

Silver Banksia, Sweet Bursaria and Drooping Sheoak on the basalt plains and junctions with other land systems

Rod Bird, February 2018

ORIGINAL DISTRIBUTION

There are many early reports of the occurrence of *Banksia marginata*, *Bursaria spinosa* and *Allocasuarina verticillata* on the plains of SW Victoria. Several accounts are presented below:

George Augustus Robinson (1841-1843):

Robinson commented often about 'stunted *Banksia*' that he saw at many areas on the plains near Hamilton, Peshurst and further south and east. The main sources are the publications listed here.

- G. Presland (1977) Records of the Victorian Archaeological Society No. 6 *Journals of George Augustus Robinson March-May 1841*
- G Pressland (1980) Records of the Victorian Archaeological Society No. 11 *Journals of G.A. Robinson May to August 1841*
- Ian D. Clark 1988 Monash Publications in Geography No.34 *The Port Phillip Journals of George Augustus Robinson 8March-7April and 18March-29April 1843.*

Examples where Robison mentioned banksia are given below:

- 7 May 1841 – 'Took a route...to Forlonge's station [Mt Rouse to Lake Linlithgow and Grange Burn]...through a beautiful undulating country covered with dwarf banksias, gums, cherry tree and well grassed...the vast downs to the NW and NE thinly studded with dwarf trees [banksia]....' (Presland 1977 No. 6)
- 30 June 1841– [describing land between the Grange and Mt Abrupt] – *open downs thinly studded with lightwood, banksia, cherry tree and well grassed*' (Presland 1977 No. 6).
- 30 June 1841– [from Dairy Station near Branxholme to Wannon] – 'In my way from Arren.doo.rong... came upon extensive open downs on the banks of the Grange Burn. The land was undulating and thinly covered with dwarf trees, the banksia, eucalyptus and lightwood [Blackwood] prevailed and cherry also...' (Presland 1980, No.11)
- May 1841 – [meeting Aborigines at 'The Great Swamp' (Buckley Swamp) near Mt Napier] – 'It was an interesting sight to see all these people [Tappoc Conedeet clan] grouped around me, under the umbrageous branches of 2 fine banksia...' (Presland 1977 No. 6).
- March 1842 – Hunter's [a few km south of Mt Napier] to Port fairy – *the country consisted of open forest: well grassed, trees stunted banksia – which prevailed – stunted gum with mixture of cherry tree & mannar & shee oak*' (ID Clark 1988).
- April 1843 – Banksia called *Weerrite* by the natives of *Calorer*. [Mt Rouse]. The flower cones sucked or soaked in water and mixed with gum to make a sweet drink. "From *Calorer* came to *Burchell's* ['The Gums']...proceeded to *Gibb's Hopkins* ['Bolac Plains'] 'the country was plains with dwarf banksia. This species is low and thin and is fast decaying or being blown by rain and will ere long be like other portions, treeless' (ID Clark 1988).

Surveyor Tyers (1839) 5 March:

- 'Between Mounts Shadwell and Rouse...prevailing timber consists of banksiae, casuarina, eucalyptus, exocarpos cupressiformis [Cherry Ballart] and lightwood'.
- 'Between the Grange Burn and Portland Bay are thick forests of eucalypti, casuarinae strictae...and here and there a myrtus australis [*Bursaria spinosa*] ...'

Hamilton Spectator (1886) 26 Nov:

- 'Basset estate...Branxholme...the whole area was heavily timbered with gum and honeysuckle [Banksia] with a large proportion of splendidly grown wattle [*A. mearnsii*] growing on the river slopes...for every wattle tree they stripped they should ring an adjacent gum or honeysuckle...falling the honeysuckles proved too expensive and eventually ringing was adopted...the honeysuckle on this patch stood as thick as they could grow, and visitors to the station...would hardly credit that this was ever the case'.
- 'Having a very clear recollection of the property [visited 16 years ago]...I was not prepared for the transformation...the forests have almost disappeared...whilst the honeysuckles have vanished, root and branch'.

The Australasian (25 April 1903):

- Bruni (GA Browne – a journalist who wrote of farming) in this article on the ‘Hamilton District’ described the land at Muddy Creek and Thompson’s *Monivae Estate* as ‘lightly timbered country where of old I recollect a thick forest, mostly composed of honeysuckle trees’. Before reaching the Mt Napier stony rises and the western side of Buckley Swamp he passed through Robertson’s *Murroa Estate*: ‘this country was originally covered with a dense growth of honeysuckles, of which scarcely one remains’. He continued ‘The change in this part of Australia is astonishing to one who knew it in the squatting days. Fully three-fourths of the timber has disappeared... the country is becoming so open that ere long the landholders will have to set about establishing shelter plantations’.

