Great Botanical Adventures
Mission
The Australian Garden History Society will be the leader in concern for and conservation of significant cultural landscapes and historic gardens through committed, relevant and sustainable action.

Contents

Viewpoint: Recognising our significant trees 4
Mary Ellis puts the case for recording and registering our trees

The Influence of Robert Brown on Western Australian Botany 5
Greg Keighery and Neil Gibson pay tribute to the importance of the Flinders Expedition and the work of its illustrious botanist

2001: Celebrating a Visit by ‘scientific gentlemen’ 9
Janette Gathe describes celebrations marking the bicentenary of the Flinders Expedition

Robert Brown at Swan Bay 10
Peter Munster writes of Robert Brown’s botanising on the Bellarine Peninsula in Victoria

In the Footsteps of Robert Brown 11
Douglas Benson and Jocelyn Howell follow Brown’s track into the Hawkesbury and Grose Valleys

George Caley – Brown’s Collecting Partner 15
Joan Webb tells of the friendship and professional association of Australia’s early botanical collectors

The Mysterious Mr Shelley in Adelaide 17
David Jones completes the story of Max Shelley

Alister Clark, his Roses and their Names 18
Nina Crone recalls the man who loved roses and horse-racing

For the Bookshelf 20
Vale: David John Edward Whibley 22

Items of Interest • Mailbox 23

Diary Dates 24
Throughout Australia over the past year, hundreds of people have celebrated the remarkable voyage of Matthew Flinders as he mapped the coast of New Holland in 1801-1802. This issue of Australian Garden History focuses on the work of the ‘scientific gentlemen’ of the expedition, notably Robert Brown, reminding us that there is a history to systematic botany.

The anniversary has occasioned many publications catering for a range of readers, and a web-site showing us the valuable collection of Flindersiana held in the Mitchell Library. There have also been seminars, conferences and exhibitions in cities and towns, in schools, museums and visitor centres around the country.

We should remember too, the less fortunate Nicolas Baudin and his ‘scientific gentlemen’ – Peron, Petit and Lesueur - in the Géographe and the Naturaliste. They suffered appalling hardship and privation as France vied with England to establish a claim to part of the uncharted southern continent. That story is sensitively told and superbly illustrated in Terre Napoléon: Australia through French Eyes 1800-1804.

The Australian Broadcasting Corporation offered a comparative study of the two expeditions in the television program ‘The Navigators’ that graphically showed the strength of the English expedition in terms of organisation, navigation, and concern for the health and welfare of crew. The challenges facing both Flinders and Baudin were considerable and the contribution of the French in furthering scientific knowledge was not insignificant.

But for botanists and garden historians the work of Robert Brown, Ferdinand Bauer, William Westall and Peter Good holds prime interest. It introduced another treasure trove of exotic species to European glasshouses, gardens and herbaria.

Nina Crone

A study of significant trees helps bring a sense of proportion and perspective to our endeavours as gardeners, farmers and town planners. We have native trees that are centuries older than our first attempts at agriculture. We have planted species that grow to enormous size and age in their native environments and are still relative infants here, we have preserved species that have been overcome by disease in other parts of the world and we have introduced many new species to horticulture.

But we have also introduced trees that have become weeds. With trees that will long outlive us, our mistakes will have to be rectified by future generations, remembering that they will also benefit greatly from well-considered preservation of our native bush and from knowledgeably planted parks and gardens.

In the rural landscape of South Gippsland trees are a delineating feature, on roadsides and in remnants of the bush. Less than 15% of the native forest that once covered the area, remains. As native trees were cleared for cattle runs, mining props and railway sleepers during the latter half of the 1800s, exotic species were introduced for shelter, fruit, timber and ornament.

Three men had a great deal of influence in the early history of the South Gippsland Shire. Baron Ferdinand von Mueller, director of the Botanic Gardens in Melbourne, and Henry Borrow and Francis Moss, who started nurseries north of Leongatha in 1888. Mueller introduced conifers throughout the state of Victoria in acclimatisation studies. Borrow and Moss established nurseries at Woreen and Berrys Creek respectively, introducing a huge selection of fruit tree varieties, numerous species of oaks and elms and other deciduous trees and some conifers including the redwoods of California.

After the First World War, Avenues of Honour were planted in almost every town in the shire. The popular species for these avenues were elms, occasionally oaks and, in the case of Strzelecki, Monterey Cypresses. Australian species were also grown in some instances – Southern Mahogany in Toora and Flowering Gums in Meeniyan. After the Second World War, Italian Cypress Pines and other conifers were planted in Memorial Gardens.

In 1981 the National Trust established a Register of Significant Tree for the State of Victoria. The purpose was to protect significant trees and create awareness of their contribution to the aesthetic, cultural and historic fabric of the State. There are seven trees in the Shire of South Gippsland included on the State Register. Eighteen years later, in 1999, the Shire Council appointed the South Gippsland Conservation Society to develop a local Significant Tree Register to provide residents and visitors with information – why certain trees are significant, where they can be found, a little of their horticultural history and how to identify them.

To promote community awareness of significant trees, a grant from the Community Support Fund Local History Grants Program has subsidised the printing of a book to complement the Register. In his Foreword John Hawker, horticulturist with Heritage Victoria writes:

This survey . . . is a valuable contribution to the knowledge of significant trees in Victoria. It has brought awareness of a number of Avenues of Honour that have been forgotten and reduced to only a few original trees and sometimes poorly managed. The survey includes exotic, Australian and remnant trees, including the mighty Mountain Ash, a rare Shining Peppermint, important palm plantings and the outstanding collection of exotic trees at Moss vale Park . . . It is important that the community continually works towards the care of these valuable and significant trees.¹

¹ Significant Trees of South Gippsland is available from the South Gippsland Conservation Society or the Bunurong Environment Centre, The Esplanade, Inverloch, Victoria 3996 for $20.

Mary Ellis gained her Ph.D from Melbourne University for work on Poa annua. This was followed by further work on Lotus corniculatus at the University of Hull. Now retired she is a member of the South Gippsland Conservation Society and the National Trust (Victoria). She also serves on the Wilsons Promontory Advisory Group, the South Gippsland Municipal Fire Prevention Committee and the Great Southern Rail Trail Committee of Management.
The Influence of Robert Brown on Western Australian Botany

By Greg Keighery and Neil Gibson

Robert Brown is considered the ‘founding father’ of Australian botany, one of three major figures in 19th century botanical endeavour centred on Australia. The others were George Bentham and Ferdinand von Mueller. Brown was essentially a professional scientist in that he undertook the study of our unique flora from collecting, through classifying, to publication and analysis.

Prior to the Investigator expedition, Archibald Menzies had collected at King George Sound during Vancouver’s landfall, and the Frenchman La Billardière had collected in the Esperance area during Bruny D’Entrecasteaux’s expedition in 1792.

Robert Brown: the Collector

During four years in Australia, the Flinders expedition amassed over 4,000 collections of Australian plants. Of these, Vallance et al. (2001) list 727 collections from Western Australia (WA). These collections include over 500 species from the Albany area, and another 100 from Lucky Bay and the islands of the Recherche Archipelago. This is a considerable contribution especially when the expedition’s timing is considered.

A total of 42 days were spent in WA (December 9, 1801 to January 16, 1802 and 2 days in May, 1802) and 40 of these days were in summer, long past the peak spring flowering period for WA’s southern flora. This can be demonstrated by a comparison of the Brown collections and names on the current list for Torndirrup National Park, an area where Brown, Bauer and Good collected. Lyons et al. (2000) list 721 species of vascular plant from the Park, including 89 naturalised weeds.

Of the 632 native species listed, Brown, Bauer and Good collected 121 native species. Almost all of the 121 were spring or summer flowering shrubs and perennial herbs. Missing were winter and spring flowering herbs (Orchids, Droseras, Sedges), autumn and winter flowering shrubs, and interestingly many of the post fire ephemerals. Discovery of most of these had to wait for the collections of Ludwig Preiss in the 1830s. So, while the expedition missed the peak flowering period they were fortunate in being in part of the mildest area of Mediterranean climate for southern Western Australia and obviously were able to find a few plants with flowers.

These collections by Brown, along with those of Ferdinand von Mueller and James Drummond, were the major sources of Western (and Australian) plants cited in all seven volumes of the Flora Australiensis by George Bentham. This was possible as Brown’s Herbarium was accessible to Bentham as Bennett, who was then responsible for the Herbarium, made it available to him.

Interestingly Brown recognised and collected many of the earliest naturalised weed records for Australia from Sydney in 1802-04, only 14 years after first settlement. Little did he realise they were the forerunners of several thousand more! Brown also confirmed the native status of forms of plants.
Brown named over 2,000 species from the expedition’s collections. As a consequence the expedition’s collections contribute over 2,000 type collections. These type collections made during the Flinders voyage remain vital and often critical to ongoing studies of the taxonomy of many West Australian plants of conservation and economic significance. Fortunately we can usually trace these collections to exact localities in Western Australia. The continuing value of Brown’s types to Western Australian botany can be seen in the following examples from the genera Lambertia (Proteaceae) and the genus Santalum (Santalaceae).

