Early vineyards and viticulture in the Sydney basin

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ABSTRACT

South Australia and the Hunter Valley rightly herald their rich wine history, production prowess and international reputations. Perhaps overlooked are the sources of this and in particular, Sydney. Others such as ports of the Spanish and Portuguese world, en route to Australia, are remembered less than perhaps they deserve to be. This talk gives an overview of the 1788 introduction of grape vines into the colony of New South Wales, their dispersal and the fluctuating fortunes of growers, struggling to gain expertise and cope with new conditions. Key examples of sites and people are highlighted, including Governors, organisations and individuals. Early growers are outlined such as Gregory Blaxland of *Brush Farm* and properties in the Hunter, Sir John Jamison of *Regentville*, James Chisholm of *Gledswood*, Sir Charles Cowper of *Wivenhoe* and Dr. Robert Townsend of *Varroville*. Key distributing nurseries are noted, such as that of Thomas Shepherd of the *Darling Nursery, Camden Park* under William Macarthur and the Sydney *Botanic Garden's* extensive collection of varieties, several hundred originally donated by James Busby. While mildew, humidity and urbanization put paid to most vineyards in the Sydney basin, it retains traces of viticulture on its western margins. This Cumberland Plain provided cuttings and plants that established successful and longer-lived industries in all other Australian states.

Due to time constraints, this is but an introduction – a skimming of grape must if you will - to a large topic that continues to inspire research and writing. The paper slows at 1840 (by which time the Hunter Valley had some 30 years' maturing) and stops at 1850. By then all southern states had established wine industries. It focuses on New South Wales and particularly on the Sydney basin and early Hunter Valley plantings. From here originated all other states' industries: New South Wales both provided initial grape vines or cuttings to all or most other colonies and provided bulk 'supply' of sufficient plants to enable commercial scale planting, through both its nurseries and botanic garden. That of course is not to say that migrants landing, say, in South Australia did not bring cuttings and plants directly from other ports. Between the First Fleet's arrival in 1788 and Busby's 1832 collection of 570 varieties of grapes being donated to the Sydney Botanic Garden (for wide distribution), a steady stream of grape varieties were brought into the colony. Some came from the *Royal Botanic Gardens, Kew*, others from France, Germany, Spain, Portugal, Madeira and the Cape of Good Hope (Seton Wilkinson (5), 5).

My focus is history, not exhaustive analysis of grape varieties – time precludes this. There is a limit to what a 25 minute paper can cover. It summarises the research and writing work of many, done over decades – I offer no new research, just synthesis. My focus is where and who – particularly the latter. Who were key people of influence and what were key early dates, both in the Sydney basin from 1798 and Hunter Valley from the 1810s and more-so, the 1820s. Some writers such as Don Seton Wilkinson are putting right the perhaps disproportionate amount of renown people such as James Busby, Gregory Blaxland or William Macarthur have assumed, pointing up others deserving more credit. Such as Governor Phillip, Philip Schaeffer, Sir John Jamison, nurseryman Thomas Shepherd, growers George Wyndham and James King in the lower Hunter.

Another focus is conservation – only a scatter of early vineyards remain in the Sydney basin today (the oldest-surviving continuous one being *Vicary's* at Luddenham, established in 1918, which closed in November 2015), the earlier ones all having disappeared to ongoing subdivision and urbanization. Similar has occurred and continues in the lower Hunter. Wyndham's *Dalwood* estate at Branxton is Australia's oldest surviving continuously-operating vineyard, albeit owned now by French giant Pernod-Ricard and run as *Wyndham Estate*. All the other early Hunter plantings have disappeared and morphed position, scale and ownership over the century since. This industry and its palpable origins and remains deserve closer scrutiny.

Origin and global spread of grapes

'The cultivation of the vine dates to ancient times; perhaps from near the Turkish / Iranian border through Anatolia to Syria and Palestine by 5000 BC or earlier. Vine seeds have been found in early Bronze Age sites at Jericho, Lachish...and Mesopotamia. The grape was introduced by Phoenician galleys west, north and to Egypt, where the first evidence of wine making in 4000 BC survives (Buck, 1969). It figures prominently in Greek, Roman literature and the Bible. The Greeks were the first to study viticulture in detail: pruning, selecting cultivars, the role of soils and how to mature wine (RHSD/Hortus, in <u>www.hortuscamden.com</u> entry on '*Vitis vinifera*').

Rome spread vines across its empire. It learnt more on improving growing standards from its colonies. Romans adapted wine growing to Italy, popularising wine as a drink of the masses (Driscoll, 1969). By the 5th century BC Italy exported very large amounts of wine. In that era the vine was established in southern Spain and southern France, later North Africa which, by the 3rd century, began to supplant Italian trade. The spread of viticulture north continued under Roman influence. By AD 600 all climatically favourable areas of France...had established vines. Within 200 years it reached Germany and southern Britain. (Its) slow progress can probably be explained by Rome's rigid laws restricting planting to cereals and essential foods (RHSD/Hortus, in <u>www.hortuscamden.com</u> entry on *'Vitis vinifera'*).

In the Dark Ages and Renaissance the church led vine planting and production for its rituals. Monastic orders refined viticulture. As Spain colonized South America, the vine was introduced ... In 1817 Hernan Cortes ordered Mexican land owners to plant vines – 1000 per year per 100 Indians on the land. Once production rivalled Spain's it was restricted but by then grapes were in Californian missions (Driscoll, 1969). In North America, early efforts in the east foundered on the ravages of *Phylloxera vasterix*, an aphid. This was absent in California... where vineyards flourished. Vigorous Californian vines became rootstocks on to which phylloxera-susceptible European vines were grafted in the late 19th century [and Australia], saving the great European vineyards from extinction. At about that time, European vines were cross-pollinated with American cultivars producing phylloxera-resistant hybrids. These are widely grown today, though some believe the grapes are of lesser quality than their European ancestors (RHSD/Hortus, in www.hortuscamden.com entry on '*Vitis vinifera*').

Ports of call to Australia for the first and subsequent fleets meant stocking up on provisions, including cuttings of vines: The islands of Madeira, Tenerife, the Cape of Good Hope and Rio de Janeiro all provisioned the first fleet in 1788 and later ones. Madeira led the wine market in the 1850s until mildew (*Oidium* sp.) and vine louse (*Phylloxera*) all but wiped out its crops, leading to port and sherry dominating the wine trade within a decade (Dingle). The grape variety 'Madeira' was imported to Australia in 1800 by George Suttor for Sir Joseph Banks, to *Sydney Botanic Garden* (McIntyre, 2012, 224).

Cape Town's *Constantia* vineyard (one vineyard in 1679 under Governor Simon van der Stel, later a whole district) was a fertile source of plants and cuttings. Cape Governor Jan van Riebeck had first planted a vineyard in 1659 and from 1688 Huguenot migrants firmly established the Cape's viticulture industry (Buck, 1969). Hendrik Cloete bought *Constantia* in 1778 and developed the famous 'Constantia' wine, a blend of 'Muscat Blanc a Petits Grains', 'Muscat of Alexandria', 'Pontac' and 'Chenin Blanc' (Steen). It is reasonable to conclude these varieties were among cuttings taken on board the first fleet. There is every chance 'Semillon' (Green grape/groendruif) was also included – by 1822 it was the most common variety planted, some 93% of Cape vines (Seton Wilkinson (5), 3).

London's Colonial Office had envisaged Sydney to be a potentially productive climate for wine grapes. Horticulturist George Suttor recalled that grape cultivation and its probable success in Australia was the focus of his meeting with the Board of Trade in London in 1798 (Morris, 2008, 47). Governor Phillip had picked up samples on the voyage, stopping at Tenerife, Rio de Janeiro and the Cape. He had grape cuttings planted in three gardens established to the east of Sydney Cove (ibid, 2008, 22; Newling (2), 1). Others were perhaps on *Garden Island*. More were soon planted at Parramatta (ibid, 2008, 22).

Lt. David Collins recorded: A portable canvas house was brought over for the Governor and erected on the east side of the Cove...Some ground having been prepared near...the plants from Rio-de-Janeiro and the Cape of Good Hope were safely brought on shore in a few days and we soon had the satisfaction of seeing the grape, the fig, the orange, the pear and the apple taking root...