Edward and Fortescue Arthur (c. 1844) (report transcribed in 1975 at Sullivans Cove, Hobart)

A Journal of events from Melbourne, Port Phillip, to Mount Schank, undertaken in 1843 with a flock of 4000 sheep. ‘The country round Mount Rouse was the finest we had seen; it was formerly an extensive cattle station....The soil is excessively fine, and forest of *Banksia*, *Casurina*, &c, &c, and light wood, surrounds it for some miles, thus giving the aborigines plenty of ground to hunt over’.

Thomas Mitchell (1836)

- An engraving of a scene at the summit of Mt Napier indicates presence of sheoak.

John Anderson, Willaura farmer, Feb 2002 (comments by John at a CMA Groundwater Systems tour):

- An 1870s photo of the landscape between Mt Stavely and the Grampians shows an extensive woodland with sheoaks singly and in groups of 2-6 trees spaced an average of perhaps 20 m apart. The trees occurred right across the landscape to the lakes. There were some dead trees and logs and some stumps, cut off at about 2 foot high. No regeneration is evident and there did not appear to be any eucalypts. (this photo was retrieved from a pile of rubbish when offices at the Ararat Shire were cleaned out a few years ago).

CURRENT STANDS OF SWEET BURSARIA, SILVER BANKSIA & DROOPING SHEOAK

Bursaria spinosa

- Hensley Park Rd and adjacent paddocks about 4 km from Hamilton
- Picnic Rd at Tarrington,
- Land adjacent to Old Lutheran Cemetery and RMIT on Chatsworth Rd in Hamilton,
- Banks on the north shore of Lake Linlithgow (off North Lakes Rd),
- Banks of the Wannon River at various places
- Mount Napier State Park (Cole Track is a convenient site)
- Wannon Falls Scenic Reserve (planted site – see below).
- Kanawalla Rail Res (planted site – see below)
- PVI (Dept Agric) – Dam area west of buildings on entry lane (planted site see below)
- Old Reservoir in the Hamilton Community Parkland

The Hensley Park Rd source is abundant but mainly in private land adjacent to the road (north side, about 1 km from the last houses on the edge of town).

Lake Linlithgow. In 1990, 190 seedlings from Hamilton Grange Burn were planted on the east bank, starting at the southern edge of trees planted in 1975, about 80 m south of Linlithgow Lane.

From 2003 there was extensive planting by HFNC of *Bursaria* at Lake Linlithgow. In 2003, 600 seedlings were grown from the shrubs on the banks of the north shore; of those 370 were planted by HFNC on the high bank section west of the inlet on North Lake Rd.



Kanawalla Rail Flora Reserve. *Bursaria* was planted by HFNC in the Kanawalla Reserve between McFarlane’s Rd and Forts Rd in 2006 (74 seedlings) and 2007 (8 plants) from Lake Linlithgow.

Wannon Falls Scenic Reserve. Sweet Bursaria was planted in 1999 by HFNC at the old pine site adjacent to Morgiana Rd and the Thomas Clark viewing area – 200 plants from local Wannon River upstream from old Wannon Bridge.

PVI on Mt Napier Rd. Seven clumps of Sweet Bursaria, each containing about 12 trees were planted in 2000 on a tough clay bank on the dam site at PVI. Approximately 50% survived. The seed came from the Wannon River upstream from the old Wannon Bridge.

Silver Banksia

- Yatchaw Railway Reserve (Twombys Bridge Rd) – as of 18 Feb 2018 there are 72 trees alive in 2 patches (11 in a group 0.6 km from Research Station Rd and 61 in a group starting 0.7 km further east) but only 10-20 are large or old trees (most of the others were planted by HFNC and Liz Fenton from 1982-2000 from seeds collected on site). A few of the old trees alive in 1982 have died. In 1985 HFNC persuaded Dundas Shire to erect a Roadside Preservation Area sign at this site (see recent photo). More trees of this source need to be established on the bare parts of this railway-road reserve and the old pines need to be cut down.
- Railway Res south of Mt Pierepoint – about 36 live and 13 recently dead trees in 2 spots on the disused rail reserve about 1-2 km E from Mt Napier Rd crossing at Muddy Creek. Some trees 10-12 m tall (incl. one recently wind-thrown) and some 0.5-0.7 m diam. at 0.5 m above ground. Most are growing close by old drains along the sides of the line. Like Yatchaw this is basaltic clay soil, waterlogged in winter. The site is about 3.5 km from the Yatchaw site and both sources probably comprise one population. Some planting on this section of the rail reserve is needed to offset the loss of aged and wind-thrown trees. Photos are shown below.
- Purdeet Rail Reserve siding south of Peshurst – a dozen or more trees
- Hawkesdale Rail Reserve north of town – several hundred trees over several kms (see photos)
- Hamilton-Portland rail line, east of Portland road crossing (a few may still be surviving)
- Old Reservoir in Hamilton Community Parklands – a few trees present but little or no seed
- Wannon Flora Res (not a basalt plains site) – a few dozen trees present
- Cavendish (Henty Highway, south of the town) – a dozen or more trees but not basalt plain
- Nigretta Flora Res (upstream end on north side – not basalt plains) – a small grove
- Wannon River upstream from Four Posts (east bank) – extensive groves on slope
- Strathkellar Rd near Glenelg Highway intersection – sand sheet over basalt
- Lake Linlithgow (planted sites – see below)
- PVI (Dept Agric) – Dam area west of buildings on entry lane (planted site see below)
- ‘Brie Brie’ 100 ha Scrubby Hill, sandy, Glenthompson area (check with Ted or Jane Mann)