Santalum (Santalaceae).
Brown described and named both Sandalwood (as Fusanus spicatus, from Spencer Gulf, SA) and the Quandong (as Fusanus acuminatus from Fowler Bay, South Australia) in the Prodromus in 1810. Sandalwood (Santalum spicatum) harvesting was, and is, a major industry in WA. Sandalwood was the first export from the fledgling colony and is currently being proposed as a major woody tree crop in the Western Australian agricultural zone to help combat rising water tables. Current genetic and ecological studies on Sandalwood as part of this effort suggest that there are at least two separate taxa in this widespread species:
- one of southern and eastern Australian distribution, corresponding to S. spicatum of Brown and;
- a northern taxon only in Western Australia, which may correspond to S. cygnorum Miq. named from York.

The widespread Quandong (Santalum acuminatum) also has several taxa on morphological grounds. The type has thin grey leaves and red flowers and occurs from South Australia to Mount Ragged in Western Australia. Around coastal Western Australia Quandongs have orange-green flowers and green broad leaves and are probably the species named S. preissianum from Busselton.

Lambertia (Proteaceae)
Lambertia is a small genus of Proteaceae that has diversified in south Western Australia where 9 of the 10 species are confined. The genus has several species with very localised ranges that are declared endangered in Western Australia because of the threat posed to the species by dieback or root rot disease (caused by the introduced fungus Phytophthora cinnamomi), to which they are highly susceptible. The genus was revised by Hnatiuk (1995) who combined the declared endangered pink flowered Lambertia echinata R. Br. (Type: in Novae Hollandiae ora australis, Leeuwin’s Land, 1801-1802 [Bay 1-Lucky Bay], R. Brown) of Esperance with the yellow flowered Lambertia propinqua R.Br. (Type: ora occid-merid, King Georges Sound, 1829, W. Baxter) of Albany as two subspecies of Lambertia echinata. Subsequent genetic studies have shown that disjunct populations of Lambertia, often with only minor morphological differences, are very distinct and probably deserve recognition as separate species. This may necessitate the resurrection of these separate species and the transference of a newly described second rare subspecies of Lambertia echinata (L. echinata subspecies occidentalis, Keighery, 1997) to Lambertia propinqua.

In southern Western Australia, an area of world class mega-diversity of flowering plants, botanists are only beginning to resolve the taxonomy of the many species complexes present in the region. The collections made in Australia by the Flinder’s Expedition, which are often the types of current and superseded names, will remain vital to the elucidation of the status of many Western Australian plants for the next 200 years.

Robert Brown: the taxonomist
It was Brown’s taxonomic treatment of the collections from the expedition that ensured that it is as a taxonomist, that Brown has had his greatest influence on Western Australian botany.

There are 312 Australian vascular plant genera named by Robert Brown, of which 187 were proposed in the Prodromus alone. Of these genera 216 are still current and 158 of them occur in Western Australia. The list of major Australian genera that he named include: Livistonia, Tridici, Eriachne, Caladenia, Isolepis, Prasophyllum, Pterostylis, Pterospermum, Conostylis, Thysanotus, Pityrodia, Hemigenia, Lechenaultia, Eremophila, Logania, Dryandra, Isopogon, Grevillea, Petrophile, Telopea, Leptospermum, Gymnostoma, Jacksonia, Leucopogon, Stenopetalum, Ptilotus, Sclerolaena and Rhagodia. Virtually anyone at all interested in the Australian flora will be familiar with a genus named by Robert Brown.

Brown named 26 genera that are confined to Western Australia, and he provided the backbone of the generic list for any of the characteristic vascular plant families of southern Western Australia.
At the species level, there are 1450 names of vascular plants published by Brown that have been applied to Western Australian plants. Of these 1137 are current names and 313 are no longer current. Of these current names 821 are species. Two hundred and twenty six species of these 821 are tropical or desertic in distribution (mostly named from collections made in the Northern Territory and Queensland) and 595 are from south Western Australia. As we have seen these specific names and their type collections, whether current or subsequently placed into other species, remain a vital research tool for taxonomists.

Despite his brief sojourn in Western Australia, no single person has made a greater impact on the taxonomy of the flora of Western Australia than Robert Brown.

**Robert Brown: the scientist**

Unlike many collectors Brown not only made the collections, he prepared draft descriptions of his material and he endeavoured to see this material was then written up and published. Brown was essentially a wide-ranging scientist and natural historian, not a monographic taxonomist like George Bentham. Although his goal, to produce a Flora of Australia, was not realised, Brown from his efforts with the Flinders expedition did remain an authority on Australian plants throughout his life and published widely on the taxonomic results of early collectors and expeditions.

In any estimation Robert Brown was one of the major figures of Western Australian botany, and, by placing him in context with other botanists, we can appreciate his contribution to the study of Western Australian plants. This comparison can be divided into several overlapping phases:

**The explorers, collectors and taxonomists 1699-1800**

Those with the major impacts on Western Australia were: William Dampier, Banks and Solander and the Forsters on Cook’s voyages to eastern Australia, and J.J. La Billardière, the naturalist on the expedition of D’Entrecasteaux, who visited the Esperance area in December, 1792, and whose careful observations were published in 1799. These were largely collectors before any appreciable settlement had occurred.

**The collectors and taxonomists 1801-1900**

During this period Australia and Western Australia became settled and grew to nationhood. Robert Brown collected and described plants Australia-wide, the last one to do so before any substantial settlement. After settlement Baron Karl von Huegel collected in Western Australia from 1832-33, Ludwig Freiss, from 1838-1842, collected 2,718 specimens, (species described in *Plantae Preissiana*) and James Drummond, the greatest colonial collector from Western Australia, collected extensively in southern Western Australia for taxonomists in Europe, including John Lindley of Cambridge who wrote a “Sketch of the Vegetation of the Swan River Colony”, and Ferdinand von Mueller the first great Australian collector and taxonomist, who collaborated with George Bentham, author of the *Flora Australiensis* (1863-1878) from Kew.

**Collectors, taxonomists, ecologists and popularisers 1900-1960**

Gradually a shift occurred to the study of the ecology and biology of Western Australian plants. The German botanists Ludwig Diels and Ernest Pritzel made the first major contribution. Diels and Pritzel amassed over 5,700 collections between 1901-02, described 235 new species and prepared the first account of the ecology of the flora of Western Australia. It was not until much later that this approach was continued by John Beard and now many others. In the 1920s Oswald Sargent from York pioneered the study of the biology of Western Australian plants. Charles Gardner continued the traditions of von Mueller, naming 8 new genera and over 200 species. As a local Western Australian botanist, Gardner also made observations on phytogeography and helped popularise the flora.

Making flora accessible to everyone is now the prominent trend. Using the base keys of William Blackall, Professor Brian Grieve has laboured over 50 years to produce user-friendly keys to our local flora. The other major achievement beginning in this period was the production of the first popular accounts and colour guides to our brilliant flora by gifted artists and writers such as Emily Pelloe and Rica Erickson. Rica’s book on orchids was the first botanical book Greg Keighery purchased as a child and it helped start a career that included postgraduate study of Laxmannia, a genus named by Robert Brown, from collections of two species he made at Lucky Bay and Sydney.
We have now made the transition from a colony to a modern state where expertise on our flora is now our own in all areas. The next phase in this listing would be Ecologists, Conservationists, Popularisers, Collectors and Taxonomists, but with a greater emphasis on the conservation of our unique flora.

Robert Brown will remain a major figure linking the present and the past in the study of Western Australian plants, because of the prodigious numbers of new genera and species he named. He well deserves the appellation bestowed in Edwards: 15

Robert Brown’s study of Australian Plants was only part of his many-sided activities, and did not itself constitute his most important contribution to the advancement of botanical science. It was, however, a vital factor in much of his most significant work. Brown, a naturalist on the Matthew Flinders voyage for the circumnavigation of Australia, can justifiably be said to be the father of Australian Botany.

Fortunately, while Brown and the Flinders expedition have passed into history, most of the areas where they collected are now preserved as National Parks (Cape Le Grand, Tomminup), Nature Reserves (Middle Island) or local government reserves (Mount Melville, Mount Clarence) and the plants remain alive, rather than just herbarium specimens. Our challenge for the next 200 years is to ensure those celebrating the 400 year anniversary conference can say the same. This would be the most fitting memorial to their work and place in botanical history.

Acknowledgements

The authors would like to thank Browne Keighery for editorial assistance with the layout of the paper.

Bibliography


4 Chenopodium L. Brown collected and named Chenopodium ambiguum from Tasmania. This taxon was subsequently combined into the cosmopolitan species C. glaucum L., first as a separate variety or subspecies, but in the latest treatment considered as an uninformal ‘element’ (Wilson, 1984) as C. glaucum is a ‘A polyphyletic species in Australia which may include an endemic element (subsp. ambiguum) as well as an introduced element (subsp. glaucum).’ (Wilson, 1984, p 137) Brown’s collections indicate that there is an endemic Australian taxon, probably coastal in distribution, not as currently placed as a weed.

