200 YEARS OF GARDENING IN AUSTRALIA By Diana O'Brien

Three days after the First Fleet had dropped anchor in Port Jackson on 26th January 1788, Lieutenant Philip King noted that a number of convicts were digging up the ground for a garden. On the fourth day he wrote, 'A Number of Plants belonging to the Governor was landed and put into ye ground."

It had been a long voyage, full of hardships, but as the official records show, the supplies that accompanied the human cargo and crews were surprisingly diverse.

In December 1786 Sir Joseph Banks, Administrator of the Royal Gardens at Kew had prepared an inventory - a list of seeds for New

South Wales. His knowledge of the climate there, having made the voyage himself with Captain Cook on HMS Endeavour, was of the utmost assistance.

Captain Philips' botanist on board, Mr. Mason, was to procure vast numbers of plants such as coffee, bananas, oranges, lemons and other citrus as well as figs, rice and corn at ports en route such as Rio de Janiero and the Cape of Good Hope.

Loaded aboard the flagship Sirius as well as HMS Supply and three other store ships were not only hundreds of bushels of vegetable seeds, plant cuttings and fruit trees but tools and implements as well as rations sufficient for two years.

Diary notes offer fascinating glimpses of that historical voyage. Arthur Bowes-Smyth, surgeon on the Lady Penrhyn another of the ships of the First Fleet, recorded 'a fine breeze - this night was so very hot I was obliged to throw of the bedcloathes. There are now in the cabin geraniums in full blossom and some grapes which. flourish very much. A whale, some Rockweed and a seal seen this day."

George Worgan, who was the surgeon on the HMS Sirius, informed his brother by letter that Cape Town was the last "civilized place we touched before Botany Bay so we procured all that the Cape afforded in the way of seeds, plants and other garden articles such as orange, lime, quince, apple and pear trees. Thus equipped, each ship, like another Noah's Ark, away we steered".

Sir Joseph Bank's list of seeds for New South Wales was remarkably comprehensive. Apart from the staple grains such as wheat, barley and oats together with pasture enhancers like clover and lucerne, the bulk of the fleet's seed supplies consisted of traditional vegetables and herbs.



Keen gardeners who value the texture and flavour of those original, now heirloom varieties of vegetables, as opposed to the more rigid dimensions of the F1hybrids grown commercially in the 21st century, will be fascinated to find that many of them are still available today. Windsor (broad) beans, Cos lettuce, Savoy cabbage, and white Spanish onions, to name but a few.

Among the seeds on Bank's list (the total cost of which -including today's equivalent of postage and packing, came to 286 pounds, 18 shillings and sixpence) were peas, carrots, spinach, beans, parsnips, asparagus, red and white beet, cauliflower, celery, prickly



cucumber, lettuce, parsley, broccoli, kale, nasturtiums, mustard and cress, basil, thyme and other pot herbs, radishes, leeks and turnips.

Cabbages had not only been cultivated for culinary use since Roman times, but many had been used medicinally, mainly for drunkenness. Quite early on, caterpillars, one of their major pests, were found to be susceptible to sprays of salty water.

Left: Sir Joseph Banks

Establishing a garden in the new colony was hard work and there were some spectacular failures as well as successes. Not only were there poor soils and pests like parrots and grubs to contend with but unguarded gardens, whether on an island in Sydney Harbour or closer to Sydney Town were soon pilfered by hungry

thieves. Sadly, some might think of these last observations, that not too much has changed in the last two hundred and twenty two years..

While the pursuit of horticulture and agriculture was always paramount in those food-scarce times, some of the first ornamental plantings fashioned the landscape of Governor Phillips first residence.



Governor Phillips' first residence

Plants from Rio de Janeiro and The Cape of Good Hope were safely brought ashore and, according to the records of a David Collins, we soon had the satisfaction of seeing the grape, the fig, the orange, the pear and the apple - the delicious fruits of the Old taking root and establishing themselves in our New World. European horticulture had taken root in Australian soil.

Those early years of settlements are full of fascinating history of gardening trials and tribulations we can't even begin to imagine in this day and age. Seeds were taken from common stores to a parallel settlement at Norfolk Island, where Philip Gidley King was in charge and ran it like a farm. Rats destroyed the wheat and barley while grubs, along with parrots, destroyed all the potatoes and most of the other vegetables

James Ruse, of Launceston in Cornwall, whose name all school teachers will know, was convicted of burglary and transported. He began working a plot of land at Parramatta in 1789. Five years later huts and gardens lined the one-street village where settlers raised cabbages, pumpkins, turnips, potatoes tomatoes and cape gooseberries.

