

Theme: Tocal's agriculture and pastoralism

Note: Tocal's thematic history has been prepared as part of the assessment of the site's heritage significance in the 2012 (draft) conservation management plan.

Australian heritage theme: 3. Developing local, regional and national economies

NSW heritage theme: Agriculture, pastoralism

Tocal's first land grantee, James Phillips Webber, arrived in the Colony in January 1822 and was one of the first to take up land in the Lower Hunter Valley when it was opened to wide scale settlement at the end of 1821. This followed the decision to close the penal settlement at Newcastle and transfer it to Port Macquarie. In March 1822 Henry Dangar was instructed to survey the Lower Hunter area in preparation for settlement and to accommodate Webber who already occupied his land. This explains why Dangar started his district survey at Tocal, using the estate's boundaries as his base datum (Dangar, 1822).

Tocal's frontage to the navigable, tidal section of the Paterson River is a key to understanding why Webber chose to settle there. It gave him direct access to Sydney markets. The nearby deep-water port of Morpeth provided regular sailings to Sydney, and from 1832 a regular steamship service (Walsh and Archer, 2007). Webber and fellow settlers could ship their produce by boat to Morpeth and trans-ship it to Sydney in larger ships.

This maritime access offered considerable advantages in trade and amenity for Lower Hunter Settlers compared to other areas of the colony such as Bathurst. It drove the rapid, large-scale alienation of land in the Paterson Valley from 1822 as settlers received up to several thousand acres each. By 1825 most of the prime alluvial land along the lower reaches of the Paterson River has been granted to European immigrants (Perry, 1963).

Like many other established settlers, Webber purchased Crown land adjoining his grant, and by 1828 Tocal comprised 3,300 acres. With a large convict workforce, Webber produced wheat, oats, barley and maize, but his largest cash crop was tobacco. Webber ran up to 600 cattle and 3,000 sheep, and produced milk, butter and cheese.

Many of the elements of agriculture and pastoralism under Webber are still evident at Tocal. His farm land, the stone barn where tobacco was stored, blacksmith's shop, barracks and supervisor's cottage remain intact, and there are remnants of his sheepwash. The relationships between the buildings, fences and spaces are substantially as they were in 1834 and accurately reflect the form and function of early colonial agriculture.

A notable activity at Tocal under Webber was viticulture and wine making. In the 1830s Webber was acknowledged as one of the pioneers of the wine industry in the colony (Walsh, 2007, 2008), but this is largely unrecognised in modern histories. Consequently the mounds and trenches of Webber's vineyard evident today are among the oldest remnants of the Australian wine industry but are seldom accorded that significance.²

In 1834 Webber sold the whole estate to Sydney merchants Caleb and Felix Wilson. Caleb died in 1838 and Tocal Homestead was constructed in 1841 as the country residence for Felix, a city businessman and banker. Over the next few decades Tocal underwent considerable transformation. The changes mainly reflected the preferences of the new owners and lessees, but were also partially driven by the unsuitability of some of Webber's original enterprises to Tocal's humid, high rainfall coastal environment.

Wheat production was susceptible to fungal diseases such as smut and rust. Tobacco was probably phased out at Tocal because of disease and reduced market prospects. Sheep numbers were reduced as the wet climate was not ideal for wool production. These changes at Tocal are representative of wider patterns of agricultural adjustment in the colony as much cropping and grazing moved inland and pastoralism expanded west of the ranges where the climate was more suited to sheep and wool production.

In 1843 Felix Wilson leased Tocal to Charles Reynolds, and the lease between the Wilson and Reynolds families continued in an unbroken span until Frank Reynolds purchased Tocal

² Extant evidence of Australia's early wine industry is rare. A recent doctoral thesis on the history of the industry featured ruins of wine vats at Camden Park from the 1840s, a decade later than Tocal's evidence (McIntyre, 2008 p.154).

in 1907. This 64 years of continuous lease protected the estate from major changes or subdivision during this period.

Charles Reynolds, pursuing his interests and recognising that Tocal was more suited to livestock production than to cropping, changed the estate into a specialist stud breeding business. As part of this change, Tocal's river and creek flats that were previously used to produce grains and tobacco for sale, were now used to grow fodder to feed the stud animals. Reynolds had found a niche that proved to be a long-term, sustainable use of Tocal's land.