5 Salsola L. Similarly Brown collected and named Salsola australis from material Peter Good and Ferdinand Bauer collected at Forteil Bay, kie St. Francis in South Australia in February 1802. Brown also collected material of this genus at Thirty Bay in Queensland, which he named as Salsola macrophylla, both on page 411 of the Prodromus. All Australian material has now been placed under Salsola kii., which is considered to be a Eurasian species introduced to Australia (Wilson, 1984). However, both of these taxa were collected from remote areas of Australia before European settlement and it seems that at least part of its species is native in both cases.


7 As above.


2001: Celebrating the bicentenary of a visit by ‘scientific gentlemen’  

By Janette Gathe

In Western Australia the bicentenary of the *HMS Investigator* voyage was celebrated at four places – Cape Leeuwin, Albany, Lucky Bay and Porth. The first three sites were part of the *Investigator* ‘itinerary’, the fourth was not. However Porth’s Alexander Library, together with the Western Australian Herbarium provided an overview of the botanical significance of the voyage with a display of books, maps, and plant vouchers including two collected by Robert Brown in 1801.

**Cape Leeuwin**

On 7 December 2001, the first sighting of *Terra Australis* by the *Investigator* expedition and the naming of Cape Leeuwin by Matthew Flinders was celebrated by the Augusta community with a picnic day at Flinders Bay where many families entered into the spirit of things wearing period costume. Following reading from Matthew Flinders *Voyage to Terra Australis* and from Gail Cresswell’s *Light of the Leeuwin*, there were talks by local and visiting historians. The Historical Society of Augusta officially opened the ‘Rails to Sails’ project dedicating the site as the Matthew Flinders Park.

**Albany**

The *Investigator* 200 Symposium held in Albany from 9 to 11 December 2001 marked the first landfall of the Expedition at King George III Sound where Flinders and his party stayed from 9 December 1801 until 5 January 1802. The Symposium was chaired by Alex George and supported by the Australian Systematic Botany Society, the Western Australian Herbarium and the Wildflower Society of Western Australia. The program of activities shows the varied contributions from the local community.

The initial excursion to sites visited by members of the *Investigator* expedition enjoyed good weather and it was very exciting to see the vistas illustrated by William Westall and the plants collected by Robert Brown and sketched by Ferdinand Bauer actually in flower. Then two days of papers presented by local, West Australian, Australian, and overseas researchers followed.

The wide range of topics covered by many eminent speakers, each an authority on his or her subject, made for a very interesting and informative two days for the 230 people attending the Symposium. To commemorate the work of Ferdinand Bauer the Botanical Artists Group organised the Natural History Art Exhibition that adorned the walls of the Function Centre where the symposium was held. On 12 December there was the unveiling of a plaque listing the marine explorers and botanists who visited King George Sound since its discovery by Captain George Vancouver.

**Lucky Bay**

The last celebration held in Western Australia was at Lucky Bay. Organised by the Esperance Wildflower Society there were talks by David Mabberley, David Moore and Mark Webb who emphasised the importance of this landfall in terms of plant species collected, named, described and later cultivated from this locality. Ferdinand Bauer’s superb drawings and paintings illustrated the talks.

On 13 January 2002 there was a commemorative picnic at Cape Le Grand National Park with participants reaching the site by boat, coach or private vehicle. During the day there was a further variety of excursions on land and sea to learn more about the *Investigator* expedition and the Cape’s flora. Bronze plaques sculpted by local artist Chris Siemer were installed at Lucky Bay and Thistle Cove to celebrate the bicentenary of the natural history collections at Lucky Bay.
Publications
The following four books have been written to coincide with the Western Australian bicentenary celebrations:


S. Curry, B.R. and J.A. Maslin, *Allan Cunningham Australian Collecting Localities*. For further details contact Alex Chapman via e-mail: alexc@calm.wa.gov.au

J. Gathe, M. Edgecombe, and B. Carter, *Robert Brown*, species named and described by Brown. The images are also contains computer-scanned images of more than 80 WA species named and described by Brown. The images are also available on a CD. Book plus CD - $30. Book only - $25. CD only - $15. Postage - $2. Contact: Bevan Carter, 8 Hyland St, Bassendean, WA. 6942 or e-mail: carters@vianet.net.au

Esperance Wildflower Society, *Wildflowers of Cape Le Grand National Park*. This book profiles Ferdinand Bauer, Robert Brown and Peter Good and is beautifully illustrated with photographs of coastal profiles, the collecting sites and more than 120 local plant species. Book - $9.50. Postage - $2.50. From Esperance Wildflower Society, P.O. Box 1138, Esperance, WA. 6450.

Janette Gathe is a natural history enthusiast trained in botany who has co-ordinated volunteers for the Western Australian Herbarium working in the Regional Herbarium Program.

ROBERT BROWN AT SWAN BAY 

By Peter Munster

During the visit of the Investigator to Port Phillip from 26 April to 3 May 1802, Robert Brown was able to examine the flora of the coast near Arthur’s Seat, Portsea, and also on the opposite shore at Swan Bay. Flinders named the latter Swan Pond, rejecting Lieutenant Murray’s more grandiose Swan Harbour nominated during the visit of the Lady Nelson three months earlier.

While Flinders was busy making charts of Port Phillip, Brown was collecting plant specimens, describing rock formations and observing the birds and animals of the coast. Altogether he noted 95 plant species, many of which still grow in the Swan Bay-Edwards Point area. Of the 95, he described 29 as plants that were completely new, meaning that they were previously unknown to European botanists, and later he came to believe that 9 were unique to Port Phillip. The native holly (*Lomatia ilicifolia*) particularly impressed Brown who described it as a spectacular example of the local flora. Unfortunately this plant is no longer found at Swan Bay.

To commemorate Brown’s botanising in the area about 50 people from the Bellarine Peninsula and Geelong area met at Swan Bay on 4 May this year to hear Dr Peter Munster speak of the significance of the occasion. Then Sue Longmore, an expert on the native flora of the Swan Bay area, led a guided walk through the Plant and Bird Reserve on the shore of the bay.

Among the plants common to the Swan Bay-Edwards Point area and still here today are Wirilda (*Acacia retinoides*), Moonah (*Melaleuca lanceolata*), Bidgee Widgee (*Acana anserinifolia*), Small-leaved Clematis (*Clematis microphylla*), Cherry Ballart (*Exocarpus cupressiformis*), Sword Sedge (*Lepidosperma congestum*), Bladey or Kunai Grass (*Imperata cylindrica*), Coast Beard Heath (*Leucopogon parviflorus*), and the ever present Coast Tea Tree (*Leptospermum laevigatum*).

Peter Munster showed the group examples of Ferdinand Bauer’s magnificent paintings, including the Blue Pincushion (*Brunonia australis*) which Brown collected during the visit to Port Phillip and named for him. Sue explained that the plant is very rare today. She is always interested to know whether any residents on the Bellarine Peninsula have seen it growing in the wild.

For readers who may be interested, there will be further opportunities to discover the flora of the Swan Bay area. The Swan Bay Integrated Catchment Management Committee and the Friends of Edward’s Point organise guided walks from time to time, mainly in the spring and summer months. Further information can be obtained from

The Secretary, Friends of Edward’s Point PO Box 424, Drysdale, VIC 3222

Peter Munster is a retired academic from Deakin University where he lectured in Australian History. He lives at St Leonards and has an interest in the Edward’s Point area. Sue Longmore works for the Swan Bay Integrated Catchment Management Committee facilitating environmental awareness in the local community.

JULIE KEEGAN TOURS

ESTABLISHED 1983

PROGRAMMES 2003

May - South of France, Italy
June - Southern Ireland
October - South Australia
November - New Zealand

Enjoy first class accommodation, food and wine with special visits to houses and gardens. All at a leisurely pace.

BROCHURES

JULIE KEEGAN TOURS PTY LTD
7 Cove Street Watsons Bay Sydney 2030
Tel (02) 9337 1147 Fax (02) 9337 6782
Licence No: 2TA 4710

Special Interest Tours for Discerning Travellers
In the footsteps of Robert Brown

By Douglas Benson and Jocelyn Howell

On Thursday 9th May 2002, as part of the Robert Brown 200 Conference held at the Royal Botanic Gardens Sydney, Doug Benson and Jocelyn Howell with the assistance of Peter Jensen of Greening Australia, led a field trip by bus to the Grose and Hawkesbury Rivers. This is the record of that excursion.

The recent publication of Nature’s Investigator: The Diary of Robert Brown in Australia, 1801-1805,1 gives an insight into the collecting activities of Robert Brown in the Sydney area. With this information we put together a field excursion to some of the areas Brown visited particularly in the Hawkesbury and Grose River areas. Robert Brown travelled a number of times from Sydney to Green Hills (now Windsor) and explored the nearby Grose and Hawkesbury Rivers. A particular base for his work there appears to be Badgery’s Farm at Yarramundi.

Comments by Brown in his journal are mainly concerned with plants he collects and describes; there are virtually no observations of the countryside or general comments on the vegetation. The editors of Nature’s Investigator, though, have provided careful notes on his actual route - where this can be determined.

In the field trip we included sites we know he visited and others that still retain native vegetation that he would doubtless have recognised. We departed from the sandstone landscape of coastal Sydney, crossing the shale landscape of western Sydney, including the Nurragingy Reserve, to the Hawkesbury River. At Agnes Banks we saw an aeolian landscape thought to be of Tertiary age, and visited floodplain landscapes of Recent geological times at Pughs Lagoon and Navua Reserve. Finally we returned to a landscape formed from Hawkesbury Sandstone laid down in the Triassic at the Vale of Avoca Reserve in the lower Blue Mountains.

