Barossa owes much to Europe. Its name, cultural instincts, languages, food, viticultural and winemaking heritage, are all transportations that have been moulded and honed by 175 years of Australian innovation.
Barossa

One could be forgiven for thinking Barossa was settled by the Spanish. Its name can certainly be traced back to the windswept Barrosa Ridge in the Spanish region of Andalusia where in March 1811 Lieutenant General Thomas Graham of the British Army defeated the French Marshal Victor, during the Napoleonic Peninsular Wars.

Graham received a peerage and was named Lord Lynedoch but it was his young aide-de-camp Lieutenant William Light who was to remember the name. When he was appointed Surveyor General of the new colony of South Australia in 1836 and discovered a verdant valley he named it Barrosa – and a slip of the pen by a public administrator gave the region its unique name, Barossa.

However it was not Spanish but English and Silesian settlers who pioneered the region. The English, including the colony’s founder George Fife Angas, took over pastoral sheep and cattle runs in Eden Valley, east of Angaston; and the Silesian settlers – mainly peasant farmers and artisans fleeing Prussian religious persecution – settled the Valley floor at Bethany, Langmeil, Tanunda and Nuriootpa.

After experimenting with a range of crops, from flax to tobacco, the Silesians found the Mediterranean climate suited wine grapes.

Entrepreneurs with big visions built stone wineries and started making fortified “ports” and “sheries” as well as fine table wines called “claret” and “hermitage” and “burgundy”, paying homage to European tradition. Barossa became the largest wine-producing region in Australia by the turn of the century, sustaining a community of grapegrowers, winemakers, cellar hands and coopers and earning significant export income for the state of South Australia.

Through the 20th century Barossa had its booms and busts – Imperial demand crashed during both wars and in the post-war 1960s and 1970s customers wanted sweet sparkling wines such as Barossa Pearl and Cold Duck. Finally Barossa settled on what its soils and climate do best – ripening red wine grapes – and from the 1980s onwards its fame grew for its full bodied Shiraz and Cabernet, Grenache and Mataro. In the late 1990s during an international boom in demand for Australian wine, the Australian Wine and Brandy Corporation decided to define Australia’s regions along similar (but less restrictive) lines to Europe’s appellation system.

The Barossa’s winemaking geographic indication zone was formalised in 1997, comprising two regions: the warmer Barossa Valley “floor” specialising in red wine and the cooler, higher altitude Eden Valley, which focussed on fine white wines such as Riesling and Chardonnay as well as medium body reds such as Shiraz and Cabernet. Now Barossa is the most recognised name in Australian winemaking, due to its forgiving viticultural environment, its treasure-trove of century old pre-phylloxera vines and its six generations of grapegrowing and winemaking heritage.

But it has also evolved over 175 years into much more than a wine region. Old Silesian cultural food traditions continue to be celebrated, such as the fermentation of meats into sausage and wursts; salting and smoking hams and bacon; the preservation of fruits and vegetables such as pickled onions and dill cucumbers and the maintenance of age old baking traditions: sour dough breads, pretzels and streuselkuchen.

There are also European music traditions still maintained such as brass bands and men’s and women’s choirs and Barossa continues to be the epicentre Lutheran faith in Australia with more than a dozen steepled churches dotted across the valleys.

This colourful culture has attracted thousands of new settlers over subsequent generations, continuing the immigration that started in the 1840s, making Barossa a vibrant, diverse and exciting contemporary Australian community.
Viticulture – the science of growing grapes – has seemingly changed little since Biblical times. Vines are the most vigorous of plants so on the surface it might appear to the amateur that some rudimentary pruning and judicious watering, will simply yield dozens of succulent red and green bunches, ripe for the picking.

But Australia is the driest, inhabited continent on earth with the world’s oldest and most ancient geology. Understanding this finite resource that is increasingly influenced by climate change is the generational challenge of the Barossa grape-grower.

It has always been a game of resilience. When these Silesian settlers arrived in the 1840s from the northern hemisphere they were alarmed at the juxtaposition of seasons, at the harsh hot summers and the moderate winters without snow or ice, at the voracious bird life and un-named insect pests. They had to experiment with different crops – even tobacco and flax – before settling on wine grapes and then determine through trial and error the best varieties and clones.

Gradually a type of viticulture emerged in Barossa based on seasonal knowledge and climatic experience, on the understanding of altitude and soil types and wind, and this was handed down from father and mother to son and daughter.

The current generation of Barossa grape-growers are now shifting their focus from ‘what’ they are doing, to ‘how’ and ‘why’ they are doing things, sharing with consumers the most important lesson of all: ensuring generations to come have the same opportunity to benefit from the land that they did.

Resilience now is more about the sustainability of the natural environment and the perpetuation of the landscape than the broadness of one’s back or strength of one’s hands.

There is a focus from the ground up, with soil improvement a critical first step. Every grower knows if they farm a red clay or a brown earth or a yellow calcareous sand and most use mulches and composts under their vines to reduce moisture loss in summer and minimise the need for herbicide weed control.