Under Charles Reynolds' management Tocal gained national renown for stud Hereford and Devon cattle and Thoroughbred horses. Using high quality imported and colonial bloodstock, Tocal stallions sired Melbourne Cup and other high profile race winners. The bloodline of the famous 20th century racehorse Gundsynd can be traced back to The Barb, a stallion that Charles Reynolds purchased in 1869 for the staggering price of 2,000 guineas. Other nationally reputed Tocal stallions included The Drummer and Goldsborough. The historical importance of Tocal bloodlines to the Australian horse racing industry should not be underestimated. In addition, Tocal stud Hereford and Devon cattle won numerous championships at the Sydney Royal Easter Show, reaching their peak of achievement in the late 1800s and early 1900s (Reynolds, 2006).

Charles Reynolds adapted the convict-era farm structures for his own use, including the addition of stables or 'loose boxes' to the western side of the 1830 stone barn. Reynolds also added new structures at Tocal, purpose built for stud breeding enterprises. These now stand alongside the convict era infrastructure and add another significant layer of agricultural and pastoral heritage to the estate.

Particularly notable among the Reynolds-era structures is the imposing barn designed by colonial architect Edmund Blacket (primarily known as a church architect), the timber bull barn and brick stables. The scale and character of these buildings reflect the large investment in capital and husbandry that accompanied top quality stud breeding. They also reflect the rewards in finance and prestige that flowed to those who reached the pinnacle of the industry. Animal wash pads, water tanks and a stallion exercise yard in close proximity to Tocal Homestead further evoke the high regard for the stud animals and the degree of attention and care they received.

The Reynolds era at Tocal is also notable for its workers and in particular the Kidd family whose contribution to Tocal is well documented (Brouwer, Meehan and Brown, 2005). John Kidd was a convict initially assigned to Tocal in 1833 who left the estate in 1838 after receiving a ticket-of-leave. In 1856, now married and holding a conditional pardon, he returned permanently to Tocal with his family to live and work. When John died in 1881 his sons John and William and their families were well established at Tocal as part of a life-long commitment to the estate by the Kidds that spanned four generations.

The Reynolds era Tocal heritage is therefore significant as the workplaces and living areas of the Kidds and others. The social strata and class divisions operating at the time is well illustrated by extant buildings such as the tearooms where workers ate meals in isolation from the owners or lessees who ate in the Homestead itself.

In 1926 Tocal was sold to the Alexander family and, although some stud Herefords were retained, the estate changed from a stud enterprise to a commercial beef farm. In 1963 the Presbyterian Church became the beneficiary of the deceased estate of CB Alexander and consequently became the owner of the Tocal property.

In 1965 the CB Alexander Presbyterian Agricultural College was opened on the Tocal property. In 1970 the College was transferred to the NSW Department of Agriculture and the Tocal land was entrusted to the CB Alexander Foundation under the *CB Alexander Foundation Act*, 1969. This arrangement continues today. The Tocal land retains all the original grants and purchases (with some minor boundary adjustments) and has been expanded by purchases from the 1960s to 1980s. Tocal now operates large commercial beef, dairy and poultry enterprises.

Tocal's layers of 19th, 20th and 21st century farm structures and equipment provide substantial evidence of major transformations that Australian agriculture and pastoralism underwent between initial establishment and the present time. Tocal's farm heritage collection

demonstrates agriculture based on horse and bullock power, and early mechanisation including one of the first tractors in the district. Other evidence of the full gamut of farm mechanism includes horse-driven machinery that powered chaff cutters and water pumps, and a 1927 generator and battery room that provided domestic and farm electricity years before Tocal was connected to the grid. The transformation from timber to wire fences, which had far reaching effects for agriculture, is well represented by numerous examples of both.

The changes often involved adaptive re-use of existing structures. For example, CB Alexander installed his power generator and bank of batteries in the brick stables previously used by the Reynolds to house stud Thoroughbred horses. Alexander also extended a portion of the 1830 stone barn to house his Rolls Royce motor cars.

In contrast, Tocal's present-day horse facilities are used for the Australian Stock Horses that are bred on the estate. These modern structures, that range from simple paddock shelters to a large indoor equestrian arena, add a 21st century layer to Tocal's colonial and 20th century horse facilities.

Other evidence of successive implementation of new technology at Tocal include the change from farmyard colonial poultry production to a modern broiler farm with a throughput of over one million chickens per year. The Tocal broiler farm was the first to use tunnel ventilated sheds in New South Wales.