To Nurragingy Reserve through Cumberland Plain Woodland

Robert Brown would have traversed many miles of Cumberland Plain Woodland on his route between Parramatta and Windsor. Cumberland Plain Woodland was the predominant type of vegetation of western Sydney. The Cumberland Plain extends from present-day Parramatta west to Penrith, and from Cattai, near Windsor, in the north to Picton (south of Camden) in the south. This is gently undulating country, on Wianamatta Shale forming clay-rich soils. Rainfall is low, ranging from 700-900mm average per annum.

The main trees in Cumberland Plain Woodland are Eucalyptus moluccana (Grey Box), Eucalyptus tereticornis (Forest Red Gum), and Eucalyptus crebra (Narrow-leaved Ironbark, and occasional stringybarks (Eucalyptus eugenioides). In poorly drained areas like parts of Nurragingy Reserve are Eucalyptus amplifolia (Cabbage Gums) and Casuarina glauca (Swamp Oak). Smaller trees include Acacia parramattensis and the paperbarks Melaleuca decora and Melaleuca styphelioides.

The woodland’s most common shrub is Bursaria spinosa which may form local thickets.

The understorey is predominantly grassy and herbaceous. The most characteristic grass is Themeda australis (Kangaroo Grass). Common herbaceous species include Brunoniella australis, Dichondra repens, Geranium homeanum, Glycine tabacina, Desmodium varians and Pratia purpurascens. Most
Cumberland Plain Woodland remnants like Nurragingy Reserve were used for grazing in the past, so weedy species may overshadow the native herbs in many places.

Cumberland Plain Woodland and Sydney Coastal River Flat Forest (the original floodplain forest of the Hawkesbury River and adjacent creeks) are plant communities now listed as Endangered Ecological Communities under the NSW Threatened Species Conservation Act.

Nurragingy Reserve

Nurragingy Reserve is named after an elder of the Gomerigal tongara, a sub-group of the Dharuk tribe who inhabited the Eastern Creek area of Blacktown for many thousands of years. The reserve is a 67ha parcel of community land currently managed by the Blacktown City Council for passive recreation. It is part of the Eastern Creek corridor, which flows north-westward to the Hawkesbury-Nepean River. More than half the reserve contains formalised parkland and the remainder contains a significant remnant of Cumberland Plain Woodland and Sydney’s Coastal River Flat Forest plant communities.

The dominant species are Eucalyptus tereticornis, Eucalyptus moluccana and Casuarina glauca with a sparse storey of Bursaria spinosa, Acacia spp, Grevillea juniperina and various prickly Fabaceae including Pultanaea and Daviesia. There is also a considerable diversity of native grasses and groundcovers. There are around 130 recorded plant species, including some listed as rare and/or vulnerable. For example, some plants of the listed rare shrub Grevillea juniperina have been planted near the Greening Australia nursery entrance. Nearby in the drainage line are two common wetland plants Persicaria hydropiper and Typha orientalis. The vegetation provides habitat for over 50 native fauna species, primarily reptiles and birds.

Nurragingy Reserve has significant cultural values as the site of the first Aboriginal land grant from Governor Macquarie between 1815-1819 and is rich in Aboriginal archaeological relics including scar and burial trees. The reserve provides a good example of the complex issues arising at the interface between urban development and natural ecosystems. Development pressures have led to altered hydrology and fire regimes, influx of nutrients, soil disturbance, and the proliferation of over 50 weed species.

Nurragingy Reserve is the operational base and community nursery facility for the Greening Western Sydney (GWS) project: a large-scale restoration project managed by Greening Australia under contract to Planning NSW spanning the past 10 years. GWS has the task of restoring around 1500ha of cleared and degraded bushland along the three major creek tributaries of the Hawkesbury-Nepean River in Western Sydney. The Community Nursery includes an office, seed bank, works depot and volunteer facilities. The nursery supplies several thousand provenance plants per year for GWS and other community-based projects and provides an important resource for community involvement, education and awareness of the value of urban bushland in Western Sydney.

Brown’s first visit to the Grose River – Tuesday, 22 June 1802

Brown recorded:

*From the Green Hills we mad[e] on near to the ambuche of the Nepea[n] & walkd a little way up the bank of the Grose. [22nd June] At 3 o’Clock in the morning set off in a boat to Richmond Hill. Reached the top of the settlement a little after day light. Went on to the island at the 2d rapid – where we stopp an hour. With difficulty got our boat [large one]] to the top of the island. Got out and walkd about 3 miles towards the mountains. Saw the Grose twice, its banks then steep & rocky but not perpendicular, its channels considerably contracted. Got upon the first hummocks of incon siderable height. The ridge nest these wooded to the top not high – flat topped rocky & rather steep but apparently not impassable.*

View to Richmond Hill

Near Richmond nearly 200 years later we looked across the fertile Hawkesbury floodplain, now covered with crops, to Richmond Hill, rising from the western riverbank. In 1802, the fertile floodplain around Windsor, established about 1793, was already settled and much cleared for growing crops for the colony. From Windsor, Brown travelled by boat up the Hawkesbury past Richmond Hill (named by Governor Phillip during his trip up the river in 1788), to the islands of gravel at the junction of the Grose and the Nepean.

Yarramundi Lagoon and Nepean River crossing

On a number of occasions, Brown stayed at Badgery’s Farm, beside Yarramundi Lagoon, a short distance from the Nepean River, just upstream of its junction with the Grose River. This was the site of some of his wetland collections but it has been much degraded since then. Interestingly Brown in his notes from Caley 14/9/1804 refers to Jussieua at the margin of Yellownundy’s Lagoon. Could this be the origin of the Yellow Monday Cicada – well known to those with a Sydney childhood. Also Jussieua is undoubtedly Ludwigia peploides subsp. montevidensis a common wetland species, always regarded as a native species but in the recent Flora of NSW Volume 2 (2002), asterisked as an exotic, with comment that it is probably native to South America. It is clear Brown’s record was not considered.

Agnes Banks Nature Reserve

Agnes Banks Nature Reserve, near Yarramundi, is a most interesting area with vegetation related to that on the coastal sands of areas such as Myall Lakes and Botany Bay, yet 60km from the coast and any similar vegetation. Here is sclerophylous healthy vegetation growing on an isolated high-level deposit of windblown sand – an outlier of the North Coast Wallum country. Banksia aemula is one of the most distinctive shrubs, and the white tree trunks belong to Eucalyptus sclerophylla, one of the Scribbly Gums. Brown doubtless collected near here; one of his collections, Persoonia nutans, is a shrub that is found only on the particular sandy soils here.

Pughs Lagoon

Pughs Lagoon is a freshwater swamp on the floodplain of the Hawkesbury River, just west of Richmond. It is similar to Yarramundi Lagoon, and still includes a number of native species, despite the total clearing of the nearby floodplain for agriculture. Species here include Phragmites australis, Ludwigia peploides, Juncus usitatus, Persicaria decipiens, and in the past there were sightings of the aquatic fern Marsilea mutica, and also the floating fern Azolla. The introduced Myriophyllum aquaticum may grow on the fringes. The lagoons here are now permanently dammed, and lack the species diversity associated with naturally fluctuating water levels and margins. Tree planting on the banks includes Casuarina cunninghamiana (River Oak) and miscellaneous eucalypts.
PLANTS THAT MAY BE SEEN ALONG THE TRACK AND AROUND THE LOOKOUT AT THE VALE OF AVOCA

**TREES**
- CASUARINACEAE
- Allocasuarina litoralis
- Allocasuarina torulosa
- MYRTACEAE
- Angophora costata
- Corymbia eximia
- Corymbia gunnifera
- Eucalyptus agglomerata
- Eucalyptus piperita
- Eucalyptus punctata
- Syncarpia glomulifera

**SHRUBS**
- APIACEAE
- Platycaea linearifolia
- ASTERACEAE
- Cassinia quinquefaria
- CUNONIAEAE
- Ceratopetalum gunnifera
- EUPHORBIACEAE
- Phyllanthus gasstroemii
- FABACEAE
- Acacia falcata
- Acacia linifolia
- Acacia suaveolens
- Acacia terminalis
- Acacia ulicifolia
- Bossiaea rhombifolia
- Dilwynia retorta
- Gompholobium latifolium
- Jacksonia scoparia
- Pultenea flexilis
- Podolobium ilicifolium

**GOODENACEAE**
- Scaevola ramosissima
- MYRTACEAE
- Leptospermum trinervium
- PROTEACEAE
- Banksia serrata
- Banksia spinulosa
- Grevillea mucronulata
- Hakea dactylodes
- Lambertia formosa
- Lomatia silaifolia
- Persoonia laevis
- Persoonia linearis
- Xylorhynchus pyriforme
- THYMELAECACEAE
- Pimelea linifolia
- XANTHORHOACEAE
- Xanthorrhoea arborea
- Xanthorrhoea media