His garden was noted for fruits including vines from November 1788 onwards. Vines flanked the path from close to Circular Quay through the subsistence garden planted under Henry Dodd to the Governor's front gate (ibid, 2012, 43). The garden of *Government House, Sydney* was productive for the Governor's table: military rows held food producing plants (ibid, 2008, 22).

An April 1788 convict-drawn map of the settlement shows four 'garden' areas (Fowkes). In 1789 an account in 'The Voyage of Governor Phillip to Botany Bay' published in London noted (inter alia) that (the Governor's) ...vines are improving still more rapidly (Erlich, 1987-8, 45).

Parramatta's *The Crescent* from 1788 on rich alluvial soil was the most successful Government Farm under the supervisor of convict labour (and experienced farmer), Henry Dodd. It grew wheat, corn and vines amongst other crops. Captain Watkin Tench in 1791 noted 8000 vines there, *all of which in another season are expected to bear grapes* (Seton Wilkinson (5), 4). In 1802 there were 5000 more in *The Crescent*.

Tench recorded in 1791: On the 24th January, two bunches of grapes were cut in the Governor's (3 ½ acre) garden from cuttings of vines, brought three years before from the Cape of Good Hope... (Seton Wilkinson (5), 4; ibid, 1987-8, 45).

Two months later, John Macarthur wrote from Sydney: *The Governor sent me some bunches this season as fine as any I ever tasted, and there is little doubt that in a very few years there will be plenty* (Seton Wilkinson (5), 4).

At the close of 1791 Phillip wrote to Sir Joseph Banks in England: *I had two or three bunches of grapes the year before last, and last year several good bunches: at present the old vines in my garden are loaded with very fine fruit* (ibid, 2012, 46).

Lt. Ross's Observations on Norfolk Island in December, 1790 noted: From 8 grape vines which I found in His Majesty's garden, and 2 I found in Lt. Creswell's, there are 600 cuttings planted, and all of them are in a flourishing condition; and last August, His Excellency the Governor-in-Chief sent 250 cuttings from Port Jackson, all of which are thriving equally well..., and some of the old stocks have fruit this year, nor

have I any doubt but the whole will bear fruit the next year...in a short time, they may export wine from this island (Seton Wilkinson (5), 4).

Phillip introduced (what we now call) 'Semillon' grape (then called 'green grape/groendruif, later, Shepherd's Riesling/Hunter Riesling') ...to Sydney and Parramatta (Seton Wilkinson (5), 2-3).

Philip Schaeffer, son of a German farmer and vigneron, had been superintendent of convicts, teaching them to farm (McIntyre, 2007, 9). His poor English meant he resigned and was given a grant of 140 acres at Rydalmere, near Rosehill, by Phillip. This was by far the largest such grant at the time, most being 20-60 acres (ibid, 13). On 7 December 1791 Tench reported: *His vines, 900 in number, are flourishing, and will, he supposes, bear fruit next year.*

In 1792 Phillip sent wine to England (Australia's first export, decades before the more-celebrated Gregory Blaxland (Seton Wilkinson (5), 4-5; ibid, 2012, X). Phillip requested trained vineyard workers be sent from London: none were. The two French prisoners-of-war believed to be vignerons were sent who arrived under Governor King had no relevant experience (Dunstan, 2002, 620).

It is likely that the first successful wine making (rather than just table grapes) was by Schaeffer at *The Vineyard* (McIntyre, 2012, X) in 1792 (Seton Wilkinson (2), 1). By 1795 Schaeffer's vines were bearing and Paterson advised Banks that Schaeffer had made *ninety Gallons of wine in about two years now* (ibid, 2007, 16; ibid, 2012, 48; Seton Wilkinson (5), 5). *The Vineyard* was painted by Conrad Martens in the 1830s. Tench (7/12/1791) reported that Schaeffer had an acre in vines, *900 in number, flourishing, and will, he supposes, bear fruit next year* (Seton Wilkinson (5), 4).

In 1795 Schaeffer had the first record of wine made (Lt. Paterson told Banks that Schaeffer had made 90 gallons of wine in about two years) in NSW and it is likely he that made the wine Phillip sent to Banks four years prior to this (Seton Wilkinson (5), 5; ibid, 2012, 48). Likely problems with wine production, spoiling and vine blight (a noted problem at the Government Farm nearby), Schaeffer sold *The Vineyard* in 1797 and moved to a lease of 60 acres at the Field of Mars (ibid, 2007, 16).

Phillip left in December 1792 (Seton Wilkinson (5), 5) and it fell to interested settlers to take up the challenge of viticulture. The Government encouraged this by holding an enthusiastically-run competition to produce the first drinkable wine. The Macarthurs grew grapes from 1793 at Parramatta where *Elizabeth Farm* was the main base of the family: John noted in a letter to his brother James in London: *I have built a house surrounded by a vineyard and garden of c. 3 acres* (Simon, 1966, 6). Elizabeth wrote to a friend in 1794 that she had an *excellent brick house surrounded by about 3 acres of vineyard and garden, with the vineyard full of vines and fruit trees* (Seton Wilkinson (5), 5).

Closer to Sydney, Lt. Colonel Johnston's *Annandale* farm from 1793+ (Norrie (1)) and his able convict wife, Esther Abrahams was cultivating vines for table grapes (ibid, 2008, 36).

Paterson reported to Banks that by 1800 *the cultivation of the Vine has been totally neglected... there are not so many more as there was in the year 1796* (ibid, 2007, 16).

In 1802 Francois Peron (who was on Baudin's 1800-4 expedition) wrote of the vast Parramatta garden of the King's Botanist George Caley: (a) great number of useful plants cultivated in it...interesting experiments are made....

It is pleasing today to see some interpretation in *Parramatta Park* of the straight crop lines of the Government Farm on the Parramatta River's northern river bank. These are across the river from *The Crescent* on roughly the site of George Caley's hut and garden.

John Palmer's *Woolloomooloo* farm, shown in a sketch of 1803+ had a vineyard, clearly visible in an 1838 plan and comprising 20,000 vines in 1835.

Peron believed Australia would eventually enable Britain to stop buying wine from France, Spain & Portugal altogether (Dunstan, 2002, 620). The UK was spending millions of pounds in the 18th century importing wines and had no native industry.

John Macarthur thought Australia could supply Britain with wool and wine to fill a trade blockade_with Napoleonic Wars. Norrie ((2), 1, 2) credits Macarthur as being father of the Australian wine industry, having established the colony's second private vineyard around *Elizabeth Farm* in 1793. John and his son William Macarthur both here and from 1807 at *Camden Park*, South Camden / Menangle made experimental plantings. From 1808 John's wife Elizabeth & nephew, Hannibal Macarthur managed the Sydney estates in his exile after the Rum Rebellion.

John, keen to improve his reputation to allow his return to NSW, had embarked on a tour of France and Switzerland in 1815 with his sons William & James, studying grape growing and wine making (McIntyre, 2011, 44). They returned on the *Lord Eldon* in 1817 via Madeira, where some of the world's finest wines were then made (collecting more cuttings), bringing these back to Sydney (Mills; ibid, 2008, 47; ibid, 2012, X). These included 'Burgundy' (commonly then called 'Claret grape', source of most of the colony's red wine: possibly 'Cape Pontac'; 'Millers Burgundy' ('Meunier', 'Pinot Meunier', 'Schwartzriesling'; 'French Gouais'; 'Black Portugal' or 'Oporto'; and 'Sweetwater' (all in 1817: ibid, 2012, 224). They planted two vineyards, one on a family farm on the Nepean River at Penrith (1820: Norrie (2), 2) and the other at *Camden Park* (Buck, 1969). In time William found that the London nursery entrusted with their collection had switched cutting types, not the first instance of horticultural bastardy – but this minor setback was temporary (ibid, 2008, 47).

Merchant shipper Robert Campbell collected 'Black & White Muscadelle' in the Cape of Good Hope, bringing these to Sydney in 1805 (Seton Wilkinson (5), 7; ibid, 2012, 224).

