

NURSERY TALES FOR A GARDEN CITY

THE HISTORICAL CONTEXT OF THE RECORDS AT CANBERRA'S YARRALUMLA NURSERY



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It is impossible to work amongst the records of Yarralumla Nursery without recognising the ongoing contribution to Canberra of so many who worked there. Among those mentioned in this report Charles Weston MBE and Professor Emeritus Lindsay Pryor AO figure most prominently, but both would insist their recognition be shared by colleagues like John Hobday, Tom Sharp, Dr Robert Boden OAM, David Shoobridge ISO, and Peter Sutton, to name just a few.

This report is also in admiring memory of the late Tony Byrne. His quiet dedication and knowledge of the unique role of the Nursery, joined to Michael Kidd's experience and passion for the Nursery and its history, made an irresistible combination when we first talked together amongst the records at Yarralumla Nursery.

1. INTRODUCTION

Yarralumla Nursery made the national capital a garden city and also put the bush in the 'bush capital'. It clothed the landscapes of the Australian Capital Territory and influenced its broader 'food-bowl' region. The sketches of this intriguing history given here are drawn from evidence recorded in two groups of handwritten records kept at the Nursery. The records precede the city, they nourished its growth and influenced the wider landscapes of the ACT region. They have been a concealed key to the history of Yarralumla Nursery and of the landscapes and gardens of the national capital. This report shows how digitisation of these records now enables us to unlock a store of tales of the nursery that planted a city.

These records, started by the Nursery's founder Charles Weston 100 years ago, are mostly handwritten. They are on file cards still consulted and in ledgers still active in daily operations. For this reason the cards and the ledgers, as vulnerable as they are valuable, have remained at the Nursery while other significant records of the first century of Australian government are safe in the custody of the National Archives, or the newer Territory Records Office now responsible for records of the government of the ACT.

The corrugated iron shed housing these records is the same building we see in the background of the iconic images of Nursery head Charles Weston and his nurseryman John Peace Hobday and their families. It was the first Nursery office in 1914 and it serves the same purpose today. The index cards in wooden drawers are the very ones Weston began as a meticulous account of the source, propagation, cultivation, location and trial results of the trees, shrubs, flowers and even pasture grasses the Nursery supplied the city and its countryside. The ledgers are those where thirty years later, Lindsay Pryor began recording the seeds and cuttings he collected around the world – and from the streets and parks Weston had planted.

Of the many issues influencing the selection of a site for Australia's national capital, horticultural promise was not one. The Limestone Plains were an undulating grassland with few trees, surrounded by lightly wooded hills. Local pastoral estates and farms were garden pockets, marked by trees established as windbreaks. Ninety years of pastoral occupation had shaped the landscapes,

but the dominant influence was human and climatic impact over millennia, with a pattern of cold frosty winters and hot dry summers. Wind across the exposed plain and 'frost hollows' were added natural handicaps to more extensive tree cover, matched by the introduced problems of rabbits and the practice of clearing trees on hills.¹ In 1911 the landscapes imagined in the winning design for the national capital were far removed from this reality, yet verdant landscape became the chief characteristic of Canberra. The records at Yarralumla Nursery reveal a neglected side of this story, the part science and skill played toward realising the artistic intent.

When Charles Weston saw the site of Canberra in 1911 he knew that collection and analysis of data was essential in meeting its challenges, with precise record-keeping the essential tool. His emphasis on this was recognised by colleagues like head of the Botanical Gardens in Sydney JH Maiden, who reported in 1919:

we are . . . dealing with a largely treeless area whose silvicultural conditions, as regards any large number of species, are almost unknown, and data is being laboriously ascertained by the Officer in Charge of Afforestation on the spot. His methods of keeping his records are quite in advance of planting records in Australia, and probably in most other countries'.²

The records at Yarralumla Nursery are of importance for botanical scholarship and have a prominent place in investigation of the foundation of the present landscapes of the ACT. They are scientific treasure as well as rich cultural artefact. With their partner documents in government archives, they hold the fascinating stories of people and plants, of pleasures and politics that tell us how a garden city was created. They tell a constitutional tale too, of how an imagined civic landscape was realised from a never ample and sometimes shrivelled public purse.