**GROUND PLANTS**
- ACANTHACEAE
- Pseuderanthemum variabile
- CYPERACEAE
- Lepidosperma laterale
- DENTSTEADIACEAE
- Pteridium esculentum
- LOBELIACEAE
- Pratia purpurascens
- LOMANDRACEAE
- Lomandra multiflora
- Lomandra oblqua
- PHORMIACEAE
- Diarela longifolia
- POACEAE
- Aristida vagans
- Aristida benthamii
- Dichelachne micrantha
- Entolasia stricta
- Microlaena stipoides
- Panicum effusum
- Themeda australis
PLANTS TO BE SEEN AT AGNES BANKS RESERVE
(This is not a complete species list for the reserve)

**SHRUBS**
- APIACEAE
  - Platysace lanceolata
  - Platysace lineariifolia
  - EAPRClIACEAE
  - Leucopogon ericoides
  - EUPHORBIAEAE
  - Rhinocarpos pinifolius
  - FABACEAE
  - Acacia brownii
  - Acacia elongata
  - Acacia suaveolens
  - Acacia ulicifolia
  - Dillwynia floribunda
  - MYRTACEAE
    - Leptospermum polygalifolium
    - Melaleuca nodosa
  - PROTEACEAE
    - Banksia aemula
    - Banksia oblongifolia
  - Conospermum taxifolium
  - Isopogon anemonifolius
  - Persoonia nutans
  - THYMELACEAE
    - Pimelea linifolia

**GROUND PLANTS**
- APIACEAE
  - Trachymene incisa
- CYPERACEAE
  - Cyathochaeta diandra
  - DENSTTEADIAEAE
  - Pteridium esculentum
  - EUPHORIAEAE
  - Amperea siphlocada
  - HAEMODORACEAE
  - Haemomorus planifolium
  - STYLIDIEAE
  - Stylidium graminifolium

**TREES**
- MYRTACEAE
  - Angophora bakeri
  - Trachymene incisa
  - Eucalyptus sclerophylla

**Navua Reserve**
Navua Reserve, at Grose Wold, is at the junction of the Grose River with the Hawkesbury, which becomes the Nepean River upstream from here. Brown collected in this area during his trips to the Hawkesbury, following the Grose upstream in 1804. Joseph Maiden, Director of the Sydney Botanic Gardens 1896-1924, also collected here in September 1906 as part of his interest in re-visiting historical collecting sites.

The catchment of the Grose River is relatively undisturbed, and drains the land between the Great Western Highway between Springwood and Mount Victoria, and Bell's Line of Road, most of which is now in the Blue Mountains National Park. Looking upstream along the Grose, the view is probably quite similar to what Brown would have seen.

The banks right at the junction have been altered by sand extraction, but the River Oaks (Casuarina cunninghamii) are possibly 40 years old. Native riparian vegetation on fertile high soils is very susceptible to weed invasion. Weeds here include the Hackberry (Celtis orientalii), and privets (Ligustrum lucidum and Ligustrum sinense).

Bush regeneration, including weeding, has improved parts of the reserve. Plantings near the car park include Angophora subvelutina. Young trees of Casuarina cunninghamii, Acacia bineria and Acacia paramannensis are growing vigorously on the central sandbank. Near the water's edge can be seen occasional plants of Lomandra longifolia, Carex appressa, Juncus usitatus, Eleocharis spathelata, Bolboschoenus fluitatilis, Paspalum distichum, Persicaria hydropiper, Ludwigia peploides, and Pavonia hastata.

A longer walk would reveal scattered plants of Commelina cyanea, Oplismenus imbecillus, Oprecularia aspera, Centipeda minima, and species of Wahlenbergia. Interestingly, Pavonia hastata in the Malvaceae family was recorded on the Hawkesbury and Hunter Rivers by Brown, though it is currently described as a naturalised species. Despite the disturbance, it is still easy to imagine Aborigines living in this place, with its scrub, sandbanks and flowing water.

**Brown's last visit to the Grose River – December 1804 to January 1805**
Brown's longest and last visit to the Hawkesbury was from 13/12/1804 to 17/1/1805. During this time he travelled from Badgery's Farm at Yarramundi Lagoon up the Grose River to Burralow Creek, returning to Badgery's Farm for Christmas Day. He then appears to have travelled back up the Grose to just beyond Springwood Creek junction, returned to the Burralow junction and walked about 1km up Cabbage Tree Creek. He next spent four days at Badgery's Farm and returned to Green Hills (Windsor), then visiting the Hawkesbury downstream by boat.

**Walk to Vale Lookout.**
The track to Vale Lookout (220m) in the Vale of Avoca Reserve passes through open forest on Hawkesbury Sandstone soils with Angophora costata (Sydney Red Gum), Corymbia glaucophylla (Yellow Bloodwood), Eucalyptus piperita (Sydney Peppermint), Eucalyptus punctata (Grey Gum), and Syncarpia glomulifera (Turpentine). The occurrence of Turpentines here is due to localised shale influence. Shrub species, Acacia suaveolens and Banksia spinulosa are sometimes seen flowering along the track. On our excursion we saw resprouting after recent fire, probably a control burn associated with the bushfires of December-January [2001-2].

The view westward from Vale Lookout towards the upper Blue Mountains is worth the climb. Below is the junction of Cabbage Tree Creek and Burralow Creek and their confluence with the Grose River. The steep cliffs are of Hawkesbury Sandstone, clothed in woodland and forest similar to the walk inwards. At the base of the cliffs in sheltered sites is rainforest with Cabbage Palms (Livistonia australis), Coachwoods (Ceratopetalum apetalum), Sassafras (Doryphora sassafras), and vines including Cissus hypoglaucu. Brown explored the Grose and Burralow Creek in 1804, and probably camped near the junction with Cabbage Tree Creek. Near here the rare shrub Epacris sparsa was collected in 1991, the first recognised collection since Brown collected it, presumably near here.

Around the lookout is low woodland with Corymbia eximia (Yellow Bloodwood). Shrubs include Lambertia formosa, Leptospermum trirestum, Bossiaea rhombifolia, Acacia linifolia, Platysace lineariifolia, Banksia spinulosa, Allocasuarina litoralis, Xanthorrhoea arborea, Acacia terminalis, Persoonia linearis, Banksia serrate, Ceratopetalum glomeriflorum, Dillwynia retorta, Acacia ulicifolia, Pultena flexilis and Hakea dactyloides.

---


**Douglas Benson** and **Jocelyn Howell** are ecologists working at the Royal Botanic Gardens Sydney.
George Caley (1770-1829) collected for Joseph Banks in the colony of New South Wales from 1800 to 1810. His altercations with governor King and the Reverend Samuel Marsden, and his reputation as an irascible character have coloured the historical record so that his botanical contribution has often been minimised. But Robert Brown saw evidence of Caley’s ability during their contacts in the colony, and their friendship continued when Caley returned to England in October 1810.

Lionel Gilbert, historian-cum-botanist, writing on ‘Plants, politics and personalities in colonial New South Wales’ in 1981, described an irascible George Caley. He highlighted his clashes with King, and implied that Robert Brown was sent with Flinders to resolve both the botanical and personal problems created by Caley in the colony. ‘It was probably no accident’, Gilbert wrote, ‘that it was an extremely irritable and sensitive genus of orchids that Brown named Cateana!’

But what did Robert Brown say about Caleana? In his Prodromus of 1810, p.329, he wrote in his dedication of this orchid, in Latin: Genus pulchrum et valide distinctum dixi in honorem Georgii Caley, botanici periti et accurati . . . (The pretty and definitely distinctive genus I named in honour of George Caley a skilful and accurate botanist . . .)

Brown and Caley made many collecting trips together while Brown remained in the colony, and from an early cautious opinion Brown developed a high regard for Caley’s dedication to his work as Banks’s collector. The Investigator arrived in Sydney on 9 May 1802. As early as 8 June 1802, Robert Brown and the gardener, Peter Good, and perhaps Ferdinand Bauer too, walked with Caley from Parramatta (Caley’s base) to North Rocks, a distance of six or seven miles (10-11km). Brown recorded in his diary:

A few plants found . . . Caley accompanied us . . . his loquacity, his names of plants generic. Mostly bad Greek. However his is an observer and should be encouraged . . . his collection not numerous but well preserved.2

Compare this early assessment with Brown’s comment in a paper he read to the Linnean Society in London on 17 January 1809:

Besides the Proteaceae described or noticed in this paper I am acquainted with several very beautiful species, chiefly of Grevilleas and Persoonias, discovered in New Holland by Mr George Caley. A most assiduous and accurate botanist, who, under the patronage of Sir Joseph Banks, has for upwards of eight years been engaged in examining the plants of New

South Wales, and whose numerous discoveries will, it is hoped, be soon given to the public, either by himself, or in such manner as to obtain for him that reputation among botanists to which he is well entitled.3

Caley did not meet Brown’s hope that he would publish his discoveries, and this failure to publish must be a major factor in the historians’ neglect of Caley’s real contribution. Caley had the knowledge, the information set down in note form in his many journals, and he had the literary ability, evident from the many letter he wrote and the journals he kept. But Brown’s Prodromus of 1810 must have superseded Caley’s possible contribution, and on Caley’s return to England he isolated himself in the provinces, pre-occupied with his numerous collections and suffering from acute shortage of money.