Dr. Robert Townson at *Varroville*, Campbelltown (planted after 1811: Norrie (1), Everett (2001, 4) says 1812), Schaeffer and subsequent owners of *The Vineyard*, Rose Hill and Gregory Blaxland at *Brush Farm*, Eastwood all had sizable vineyards (ibid, 2008, 47). Townson's *Varroville* was described as *the finest* orchard in the colony and a vineyard second only to Gregory Blaxland's. He had done a study tour of

Hungary including observing Tokay wine production closely (ibid, 2012, 54). Shadows at the right time of day on *Varroville's* north-western hill slopes show possible vineyard terraces on sloping land. Unfortunately much of this estate lacks any heritage listing and belongs to developers who have since gained rezoning for a new cemetery, now (2023) in construction.

North of Sydney, John Tucker Junior on his permissive occupancy farm at *Albion Farm*, Woodville (northeast of Maitland) had perhaps the first Hunter River grant (confirmed 1823) outside Newcastle and amongst other endeavours (red cedar, cattle, sheep, 60 acres cultivated) had perhaps the first vineyard in the Hunter, some 12 acres from c.1812-1820. Wine from here tasted by visiting Governor Macquarie in 1819 was deemed '*fair*'. A surviving slab barn (c.1818-22) retains an underground brick domed cellar for storing wine (Redman, c2006).

In Sydney, Blaxland's *Brush Farm*, bought off William Cox and developed from 1816 at Eastwood / Ryde had a noted vineyard. Blaxland brought cuttings from several ports including Cape Town, where he had observed grape cultivation on his emigration in 1805-6. He tested varieties for performance for wine making (ibid, 2012, 60), pulling most out due to blight susceptibility, except for Burgundy ('Pinot Noir') and Miller's Burgundy ('Pinot Meunier'). He moved his vineyard closer to the house and planted two varieties which he thought Claret grapes. These were probably 'Pinot Noir' and 'Pinot Meunier' (Seton Wilkinson (5), 6): Dunstan (2002, 621) suggests 'Shiraz'). He raised 200 new vines from seed, a common practice then (ibid, 2012, 61). Blaxland subsequently sent a barrel of wine to Macquarie in 1816 (which was declared *'little better than water'*!) and another which was deemed much better (Buttrey, 2006; Blaxland, 2013; Driscoll, 1969; Dunstan, 2002, 621).

In 1819 Gregory had published *A Statement on the Progress of the Culture of the Vine- t*he first Australian book on wine growing (ibid, 2013; ibid, 2006). He sent two papers to the Royal Society in London in 1822 for its library (Driscoll, 1969). He exported 86 gallons (two casks) of red wine in 1822 which was given a silver medal by London's Royal Society of the Arts, Manufactures and Commerce (ibid, 2012, 61). He could be said to be the first commercial wine grower in NSW. In 1826-7 he took a pipe (105 gallons) of wine to London which won the gold medal from the same body's 1828 awards (ibid, 2008; ibid, 2006). Blaxland also experimented with blight-resistant varieties. 'Black Constantia', a Muscat variety was found most suitable and 'Claret' (Shiraz?) (ibid, 2013; ibid, 2006; Dunstan, 2002, 621). *Brush Farm House* today survives and pleasingly has provision for a small grape vine display at the house's rear for interpretation purposes.

Colonial Secretary Alexander Macleay from the 1820s was cultivating 54 acres of his estate at *Elizabeth Bay*, a decade before he built his renowned house. He has been credited with introducing within a year or two of his arrival 46 of around 1800 plants in Australia's first census of exotic species, including crop species such as several grape and citrus cultivars (Gilbert, 2000). His extensive kitchen garden included a vineyard with table grapes 'quite comparable with Europe's finest'. Macleay's son George worked closely with James and William Macarthur to establish a productive vineyard at *Brownlow Hill*, Orangeville, not far from *Camden Park*. The former produced wine grapes from the 1840s including Madeira (Verdelho), red, white and black Muscat (Muscat) and Riesling (Newling (1), 2).

For the purpose of planting the young vines already rooted, holes are to be made ...at a discretionary distance of about 2 and a half or 3 feet open from each vine, and some mould or old turf must be lain round the foot of each... The vines should be carefully pruned or thinned about three thrice during the season, by clearing away all the exuberant shoots from the body, which deprive the young shots round the root of the vine, as they diminish the vigour of the main trunk... (1803, Sydney Gazette & NSW Advertiser, 5, 12 & 26 March issues, 'Method of Preparing a Piece of Land for the Purpose of forming a Vineyard' (translated from the French) (ibid, 1966, 130).

The fact that Howe on the back page of the first newspaper in Australia (*Sydney Gazette ...*, 5 March 1803) published an article on laying out a vineyard, cultivating grapes and making wine indicates strong interest among settlers. In 1810 Rev. Samuel Marsden (perhaps a better farmer than priest?) planted grapes on his land north of the Parramatta River (now *Cumberland Hospital*: Tatrai, 44). He also had grapes at his Parramatta farm pre-1796 and his *Mamre* farm at St. Marys by 1819 (Norrie (1)). Between 1800 and 1810 vines extended west to Castle Hill, (Governor Bligh's daughter) Mary Putland's *Orange Grove* at St. Marys (Penrith: Norrie (1)) and south-west to Campbelltown. From 1810-20 they crossed Western Sydney's Cumberland Plain from Eastwood/Ryde to Richmond and Windsor, Emu Plains on the Hawkesbury-Nepean River's banks (ibid, 2012, X). By 1825 vineyards were planted in the Rooty Hill area further west at *Minchinbury* (Captain William Minchin's vineyard in the 1830s (Mackinnon, 1982, 65) and Hawkesbury (ibid, 1966, 8). In the 1820s vines extended south to Camden, west to Bathurst (c.1829) and north to the Hunter Valley along the fertile flats of the Hunter, Paterson and William rivers (ibid, 2012, XI, 176, 178).

Dr James Bowman's estate *Lyndhurst* at Glebe had extensive vineyards by 1823. *Horsley Park* at Horsley Park / Fairfield had them established in 1832 (NHWGGA/Norrie (1)). Alexander Riley who owned *Raby*, Catherine Field, while better known for fine sheep, sent 'Red Hermitage' (Shiraz) to Sydney in 1830 and 'Panse' a raisin grape (Muscatel) from Marseilles and 'White Hermitage' (Norrie (2), 1).

Camden Park and grapes post-1820... (Mills)

From 1820 William was managing *Camden Park* estate & the family's Penrith vineyards. By 1827 these were making 27,000 gallons of wine with *Camden Park* contributing 20,000 of those (Driscoll, 1969; Everett, 2004, 6).

Camden Park over time had three vineyards (this, from an 1851 pamphlet for the Great Exhibition, London)

1) 1820, after acquiring familiarity of vine cultivation in France and Switzerland. Fruited in 1824 but after many experiments & experience, it was abandoned (ibid, 2011, 47) – the wine *did not answer expectation* (ibid, 2012, 59);

2) c.1830 of no. 1's best vines transferred to new site, after deep trenching its soil; c 22 acres on a natural terrace, originally alluvial (roots found 15' deep...). McIntyre (2012, 225) notes that 'Black Hamburgh' was cultivated for many years at *Camden Park* from c.1829; 3) c.1840 on a different site and soil: part of the slope of a hill, re-formed into terraces... (ibid, 2012, 59).

In 1841 William won gold medals for his wine, in the 1830s sent 34,000 cuttings to **South Australia** (NHWGGA/Norrie (1); Everett, 2001, 6). While a group of Adelaide citizens had subscribed funds to import an important collection of vine cuttings from the Cape in 1840, *Camden Park's* nursery supplied most vines for early vineyards in Victoria and South Australia during the second quarter of the 19th century (ibid, 1966, 5).

He wrote (on why don't we see our hills clothed with vines...and wine the common beverage of every class in the community?): The reply is simple and obvious; it is owing to the almost entire absence of practical acquaintance with its details. Had our Home Government fulfilled its duty, there would have been conveyed to our shores, during the prevalence of the Bounty System of Emigration, two or three hundred families of German, Swiss, or French vine dressers... The colony has been most unfortunately with respect to the sorts of vines, which, up to a comparatively recent period, were introduced... (William Macarthur, On the Culture of the Vine, Fermentation, and the Management of Wine in the Cellar, 1844: quoted in ibid, 1966, 135).