These plain workaday records are a far remove from Marion Mahony Griffin's beautiful renderings of Walter Burley Griffin's design for the layout of the city. Those drawings are rightly considered among our national treasures, their aesthetic appeal the partner of their historic significance. But the records at Yarralumla Nursery, with their associated planting plans and records of plant experimentation, are an essential complement to these drawings.

¹ LD Pryor *Trees in Canberra* Canberra, Department of the Interior, 1968, pp.5-7

² JH Maiden Report 1919, quoted in GP Murphy *Parks & Gardens in Canberra* Canberra, Department of the Capital Territory, 1979, p.23

2. THE RECORDS

From the conception of the national capital in the Australian Constitution in 1900 to the granting of limited self-government to the Australian Capital Territory in 1989, the federal government's development of Canberra is amply recorded. The record keeper is the National Archives of Australia, where everything ends up when past its active life – files, maps, plans and photographs, including the incomparable series taken by Jack Mildenhall where Charles Weston's work unfolds in a visual record of the creation of a city (see **Appendix 2a** & **Appendix 3**).

Some records of Yarralumla Nursery are among significant ACT records that have been transferred to the custody of the Territory Records Office (see **Appendix 2b**). Among other relevant holdings are those in the collections of the National Library and the ACT Heritage Library, the forestry records in the Australian National University Archives and former Nursery records now part of the holdings of the Australian National Botanic Gardens.

But a premier collection of records is still housed in their historic home, Yarralumla Nursery, in formats ranging from index cards to herbarium specimens. These are the focus of this report. Their extraordinary value, their age and their vulnerability prompted the dedication and determination that enabled the digitisation project of which this report is a part. As well as providing wide access to the records, this project enables the transfer of the original material to the care and custody of the Territory Records Office.

The digitisation project undertaken in 2011 by the ACT, Monaro & Riverina Branch of the Australian Garden History Society and supported by an ACT Heritage Grant covered two of the three record sets held at the Yarralumla Nursery. The '**Plant Cards**' are two card systems housed in two sets of wooden drawers and the '**Ledgers**' are three large folio volumes. Tightly budgeted resources meant a third set of records could not be included in the project, the '**New Plant Files**' housed in filing cabinets, plus their associated herbarium boxes. All these records are important for future scholarship and in enhancing current awareness of the development of landscapes in the ACT region.

The Plant Cards consist of about 15,000 cards, in size about 20cm x 15 cm, housed in 18 wooden drawers. The mostly handwritten cards record acquisitions of seeds and cuttings and how they were propagated, with planting dates and locations also given up till 1927. The earlier and larger set of these cards is housed in 12 drawers. These are digitised as **Set 1** with entry dates ranging from May 1913, when Weston recorded the various seeds he brought with him to Canberra when he started work that autumn. **Set 1** covers natives and exotics and is filed alphabetically by genus, with blue introductory cards for each genus showing the number assigned to each species. The buff-coloured cards that follow are filed by species, with a letter assigned for the subsequent specimens acquired in each species. The latest acquisitions found on these cards are dated 1947.

The cards digitised as **Set 2** are in fact two sets. One in a drawer of about 200 cards labelled 'Bulbs' has the same date range as Set 1. The other, housed in five drawers and arranged by species, is of later cards with a number assigned each accession corresponding to a numbered entry in the Ledgers. The earliest entry is October 1944 with sporadic entries until 1948, when many entries are made, continuing until the last entry in 1965. A clue to the recording dates can be found in the organisational history of the Nursery, with Lindsay Pryor's appointment in June 1944, and his return to work in 1948 after an extended overseas collection tour (See Section 3.2.c below). These cards comprise almost entirely exotic species, raising the question of why cards covering indigenous species were separated from the 1944-65 cards. This remains a puzzle that points to further research into the close connection of the Nursery with the establishment in 1949 of a national botanic gardens devoted to Australian species.