By 1826 a group of enthusiastic gardeners in Sydney formed the first Horticultural Society. The following year Botanist William Shepherd, who had trained under the renowned Lancelot 'Capability' Brown established the Darling Nursery at Darlington near the site of the present Sydney University. rom then on all kinds of things horticultural grew like topsy. Australian

native seeds and plants were sent to England in exchange voyages that took many months even years.

One record of a specific plant that we do have is that John MacArthur, of the merino sheep fame family, sent the first camellias to Australia on the AS.S Sovereign in 1831 - one plant of which camellia anemoniflora still survives at the family homestead in Camden Park.

Let me now tell you about two ladies, each named Georgiana who in the mid 1800's proved to be among the new colony's keenest gardeners.



GEORGIANA MCCRAE

Georgiana McCrae, a talented artist and daughter of the fifth Duke of Gordon, emigrated with her husband settling first in Melbourne where he began to farm. She created a beautiful garden there and later another at Dromana on the Mornington Peninsula. In her garden journal for 1842 Georgiana notes that she sent to Mr La Trobe, a nurseryman at Jolimont for cuttings of creepers, roses and fine geraniums that he had promised.



GEORGIANA MOLLOY

On the other side of the continent in the Swan River Colony as Western Australia was once known, Georgiana Molloy had also left her family and friends to emigrate with her husband, settling in Augusta in 1830. For many years she endured much hardship, keeping house in a leaky tent where she gave birth to her first daughter who died shortly after. However, Georgiana's love of botany, which she had studied as a girl, became an all-consuming passion. In a letter to an English acquaintance Captain James Mangles, a keen horticulturist and botanist to who she sent seeds and cuttings of native plants and who in return sent her books, seeds and cuttings until her untimely death at the age of 37, she painted a charming picture of what could be achieved.

'Some of your seeds have survived the winter and now on November the 1st are in full bloom. The tall white lily, pink gladiolus from the Cape, pinks, sweet peas and geraniums and many more I have not space to mention.'

Inevitably Australia's earliest garden designs and styles emulated those that had been left behind in England. The first world war and then the Depression of the 1920's and 30's heralded much of the social change which also tended to shape the suburban garden the quarter acre block as we then knew it. Vegetable plots to feed the family, a chicken yard under a lemon tree and a

kikuyu or couch grass lawn were the order of the day when most children who grew up in Sydney in the 1940's were more than familiar with bindiis in their bare feet in summer.

When I first came to Canberra in the late 1950's it was being planned as a garden city. Every resident who moved into a house was offered 10 trees and 40 shrubs with which to establish their new garden. Fifty years later at least a quarter of those plants supplied were being

listed as either domestic weeds or environmentally incorrect - berried shubs such as Pyracantha and Cotoneasters, relished by the birds were being undesirably deposited in bushland and overwhelming more desirable native plantings/

Not only that but there were trees like burgundy and Golden Ashes, Ghestnuts and other huge growers such as Eucalyptus that would have been far more appropriately sited in parkland than the suburban landscape. If there was any early appreciation of native flora there was little attempt to work with nature and the vast arid landscape was a threat to the survival

of exotic, or introduced, plantings. Huge coastal eucalypts with shade- giving potential were felled either for timber or perhaps an attempt to train the landscape. Colourful wattle and bottlebrushes were invariably discarded in favour of European ornamentals. Strangely enough while we seemed to be disregarding indigenous beauty in the mid nineteenth century there was an increasing interest in Australian flora overseas.

When Sydney's first Botanic garden was declared in 1816, not only was its primary function to cultivate, classify and name native plants but to ship them to other Botanic gardens around the world. Kew Gardens for one embraced new arrivals wholeheartedly. The discovery of gold in the 1850's had far reaching social effect as well as political effects on the young country.