In 1844 William began selling bottled Camden wine in Sydney under his own label. He sent wine to India, but it did not travel well. He created a new vineyard, established an agent to sell plant stock including cuttings in Melbourne, and confirmed sales of altar wine to the Catholic Church in New South Wales (ibid, 2012, 155). William (titled 'Maro') wrote articles in *The Australian* in 1844 on cellar design amongst a series of others published as a book *Letters on the Culture of the Vine, Fermentation, and the Management of Wine in the Cellar* (Mills, Driscoll, 1969).

In 1845 *Camden Park* estate vintaged 10,000 gallons (Everett, 2001, 6). From then it had an overseas reputation.

55 grape varieties are described in *Hortus Camdenensis*, an illustrated online catalogue of plants grown in *Camden Park's* garden and sold through its nursery between the 1820s and 1860s. All these varieties were listed in its nursery catalogues. They included 13 table grape cv.s, 7 table + wine cultivars, and 35 wine cultivars. *Phylloxera* would wipe out its vines in 1884. The house's expansive cellars still hold bottles of the estate's wine today (Mills; Driscoll, 1969). Stone lined wine vats remaining from a huge 'wine house' south-east of the house remain, today.

John Bruchhauser's vines at Elderslie was but one of *Camden Park* estate's 7 / 28 German vine dressers... Johann Stein and three other vintners, Johann Beckhaus, Johann Jurg and Johnan Stumpf served here from 1837-50s+ (NHWGGA/Norrie (1); Everett, 2003, 4; Lewis, 11; ibid, 2011, 48; ibid, 2012, 75). In 1838 the first British-Government-sponsored migration of non-British labourers to NSW was of six vine dressers from pre-unification Germany and their families, to work in James and William Macarthur's vineyards (ibid, 2012, XI). John Macarthur can be credited with introducing the first 'Riesling' plants to Australia – although only two plants survived of 1000 rooted vines he imported from the Rhine, via England, with his second group of assisted-migrant vine-dressers. From these two plants, many cuttings supplied all Australian colonies (ibid, 2012, 69). Sir John Jamison's *Regentville* south of Penrith (he claimed to have been cultivating vines here from 1817 (Morris & Britton, 2001, 107)/1825 (ibid, 2012, 70)/1826) had dramatically terraced hills using river stones carrying 30-40,000 vines in upwards of 200 varieties (O'Brien; Norrie (3), 122-124). Jamison used skilled Madeiran workers (from 1826: Norrie (3), 122) and German ('Rhenish' or Rhine) vigneron F.A. Meyer from 1830 to lay out more (ibid, 122; ibid, 2008, 51). He grew 'White Sweet Water' grapes and received cuttings from the *Sydney Botanic Garden* (ibid, 2008, 51). This was an early example using skilled foreign labour (Driscoll, 1969). Twenty years later in 1847 over a dozen 'wine squires' received permission to import 40 German workers (vine dressers, coopers, wine makers): among them Henry Carmichael, Andrew Lang, Alfred Glennie, James Bettington, Charles Cowper, William Lawson and Henry Lindeman (ibid, 2012, 76). A sketch by artist Conrad Martens clearly shows Regentville's wine terraces. 2003 bushfires showed these survive under thickly regenerating wattle, lantana and eucalypts.

In 1834 Jamison's new cellar held 1400 gallons of wine in casks and another 400 were anticipated in that year's vintage. Busby described Jamison's wine as *very tolerable* (ibid, 2012, 70). By 1840 *Regentville* was the largest vineyard in the colony (Liston, 1981, 2) and when put up for sale in 1847 had about 7 acres of terraced vines (ibid, 2008, 52) and two and a half of field vineyards (Morris and Britton, 2001, 108). Jamison was president of the Agricultural Society (formed in 1822) and led it once united with the Horticultural Society from 1826 (Morris and Britton, 2001, 106). He was on the committee reporting to the government on the progress of Busby's vine collection in 1833-4, at which stage it was doing well (ibid). From 1823 the Society gave prizes for wine and sherry (ibid, 2012, 157).

By 1833 Meyer was offering his services to any cultivator wishing aid in pruning grapes and promoting viticulture, especially with 'Black Hamburgh', 'Oporto', 'White Gouais', 'Tinta' and 'Madeira' grapes (Driscoll, 1969).

Commissioner Bigge's 1823 audit report on Macquarie's administration was enthusiastic about grapes and olives, causing cultivation to be promoted and grow. By the end of 1827 there were many varieties of both in the *Sydney Botanic Gardens* collection, for distribution to growers (ibid, 2008, 47).

Thomas (later a Sir) Mitchell was encouraged by *Camden Park's* success by 1827 to establish a vineyard on his ten acre Darlinghurst ridge (King's Cross) estate, *Craigend*. He would create another on his country estate, *Parkhall* (now *St. Mary's Towers*) at East Bargo (Douglas Park). Over 7000 cuttings were bought from the Macarthurs (ibid, 2011, 53; ibid, 2012, 73). Madeira grape vines were planted (c.1842) and in 1844 management handed over to Frenchman, Jean d'Auvergne, the first vintage being in 1845. Mitchell travelled to Southern Spain inspecting vineyards and published an 1849 book on the subject (Everett, 2004, 6, 7; ibid, 2011, 53).

Societies and Companies: corporate entities:

Agricultural & Horticultural Society, 1822+: Australia's oldest such society was established and gained access to a site on the Parramatta River's northern bank diagonally opposite *Government House* and *The Crescent* – for an 'experimental fruit garden'. The members propagated and distributed vines & fruit varieties amongst themselves – they were all major farmers and pillars of the early colonial establishment such as Jamison, Macarthur and their gentlemen friends.

In 1824 Captain Bell on the 'Minerva' brought 13 varieties of vines, some 800 cuttings, from the Cape to the *Sydney Botanic Garden, in excellent condition*. The government intended to distribute them to interested individuals. They included 'Pontac', red and white 'Muscatel' ('White Muscat of Alexandria' and 'Muscat Blanc a Petits Grains'), 'Steen', large and ordinary 'Steen' ('Chenin Blanc'), water and red honepoten ('Muscat Gordo Blanco'/'Lexia'), 'Frontignac' ('Brown Muscat'), 'Chrystal', Persian, green grape ('Cape Colony grape / 'Semillon') and ordinary honepoten (*Sydney Gazette and NSW Advertiser*, 16/12/1824, in Seton Wilkinson (5), 6-7). McIntyre (2012, 225) notes that 'White Muscat of Alexandria' was sent by Lord Charles Somerset from the Cape to Governor Brisbane in 1825.

The Australian Agricultural Company gathered varieties of vines from the (UK) *Horticultural Society's Garden* at Chiswick, London and imported these in 1825, starting a vineyard at their Port Stephens property, at Carrington. It was not a long-lived venture but was thriving in 1849 (Driscoll, 1969). These included 'Tinta' or 'Tintilla', 'Wantage', 'Verdelho' / 'Verdelet' (Madeira grape) and 'No. 16 – Muscat Rouge (/ 'Red Muscadelle' (ibid, 2012, 225) 'Red Frontignac' was William Macarthur's description, writing under the pseudonym 'Maro', in 1844 of this grape):

- more delicate in its habit than either of the two [Muscat Gris and Muscat Noir] & rather less productive.
- Fruit, when ripened ... bright reddish brown and very highly flavoured.
- Subject to the blight.' (Mills).

English landscape designer and nurseryman, Thomas Shepherd arrived in 1827 and in 1828 established NSW's first (not counting George Suttor selling *Citrus* and other fruit trees in Sydney from c.1800) commercial nursery, the *Darling Nursery*, in today's Chippendale, adjoining Grose Farm in Sydney's inner-west. He endured drought the first two years, observing some grape vines green and lush in spite of it: others withered. Shepherd propagated this lush vine in a small vineyard (Crittenden, 1992, 67), distributing it in the 1840s in the Hunter. This proved to be 'Semillon', the now famous grape variety of the Hunter. Then it was popularly called 'Shepherd's Riesling', or 'Hunter Riesling'. The original NSW source of this grape variety was Governor Phillip in 1791 and Charles Fraser of Sydney Botanic Garden and William Macarthur of *Camden Park* also got it from *Sydney Botanic Garden*, from cuttings off the 'Minerva' which arrived in 1824 (Seton Wilkinson (5), 10; ibid, 2012, 65).