Consider the following statement in a letter to his friend George Suttor in New South Wales in 1812:

It is a sad thing I am so much engaged as scarce to have time for anything but my present pursuit, [i.e. cleaning specimens] else I certainly would now favour the world with a publication of your country.4

Another letter to Suttor in 1825 makes it clear that the men who may have been Caley’s equal in botanical knowledge had a cash surplus and could afford to venture into writing and publishing. Caley wrote:

To publish new plants nowadays requires not only a great botanical knowledge, but an extensive library. To purchase the books which are daily making their appearance in Natural History can only be done by men of opulence.5

Evidence points to the fact that Robert Brown did publish a number of Caley names, but Caley did tell Brown to ‘act as you think proper with my nondescripts at Sir Joseph’s . . . ’ and one could give Brown the credit for waiting until Caley died in 1829 before publishing many of Caley’s finds in 1830, still hoping,
perhaps, that Caley himself would publish. The 1830 paper on Proteaceae named, for example, Grevillea caleyi, a plant, now rare, first found by Caley in 1805 in his Journey to the Sea, near Belrose (a Sydney suburb not far from the Narrabeen Lagoon).

Matthew Flinders’ ship the Investigator, was in Sydney in 1802 for twelve weeks, and left on 21 July to complete Flinders’ survey of the coastline. The ship returned to Sydney in 1803, the ship’s hull so rotten that she could have founded at any time. Flinders decided to return to England with his charts in the Porpoise, the only ship available. Brown selected the best of his specimens to return also, while he and Bauer elected to stay until the Investigator could be repaired.

Governor King was anxious to help, and wrote to Banks in September 1803:

I have supplied Mr Brown with a very good apartment of boxes for the Porpoise’s plant cabin ... Caley is very angry because he cannot get the same boxes ... I have given directions that some should be made for him. I believe he is very angry at having Mr Brown here, who he cannot help considering as a laborer in the field that ought to be wrougt by himself. He has all he wants but is by no means satisfied.

This animosity towards Caley may or may not have been justified, but King’s comments are not supported by Caley’s own words to Banks in a letter of 7 August 1803:

I am glad that Mr Brown will remain some length of time here ... in some respects I flatter myself I may benefit him in showing him the most likely places to meet with new plants ... on the other hand, I know I shall be much benefitted by Mr Brown for in general, until the present, I have nobody to discourse upon the same pursuit, for want of which, the pleasures of study were abstracted.

Caley was well received by the botanical fraternity when he returned to England late in 1810: ‘Mr Dickson called on me and I went with him to town – then to Sir Joseph’s and after to Mr Brown’s.’ James Dickson was a leading cryptogamic (non-flowering plants) botanist with a successful herb and seed shop in Covent Garden. He was one of the founders of the Horticultural Society of London and the Linnean Society, and it is significant that he befriended Caley and continued to give him support during the years Caley remained in England.

In August 1911 Caley settled down in a rural area some 10km to the north-east of Manchester, occupied with cleaning, sorting and naming his specimens. He continued to correspond with Brown and Banks. Brown visited Caley in Manchester in October 1915, Caley having written to Brown in July:

If you can in any shape put up with a Botany Bay reception, I will endeavour to make you as comfortable as I can, and shall be glad of your company ... .

Perhaps Caley’s greatest contribution to Australian botany is that he was the first to recognise hybridisation in the genus Eucalyptus. This he did as early as 1810, whereas later more eminent workers such as the Reverend Doctor Woolls and the great Ferdinand von Mueller himself believed such did not, and could not, happen. Today it is well accepted that hybrids do commonly occur.

Joseph Maiden (Director of the Botanic Gardens in Sydney 1896-1924) dedicated a New England Ironbark, Eucalyptus caleyi, to Caley’s memory, and said:

The vernacular name, Caley’s Ironbark, is short: it commemorates a worthy pioneer botanist whose work requires much more emphasis than it has hitherto received.
Dr David Jones completes the story of Sydney designer Max Shelley who moved to South Australia after being demobbed from the Royal Australian Airforce in 1945.

The Mysterious Mr Shelley in Adelaide

Stuart Read's article ‘The Mysterious Mr Shelley’ provides an insightful profile of a prominent but obscure landscape designer of the 1920s-40s. There is however a gap in the profile as to Shelley's activities and life in Adelaide from 1945 to 1954.

Upon his arrival in Adelaide Shelley was immediately drawn to seeking employment. During the 1930s and 40s in Adelaide the plant nurseries often orchestrated design and plan-and-construct activities as a precursor to the rise of individual landscape designers and to design-and-construct practices. The Kemp family with nurseries based principally at Kingswood, adjacent to Unley on Cross Roads, was one of the leaders in this endeavour in Adelaide. Shelley was obviously attracted to the energy and talent of Jack Kemp who at the time was not only managing the Kingswood Nursery, but also was providing prolific horticultural and landscape design advice in the print media and on the radio.

Kemp employed Shelley as 'Chief Designer' from 1945 until his untimely death in 1954. In this position Shelley designed and supervised the planting and construction of many medium to large institutional, commercial, industrial and residential projects undertaken in Adelaide during these years, including Le Fevre Hospital, James Hardie's factory estates, and projects in the new town of Elizabeth.

Two apprentice landscape designers and a works crew of eight served under Shelley. The designers were Robin Hill and Richard (Dick) Massey. Hill recalls that Shelley was passionate about random Mintaro slate, formal garden patterns and 'lines', the use of roses and typical English flowering plants available in the Kingswood Nursery, and the use of arbors. Kemp also apparently asked Shelley to provide much of the landscape design advice in the Adelaide print media that appeared under Kemp's pseudonym, 'Grevillea'.

In executing these designs and planting works Shelley always prepared plans, often with Robin and Dick drafting layouts and final watercolours. Shelley's manner was very organised, 'pedantic', ordered, and 'well-groomed', echoing his air force training.

Shelley idolised his daughter, and the rumours persist that he was associated with the English poetic Shelley family. He lived in a boarding house apartment in Hawthorn, within walking distance of the Kingswood Nursery and his office. On 12 April 1954 Shelley died from "asphyxia" and was buried at the West Terrace Cemetery in Adelaide.

Acknowledgments
Many thanks to Muriel Kemp, Peter Kemp, Robin Hill, and Stuart Read for advice on this postscript.


David Jones is Acting Dean of the School of Architecture, Landscape Architecture & Urban Design at The University of Adelaide. He is a major contributor of entries to the Oxford Companion of Australian Gardens (2002), and is presently researching the history and legacy of the Kemp family nurseries.
Alister Clark, his Roses and their Names

By Nina Crone

The first Tuesday in November finds the attention of many Australians focused on Flemington race-course, its fashionable outfits, its thoroughbreds and its display of roses - many the legacy of a racing enthusiast who bred roses.

A genial man with many interests - world travel, horse-racing, golf, hunting, polo, photography - Alister Clark is best remembered as a breeder of roses suited to Australian conditions. His work was unusual for several reasons. He bred from Rosa gigantea, a rose from Burma and the Himalayas, which does not thrive in colder climates and thus rarely used by European and American rose breeders. Clark was an early conservationist in his approach to gardening as his roses had to survive Australia’s dry conditions and he did not believe in treating them with chemical pesticides preferring to rely on birds to control aphids. Most importantly he raised roses for garden display and enjoyment rather than for shows and exhibitions.

He was most exacting in his breeding methods, ruthlessly cutting out anything inclined to mildew or disease and developing good clean foliage and outstanding flowers that are generally free, open types with a generous flowering habit. After years of careful testing Clark would present the new rose to one of the nation’s rose societies that then received the profit from the first year’s sales. A foundation member of the National Rose Society of Victoria (he was the first member enrolled), he was made a life member of the American Rose Society in 1934. Two years later he became the first Australian to receive the Dean Hole Medal.

Alister Clark’s hybridising work, with daffodils as much as roses, was done at Glenara, the family property at Bulla, which Eugene von Guerard depicted in a painting that hangs in the National Gallery of Victoria. He was an active member of Victoria’s racing fraternity serving as inaugural Chairman of the Moonee Valley Race Club from 1917 until his death in 1949, and he was committed to the development and well-being of the local community serving as President of the Shire of Bulla and Master of the Oaklands Hunt Club.

Once the height of fashion, Alister Clark roses lost popularity during the Second World War when commercial rose nurseries lacked the resources needed to grow them: consequently many of his roses were lost. Following renewed interest in his work and the research of enthusiasts such as Susan Irvine, many Alister Clark roses have been found in old gardens and are once more commercially available.

There are now a number of places in Victoria where the general public can see many of Clark’s roses. Last year Hume City Council and the Bulla Garden Club established the Alister Clark Memorial Rose Garden around the old bluestone building of the original Shire Hall, relocated to the corner of Bulla Road and Green Street (formerly Somerton Road). Here nearly 70 Alister Clark roses and beds of Clark daffodils can be seen. Interpretation boards provide much information about Clark, rose-breeding and the stories behind the names he gave to the roses.