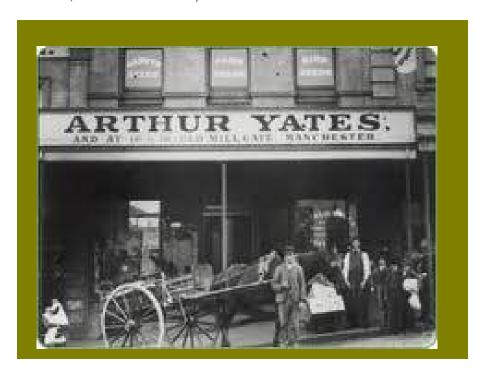
Gardens became a status symbol of the rich. In Melbourne, Rippon Lea, which is often open to the public, is a prime example. It currently boasts, as it once did, sweeping lawns with peacocks, a tapestry of deciduous and evergreen trees and shrubs, a fine rose garden and a gigantic fernery believed to be the biggest shadehouse in a private garden.



EUCALYPTS IN KEW GARDENS

Large scale market gardening of vegetables at the time was dominated by the Chinese who remained in Australia even when the gold rush petered out. Until the 1920's in fact, there were Chinese gardeners on every big property and in every country town in Australia. Farmers didn't grow their own vegetables as a rule, so most were dependant on the Chinese growers for their supplies. As a matter of interest, Chinese gardeners used

highly labour intensive methods growing plants in square beds irrigated with narrow channels, filled from watering cans carried on bamboo poles across their shoulders. In addition they fed the plants liberally with liquid manure. (I'd like to think that the manure came from cattle and goats kept for milk and meat, but one never knows).



Amid all this increasing enthusiasm for gardening, Mr Arthur Yates, from my home town of Manchester in UK, arrived in Sydney, via New Zealand (wonder what he didn't like about it?) where he set up a seed business in Sussex Street in 1887.

As you all know, Mr Yates is still very much a part of a flourishing horticultural industry today and Yates Garden Guide, first published in 1895, remains top of the Australian gardening book pops today. Increasingly, land was opened up which set the tone of prosperity in which gardening developed. The wealthy among us landscaped large gardens in the outreaches of major cities.

The soft cool climate of the Blue Mountains- west of Sydney, and the Dandenongs down in Victoria- East of Melbourne remain major tourist sites for members of garden clubs all over this side of the continent, to view English style gardens predominantly full of exotic or introduced plants like rhododendrons, wisteria, European bulbs and roses.

What an interesting turn around that currently, thousands of tourists from the eastern states book tours in advance to visit Western Australia in spring so that they can admire and photograph an explosion of native flora!

The Aborigines, who were never, ever, gardeners, but hunters and gatherers---- had understandably little impact on how plants were grown around dwellings in the early years of settlement". They, of course, knew and still know, a great deal more about the benefits of certain plants than the immigrants ever did -which ones were good for food, those that

could be used medicinally and so on. It was a century or more before those who either worked with, or employed them, began to understand the native diet and its beneficial properties.

It's sad to contemplate that if Burke and Wills had known more about bush foods and how to collect fresh water from overnight desert dew they may well have still been alive when the search party finally arrived. Should we be surprised to know that in the late 1980's early 1990's we saw the introduction of wattle seed ice cream; mountain pepper sauces, bush tomatoes, lemon myrtle, and along with mud crabs and barramundi into our main stream up- market Sydney restaurants.



Above: EDNA WALLING IN HER YOUNGER DAYS





Back to the 1920's for a moment when one of our most prominent garden designers of the day came to the fore. Edna Walling was a product of the Burnley School of Horticulture down in

Melbourne. Whilst I admire the contents of many of the gardening articles that she wrote. and agree with the fact that she stated a knowledge of horticulture was NOT the key to a beautiful garden, I think perhaps, she meant it was perhaps more in the eye of the beholder.

Nevertheless she constantly advocated pergolas which united houses with the gardens; low stone walls with weathered boulders; groups of silver birch trees; drifts of bulbs through lawns and swathes of perennials especially Erigeron the seaside daisy, that reseeded annually and popped up in every nook and cranny of her stone walls and paving". How boring was that in this day and age? In all fairness; In her later years she began to extol the virtues of native plants. In fact after World War 2 she switched to the exclusive use of native plants.

The first world war and then the Depression of the 1920's heralded much of the social change which tended to shape much of the urban garden, the quarter acre block as we grew up to know it in the 50's.

In my more than a quarter of a century of writing garden columns and dispensing advice there have been many changes in the way we nurture our personal landscapes. No longer do we unthinkingly pour toxic chemicals onto our ripening fruits and vegetables. We now know, not only from our reading, of newspaper gardening columns, but from radio and television gardening programmes that there are now less damaging ways of protecting crops. We have, in fact, learnt a lot from nature itself. Trees that appear to be untouched by pests or disease for example the Indian Neem tree, have yielded extracts that have since been commercialised in the form of Eco-Oils.