*Thomas Shepherd v 'Bacchus' on 'Blight' or mildew's cause?

"A new theory ... lately published by a person of undoubted horticultural experience, but it is a question whether his standing ... or ...observation have been such as to warrant his arriving at a conclusion, which in my opinion may be called rather hasty."

Bacchus goes on to discuss an alternative theory: "occasioned by the sun's rays upon the dew drops...The cure is of the first importance, and Mr. Shepherd having discovered southerly winds to be the cause, pursues a most consistent course...by cultivating a belt of plantation between the vineyard and the

south, (to) shelter vines from the ...winds ...keep up temperature, and a consequent constant progress of vegetation".

He entered into correspondence in *The Sydney Gazette* on the topic of viticulture and in particular the cause of blight in vines (Annable, 1999, 5). Shepherd was active in promoting a wine industry, giving public lectures on grape cultivation (ibid, 2008, 55) and supplying cuttings. Four of his lectures were published in the *Sydney Gazette* and posthumously all were published (Crittenden, 2002, 549; Seton Wilkinson (5), 8). He helped Busby with his second (1830) book (Seton Wilkinson (5), 8). The *Sydney Gazette* in 1835 on Shepherd's death printed: *To Mr Shepherd is chiefly to be ascribed the extended cultivation of the vine in this colony; which has also been greatly promoted by the zeal of Mr James Busby...of whose exertions Mr Shepherd was a warm admirer* Shepherd was, like Busby, early to commit to print, thus extending the reach and duration of practical and useful knowledge of both cultivation and manufacture of grapes and wine (Driscoll, 1969; ibid, 1992, 69-72, 132).

The only documented landscape design by Shepherd was at Darling Point: *Mount Adelaide* estate 1833-7 - a terraced vineyard he laid out for businessman, William McDonald. This tumbled down the eastern flank to Double Bay and was sketched by Georgiana Lowe of *Bronte House* (Dunstan, 2002, 550; ibid, 1999, 3; ibid, 2008, 53, 55).

While not by Shepherd, John Eyre Manning, Registrar of the Supreme Court, established a vineyard above Rushcutters Bay in 1833, later called *The Terraces* (which was what later become the *Scottish Hospital* site), which may have supplied the Wentworth family's *Vaucluse House's* cellars (Musecape, 2000; Driscoll, 1969).

James Busby: father / catalyst of the industry

In 1823 Scotsman Busby, who had studied agriculture in England and lived in Cadillac, France, over the river from famous wine districts of Sauternes, Barsac and Preignac (ibid, 2012, 63) was abreast of a House of Lords report on trade drawing attention to the demand for wine for British India. The voyage from New South Wales to India was shorter than that from Europe (ibid, 2012, 63). Busby considered New South Wales could meet India's demand for wine and wrote his 1st book on viticulture on his 5 month voyage to Sydney via the Cape (and *Constantia*) with his family (ibid, 2012, 63). By 1824 he was teaching viticulture at *Male Orphan School*, Cabramatta (now Bonnyrigg) in Sydney's south-west.

In 1824 he received a grant in the Upper Hunter, he called *Kirkton* (Birmingham, 1982, 33). He never lived there, working at Cabramatta at the *Male Orphan School* until 1827 then in Sydney until 1829. From 1828 his brother-in-law William Kelman arrived from Van Diemen's Land and took up clearing the land and running *Kirkton* (ibid, 1966, 10; Seton Wilkinson (5), 11; Birmingham, 1982, 33). Its grapes would appear to date from 1829 and their origin, the *Sydney Botanic Garden* (Seton Wilkinson (5), 11). 45 litres of *Kirkton's* 1830 vintage were distributed in London, where it was pronounced *very promising* (Birmingham, 1982, 33).

In 1825 Busby's 1st book: *Treatise on the culture of the vine/ art of making wine* was published. Due to its lofty tone and musings on esoteric points of wine making in Europe it was roundly criticised as useless to the colony's struggling growers - little practical help for growing and tending (ibid, 2012, 64).

His second book in 1830, prepared with a great deal of help from nurseryman Thomas Shepherd, was far more practical - *A Manual of Plain Directions for planting and cultivating a vineyards and for making wine in NSW* (ibid, 2012, 65).

Prior to 1830 the 'White Sweet Water' was the most grown grape in the colony (ibid, 2000, 47).

In 1831 Busby took *Male Orphan School* wine around to influential Europeans: its 1829-30 vintage was noted as '*very promising*'. Late in 1831 he made a 4-month trip around the best French & Spanish wine districts, studying their climate, soil and grape culture and collecting 678 of the finest varieties' cuttings cultivated in each for NSW. 433 were from the *Montpellier Botanic Gardens*, 110 from the *Luxembourg Gardens*, 44 from *Sion House* near Kew, London (Driscoll, 1969; Ramsden; Norrie (1); Seton Wilkinson; ibid, 2012, 66). He donated the collection to the British Government to establish an experimental garden at Sydney. A similar fate to Macarthur's collection occurred – fewer stocks were shipped than were ordered from the *Royal Nursery of the Luxembourg* in Paris. Busby's entire Spanish collection 'perished' on the voyage (ibid, 2011, 51). The remaining plants arrived and were planted in *Sydney Botanic Garden* in 1832. They were later neglected but 395 duplicates he sent to *Kirkton* survived and thrived (Driscoll, 1969). In 1832 Busby had planted at *Kirkton* a 40-acre vineyard. He distributed from there over 20,000 vine cuttings to about 50 Hunter River vignerons (ibid, 1966, 10).

One Sydney recipient of Busby's vines was businessman and banker, Alexander Brodie Spark, of *Tusculum*, Potts Point and *Tempe* estate on the Cook's River at (now) Arncliffe. By 1828 he had an overseer and gardener (Thomas Birkby) and 13 convict labourers on his 110-acre estate and by 1830 he was experimenting with grape growing there – in an enormous, fenced rectangle on flat land, a bench over the river (ibid, 2008, 68).

During 1833 Busby kept a journal of his tour through some vineyards of Spain and France, which he published the following year (Buck, 1969). His 3rd & 4th books gave useful lessons on foreign vine cultivation: *...two hundred and fifty gallons (about twelve hundred bottles) will be the average produce of an acre of vines, observing, nevertheless, that this will allow the family to consume as many grapes as they please...with a very few years, vineyards will be as common as corn fields, and the grapes so abundant, that no one will think it worthwhile to steal them... an acre of vines would yield a tolerably abundant supply of wine for a family, and a large family too, and, were part of it made of second rate quality, for two or three servants also... (James Busby, 'A Vineyard is a very desirable thing', in <i>A Manual of Plain Directions for Planting and Cultivating Vineyards and for Making Wine in New South Wales* (first published in Sydney in 1830 by the Government Printer, George Howe. For many years, this was the 'Bible' of Australian vignerons (ibid, 1966, 133).

From 1833-40 Busby introduced vines into New Zealand, to *Treaty House,* Waitangi which still exist. They weren't quite its first: in 1819 the Rev. Samuel Marsden had planted vines on his New Zealand mission station at Kerikeri (Buck, 1969). In 1838 cuttings from Busby's collection in *Sydney Botanic Garden* were sent to **Victoria**; 1839 to **South Australia**; 1840 to **Western Australia** and in 1866, **Queensland** (Buck, 1969; ibid, 2012, 66). The *Sydney Botanic Gardens* under superintendent, Charles Fraser, experimented with crop species, including vines. McIntyre (2012, 225) notes that Fraser raised 'Black Hamburgh' from seed c.1829. Busby noted in his 1830 book that Fraser preserved many grape cuttings each year for distribution to interested settlers (Seton Wilkinson (5), 9). He reputedly introduced and cultivated some 3000 varieties of grapes, trees, fruits and other valuable (vegetable productions) (ibid, 1992, 67-68).