This entire card system has been digitised in the 2011 Heritage Project.

The Ledgers are three large folios with handwritten entries recording each acquisition of seeds and cuttings over the past 63 years. A deposit book of the development of the seed bank at Yarralumla Nursery, this is a record in active use. Entries are given consecutive accession numbers, with acquisition dates not always in sequence. The Ledgers record both indigenous and exotic species.

The first acquisition recorded was a sample packet of *Juniperus californica* seed from the Californian Institute of Plant Genetics on 6 January 1948, with accession number 4893. The latest entry digitised is for 27 grams of *Taxodium mucronatum* (Montezuma Cypress) seed for

propagation in the ACT's new National Arboretum, collected on 15 June 2011 from the evergreens growing in the ANU forestry compound and given the accession number 11040.³

All of **Ledger 1** (1948-1960) and most of **Ledger 2** (1960-1967) duplicate the exotics accessions between 1948-65, recorded as Set 2 of the Plant Cards. From 1965 **Ledger 2** and all of **Ledger 3** (1969 -) appear to be a unique account of deposits in the Yarralumla Nursery seed bank. So if the Montezuma Cypress in the ANU forestry compound, from which seed was collected in June 2011 grew from Yarralumla Nursery stock, we can use the Ledgers and the Plant Cards as a clue to the source. The only acquisitions of this species were in 1962 from the USA, or in 1964 as part of a substantial botanical exchange with Italy.⁴

All three Ledgers have been digitised in the 2011 Heritage Project.

The New Plant Files are mostly paper records in file folders, created by the Technical Section of the former Department of the Capital Territory, documenting accessions and in some cases species performance. There are around 400-500 files housed in four filing cabinets and 40 herbarium boxes with herbarium sheets associated with the files.

This material was not yet digitised as these interesting records were beyond the scope of the current project.

³ **Ledger 1**: entry 4893 for 6 January 1948 *Juniperus californica* [digitised as Ledger 1: 101, page 1]; **Ledger 3**: entry 11040 for 15 June 2011 *Taxodium mucronatum* [digitised as Ledger 3: 315, page 3]

⁴ **Cards Set 2**: *Taxodium mucronatum* seed acquired 23 June, 20 August 1962 & 18 November 1964 [digitised as Taxodium 5]; **Ledger 2**: entries 621717, 622016, 643345 *Taxodium mucronatum* seed acquired 23 June, 20 August 1962 & 18 November 1964 [digitised as Ledger 2: 213, page 11; 213, page 3; 227, page 3]

3. HISTORY

A comprehensive history of Yarralumla Nursery, established on its temporary site one hundred years ago, is long overdue. This brief history, generated from the Plant Cards and the Ledgers at Yarralumla Nursery and associated records, also signifies their place in the shared history of the Nursery and the national capital.

This Section sketches seven aspects: (1) the origins of the Nursery; (2) its organisation; (3) how seeds and plant stock were acquired locally and internationally; (4) how shelter was first provided and the Nursery's early role in food growing and forestry; (5) planning a garden city; (6) the plant issue scheme and home gardens and (7) ceremonial planting and public places.

3.1 ORIGINS

Yarralumla Nursery and its two handsome offspring, Westbourne Woods and Weston Park, are living history. You can sit in the shade of the first trees planted almost 100 years ago, or stroll through the village of shadehouses and glasshouses that served as research laboratories as well as tender incubators for baby plants. When you step into the office building at Yarralumla Nursery, you step back a century to the days when Canberra's founding forester and horticulturalist, Thomas Charles George Weston, met with his head nurseryman, John Peace Hobday, to plan every tree, shrub and flower that created the garden city conceived by Walter Burley Griffin in 1911, founded on 12 March 1913, and unveiled on 9 May 1927.