Kelp harvested from the ocean currently plays a huge role as a plant tonic (Seasol - Maxicrop) and it's ability to strengthen plant cells thus increasing their tolerance to both frost and drought.

Come to think of it there aren't too many companies in the business of plant foods and fertilisers who haven't yet jumped on to the seaweed wave. Over the years SO many previously recommended gardening practices have disappeared or at least have been amended.

In the mid twentieth century we were told to soak cigarette ends in water so that the resulting nicotine solution could be sprayed on roses as well as edible crops that were troubled with aphids.!!!!!

Do you remember laying metres of black plastic sheeting beneath roses and as bases for pebble gardens? It might well have kept down the weeds but it surely did nothing for the soil but turn it sour for the lack of air, water, and all the nutrients it was unable to receive to sustain life.

Fortunately we have since learnt a thing or two about mistreating the soil-to say nothing of the land.

(I have much more to say about the degradation of the land by farming practices, unnecessary cutting of trees etc. one tree in a paddock surrounded by a mob of sheep is cruelty to animals. but that's another subject for another day)

Nowadays we know how to select organic mulch such as compost and spent plant material - and then let the worms and other organisms do the work for us (Worm farms of course are another of the ways that householders can turn kitchen waste into a soil additive.) after which, of course, we reap the benefits of a rich black loam in which to plant crops that will grow without the need for chemical additives.

Those who wish dig virgin ground can now choose ergonomic and lightweight tools; cut hedges with electric clippers: and collect and mulch fallen leaves and lawn grass in one operation. We now have Fly-mowers- one only needs to guide and not even push. And believe it or not there are now Robots that will mow your lawn much as you would sail a remote- control boat on a pond. Over the years we have not only battled drought as well as bushfire but because of them we have learnt how to regenerate the soil and conserve precious resources like water.

In all areas of the country, water restrictions have dictated the way we currently irrigate our gardens- drippers have replaced overhead or circulating sprays and the times we can water plants have been adjusted. Weather patterns change of course.. Right now we are having to cope with too much water.

As new houses grow bigger and house blocks become smaller we have managed to adapt to and make the best use of available space. Many of us have learnt how to grow vertically, on trellises and fences or by horticultural techniques such as espaliering trees and shrubs when horizontal space became scarce.

For those of us who may have downsized from family homes on bigger blocks to high rise units, our yearning to grow, however, has not lessened as evidenced by the popularity and increasing waiting lists for blocks of ground in community gardens. Community gardens operated by the Canberra Organic Growers Society (www.cogs.asn.au) can be found on a dozen or so sites throughout north and south Canberra as well as Queanbeyan.

Over the years many of us have been able to appreciate the advances in disease resistant plant varieties- particularly among vegetable and fruit crops. Insect pests can be taken care of by the laboratory farming of beneficial insects and predators that devour the ones that we would rather not have. Fruit trees grown on dwarf rooting stock- far easier to pick and net from the birds are commonplace. We can even grow some of them as columnar specimens without lateral branches, Ballerina apples and Crabapples among them, and then there are even innovations like thornless roses.

Almost two decades or so ago we shared the excitement of the discovery of a dinosaur plant found just by chance in a damp ravine in the Wollemi National Park. Subsequently the Wollemi Pine has been propagated commercially to the delight of gardeners all over the world. Whether it will survive in the full sun site of the newly emerging ACT Arboretum remains to be seen - I confess to being one of the sceptics.

Computers, of course have already changed the way we garden. We have access to encyclopaedic lists of plants; how to grow them; where to grow them and when. Perhaps in the future we can look forward to polymers and plastics that incorporate solar chips than will allow cool climate gardeners to extend the growing season from 150 days to 365 under perpetually warm vegie plots beneath inexpensive domes or 'glasshouses'. In the meantime, although the most popular part of talk back gardening programmes are invariably questions on pests and diseases "What will I spray for what?" Iphone and Itouch users now have their own problem solve at their finger tips-. great for tech savvy gardeners.

You'll find all this on the website of Yates - who this year won the Technology Laurel at the Horticultural Media Association awards. Simply download the images from www.yates.com.au/ problem solver app, to identify a garden problem and check out the solutions.

Two hundred years of gardening in this vast continent has taught us much - who knows what other generational changes might lie ahead.■