High humidity near the coast destroyed young vine shoots & leaves ... making mildew a big problem for viticulture in Sydney. In 2007 the now *Royal Botanic Garden, Sydney* had a display of old 'Shiraz' grape vines donated from George Wyndham's estate, *Dalwood* (1830s+) at Branxton in the Hunter. These were planted alongside the Palm House in the Inner Garden in 2013 (Parker). A sign alongside claimed that Australian viticulture began here in the gardens in 1832. This was poor history, given Phillip's planting in 1788 – certainly distribution of Busby's vine collection around NSW in the 1830s from here was a major booster of availability, quality and range of varieties. Sadly this display did not thrive and has since been removed.

Coolangatta estate was the first vineyard on the NSW South Coast's Shoalhaven district, established by Sydney merchant Alexander Berry in the 1820s as part of a farming village (Irvine; ibid, 2012, 194).

Hunter Valley pioneers (other than Tucker at Albion Farm from 1812/20s) and from 1830 Busby/Kelman at Kirkton) were several prior to the 1840s and more numerous after that. James Webber of Tocal at Paterson had a 1.2-hectare vineyard (Birmingham, 1982, 33) and was one of the first. In 1832 Webber was one of ten locally growing vines - on three acres. He was inaugural president of the Hunter River Farmers' Club which promoted agriculture and viticulture (ibid, 2012, 157, 178). Other 1832 growers were William Ogilvie at Merton (using German vine dresser, 'Luther' (ibid, 2012, 74, 178), George Wyndham at Dalwood, Branxton and George Townshend at Trevallyn, Gresford (two acres each), E. Cory at Gostwyck and Alexander Park at Lewinsbrook (Birmingham, 1982, 33; ibid, 2012, 178; Seton Wilkinson (2), 1). Five others (Mr. Kelman at Kirkton, Philobert Terrier at St. Heliers, Mr. Pike at Pickering, Mr. Little at Invermain and Mr. Pilcher of Maitland) had an acre each and Alexander Warren at Brandon near Seaham had half an acre (Seton Wilkinson (2), 1; Seton Wilkinson (3); ibid, 2012, 178; Driscoll, 1969) and Captain Samuel Wright, of Bengalla (Seton Wilkinson (3), 5). Others by 1832 included Lt. William Caswell's Tanilba at Port Stephens (1830: Driscoll), St. Helens, James King's Irrawang (1832, first vintage 1836: Driscoll, 1969; Birmingham, 1982, 33), nearby William Burnett's Glenview and Wyndham's Dalwood (HLA-Envirosciences). Several estates near Gresford to the north had planted grapes, including Camyr Allyn, by 1833 (Allyn and Paterson River Valley) and Alexander Park MLC's Lewinsbrook (Driscoll, 1969).

In May 1833 the *New South Wales Magazine* named Webber as one of four pioneers of viticulture in New South Wales. The other three were Sir John Jamison at Nepean (*Regentville*), Macarthur at Camden (*Camden Park*) and Thomas Shepherd at Sydney (*Darling Nursery*).

In March 1834 the Australian described Webber's efforts as follows: "*Mr Webber's grapery at the Hunter, the finest in that part of the Colony has produced an unusual crop of fine grapes this season of*

the Oporto description; this gentleman expects next season to produce no insignificant quantity of wine from his vineyard..."

In 29 May 1834 Wyndham of *Dalwood* visited Webber at *Tocal*. Six days later Wyndham's diary recorded that he received 'Oporto' and 'Govais' cuttings from Webber. George had toured France and Spain looking at vines in 1824. He arrived in NSW in 1827, buying 2000 acres, with 20 convicts. 600 vine cuttings he received from Busby in July 1830 *were dead before I got them* (Seton Wilkinson (4), 6; Driscoll, 1969). Busby's cuttings at that time were also delivered to other Hunter recipients, including: Busby's brother-in-law William Kelman of *Kirkton*; Captain Pike of *Pickering*; George Townshend of *Trevallyn*, Gresford; Webber of *Tocal*; Col. Dumaresq of *St. Heliers*; William Ogilvie of *Merton*; Mr. Little of *Invermain*; Mt. Pilcher of Maitland, James Glennie of *Dulwich* and Frederick Hely of *Wyoming*, Gosford (Seton Wilkinson (2), 1; Seton Wilkinson (5), 10) and King of *Irrawang* (ibid, 2).

Wyndham systematically acquired cuttings from other settlers and Shepherd's *Darling Nursery* in Sydney (Seton Wilkinson (3)) having 1400 vines planted by late 1831. Associates who gave him vines included Hunter owners George Townshend, James Busby and William Kelman, Dr. James Mitchell of *Stockton*, Captain Pike, Gregory Blaxland and Rev. Marsden of *Mamre*, St. Marys, Sydney (Norrie (2), 3-4; Seton Wilkinson (2), 1). Explorer and naturalist Ludwig Leichhardt called in to *Dalwood* on his way up to Brisbane in the 1840s giving George advice on how Germans grew grapes and made wine (Hoolihan, pers. comm., 7/2015 and 21/8/2015). Wyndham's first vintage was in 1835 (Driscoll, 1969). *Dalwood* was a significant supplier of cuttings for expansion of the Australian and New Zealand grape industries in the 1860s-80s (Seton Wilkinson (4), 7). *Wyndham Estate* is now one of Australia's leading producers. It is still on its vineyard, now owned by French wine company, Pernod Ricard / *Wyndham Estate*. It is Australia's oldest continuously operating vineyard and the only one of early Hunter estates still in production (Seton Wilkinson (5), 10).



Dalwood homestead, photo Athel D'Ombrain (1901-1985), Athel D'Ombrain Photographic Archive *Dalwood house*, Branxton, George Wyndham's home, photo Tanya Hoolihan

Vine plantings in the 1830s reached NSW's Illawarra (South Coast), over the Blue Mountains at Bathurst (Newling (2) 2), mid-north coast to Port Macquarie (e.g.: Henry White's post-1836 vineyard, sold to William Stokes in 1839: ibid, 2012, 180) and Raymond Terrace (*Irrawang*) (ibid, XI, 178).

James King of *Irrawang* at Raymond Terrace first planted grapes in 1834 and played a major leading role in the Hunter River Vineyard Association's first decade. His vineyard was of realistic rather than ambitious scale and he concentrated on improving methods of growing and making wine. In 1854 he had nine acres in grapes: six an experimental vineyard. Only then, some 20 years into his viticulture, did he expand his acreage, by another nine acres. Despite testing all manner of French, Spanish and Rhine Valley varieties, soils, aspects, pruning techniques etc, he expanded using only 'Shepherd's Riesling' (now 'Semillon'), in retrospect showing great foresight – this today is one of the Hunter's greatest grape varieties. He corresponded with great German chemist and philosopher Baron von Liebig, translating some of his writing on manuring vines into an article in the *Maitland Mercury* as early as 1845 continuing these exchanges and articles until von Fiebig's death in 1857. This correspondence helped promote NSW's wine industry overseas, as did King's and William Macarthur's success with exhibiting their wines at the 1855 Paris International Exhibition (Driscoll, 1969).

In...1854, I was solicited...to send specimens of my vineyard produce...to the Paris Exhibition...the most approved specimens of NSW wines at the Exhibition had been requested for...being placed on the table in front of the Emperor...during the ceremony of closing. Sir William Macarthur's wine and my own were accordingly selected...paying a compliment to the British crown, it being the production of one of Great Britain's dependencies. Such a compliment from France, the greatest wine-growing country in the world, might well be regarded with satisfaction. (James King, of Irrawang, Hunter Valley, in 1857 booklet, Australia May Be an Extensive Wine-Growing Country': ibid, 1966, 141-2).

King also lobbied the British Government to lift import duties on foreign (i.e. NSW) wine and for increased skilled foreign vineyard worker importation, such as from Germany. While success on both counts was lacking or partial, some migration and settlement in the Hunter of German vine dressers ensued and helped bolster the fledgling industry (Driscoll, 1969).

