in collaboration with regional authorities
- Plant native tree species to improve native habitats for wildlife, and to provide shade and shelter for cattle
- Restore and protect native grasslands and preserve existing wetlands
- Improve waterways and water quality by fencing off creeks and building more dams to capture rainfall
- Optimize grassland productivity through management and the reintroduction of native species
- Prioritize management to reduce grassland degradation
- Reduce fossil fuel requirement by investing in renewable energy sources, such as solar panels and windmills
- Protect soils from water borne erosion by planting cover crops, such as Alfalfa (Lucerne), and other perennials

Economics

- Reduce energy costs by investing in renewable energy sources
- Improve feed efficiency by investing in performance tested genetics, which improve growth rates and time to slaughter
- Improve land and assets to pass on to the next generation
- Meet and exceed market expectations regarding quality of the final product
- Engage in the Livestock Producers Assurance program to improve animal welfare, treatment, transport and nutrition
- An annual financial summary is produced to allow a year on year review, as well as providing financial data to benchmark against other similar farms to highlight areas of focus and improvement

Ethics

- Continuously improve the land, environment and business for the next generation
- Collaborate and engage with local peers and industry organisations to identify, improve and adopt new practices
- Improve the health, welfare and productivity of cattle
- Improve practices and help inform public perception around animal welfare, food safety and environmental footprint of beef production

Rotational Grazing

Grassland management is viewed as a critical element for improving the productivity of pastures and cattle on the farm. The aim of rotational grazing is to regularly move the cattle every two to four days onto a fresh pasture. The frequency and timing of moves is dependent on several factors which must be carefully considered and managed to ensure the best results are achieved.

One of the Allen's 150-acre fields, for example, is subdivided into 13 smaller paddocks ranging in size from 5–10 acres. A group of 150 steers are grazed through this system, taking almost four weeks to work around all the available paddocks on a two-day rotation.

The basis of rotational grazing is that it allows more time for grasses to recover and regrow between grazing episodes. This can drastically increase pasture productivity, with much of this increase being achieved by minimizing overgrazing of certain plant species in the pasture.

Key Outcomes & Actions

- Rotational grazing can increase forage production by an estimated 30-70% each year
- Over-grazed or continuously grazed grasses have a smaller root mass which leads to less soil organic matter being produced
- Soils with good organic matter levels:
  - Are more drought resistant
  - Have improved water infiltration rates (less run-off of rainfall)
  - Have higher fertility resulting in increased forage production
- Regular contact moving the cattle can help improve the human-animal relationship whilst reducing fear, which has a negative effect on animal welfare

Protecting & Preserving Water

Clean and plentiful water is a valued resource at Boorook and avoiding the risk of pollution to surface water has been a focus for the farm. By fencing off creeks and waterways to limit cattle access, the Allens aim to protect creek banks and habitats, which in turn protects local water quality by helping to avoid contamination caused by soil and organic matter.

Restricting access to the creek and the use of rotational grazing has meant a large investment in providing livestock drinking points around the farm. This includes 16 dams (constructed by the Allens for capturing rainfall), 13 of which are fenced to limit cattle access to a designated drinking point. The perimeters are planted with trees to shade the water, reducing algal growth and water loss through evaporation. Concrete ramps have been constructed on the other dams, providing cattle with easy access to the water, and preventing problematic pugging / poaching which can impact water quality.

The ability to capture and retain rainfall and moisture in the soils is critical. Cultivated land is planted with a cover crop such as Alfalfa (Lucerne) or other perennials as quickly as possible. This helps reduce moisture losses from the soil via evaporation and helps reduce the risk of soil erosion which can be particularly problematic on the farm's sandy loam soils.