Similar evidence of the progression of technological change is provided by Tocal's dairies. They comprise a colonial era dairy in the Homestead precinct where cows were hand-milked, an early 20th century walk-through dairy on Glendarra (part of Tocal), and the late 20th century, modern herringbone dairy currently in operation that produces nearly two million litres of milk per year. This dairy was one of the first in the region to introduce innovative practices such as bike-shift irrigation and environmentally sensitive effluent treatment.

Another initiative, Tocal's '40 Acre Dam', was constructed to provide practical demonstration of on-farm water storage to Hunter Valley farmers. (Pattison and Hatfield, 1971). These practices had been well accepted in the Sydney Basin through pioneering research work by the University of Sydney in the 1950s. (Geddes 1954, 1960).

Similarly, transformations in labour history are well evidenced at Tocal. Workplaces, structures and sites of convict labour stand alongside those for free colonial labour and modern agricultural and pastoral workplaces. The social structure and organisation of labour, supervision and estate ownership is also clearly evident through the diverse accommodation on the estate, ranging from basic worker residences to the stately, Georgian two-storey owner's residence.

The Tocal estate also contains evidence of competing and conflicting land use for defence purposes. During World War II, a concrete observation post (OPIT) was constructed on Tocal and part of the farm was used as an artillery practice range. Shrapnel scarred trees remain evident, and unexploded ordinance is still occasionally found, restricting current land use (Brouwer, 2009).

Since 1965 the Tocal estate has been remarkable for its commitment to farm planning and its implementation of coordinated strategies and actions to improve land management, conserve natural resources, enhance biodiversity, ameliorate past degradation and rehabilitate environmentally sensitive areas such as wetlands and riparian zones. The Tocal property is unique for its planning process that has been continuously and consistently implemented over 45 years.

This process began in 1965 with the adoption of a holistic farm plan drawn up by the NSW Soil Conservation Service. At that time it was Service policy to prepare farm plans under the Farm Planning Scheme that began in 1958 (Breckwoldt, 1988). The main thrust of the initial 1965 plan was to transform the extensive grazing layout based on 19th century husbandry practices into a paddock layout suited to a 20th century animal breeding and production enterprise based on scientific principles. The farm plan was revised in 1978 and 1991, and most recently in 2007.

Planting of introduced species of farm trees began at Tocal in 1968 and the first native trees were planted in 1978. Large-scale plantings were made on the beef section under the State Youth Employment Scheme in 1982, followed by beef and dairy plantings in 1984 (Brouwer

and Gillespie, 2007). Rehabilitation of the Bona Vista lagoon precinct began in 1980 and plantings continued there for several years (Archer and Brouwer, 2004).

In 1989 a section of the Paterson River on the Tocal dairy was fenced to exclude stock, Tocal being the first landholder in the Paterson Valley to take such an initiative. In 1990 more river bank was fenced at Glendarra, and tree plantings were undertaken on both sites (Brouwer, Bell and Archer, 1998).

In 1991 a formal Tree Management Plan was developed and Tocal's property plan was updated. In 1996 a major project was undertaken to regenerate the riparian zone along Webbers Creek near Tocal Homestead in order to restore a natural ecosystem using endemic species to regenerate the rainforest. In 1997 the Quarry Creek wetland area was rehabilitated, guided by a 1996 report (Heinrich, 1996).

In 1998 a landscape plan was commissioned for the Tocal Homestead precinct, which built on a landscape plan prepared in 1994 (Ratcliffe, 1994; Heinrich, 1998). This plan now guides planting and maintenance of the area to ensure a consistent approach that is sensitive to the heritage values and characteristics of the area.

On the Tocal farm, work has continued since the 1990s to extend the network of wildlife corridors and tree lots, and to progressively join these corridors to other areas such as the wetlands. These actions improve biodiversity and provide shelter for both farm and native animals. During this period key principles developed by the Potter Farmland Plan Project in western districts of Victoria were adopted to create a balance between habitat for native fauna and avifauna and food production for people (Campbell, 1991).

In 2007 Tocal prepared a Property Vegetation Plan (PVP) under the *Native Vegetation Act*. The PVP included a Permanent Conservation Order for an area of Tocal below the campus oval, one of the first such orders under the *Act* in New South Wales. Another recent landcare initiative was the blocking of a drain to reclaim and rehabilitate Tyeli Lagoon.