French wine maker Philobert Terrier, invited here to teach viticulture and viniculture, made wine at *Kaludah*, Lochinvar from 1835 (EJE, 2004; Birmingham, 1982, 33; ibid, 2012, 77). He later set up his own vineyard at *St. Heliers* (Driscoll, 1969). Rev. Henry Carmichael planted *Porphyry* vineyard at Raymond Terrace in 1838. Henry Lindeman planted *Cawarra* on the Paterson River in 1840 (Jose & Carter, 1926, 626) / 1843 (ibid, 1966, 65; HLA-Envirosciences; Birmingham, 1982, 33; Newling (1), 2) with Shiraz, Riesling and Verdelho (Oliver, 1994, 58). By 1832 there were 62 acres of vines in the Hunter and by 1850, double that. When the first returns for vineyards were made in 1844, the Hunter had 262 ½ acres of NSW's total of 508. By 1850 there were over 500 acres in the Hunter alone (Driscoll, 1969).

French-Australian Jules Joubert brought out vines from the Medoc district of France (ibid, 1926, 626).

George Hobler of *Aberglasslyn*, west of Maitland made a champagne-style wine in 1844 (Seton Wilkinson (5), 13). Richard Windeyer of *Tomago* estate made his first wine in 1845, having planted 12 acres and imported a German wine dresser, and gaining permission to import seven more and one wine

cooper (NSWHD-TH&TC; ibid, 2012, 73). Windeyer's brother Archibold at *Kinross* had a longer-lasting, more important vineyard and another near Hinton was Edwin Hickey's *Osterley*. In 1837 the Hunter Valley's *Windemere* and *Luskintyre* vineyards, developed by and advertised to let by politician W.C. Wentworth in 1848, were 30 acres with 12 in full cultivation (Driscoll, 1969; Birmingham, 1982, 33; ibid, 2012, 73).

In 1847 the Hunter River Vineyard Association was formed – open to every '*reputable and intelligent winegrower in the district*' to meet and discuss improvements. Early members included King, Wyndham, Kelman, Windeyer, Andrew Lang of *Dunmore*, the Rev. John Dunmore Lang's brother, using George Schmidt '*a highly intelligent Wurtemberger*' as his manager (Driscoll, 1969; Birmingham, 1982, 33; ibid, 2012, 74, 159).

London's Great Exhibition of 1851 featured a display including three dozen bottles of red ('Black Spanish'/'Lambrusquat') and white ('Mr. Shepherd's Riesling') 1849 wine made on Mr. Carmichael's *Porphyry Point* vineyard on the William River, Seaham in the Hunter (*Maitland Mercury*, 13/11/1850, 4).

In the 1840s vines had reached south-west to Wagga Wagga, Gunning (near Canberra, by Dr. Benjamin Clayton and wife Fanny, at *Baltinglass*) and the south's Shoalhaven coast (ibid, 2012, XI, 188). In 1844 John Smith imported German vine dressers to establish his vineyard at Kyeamba. He and John Nixon of Gregadoo sold their wines on the gold fields in the 1850s (ibid, 185). The German vine dressers later moved to Albury on the Murray River, forming their own vineyards which flourished in the gold boom years of the 1850s (ibid, 176). A decade later the Murray district emerged as a major vine district, second only to the Hunter (ibid, 1981, 3).

Colonial Secretary's records in 1843 showed the Sydney Basin had some 183.6 acres of grapes. In 1845 this was 200 acres. By 1855 it was 350 acres (NHWGGA/Norrie (1)). NSW total acreage climbed slowly, with considerable fluctuations, from barely 500 acres in 1843 to over 1000 in the 1850s and 1860s, peaking at 3077 acres in 1875, falling and rising to 4500 acres in 1895 (ibid, 1981, 3).

George Suttor - horticulturist

In 1798 Suttor accompanied and supervised Joseph Banks' 18 boxes of *useful plants* including vines)' transport to the colony (he noted 13 types of vines survived the voyage: Seton Wilkinson (5), 5: McIntyre (2011, 52) notes all of the plants in the specially designed cabin died en route and Suttor had to purchase replacements at the Cape). From 1800 Suttor was growing and selling *Citrus*... in the colony. In 1835 he planted a vineyard at *Chelsea Farm*, Baulkham Hills of 2500 vines, which failed (NWEGGA). Suttor toured Rhine vineyards in 1840, studying their cultivation and wine making carefully, followed by a visit to Chateau Margaux, France for their 1842 vintage (ibid, 2011, 52). In 1843 his book '*Culture of the grape vine and the orange in Australia and New Zealand*' was published, chronicling his European tour and observations, with translations of contemporary works on wine (ibid, 2012, 72).

A map of Sydney vineyards up to 'Busby's Collection' being planted in the *Sydney Botanic Gardens* in 1833 (about the time Hunter Valley vineyards really got going) shows a good number (Norrie (3), 9). From *Mona Vale* (Robert Campbell's farm, 1814+) in the north, to *Sydney Botanic Gardens* and Sydney

Cove, Annandale farm (prior to 1808), Brush Farm in the inner west (1816), Schaeffer's The Vineyard at Rydalmere, Elizabeth Farm at Parramatta, (Third) Government Farm at Castle Hill, Chelsea Farm at Baulkham Hills, Orange Grove and Mamre at Erskine Park, Regentville (1826), the Government Farm at Emu Plains (1819) and Macarthur's farm at Penrith (1820), Cox family farms Winborne and Glenmore at Mulgoa (both 1824), Wallacia near Liverpool, the Male Orphanage, Cabramatta (1825; now Bonnyrigg), Varroville, St.Andrews (1811) and Campbellfield at Minto, both near Campbelltown, Montpellier, The Oaks (its vines planted by William Panton in 1830: Everett, 2002, 4), Camden Park (NHWGGA/Norrie (1)) and Jean Baptiste Lehamaz de Arietta's Moreton Park, Douglas Park (planted 1822 by a 'worthy and sensible man familiar with commerce and possessing a knowledge of viticulture...' (Norrie, quoted in Everett, 2003, 4), all of these south of Camden (Norrie (1)). Campbellfield was established in 1824 (Newling (1), 2) says 1818) for Dr. William Redfern, who had studied the wine industry, bought cuttings and hired Portuguese vinedressers to bring to NSW while on Madeira (ibid, 2012, 63). Redfern is recognised as the first to introduce 'Verdelho' to Australia. The Hunter Valley strain of 'Verdelho' is said to have come from here (Norrie (1); Everett, 2001, 4-7; ibid, 2011, 48)

Not on that map but north of Camden was *Gledswood*, Catherine Fields, a farm bought by James Chisholm in 1816. His son, also James, planted its vineyard c.1830 (Everett, 2003, 4). The house's cellar would store 20,000 bottles (NHWGGA/Norrie (1)). He wrote in the 1830s: *there is much about the vine that renders it an attractive pursuit* and imported German vine dresser F.Worner in 1847. Nearby neighbours Charles Hook, later Rev. Hassall at *Denbigh* and politician and grazier, Charles Cowper *at Wivenhoe* (1830s, at Cobbitty) both had vineyards (ibid, 2012, 73). In 1835 Henry Whitaker established *Orchardleigh* at East Fairfield (NHWGGA/Norrie (1)). By 1840, 2000 gallons of premium first class wine were produced and stored in the celebrated cellars under Cowper's *Wivenhoe* villa. In 1848 he sent 1000 'Hermitage' cuttings to the famous George Cox of *Winborne*, Mulgoa and *Burrundulla*, Mudgee (Everett, 2003, 4).

The Hermitage, Denistone in north-central Sydney near *Brush Farm*'s 1842+ home farm built for John and Ellen Blaxland included a vineyard. From 1875 improvements included a vineyard, a gardener's cottage and wine house...yet 1884+ saw subdivisions of the estate (NSWHD-H&G). In 1847 the Marist Fathers Catholic Order from Lyon, France bought *Longwood* at Gladesville, later renamed *The Priory*. Vines were reported to be growing well there that year (NHWGGA/Norrie (1)).

By the 1850s NSW's (and by then particularly the Hunter's) infant wine industry could face the second half century with confidence. It had weathered uncertain starts, clumsy varying experiments with varieties, locations, soils, growing techniques, shortages of skilled labour and uncertain domestic and export markets. In the 1850s NSW wines would win international recognition in Paris, London and elsewhere. More importantly, attitudes to wine growing, making and drinking had changed considerably from 1788 or 1820 – it was more widespread, more accepted and more supported including by Members of the Colonial Legislative Assembly such as Windeyer and Macarthur (Driscoll, 1969; ibid, 2012, 73).