In that humble building are records older than Canberra. When the Federal Capital Territory was established by an Act of Parliament in January 1911, the government nursery was not far behind. It was founded just three months later, when Charles Weston visited Canberra in April 1911 to report on an initial temporary site, three acres of sandy alluvial soil adjacent to the first government offices at Acton – now under the main carpark of the National Museum of Australia. At the end of the month Prime Minister Andrew Fisher's Government launched the international competition for a design for the national capital. Then employed at 'federal Government House', the State Governor's residence temporarily leased to the Commonwealth as a Sydney base for the Governor-

General, for the next two years Weston was adviser to the federal government on establishing the Nursery in the national capital.⁵

In the spring of 1911 Weston was in Canberra again to check the ploughing and fencing work being done by two men, one of them Tom Sharp, whose long career at the Nursery culminated in twenty years as Chief Nurseryman from 1935-54. February 1912, when Weston returned to Canberra to oversee the installation of irrigation at Acton, was also the month that entries in the design competition closed. Griffin's winning design was unveiled on 23 May 1912 and at the end of that winter, Weston returned to Canberra bringing his gardener colleague James Maxwell who supervised the first plantings in the spring. During the five days Weston was in Canberra in August 1912 he oversaw the planting of the shelter belt he emphasised was essential to the success of the Nursery. This first planting included the *Pinus insignis* (Monterey Pine), *Cupressus macrocarpa* (Monterey Cypress) and other trees and shrubs he had ordered for this purpose. As adviser in 1911-12, Weston supplied all the lists for ordering plants and seeds from suppliers and nurseries in Australia and overseas, as well as securing lists of local plants including prevalent weeds. His planting lists were for experimental trials to establish suitable species for the national capital and its region and included plants useful for shade and shelter, and food and fodder, as well as the beautiful and ornamental.⁶

3.2 ORGANISATION

Though usually individually identified as Acton Nursery and Yarralumla Nursery, the temporary establishment at Acton and the permanent one at Yarralumla are the same agency. In this report the organisation at both sites is referred to as Yarralumla Nursery to take into account the continuation of nursery work at the Acton site for many years after the permanent Nursery was established at Yarralumla in 1914.

The administrative history of Yarralumla Nursery shows twin peaks of organisation and activity: the first spanning Charles Weston's years from 1911 to 1927 and the second from 1944 to 1958, Lindsay Pryor's term as Superintendent of Parks and Gardens.

⁵ John Gray, 'TCG Weston, Horticulturalist and Arboriculturalist', PhD thesis, University of Canberra, 1999, pp.19-21

⁶ Jim Gibbney *Canberra 1913-53* Canberra, AGPS, 1988, p.7; Murphy pp.5-7; Papers . . [etc] relating to various gardening and nursery matters 1912-21, NAA: CP209/13

3.2.a The Weston era 1913-27

The post of Chief Afforestation Officer was created to encourage Charles Weston to take charge of the huge task of planting the garden city. Weston started work in Canberra on 5 May 1913, the same day his Federal Capital Territory Afforestation Branch came into official existence. That month Weston chose the site for the permanent nursery, an area of 162 hectares to the north-east of Yarralumla Homestead, between Shale Hill (near the present entrance to the Royal Canberra Golf Club) and the shore of Griffin's proposed lake. He divided the site into four equal areas, for nursery work; for a pinetum; for an arboretum; and an area for permanent planting of Australian and New Zealand species. This last was to be part of Griffin's planned 'Continental Arboretum' with sections for the species of each continent. Preparation of the permanent site began immediately and on 1 September 1914 the first trees were planted in the arboretum that became Westbourne Woods.

As at the temporary Nursery site at Acton, planting of windbreaks was the priority, with planting also of Elms for the handsome drive proposed to link the southern section of the Continental Arboretum with those on the opposite shore of the proposed lake. The Yarralumla Nursery buildings were completed six months later; in May 1915 the stock was transferred from Acton and in August Weston's capable nurseryman, John Hobday, moved to on-site living quarters with his new bride. Like Weston, for whom he had worked at the NSW state nursery at Campbelltown, Hobday had top-drawer credentials, his training under Queen Victoria's gardeners at Windsor Castle considered perfect for Australia's national capital.⁷

By the time the Federal Capital Commission (FCC) was established in December 1924, Weston's Nursery had planted a precisely reported 1,162,942 trees, in windbreaks, in the future Westbourne Woods and in the Nursery's experimental orchard; in lines and curves following the gazetted layout that would become parks, avenues and streets; at the first public buildings completed, the Acton offices and Residency, the Kingston Powerhouse, Telopea Park School and the Hotel Canberra; and on the surrounding slopes of Green Hills, Mt Stromlo, Black Mountain, and Mt Majura.