Within the St Kilda Botanic Gardens in Blessington Street, an Alister Clark Memorial Garden was planted in 1950. It is a large, formal rose garden containing among its hundreds of roses only a small number of the better known Alister Clark hybrids. Both the National Rose Garden at Werribee Park, and the Morwell Rose Garden in the Latrobe Valley, also display Alister Clark varieties.

The names that Clark gave his roses often intrigue people. Some were inspired by Australian rural life - ‘Australia Felix’, ‘Squatter’s Dream’, ‘Southern Cross’, ‘Bushfire’, or by horse-racing - ‘Flying Colours’, ‘Lady Medallist’, ‘Dividend’; others were more romantic and exotic - ‘Keepsake’, ‘Ruby Ring’, ‘Sunday Best’, ‘The Rajah’, but most arose from personal or professional friendships. Melbourne society in the first half of the 20th century comes to life through these names. Among the best known Alister Clark roses is a very feminine trio – ‘Jessie Clark’, ‘Lorraine Lee’ and ‘Countess of Stradbroke’.
Jessie Clark

'Jessie Clark': Large Single Rose of clear pink borne abundantly on a vigorous climber, 1915. R. gigantea x 'Madame Martignier'. This rose which flowers in early spring was Alister Clark's first great success.

Jessie Clark, Alister's niece, was the daughter of his brother Walter and his sister-in-law Mary. She grew up at Craiglee in Sunbury and as Alister and his wife Edith had no children, Jessie was very close to her uncle. Because her father was a professional soldier, Jessie and her parents frequently moved house and lived for a time at Emu Bottom in Sunbury. In 1922 she married her cousin Dr William Johnston and the couple had two sons.

Lorraine Lee

'Lorraine Lee': Hybrid Tea 1924. 'Jessie Clark' x 'Captain Millet', thus a second generation hybrid R. gigantea. Double, open, very fragrant rosy-apricot flowers almost perpetually. Clark's best-known rose. Available as a bush or climber.

Lorraine Lee was a distant cousin of Alister Clark, a relative of his sister-in-law Mary. Although she was born in Melbourne, Lorraine moved with her family to Frinton in Essex, England when she was young and lived there for the rest of her life. The Lee family had a strong gardening tradition and her great-great uncle was Curator of the gardens at Versailles under Napoleon III.

Lorraine was appointed a Member of the Civil Division of the Most Excellent Order of the British Empire (MBE) in 1918 for her work with the war effort.

The Lorraine Lee rose was named during Lorraine's only Australian holiday. After the Caulfield Guineas on 11th October 1920 Alister took her back to Glenara, showed her a number of unnamed seedlings and asked her to choose one to be named after her. Her choice was to be possibly the best-known of all Alister Clark roses, one which fulfilled Clark's aim to produce a rose that flowered all year round and was particularly suited to Australian conditions.

Countess of Stradbroke

'Countess of Stradbroke': Climbing Hybrid Tea, 1928. 'Walter Clark' x unnamed variety. Dark, glowing crimson, double blooms highly scented and very recurrent. Described in the American Rose Annual of 1939 as "probably the finest climbing rose in the world."

The Countess of Stradbroke was married to the Third Earl of Stradbroke whose family seat was Henham Estate in England. Her husband was Governor of Victoria from 1920-1926. The Countess visited Glenara in 1926, and the rose Alister Clark was then working on was named in her honour.

The Countess, who had eight children, shared Alister's love of horse-racing and herself owned a number of successful race-horses.

Further Reading:
Susan Irvine, A Hillside of Roses, Hyland House, Melbourne, 1994

'Hunting for Alister Clark's long lost blooms', the Age, 5 November 1985, p.21

Floral Tips for Racegoers
Race week tradition decrees roses as buttonhole flowers: a yellow rose for Melbourne Cup Day, a pink rose for Oaks Day, a red rose for the Emirate Stakes and on Derby Day something different – a cornflower.
For the Bookshelf

**Riddle of the Tsangpo Gorge**
Frank Kingdon Ward (ed. Kenneth Cox)
pub. Antique Collectors Club (UK), Woodbridge, 2001 (first published 1926)
ISBN 1 85149 374 9
RRP $95

**Reviewed by Trevor Nottle**

Here is a man who understood the simple needs of the determined plant hunter on the trek - quinine, iodine, a 'starter' and a 'stopper', a tent, a pannikin, mug, curry powder, the clothes he stood up in, boots and not much more. While personal needs were taken care of simply there was naturally, much more equipment needed for professional botanising, plant and seed collecting. But while the minutiae are dealt with in a light-hearted manner, the serious business of plant hunting is given the full force of Ward's enthusiasm and energy.

His writing is compelling, detailed, and filled with observations on a wide range of things that contribute to what he wanted most to convey. The nature of the region, its geography, its people and their culture. The flora and fauna, the climate. How it all combined to make the corner of the world where Tibet, India and Assam come together as a Paradise on earth - not just a Paradise for plant hunters and botanists, but also for Buddhist mystics, pilgrims, traders, and enterprising colonial powers.

The region, one of the last to be explored and mapped, was a genuine mystery. No-one knew what happened when the Tsangpo river disappeared into jungle-clad ravines near the border with Assam. Nor did anyone know where the fast-flowing Brahmaputra came from when it emerged from jungles in the same mountainous region but at 10,000 feet lower down than the Tibetan plateau above. Military men and geographers assumed the possibility of some huge, as yet undiscovered waterfall to rival the mighty Iguapu and sensational Niagara somewhere in those deep gorges between the snow-capped peaks.

This is what Ward set out to find, almost under the pretext of searching for plants for his wealthy patron A. K. Bulley. Working new territory was what it was all about. How else to find plants as yet undiscovered. How else to reward one's patron than with the promise of fame, and perhaps the honour of having a new plant bear their name?

Blessed with a stout constitution and an ability to abide great privations Ward made the journey accompanied by Jack, Fifth Earl of Cawdor. An even greater blessing than Ward's immense fortitude was his capacity as a writer to create vivid and engaging prose. As the adventure plays out, Ward draws his readers into a world peopled with Tibetans, yaks, lamas, yoginis and thick with rhododendrons, azaleas, primulas, rhumes, clematis, roses and flooded with gushing streams, rushing rivers, glaciers, tarns, snow melt. Under brooding crags, beneath beetling mountains, atop steep cliff faces, down into deep ravines, between massive boulders and over slippery scree we crawl, trip, slip, slide and stumble with Ward. It is a great adventure and one well worth taking - even if only while seated in an armchair. Thoroughly recommended.

**Verticordia The Turner of Hearts**
Elizabeth George and Margaret Pieroni
University of WA Press, Crawley WA 6009
ISBN 1 876268 46 8
$94.95
Obtainable from www.uwapress.uwa.edu.au

**Reviewed by Tony Orchard**

Venus, the Roman goddess of love, was reputed to have the power to beguile and turn the hearts of her suitors. When the French botanist De Candolle described one of Australia's most attractive groups of wildflowers, he was so struck by their beauty that the legend of Venus is thought to have influenced his choice of name.

Twenty years ago Elizabeth George dreamed of writing an account of Verticordia, one of the outstanding shrubby components of the spring and summer wildflower display in south-western Western Australia. In 1981 the talented wildflower artist Margaret Pieroni joined her, contributing 147 exquisite full-page watercolour paintings of each species, subspecies and variety.

More than 250 volunteers were recruited to search for Verticordia across its range in south-western WA, northern Australia and even into the Gibson and Great Victoria Deserts. The number of known species rose rapidly from around 50 to 101 species, with an additional 13 subspecies and 30 varieties. The known range of many species was extended during this survey, but others were confirmed to be very restricted. Out of this cooperative effort has arisen a planned conservation effort for the 75 species now documented as rare or endangered.

This attractive book of 422 pages is a tribute to the author, artist and volunteers. It contains detailed descriptions and illustrations of every species, extensive notes on cultivation, history of discovery, biology, conservation, and details of study groups. In short, everything one could possibly need to know about these plants. It will appeal to those who appreciate great botanical art, to those who want to grow one of Australia's most attractive groups of wildflowers, and to those who appreciate our incredible heritage of unique plants. It is a model that could well be used for other Australian floras.

Tony Orchard works for the Australian Biological Resources Study. He has over 30 years experience as a taxonomist, and has written extensively on the Australian flora and the history of Australian botany. For the last 10 years he has been Executive Editor/Editor of the Flora of Australia.
Both books are valuable encyclopedic contributions specifically for SA, and both will serve as essential complementary tomes to the Australian Dictionary of Biography and the Oxford Companion to Australian Gardens. Importantly, many of the SA contributors to the latter had the opportunity to expand several of their entries in the Wakefield Companion and S.A. Greats, so they provided venues for more lengthy, illustrated entries.

David Jones is Acting Dean of the School of Architecture, Landscape Architecture & Urban Design at The University of Adelaide. He is co-author of Gardens in South Australia 1840-1940 (1998), and has contributed essays in the Chicago Botanic Garden Encyclopedia of Gardens (2001), Wakefield Companion (2001), and Oxford Companion to Australian Gardens (2002).