Kanawalla Rail Reserve. Silver Banksia was planted by HFNC in the disused reserve between McFarlane’s Rd and Forts Rd in 2006 (50 seedlings from Yatchaw and 22 from Hawkesdale). In 2007 a further 77 banksia were planted (about equal numbers from Yatchaw and Hawkesdale).

Lake Linlithgow.

In 1975, 20 banksia from Wail Nursery (source unknown) were planted among other species on a 80 m stretch of the east bank of Lake Linlithgow, opposite Linlithgow Lane and running south. A few survived – any there now are from that source. Some pines, cypress and Sugar Gum were planted at The Point and on the SW corner from 1875-1940, but the HFNC planting was the first around the lake.

In 1977, 13 plants from ‘local seed’ (identity now unknown) were also planted on the east bank, immediately south of the older block of trees and extended about 70 m along the site.

In 1991, 80 Silver Banksias from Yatchaw seed were planted by HFNC on the east bank of Lake Linlithgow, extending about 300 further south of the previous plantings.

In 2003, 150 seedlings from Yatchaw were planted by HFNC on the high and wide bank west of the inlet on North Lake Rd and extending to where the road takes a sharp turn and the reserve narrows to the SW, no longer adjacent to the road. In 2004, 50 trees from Yatchaw were also planted on that site.

In 2005, 25 trees from Yatchaw were planted on the west bank of Linlithgow, on the south side of the short access lane off West Lake Rd, and extending perhaps 100 m along the bank to the south-east.

PV also planted 1290 Silver Banksia from Yatchaw around Lake Linlithgow (Liz Fenton supplier):

- 27.10.2003 *B. marginata* Yatchaw 350 seedlings
- 09.09.2004 *B. marginata* Yatchaw 250 seedlings
- 26.10.2004 *B. marginata* Yatchaw 200 seedlings
- 22.05.2005 *B. marginata* Yatchaw 440 seedlings
- 08.10.2005 *B. marginata* Yatchaw 50 seedlings

Lake Kennedy. PV planted Silver Banksia on the bank of this lake and that may have included some of the plants supplied by Liz Fenton (see above) but another source would have been used for any planting in 2001 or 2002 (PV obtained plants from ‘Arborline’, Hamilton, and that nursery was aware of the requirement to supply local provenance and Keith Cumming knew of the Yatchaw source).

PVI Dam off Mt Napier Rd. Silver Banksia from Yatchaw was planted in 2003 in several clumps at the PVI dam site (adjacent to the entry driveway).

A note on collection of banksia seed: Yellow-tailed Black-cockatoos will be active in the trees from early November until all cones have been chewed, usually by late January when the seed should be ripe. Very few cones will be left on the trees for you to harvest. The practical way to collect a quantity of seed is to harvest the cones from the ground – but the seed will shed into the grass if the cones are left until February. So, do the collection in mid-January. A good deal of this seed will not be mature, some cones having been ‘picked’ early by the cockies when too green. I believe an indication of viability is the presence of a white tip to the seed.

Another way to collect a limited amount of seed is to adopt Bill Weatherley’s approach and encase the cones on the trees in a fine mesh bag that will deter the cockies. The mesh needs to be such that it will catch any seed shed from the capsules, which will happen if you do not get to the site before February.



Feb. 2018 – sign erected in 1985 on the Silver Banksia site at Twombys Bridge Rd, Yatchaw



Feb. 1982 – Silver Banksia at Twombys Bridge Rd, Yatchaw. The first tree, at least, has gone.