In summary, the Tocal estate continues to be a remarkable national exemplar of landcare, conservation and land management initiatives. Its integrity and uninterrupted, documented chronicle of rural land-use reflects major changes in understanding of land and property management in Australia.

Chronology:

- 1822 James Webber granted land at Tocal;
- 1822 James Webber became a foundation member of the Agricultural Society of New South Wales;
- 1827 Webber became chairman of the newly-formed Farmers Club at Paterson;
- 1830 Webber built a two storey stone barn (extant) at Tocal to store farm produce;
- 1830 Webber praised for innovative drainage of part of Tocal's wetland;
- 1830 The *Sydney Gazette* described the tobacco produced at Tocal by Webber as the best in the Colony (SG 6 March 1830);
- 1832 Tocal reported to have one of the largest vineyards in the Hunter Valley (the mounds and trenches of which are extant);
- 1833 James Webber named as one of the four pioneers of viticulture in the Colony;
- 1834 Webber sold Tocal to Caleb and Felix Wilson. Various attempts at tenant farming followed, which ultimately proved unsatisfactory;
- 1840s Underground grain silos constructed at Tocal (late 1830s or early 1840s);
- 1843 Tocal leased to Charles Reynolds (lease by Reynolds family continued to 1907);
- 1844 Charles Reynolds awarded the prize for the best colonial cheese at the inaugural Hunter Agricultural Society Show at Maitland;

- 1846 Charles Reynolds imported a reaping machine from South Australia and used it at Tocal, reportedly the first such machine in NSW (*Sydney Morning Herald*, 22 December 1846);
- 1853 Fred Ward (later known as Captain Thunderbolt) and his two brothers worked as horse-breakers at Tocal until 1855;
- 1856 Fred Ward/Captain Thunderbolt stole 15 horses from Tocal;
- 1860s The stallion 'Freetrader', winner of the Grand National Steeplechase at Aintree, England in 1856, stolen from Tocal by Captain Thunderbolt (according to local legend);
- 1867 Barn constructed at Tocal, designed by colonial architect Edmund Blacket;
- 1869 Charles Reynolds purchased the stallion 'The Barb' for 2,000 guineas;
- 1888 Tocal won Hereford Champion Cow at the Sydney Show. The Reynolds family recorded wins at the Sydney Show every year thereafter until the early 1930s;
- 1907 Tocal sold to Charles' son, Frank Reynolds;
- 1926 Tocal sold to Jean Alexander who took up residence with three siblings;
- 1930s Charles Alexander travelled to Queensland on several occasions to purchase cattle which were transported by train to Tocal to be fattened and sold;
- 1947 CB Alexander died, the last of the Alexander family at Tocal;
- 1963 Ownership of Tocal passed to the Presbyterian Church;
- 1965 A detailed farm plan prepared to guide future farm development at Tocal;
- 1965 The first planting of native trees undertaken at Tocal;
- 1970 CB Alexander Foundation established and College operated by NSW Government;
- 1969 40-acre dam constructed to trial irrigation from large on-farm storage;
- 1976 The first native regrowth area protected from livestock;
- 1980 Rehabilitation of Bona Vista lagoon precinct began;
- 1989 Tocal began to fence off riparian zones, the first farm in the Paterson Valley to do so;
- 1996 Regeneration of the Webbers Creek rainforest began;
- 1997 Rehabilitation of the Quarry Creek wetlands was undertaken;
- 1998 A landscape plan was drawn up for the Tocal Homestead precinct;
- 2007 Tocal prepared a Property Vegetation Plan (PVP) under the *Native Vegetation Act*. It included a Permanent Conservation Order for an area of Tocal, one of the first in NSW;

References

- Archer, AC. *Bona Vista 1823-1985: One Hundred and Sixty Two Years of European Settlement and Agriculture*. Paterson: CB Alexander Agricultural College, 1985.
- Archer, Cameron (recorder). "Visit by Philip Cox to Tocal Homestead - April 1996". *Tocal History Notes*, vol. 1, 1996.
- Archer, Cameron. "Social and Environmental Change as Determinants of Ecosystem Health: A Case Study of Social Ecological Systems in the Paterson valley NSW Australia". Ph.D. thesis, University of Newcastle, 2007.
- Archer, Cameron and David Brouwer. *Tocal Code of Land Use Practice*. Paterson: NSW Department of Primary Industries, 2004.
- Breckwoldt, Roland. *The Dirt Doctors: A Jubilee History of the Soil Conservation Service of NSW*. Soil Conservation Service of NSW, 1988.