Key Outcomes & Actions

- Ten kilometers of creek running through the farm has been fenced off to protect water quality
- Fencing of the creek has improved riparian areas and protected wetlands has provided conditions to allow frogs and other aquatic species to thrive
- 16 dams have been constructed to capture and store rainfall as a source of drinking water for livestock
- Cover crops can help to increase water infiltration rates, reduce moisture loss from evaporation and limit soil erosion and runoff
- Dams only capture circa 0.75% of farm rainfall, the remaining water is returned to the environment

Improving Cattle Performance

The current maternal line is a Black Angus crossed with a Murray Grey and Stabiliser, this increases hybrid vigor and improves fertility, feed conversion, and daily liveweight gains. Although genetics are an essential tool, nutritional management is also crucial. Weaned cattle are split into two groups of heifers and steers, they are then provided with free access to “self-feed” silage in clamps while grazing as the summer and autumn period produces limited poor-quality forage, so supplementary feeding keeps cattle growing. The silage’s analysis is around 13.3 % protein,11.5 metabolizable energy (ME) and costs $81 per tonne of dry matter to produce. David and Nick have found that the benefits in terms of performance and growth rates make this a good return on investment.

Cattle are also provided with a legume/grass-based pellet during the last 50 days prior to slaughter and will be gaining 1.5 – 2.5 kg/head/day reaching an exit weight of 620 kgs. Although pellets can be expensive, the aim is to supply cattle “out of season” and achieve a better sale price.

Planning and tracking of weight gains has improved the ability to schedule cattle sales, helping with cash flow and business planning.

Key Outcomes & Actions

- Focus on genetics has improved hybrid vigor and desirable production traits
- 96% conception rates on cows
- 91% conception rates on heifers
- 6 week calving period
- Heifers calving at 2 years of age
- Focus on genetics and nutrition has reduced the age at slaughter from an average of 30 months, down to 22 months.
- Reduction in slaughter age has improved economic performance as well as reducing the farm’s carbon footprint
- Ability to schedule and plan cattle sales has improved cash flow and business performance

Improving Beef Quality

The Allens sell their prime (finished) cattle to a large beef processor in Australia for a branded beef line focused on producing quality beef with exceptional eating quality. The brand focuses on the sale of steaks and roasts, with the smaller cuts of beef called “trim” being supplied into the McDonald’s supply chain.

As part of the program, the farm is externally audited and inspected under the requirements of the scheme. There are specific criteria on feed, genetics and animal welfare that need to be met. David and Nick use a smartphone app to record actions such as vaccinations through to animal movements. All cattle have an Electronic Identification (EID) tag and are subject to full traceability.

The Meat Standards Australia (MSA) grading system was developed to improve the supply of consistently high-quality beef for consumers. In 2018, cattle from Boorook achieved a 95% MSA compliance score, a 10% improvement over 2014.

The Allens are working to improve their overall MSA score by fine-tuning their management, cattle nutrition and genetics, with the aim of improving the cattle’s marbling score. These improvements in the MSA score are reflected in a higher price paid for the cattle.

Key Outcomes & Actions

- Reduced stress at farm and during transport has lowered pH scores in carcasses at slaughter
- Reducing slaughter age from 30 to 22 months improves meat quality and reduces the farm's carbon footprint
- Nutrition and genetics are aimed at improving MSA scores
- Improved economics achieved with higher MSA scores
- The farm has been recognized as one of the top-10 suppliers of quality beef into the supplier program

Succession Planning

Succession planning is an often over-looked and seldom discussed subject. This lack of planning is a significant issue and can be a major worry for farming families. There can be unforeseen tax issues, which all means that the financial consequences of failing to plan for succession can be very expensive.

David's great grandfather, who originally purchased the farm back in 1906, ensured that succession was successfully completed when he handed the farm onto David's father. Critical elements around ownership, including the current and future needs and wants of the family, were all covered.

When David's father was planning the succession of the farm, a key part of this was ensuring that David and his brother were involved in discussions and agreed on the way forward.

David also sees succession planning as providing Nick the opportunity to develop the skills and experience needed to drive the business forward in the future. David's aim is to mentor Nick in the responsibilities that comes with running the business, without interfering with his ideas.

Nick is already considering the succession plan for his children and since they are only 3 and 5 years old, it shows it's never too early to start.

Key Outcomes & Actions

- Succession planning has ensured a smooth transition between three generations
- The objective of succession planning is to preserve the family farm for the next generation and to ensure its ability to continue to trade
- Avoids unforeseen financial pitfalls
- A key part to succession planning is to try and build non-farm assets which provides equity for division of assets to protect the farm and land

Carbon Reduction & Capture

David and Nick recognize the importance of making changes that directly reduce the farm's carbon footprint. They have invested in renewable energy sources such as solar panels and wind turbines to operate water pumps, electric fencing and other electrical equipment.