Nov. 2000 – Silver Banksia at Yatchaw



Feb. 1982 – Old Silver Banksia at Yatchaw



Jan. 2017 – Most westerly Silver Banksia at Pierepoint



Jan. 2017 – Most easterly Silver Banksias at Pierepoint



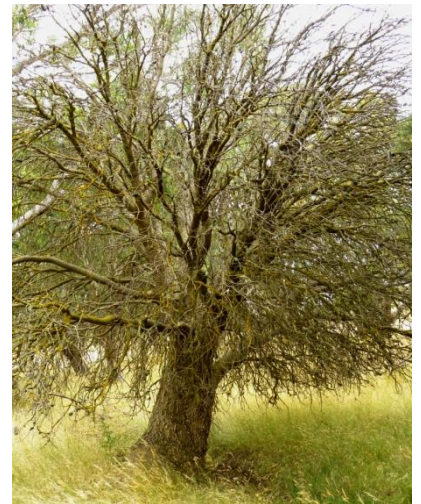
Jan. 2017 – Silver Banksia at Pierepoint-Muddy Ck.



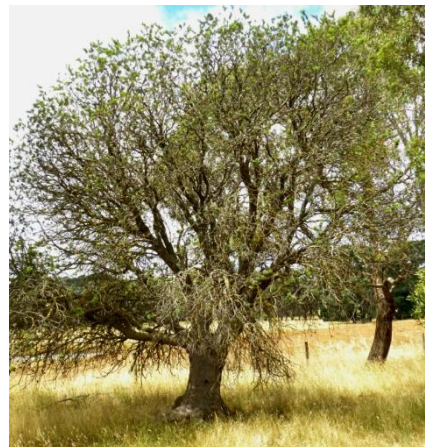
Jan. 2017 – Wind-thrown Silver Banksia at Pierepoint



Jan. 2017 – Healthy Silver Banksias at Pierepoint



Jan. 2017 – Silver Banksias at Pierepoint in decline





Apr. 2013 – Silver Banksias furthest from Hawkesdale



Apr. 2013 – Silver Banksias nearest Hawkesdale



Dropping Sheoak

- Wannan Flora Res – north edge (not on basalt plains)
- Nigretta Falls Scenic Reserve – high bank above falls (not on basalt plains)
- Four Posts Streamside Reserve (not on basalt plains)
- Hamilton Old Reservoir in Hamilton Community Parkland – a large, old stand
- Isolated trees in Tarrington area
- Summit of Mt Eccles (a few straggly trees still exist there)
- Tarrington area – a few trees at various place along roads
- Muddy Ck-Railway Res S of Mt Pierepoint – a few amongst Silver Banksia on this old disused rail reserve
- Glenelg Highway west from Hamilton, at intersection with Chadderton Rd
- Lake Linlithgow (extensive planted sites –see below)
- Lake Kennedy (planted by John Harris, PV, from 2001)
- Kanawalla Rail Reserve (planted site – see below)
- PVI (Dept Agric) – dam area west of buildings on entry lane (planted site see below)

Wannon Falls Scenic Reserve. From 1994 to 1998, 160 sheoak grown from seed collected from the Wannon Flora Res were planted on the Wannon Falls Scenic Res, on an old pine plantation site adjacent to Morgiana Rd and the Thomas Clark viewing area.

Kanawalla Rail Flora Reserve. Drooping Sheoak were planted by HFNC in the disused railway reserve between McFarlanes Rd and Forts Rd. in 2006, 142 plants (100 from Nth Hamilton Rail Reserve & 42 from Old Reservoir). In 2007, 87 trees were planted (Nth Hamilton Rail Res. source)

Lake Linlithgow

In 1975, 20 trees from Wail were planted on east side, opp. Linlithgow Lane and some survived. The source of that seed was stated to be 'Wannon area'.

In 1977, 13 plants from 'local seed' (precise location now unknown) were also planted there, adjacent on the south side.

In 1990, 100 Drooping Sheoak from 'seed collected locally' were planted by HFNC on the east bank of Lake Linlithgow, extending the planted area south along the lake's bank.

In 2004, 160 sheoaks from a mixed collection from 4 trees around Tarrington were planted by HFNC on the North Lakes Rd site. In 2005 another 80 trees from the same source were planted there.

In 2004, 25 trees from the Tarrington source were planted on the west side of Linlithgow (adjacent on the south side to the access lane off West Lake Rd).

Lake Kennedy. In 2001 and possibly later, PV planted sheoaks (source unknown but supplied by Keith Cumming of 'Arborline', Hamilton), among other species on the banks of the lake.-

Glenelg Highway. Roadside planting of sheoak among 20 clumps of trees on the Glenelg Highway from Hamilton to Howlett Rd east of Wickliffe derive from planting in 1993 by HFNC. The seed source was Wickliffe. In all, 184 sheoak were planted.

PVI dam site. Drooping Sheoak seedlings were planted in clumps at PVI dam site in 2001. The seed was collected from the remnant stand at the Old Reservoir, Hamilton.



Feb. 2018 – Drooping Sheoak at the Old Reservoir, Hamilton