- Brouwer, David. *Captain Thunderbolt—Horsebreaker to Bushranger*. Paterson: CB Alexander Foundation, 2002.
- Brouwer, David. *Who was CB Alexander?* Paterson: CB Alexander Foundation, 2007.
- Brouwer, David. *The Paterson at War*. Paterson: CB Alexander Foundation, 2009.
- Brouwer, David, Charlie Bell and Cameron Archer. *Bring Back the Rainforest—the Tocal Experience*. Paterson: NSW Agriculture, 1998.
- Brouwer, David, Esme Meehan and Lois Brown. *At Home Amongst the Stock—The Kidds of Tocal*. Paterson: CB Alexander Foundation, 2005.
- Brouwer, David and Peter Gillespie. *The Vegetation of Tocal*. Paterson: NSW Department of Primary Industries, 2007.
- Brouwer, David and Darren Bayley, Peter Gillespie and Cameron Archer. *The Climate of Tocal*. Paterson: NSW Department of Primary Industries, 2004.
- Campbell, A. *Planning for Sustainable Farming—The Potter Farmland Story*. Melbourne: Lothian Books, 1991.
- Dangar, H. *Field Notes on Townships No.17 & No.20: H365, 196, Notes on Marking the Sectional Lines of Townships, County Durham and Northumberland*. State Records NSW, 1822 & 1824.
- Geddes, H. "Rain Harvesting at Badgery's Creek". *The Agricultural Gazette* (August, 1954): 400-402.
- Geddes (1960). "The Storage and Use of Water on the Individual Holding, Farrar Oration 1960". *The Agricultural Gazette* (October, 1960): 526-545.
- Gillespie, Peter and David Brouwer. *Tocal Property Plan*. Paterson: NSW Department of Primary Industries, 2007.
- Hathway, Jo. *Guide to Tocal*. Paterson, NSW Agriculture, 2003.
- Heinrich, Anne. *Quarry Creek Wetland Rehabilitation, Tocal: Report on Wetland Habitats and their Enhancement for Native Flora and Fauna*. Paterson, NSW Agriculture, 1996.
- Heinrich, Anne. *Vegetation Development and a Management Plan for the Tocal Homestead Precinct*. By the author, 1999.
- Laffan, Jennifer. *The Soils of Tocal*. Paterson: NSW Agriculture, 2003.
- McIntyre, JA. "A 'Civilized' Drink and a 'Civilizing' Industry: Wine Growing and Cultural Imagining in Colonial New South Wales". Ph.D. thesis, University of Sydney, 2008.
- Pattison, A and A Hatfield. (1971) "The Tocal Farm Dam Hunter Valley Research Foundation". *Research Report Number 16*, 1971.
- Perry, TM. *Australia's First Frontier—The Spread of Settlement in New South Wales 1788-1829*. Melbourne: Melbourne University Press, 1963; reprint, 1965.
- Raby, Geoff. *Making Rural Australia—An Economic History of Technical and Institutional Creativity 1788-1860*. Melbourne: Oxford University Press, 1996.
- Ratcliffe, Richard. *Tocal Landscape Master Plan Report*. Canberra: by the author, 1994.
- Reynolds, Jane. *An Eye for Excellence—The Reynolds of Tocal*. Paterson: CB Alexander Foundation, 2006.
- Tocal Homestead. *Guide to Tocal*. www.tocal.com/homestead/guide/guide01.htm, 2010.
- Tocal Homestead. *History*. www.tocal.com/homestead/history/history.htm, 2010.
- Tocal Land. *Grants & Purchases*. www.tocal.com/homestead/land/land01.htm, 2010.
- Walsh, Brian. *Tocal's First European Settler—James Phillips Webber*. Paterson: CB Alexander Foundation, 1999.
- Walsh, Brian. "Heartbreak and Hope, Deference and Defiance on the Yimmang: Tocal's convicts 1822-1840". Ph.D. thesis, University of Newcastle, 2007.

Walsh, Brian. *James Phillips Webber—The Man and the Mystery*. Paterson: CB Alexander Foundation, 2008.

Walsh, Brian and Cameron Archer. *Maitland on the Hunter*. Paterson: CB Alexander Foundation, 2nd ed., 2007.

White, Judy. *Tocal—The Changing Moods of a Rural Estate*. Scone: The Seven Press, 1986.