Another Norrie map of major Sydney vineyards, from the mid-1800s to just before the establishment of current vineyards shows many more (Norrie (3), 47). Three are clustered in the northern

beaches/Pittwater. Institutions such as the Marist Fathers and *Gladesville Hospital* (1836+/'68 photo shows vineyards) are shown along with *Lyndhurst* in Glebe; *Minchinbury*, Blacktown (1859+; 1908 made champagne); *Vineyard* near Windsor (Vineyard is still a suburb name); and many south of Parramatta Road/The Great Western Highway between Parramatta, Liverpool, Camden and Penrith. *Tizzana* vineyard and winery of Dr. Fiaschi at Ebenezer on the Hawkesbury River (1885-1953, 80 hectares) is shown, which continues (revived) in production today.

By 1900 grape production for commercial wine making had been superseded by table grape production. Of 1798 acres of grapes in the County of Cumberland in 1899, only 324 were used for wine making (ibid, 1981, 3).

The offshoots towards a national industry

Western Australia's first vineyard was established in 1829-30 in Perth by Charles McFaull (Norrie (1); (2), 2; (3), 8). Norrie elsewhere says it was 1834, followed in 1837 by a Mr. Waters (Buck, 1969). McFaull brought 300 cuttings from the Cape's *Constantia* vineyards to his vineyard near Fremantle (Mackinnon, 1982, 65). *Sandalford* winery at Caversham is one of Australia's oldest-surviving. Others have dwindled: Thomas Yule, Ninian Lowis and Richmond Houghton's *Houghton*, 1836 in the Swan Valley produced raisins, its first wine not until 1859 (Ellis). In 1842 Western Australia formed Australia's first vineyard association, the W.A. Vineyard Society met and experimented with cultivars members hoped would become a model. The Hunter River Vineyard Association came five years later.

From 1834+ the first vines were grown in **Victoria** by Edward Henty at Portland, which failed (Norrie (2), 2). In 1835, John Pascoe Fawkner succeeded in Melbourne (Norrie (1)) and in 1838 William Ryrie established 12 acres at *Yering*, in the Yarra Valley (Mackinnon, 1982, 64) and got cuttings from the Macarthurs at Camden, as did John Reynell of South Australia in 1844 (Birmingham, 1982, 35). In 1838 cuttings from Busby's collection in *Sydney Botanic Garden* were sent to Victoria (Buck, 1969). By the 1850s large vineyards were being planted on the Victorian side of the Murray River around Rutherglen and along the Goulburn River (ibid, 1981, 4).

Within a decade (of 1824) vines were planted in **Tasmania**, Victoria and South Australia. The *Hobart Town Gazette* in 1824 noted settlers making raspberry and currant wine in Tasmania and by 1827 exclaiming Mr Broughton's fine vineyard at New Town, Hobart and wine '*in the imitation of champagne*' ... '*far superior*' to Mr. Blaxland's (UK) gold-medal winning wine of Sydney (Mackinnon, 1982, 64).

In 1837 South Australia's wine industry began (49 years after Sydney's). A. J. Schultz and P. Stein planted vines for the South Australian Company's Botanic Garden. John Barton Hack planted the first private vineyard that year in North Adelaide (Norrie (1); (2), 2). A. H. Davis planted cuttings from Busby's collection on his farm outside Adelaide in 1838-40. Dr. Christopher Penfold established his Magill vineyard in 1844 (ibid, 1981, 4).

The industry started in Queensland in 1866 (Norrie ((2), 2) says 1824, but mainly after 1848) (Buck, 1969).

In 1843 the first partially elected Legislative Council made a series of laws encouraging wine production and consumption and the first official record-keeping of grape plantings and wine making occurred (ibid, 2012, XI).

In that year, its first of publication, the twice-weekly newspaper the *Maitland Mercury* ran over a dozen articles, letters or tutorials on wine growing, making and quality. A March 1843 Hunter River Society dinner reported there had served wines made by Kelman, King and William Ogilvie. The newspaper intoned: *When the vineyards have acquired age, and the gentlemen engaged in the manufacture have become more conversant with an art that has taken hundreds of years to bring it to perfection in Europe, there can be no doubt that wine will form a considerable article of export from the colony* (Driscoll, 1969). That Society reconstituted itself as the Hunter River Agricultural Society in 1844 and in 1847 as the Hunter River Vineyard Association, Australia's first such solely dedicated to advancing viticultural standards (Driscoll, 1969).

In the 1850s vines reached Mudgee, Yass, Inverell, Armidale and Tamworth (ibid, XI, 191). McIntyre notes that the Cox's at Mudgee may have planted vines near Mudgee from the 1820s (ibid, 2012, 180).

In London's 1851 Great (Crystal Palace) Exhibition, the first of an array of international 'expos', a small quantity of NSW wine was exhibited to some notice (ibid, 2012, XI).

Phylloxera is and does?

This is a vine mite / louse (*Phylloxera vasterix*) which attacks root systems, 'starving' plants from water. It caused a worldwide scourge which decimated Europe's vineyards. The louse first hit Geelong in the late 1870s, spreading into Victoria & NSW. It wiped out much of Victoria's vineyards (ibid, 1966, 4; Dunstan, 2002, 621). Sydney vineyards were hit from the 1880s. The response was rapid introduction of quarantine measures and ruthless vine grubbing out.

Many 'new world' vine species proved resistant to phylloxera and survived. Resistant grape root stocks /species were grafted as rootstocks and inter-bred to foster phylloxera-resistance.

A heritage unappreciated today?

In 2015 the Sydney district still sported some 6 vineyards. *Vicary's vineyard*, Luddenham: 1918 vines, 1923 first vintage (on a John Blaxland grant of 1813, the name Luddenham being Blaxland's home village in England) until recently was the oldest continuous vineyard in Western Sydney. Thanks to Badgery's Creek (Sydney's second international) airport getting federal government approval, widening of the Northern Road and urbanisation have sealed its future as sadly it closed in November 2015 (Drinkwater, 2).

Dalwood at Branxton appears to be Australia's oldest continuous vineyard, from the 1830s until today.

Australia's wine industry exports earn \$2.5b/year, rum is now far less common than wine and NSW is increasingly promoting its own wines to the domestic market – not just the Hunter but other districts and regions.

Vineyard landscapes are beginning to attract serious heritage attention internationally as both heritage items and as cultural tradition. They are also attracting attention as big business, a crop in its own right and for their value as tourism destinations. In July 2015 UNESCO's World Heritage Committee listed Burgundy & Champagne - terroir & vineyard landscapes in France on the World Heritage List as two evolving cultural landscapes, adding to the France's already World Heritage-listed vineyard area.

This is quite a recovery from the 1850s devastation of Europe's vineyards by mildew.

In 1855: 'The fate of ... vineyards may be regarded as sealed, for the present. The ruin of Grapes in Portugal, France, Italy, Germany, and the Balearic Islands, appears ... so extensive that the price of wine must rise considerably...Madeira is in the same predicament ... mildew has begun to show itself in Sicily ...in the same state as in France. How far Spain is exempt we are as yet uninformed...mildew prevailed in Grenada last year...

Under these circumstances it becomes a subject of great interest to ascertain whether any of our colonies are likely, either to fill the void ... by exporting wine, or to relieve the market by the production of wine for their own consumption...The wines grown in NSW are gradually displacing the imported, particularly among families not resident in the towns. If their use be once adopted, the majority of persons discontinue the consumption of imported wines... alleging that they find those of home growth more wholesome and exhilarating. (The Gardeners' Chronicle of Saturday, November 25th, 1854. It includes a review of 7 wines sent from Camden Park by William Macarthur](www.hortuscamden.com)

So will we one day see the Hunter Valley or South Australia's Mount Lofty Ranges, including the McLaren Vale and Barossa and Clare Valleys as potential National Heritage Listing or World Heritage List items? Or will we see other vineyards listed as local or state heritage items? I certainly hope so. We have nothing to shy away from in world terms. These are continuous evolving cultural landscapes, carrying the second wave of Australian viticulture along with other mixed farming and cropping, into its second century. Why ever not? Cherishing this old and successful industry and securing its future will do nothing but confer rural stability, employment, tourism and cultural pride for generations to come.

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