In October 1925 when the Afforestation Branch became the Parks and Gardens Section of the Federal Capital Territory administration, Weston's title changed to Superintendent of Parks and Gardens. He retired in November 1926 but remained at work until 1927 when his assistant Alexander Bruce was appointed Superintendent.

⁷ Murphy pp. 5-8; TC Weston diary 1913, NAA: CP209/12, 3

3.2.b The gap years 1928-44

In the next seven years Alexander Bruce carpeted Commonwealth Avenue with roses and established the 'national rose gardens' in front of the Parliament House, though his other achievements in the Depression years have never been evaluated. Until 1928 the Nursery had grown as rapidly as the city; after the establishment of the seat of government in Canberra in 1927 the Nursery, like the city, felt the impact of the world economic collapse.

Weston's work in Canberra was commended in the FCC annual report, with special mention of the 'methodical tabulation of data he left as a most valuable guide to future operations'. With the city in stasis – except for its thriving gardens – Weston's records were also invoked to champion the city. Australian Natives Association president Charles Francis lauded Weston's work as

so thoroughly organised that the history of every tree planted by his Department is recorded thereby enabling trees to be selected for the most suitable positions for their growth consistent with the aesthetic requirements of the city beautiful. . . there are many houses with very beautiful and well kept gardens wholly cared for and planted by the residents themselves and not by a benevolent government as has been erroneously stated in some quarters.⁸

In 1935 Alexander Bruce was succeeded by veteran nurseryman John Hobday, whose career spanned thirty years at Yarralumla Nursery, where he and his wife raised their children among the trees he and Weston had planted, and where he died soon after his retirement in 1944. Hobday's success in maintaining the vigour of an undernourished Nursery through his decade in charge testifies to his commitment, determination and devotion. He championed its cause against every enemy, financial cutbacks, wartime shortages of materials and labour, and the emerging dominance of the most dangerous enemies of the garden city: traffic planners, cars, and drivers.

The end of the Depression meant a burst of delayed construction work in Hobday's term as head of the Nursery, with the War Memorial, Patents Office and Barton House completed and new housing subdivisions in Turner, Braddon and North Ainslie underway. Hobday's quiet firmness meant his requests were usually met with respect and mostly with success, like the establishment in 1938 of an expert Consultative Committee on Parks and Gardens to coordinate planning within the

⁸ FCC Report 1926-27; Murphy, p.78; Charles Francis 'Canberra: the National Capital' c1930, MS in ACT Heritage Library

Department, as well as to allay public concerns by explaining the reasons for thinning and replacement of trees. Similarly, his requests for a seconded draughtsman in 1939, and three years later for the appointment of an assistant Superintendent at the Nursery, were eventually agreed.⁹

3.2.c The Pryor era 1944-58

With Hobday's retirement, the appointment of 29-year-old Lindsay Pryor as Superintendent of ACT Parks and Gardens on 13 June 1944 launched the second era of vigorous organisation, activity, and output. Yarralumla Nursery shared and shaped the city's renaissance under postwar reconstruction and the resumption of planned development. An outstanding graduate of the Forestry School in 1936, Pryor brought in the complementary talents of others, notably former enemy internee the Austrian botanist Erwin Gauba in 1950, forester David Shoobridge in 1952 and in 1955 young arboreal researcher Robert Boden. As Nurseryman from 1954, Percy Moore was a worthy successor to Hobday and with his brother Jack, served thirteen years at the Nursery. Also appointed in 1954 was the ACT's first horticultural apprentice, the talented Peter Sutton.