Mathew Flinders
Miriam Estensen
Allen & Unwin, 2002
ISBN 1 66508 5154
RRP $59.95

Reviewed by Nina Crone

This book provides an excellent background for those wanting the 'big picture' of Flinders and the Investigator expedition. There is a freshness and fairness in Estensen's thorough and well-documented research. The author's close association with the sea and sea-farers which led to her special interest in maritime history, shines through the pages. Always at ease with the nautical world of charts, tides, foreign climes and bustling ports, her account also offers a broader perspective with its judiciously chosen extracts from personal letters.

Estensen is sensitive to the considerable adjustment Flinders had to make to life on his return to London, and the challenges it presented - the settlement of accounts, or tracing relatives of the ship's company who had not survived the epic voyage. And, in contrast, more intimate moments like reading Chateaubriand's newly fashionable romantic novel Atala to his wife Ann, or the happy reunion with Robert Brown and Ferdinand Bauer.

While the book does not present any significantly new research, it is a polished piece of writing, a great adventure story set against the politics of Napoleonic Europe and the burgeoning of popular interest in natural history played out by lively individuals with a grand vision. Mathew Flinders deserves to be enjoyed over Christmas on many beaches and international flights.

Next Issue
Paul Fox reviews
The Oxford Companion to Australian Gardens
DAVID JOHN EDWARD WHIBLEY, 1936-2002

Prominent horticultural identity and member of the Whibley family, David Whibley, passed away in July 2002. The family has strong botanical and horticultural associations with the Adelaide Hills.¹

David's interest in botany was nurtured by his grandparents' activities at Crafers and Stirling during his primary and secondary schooling. At the age of 16 David gained an apprenticeship at the Adelaide Botanic Gardens. Studying for a horticulture certificate, he was transferred to the State Herbarium and worked under Dr Hansjoerg Eichler (1916-1992) identifying plants and collecting them for referencing.

David worked at the Herbarium for 36 years and wrote numerous papers and books including Acacias of South Australia (1980) and Garden Weeds: Identification and Control (1982) with Trevor Christensen. He is honoured in Acacia whibleyan (Whibley Wattle), a wattle restricted to the Tumby Bay locality on southern Eyre Peninsula in SA. David assisted Director of the Gardens, Noel Lothian, in the design and planting of the 3.2ha Stirling East Primary School grounds.²

Diagnosed with a brain tumour in 1981, David sought to maintain his work at the Herbarium, writing books and papers, whilst dealing with public inquiries and coaching tennis - all while fighting his illness.

David continued the horticultural and botanical tradition of the Whibley family in the Hills. His great-grandfather, David (1847-1891), served as Head Gardener at Boode House (now Shurdington) at Crafers. His grandfather, David Francis (1878-1961), worked as a gardener and propagator at St Vigean's; established the long-standing family residence with its extensive Rhododendron collection in The Crescent, Stirling; served as Stirling Council Gardener establishing the renowned, colourful Stirling streetscape; worked at Forest Lodge as Head Gardener; and pioneered American Hickory propagation for Essington Lewis.³ David's uncles were also strongly involved in gardening, landscape design, horticulture and floriculture in the Hills and on the Adelaide Plains. The family is featured in the Oxford Companion to Australian Gardens (2002).

David Jones

Acknowledgments
Dr John Jessop.

Mailbox

AGHS can make a difference

Two Sydney Branch members write of an October visit to Bishopscourt in Melbourne.

We spent last weekend as houseguests of our old friends Archbishop Peter and Margo Watson. The reunion was timed to coincide with the opening of the Bishopscourt garden (the first time in 40 years) via Australia’s Open Garden Scheme.

We last visited Bishopscourt in May 2000 when attending Peter Watson’s induction as Archbishop of Melbourne. The house and garden showed evidence of years of neglect. Building work had started on the house, but the once magnificent garden was heavily overgrown. Since July 2001 AGHS Victorian Branch has held monthly working bees at Bishopscourt to restore this significant 150 year-old garden.

On arrival last Thursday (10 October) we were stunned by the extraordinary transformation. Rubbish had been removed, trees and bushes pruned, lopped or removed as necessary, garden beds reorganised and mulched, old pathways and vistas reopened. We were aware of the project from the Watsons, the AGHS Journal, and chats with Helen Page, one of the main AGHS members involved in it. This property of almost a hectare has been restored to what it was originally designed to be.

Double gates open into the formal section - magnificent old trees standing in a huge lawn encircled by a long gravel drive and bordered by perennial gardens some with serpentine paths. A two metre high hedge provides privacy for the “house garden” where the family can relax and children can play. In the back corner of the property there is a mouth-watering vegetable garden reached through a (new) pergola. Neatly bordered paths draw you into the coolness amongst trees on the southern side.

This spectacular project is a wonderful example of the difference that the AGHS can make and was appreciated by over 2,000 Open Garden visitors last Saturday and Sunday. Those involved in the restoration must be congratulated and applauded for such an extraordinary effort.

Warwick and Robin Lewarne
### NOVEMBER

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-7</td>
<td>Friday-Thursday Western Australia – Festival of Country Gardens – see <a href="http://www.montaza.com.au">www.montaza.com.au</a></td>
</tr>
<tr>
<td>2-3</td>
<td>Saturday-Sunday Boronias, Correas and other Fragrant Friends to be held at the Kawarra Australian Plant Garden. For further details see <a href="http://www.yarraranges.vic.gov.au/kawarra">www.yarraranges.vic.gov.au/kawarra</a></td>
</tr>
<tr>
<td>5 November</td>
<td>Victoria, Mornington Exhibition: ‘Edna Walling’s Gardens: a visionary designer’ At Mornington Peninsula Regional Gallery, Dunns Road Mornington, 3931. For more details phone (03) 5975 4395.</td>
</tr>
<tr>
<td>9 November</td>
<td>Tasmania, Hobart Garden Visit: Dr and Mrs Tooth’s garden featuring rhododendrons, exotic trees and a summerhouse. Members $6, others $8.</td>
</tr>
<tr>
<td>13-15</td>
<td>Wednesday to Friday Tour - Historic High Country Gardens, Homesteads and Properties. Tour organised by the Friends of the Royal Botanic Gardens Sydney and led by Trisha Dixon includes properties around Goulburn, Canberra, Cooma, Braidwood, and Bungendore. Cost from $472 per person includes coach travel from Sydney, 2 nights accommodation in Canberra, lunches, teas, 2 breakfasts and 1 dinner, entry to gardens and comprehensive notes. For more information phone (02) 9231 8182 (business hours) or e-mail <a href="mailto:friends@rbgyd.nsw.gov.au">friends@rbgyd.nsw.gov.au</a></td>
</tr>
<tr>
<td>20</td>
<td>Wednesday Victoria, Melbourne Working Bee – Bishopscourt (Melway 2G D3) Contact: Helen Page (03) 9397 2260.</td>
</tr>
<tr>
<td>23</td>
<td>Saturday ACT, Monaro, Riverina – Christmas Party at Palarang, NSW.</td>
</tr>
<tr>
<td>23-24</td>
<td>Saturday-Sunday Sydney, Vaucluse House – Kitchen Garden Festival. A must for those interested in gardening and food, with tastings, cooking demonstrations, a produce market featuring heirloom, organic and hydroponic vegetables, historical displays and gardening products. This is a rare opportunity to taste, purchase and learn how to grow vegetables from the 1800s.</td>
</tr>
<tr>
<td>26</td>
<td>Tuesday Sydney, Government House, Book Launch – Oxford Companion to Australian Gardens. For further details contact <a href="mailto:markbrandon75@hotmail.com">markbrandon75@hotmail.com</a></td>
</tr>
<tr>
<td>30</td>
<td>Saturday Victoria, Beaufort Working Bee – Belmont (Vic Roads S7 BG) Contact: Helen Page (03) 9397 2260.</td>
</tr>
</tbody>
</table>

### DECEMBER

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Sunday</td>
<td>Richmond, Tasmania – Garden Visits: 11am ‘Burnside’, Orielton; 12.30pm Richmond - bring a picnic lunch; 2pm ‘Strathfield’, 3pm ‘Oak Lodge’ with a tour of the house and garden being re-established by volunteers. Cost: $8 members, $10 non-members.</td>
</tr>
<tr>
<td>7 Sunday</td>
<td>Victoria, Melbourne Working Bee – Bishopscourt (Melway 2G D3) Contact: Helen Page (03) 9327 2260.</td>
</tr>
<tr>
<td>8 Sunday</td>
<td>Western Australia, Christmas Function. For details contact Edith Young (08) 9457 4956.</td>
</tr>
<tr>
<td>12</td>
<td>Thursday Victoria, Melbourne Christmas Function – Walk, Talk &amp; BYO Picnic in the Australian Native Garden, Royal Park Gatehouse Street, Parkville (Melway 2B B4). Further details from Nigel Higgins on (03) 9658 9852 (business hours).</td>
</tr>
<tr>
<td>18</td>
<td>Wednesday Victoria, Melbourne Working Bee – Bishopscourt (Melway 2G D3) Contact: Helen Page (03) 9397 2260.</td>
</tr>
</tbody>
</table>

### ADVANCE NOTICE

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-13</td>
<td>July Brisbane – 24th Annual National Conference ‘Tropical Pleasures’</td>
</tr>
</tbody>
</table>

---

**PRINT POST NO.** 345842/0016