Another important aspect of carbon reduction is carbon sequestration or capture. Agricultural soils are among the planet's largest reservoirs of carbon. Improving practices on the farm such as rotational grazing has helped reduce over-grazing and grassland degradation. Retaining and conserving native grasslands, as well as protecting habitats along water margins, have all had a significant impact on the farm's ability to increase its carbon holding capacity.

Farm efficiency has also been a focus. Improving genetics to reduce time to processing (slaughter) by 8 months has had a significant impact on reducing the farm's carbon output.

Key Outcomes & Actions

- Investing in renewable energy sources has reduced the farm's reliance on fossil fuels and its carbon footprint
- Improving grassland/crop/habitat management practices helps to increase carbon sequestration
- Improving livestock efficiency through genetics/nutrition/health has reduced carbon emissions

Collaboration & supplier relationships

Since the late 1980s, David has been working closely with Landcare on several projects that cover the protection and improvement of land and water. Landcare is a not-for-profit organization that works collaboratively with federal, state and local governments, as well as Australia's farmers and landowners. Through government grants and funding, they actively work together to implement sound land management practices and sustainable agricultural practices that combat issues like soil salinity and erosion.

David has been chairman of the local Landcare group and has worked with several Natural Resource Management (NRM) groups locally. David's local catchment and group is Beyond Bolac, which covers a 168,000 hectare area that includes two main waterways, a lake, many wetlands and minor streams as well. The group has been very pro-active over the years in all areas of NRM – protecting waterways, riparian fencing, revegetating areas (especially beside the streams), weed and pest control, improving biodiversity, monitoring wildlife and educating farmers about rare and endangered species of grasslands.

There are two current projects being undertaken. The first has two PhD students researching frog populations in the area and working with farmers to help create conditions and habitats that increase populations. The second project is called "Conservation Corners" which aims to plant awkward corners in paddocks or other areas which cannot be farmed easily. These corners have been created by the use of large equipment and machinery which cannot easily navigate small corners or awkward field boundaries, these areas are then left untreated and not utilized.. The aim is to encourage farmers to plant trees, bushes or native grasses in these areas to create habitat areas to improve biodiversity.

The grant money is provided on a match funded basis, which means the farmers must provide the equivalent amount of funding to a project. Up to 2019, the program has distributed $800,000 to the local community for NRM work within the catchment.

> "Landcare has been an ongoing interest of mine. Hopefully it's reflected in the farm in terms of the number of trees we've got planted around the creek and the shelter belts.

David Allen
Owner, Boorook Farm

Collaboration & supplier relationships

Nick is involved in two producer groups, both with the objective of improving production efficiency through targeted management practices. The first, is a local producer group called 'The Better Beef Group', which is coordinated by a local consultancy company funded through Meat & Livestock Australia (MLA). They hold six meetings per year, and currently have eight farm business involved in the group — although this is expected to grow in time. It focuses on issues that impact beef producers daily, for example nutrition, genetics, profitability, technology, and pasture management.

Nick has learnt that you need to have a holistic approach to managing your beef enterprise, noting **"it's easy to focus on the areas you understand at the expense of other parts of the business that are difficult to manage, and they then get ignored"**.

The second group is called 'The Elephant and Emu Group'. The name comes from the Elephant Bridge hotel that is located near Emu creek. It is a group that started for owners/mangers of large farm business who want to learn from each other to increase their production and productivity. It has ten members, aged from 35-40yrs and includes a mix of production systems including cattle, sheep, and cropping. This group is very focused on profit and meeting individual KPIs that each business imposes on itself. Topics such as strategic use of fertiliser and improving pastures to optimize stocking rates is a constant discussion point for this group. Sharing financial information within this group has provided an insight into how different incomes and expenditures vary considerably and where opportunities are to improve.

Flagship Farmers

We appreciate the importance of caring for our land, our animals and the environment. We love what we do together as a family and a business.

Nick Allen
Partner, Boorook Farm

Contact

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