Pryor was also responsible for the establishment of the Botanic Gardens in Canberra on the lower slopes of Black Mountain, where he began planting Eucalypts in the late 1940s. He took advantage of the visit of the Director of London's Kew Gardens to organise an official launch on 12 September 1949, with Prime Minister Ben Chifley planting a *Quercus robur* (English Oak) and Kew's Sir Edward Salisbury planting Canberra's own *Eucalyptus mannifera* ssp. *maculosa* (White Brittle Gum). The gumtree still welcomes visitors at the entrance to the Gardens on Black Mountain, where Weston had collected the seed to raise the first Nursery seedlings of this species in 1918. The Gardens, officially opened by Prime Minister John Gorton in 1970, became the National Botanic Gardens in 1979, with Robert Boden the first Director, at whose urging it became the Australian National Botanic Gardens (ANBG). Unusually, the ANBG comprises species native to Australia and there are many acquisitions of cuttings from the Gardens in the Nursery ledgers. The close association of Yarralumla Nursery with the establishment of the ANBG and its focus on Australian species is perhaps a clue to the destination of the records of Australian species absent from Set 2 of the

⁹ Parks & Gardens – cooperation in town planning, 1939-42, NAA: A292, C19521; Organization Parks and Gardens Section 1938-53, NAA: A431/1, 1952/391; Robert Boden *Canberra Times* 2000

Nursery's Plant Cards. The as yet unexplained notations 'Canberra Botanic Gardens Register' and 'Canberra Botanic Gardens Records' are substituted for many 1967 entries in Ledger 2.¹⁰

3.2.d From 1959

When Lindsay Pryor took the foundation Chair in Botany at ANU in 1959, also recruiting Gauba to his academic staff, his assistant David Shoobridge became Superintendent of Parks and Gardens, now a section of the new National Capital Development Commission (NCDC). The establishment of the NCDC in 1958 began the transfer of the key parks and gardens functions of selection of species and planting design in the national capital to other sections of the new agency.

In a reorganisation in 1968 (a year of no entries at all in the Ledgers¹¹) the Parks and Gardens Section became Parks and Gardens Branch with David Shoobridge as Director. In 1972 another restructure split the Branch and separated Yarralumla Nursery from the City Parks Administration led by David Shoobridge until his retirement in 1975. From 1972 Yarralumla Nursery was headed by a Manager, a post held by Frank Grossbechler for twenty years. Under the form of self-government legislated for the ACT in 1988, Yarralumla Nursery became the responsibility of the new ACT government. Since Frank Grossbechler's retirement, there have been three managers, Steven Hughes (1992-96), Charles Burgess (1996-2001) and Michael Kidd (2001-11).

The Yarralumla Nursery years under Lindsay Prior and David Shoobridge matched the Weston years 1911-27 in research results and in clothing the rapidly developing city. The renewal of experimentation and trialling in the Pryor – Shoobridge period was made possible by the policy of city development of the Menzies years, just as the Hughes and Bruce governments made the decisions that enabled Weston's work.

The records digitised in the 2011 heritage project signify these two golden eras in Canberra's first century. Their digitisation provides a window to the evidence of those two remarkable periods

¹⁰**Cards Set 1:** 61B *Eucalyptus mannifera* ssp. *maculosa* 23 August 1918 [digitised as Eucalyptus 347]; See for instance **Ledger 2:** 1967 entries 6662794 et seq. [digitised as Ledger 2: 238_662521,10], entries 67388-67455 [digitised as Ledger 2: 239_67211, pages 6-8] and entries 672311-672800 [digitised as Ledger 2: 242_671926, pages 12-25]

¹¹ The last dated entry in Ledger 2 is 29 December 1967, Ledger 3 commences on 7 January 1969

contained in the Plant Cards, commenced by Weston in 1913 and developed under Pryor from 1944, and in the Ledgers started by Pryor in 1948.

3.3 SEEDS & STOCK

The seed bank at Yarralumla Nursery is an Aladdin's Cave, the magic disguised in a motley of old jars, storing the seeds of most of the plants grown in Canberra and countryside for the last century. The Ledgers started by Lindsay Prior in 1947 still record new deposits in the seed bank, in a third volume of this historic working record.