Non-competitive native grasses once used by the indigenous tribes the Peramangk and Ngadjuri, are now sown down the mid-rows to improve water and nutrient infiltration.

Growers use the latest technology to monitor soil moisture and manage...
their finite irrigation water resource, with the goal of maximising quality and minimising yield. They are also adapting to global warming by choosing new drought tolerant grape varieties and applying organic sunscreens to prevent leaf damage.

Already growers are trialling artificial intelligence systems in water scheduling and disease control and Wi-Fi connected solar-powered “robots” that prune, spray and pick are expected to take the place of diesel tractors within several decades.

This all adds up to a cleaner and healthier viticultural environment and a sustainable landscape.

But despite all of this technology, an experienced multi-generational human touch is still needed: to smell the soil, inspect the vines, taste the sugary grapes and make that decisive collaborative call with the winemaker, when to harvest…and when to make wine.

Learn more and watch videos at barossa.com/wine/barossa-chapters.

“My philosophy is a holistic one – to ensure our created environment sits in a healthy balance with our natural landscape. I would like to see the next generation inherit a fertile and sustainable land. Using the principles of biodynamics and organics enables me to create the best environment for plant growth and since I started using these principles, I am seeing the benefits in greater expression of aromas and textures in the wines from all of our vineyards.”

Prue Henschke
Henschke Wines
Barossa Chapters

Resilience

Creating Resilient Landscapes in Barossa

This initiative is BGWA’s desire to encourage its grape-growers to take a more environmentally focussed attitude to their vineyard management.

BGWA has communicated the benefits of establishing native grasses and revegetating landholdings in terms of preparing for a changing climate, saving water, improving soil health, preventing erosion, improving biodiversity, and beautifying their properties.

The case for increasing biodiversity in Barossa’s vineyards – and in turn ‘creating more resilience’ in the face of a changing climate has been escalated by the release of Regional Development Australia Barossa Region Climate Change Adaptation Plan, which states:

- By 2030 temperatures will rise by 0.6° to 1.0°C (and by 1.5° to 2.0°C by 2070).
- Frequency and intensity of heatwaves will increase.
- Annual rainfall will decline by 2 to 5% by 2030 (and by 10 to 20% by 2070).

Viticultural practices recommended in light of this include:

- Improve irrigation management and weather forecasting.
- Manage water resources more efficiently.
- Manage extremes (heatwaves, rain, bush fire risk).
- Vine management mulch, canopy management, rootstocks, sunscreen.
Barossa Grape & Wine Association’s (BGWA) “Creating Resilient Landscapes” demonstration vineyards project, launched in 2014/15 with funding from Wine Australia, set up three vineyards in Vine Vale, Light Pass and Ebenezer to demonstrate the benefits of modern vineyard management techniques such as mid-row swards (particularly native grasses) and mulch under-vine to improve water infiltration, reduce vineyard temperatures, improve soil health and increase biodiversity. The project shows, rather than tells, growers the benefits of these techniques, combined with improved pruning and introduction of catch-wires.

In 2016/17, BGWA continued this project, with the set-up of three further vineyards in Krondorf, Gomersal and Eden Valley, to demonstrate the above techniques on a further three Barossa soil types with the aim of:

- Improved water infiltration (reduces water and pumping costs).
- Reduced vineyard temperatures, particularly night-time.
- More ability to withstand heatwaves, therefore improve yield and quality.
- Improved soil health and therefore more consistent yield (while also reducing “traditional” inputs/costs such as chemicals, fertiliser, fuel, machinery).
- Reduced tractor passes, fuel, chemical and fertiliser costs (reduces compaction and erosion, whilst increasing vineyard profitability).

Driving this initiative is BGWA’s desire to encourage its grape-growers to take a more environmentally-focussed attitude to their vineyard management.

BGWA has developed a pilot program in partnership with Natural Resources, Adelaide & Mt Lofty Ranges. The program aims to engage BGWA members to the west of Kaiserstuhl Conservation Park in the tributaries of Jacob’s Creek and Tanunda Creek (Bethany, Krondorf and Rowland Flat areas) to restore ‘stepping stones’ of native vegetation to the North Para River.

The video series, entitled Environmental Champions of the Barossa is another environmental initiative of BGWA.

Nicki Robins, BGWA Viticultural Development Officer, says being able to deliver a succinct, simple message is important.

“Our strategy of working with all our community to better prepare for a changing climate is to work from the ‘ground up’ and engage people through inspirational stories”, she said.

Funded by Natural Resources, Adelaide & Mount Lofty Ranges the video series, filmed by renowned photographer, Dragan Radocaj, features viticulturist Prue Henschke, Barossa wine grape-growers Anthony Scholz, Evan Gobell and Sam Dahlitz, Eden Hall viticulturist Dan Falkenberg, and Barossa-based SARDI principal research scientist, Dr Michael McCarthy.

The videos tell each growers’ environmental ‘story’ in a two to three minute timeframe, and are available on www.barossa.com.