The Plant Cards are of extraordinary value in tracing the early acquisition of seed and stock and, during the Weston period, for details of the source, propagation and destination of plants raised at the Nursery.

3.3.a From the region

Obtaining a suitable and successful range of plant species for both the utilitarian needs and the aesthetic requirements of the designer, planners and builders of the city-to-be and its setting was a major challenge. After nearly a century of pastoral and agricultural occupation, local collection of seeds yielded as many exotic as indigenous flora. The estates at Gungahlin, Yarralumla, Duntroon, Tuggeranong and Lanyon in particular provided a wide choice of exotics but many other properties and roadsides too yielded introduced bounty.

From the first, Weston collected native flora in wide-ranging expeditions. He gathered Eucalypt specimens from many locations including Booroomba, the road between Captains Flat and Queanbeyan, and the Cotter River, sending cuttings of any he could not identify to JH Maiden in Sydney. He began recording the collection of local seeds in his first month as Chief Afforestation Officer, an early example being the *Casuarina* seeds gathered on Mt Ainslie in June 1913. His detailed records enable matching some of these seeds to their progeny, for instance the *Casuarina cunninghamiana* (River Oak) seeds collected in November 1920 that provided six seedlings planted

out in Telopea Park in August 1922. The location of the parent tree was particularly closely noted as 'Cotter bridge, 1st tree left-hand side, looking down stream'.¹²

While the Plant Cards maintained under Pryor have almost no native species, the Ledgers he started reveal the intensive Eucalypt research collection he amassed, with pages devoted to these acquisitions. While the results of the botanical exchanges he arranged on his extended overseas tour in 1947 fill the first pages of Ledger 1, these also show he immediately resumed his local expeditions, with trips to Jerangle, Palerang and the Shoalhaven. The seeds he collected there included *Eucalyptus pauciflora* (Snow Gum) and *E. stellulata*, along with *Leptospermum juniperinum* (Ti-tree), *Callistemon* (Bottlebrush) and *Casuarina*.¹³

Of course, twenty years after Weston's Eucalypt trials, the city and surrounding hillsides were a handy seed farm of suitable species. For instance in 1946 Pryor harvested Snow Gum seed from Tennyson Crescent in Forrest, and *Eucalyptus cinerea* (Argyle Apple) from the Telopea Park trees Weston had planted out in 1922. He knew from Weston's records that these Argyle Apple had grown from seed collected on the Gundaroo Road in 1917, the trees in that location having singular characteristics. In turn Pryor's entry for the Argyle Apple seed he collected in 1948 indicates the source as 'selected tree Telopea Park'.¹⁴

3.3.b The Griffins

Lindsay Pryor had avid seed and plant collecting colleagues in Erwin Gauba, Robert Boden and David Shoobridge, just as Tom Sharp and John Hobday aided Charles Weston. But there were no more vigorous seed-collectors than Walter Burley Griffin and Marion Mahony Griffin. The couple arrived in Australia in May 1914 with their abundant curiosity and imagination immediately embracing the setting for the infant city. Their attendance at a Sydney session of the British Association for the Advancement of Science's Australian meeting soon after their arrival fuelled a 'deep and abiding passion' for Australia's native flora. The Griffins considered its recognition 'crucial to the country's landscape distinctiveness and, more symbolically and at the larger scale, of

¹² Eucalypts etc. 1913-21, NAA: CP209/13; **Cards Set 1**: 2A-D *Casuarina* spp. 1 & *Casuarina cunninghamiana* [digitised as *Casuarina* 2 & 6- 9]

¹³ **Ledger 1**: Entries 481251-57 [digitised as Ledger 1: 105, page 16]

¹⁴ **Ledger 1**: *Eucalyptus pauciflora* 481127-28 & 481129-33 harvested in Tennyson Crescent & Telopea Park 1948 [digitised as Ledger 1: 105, pages 5-6]; Pryor 1968 pp.88-101; **Cards Set 1**: *Eucalyptus cinerea* 40F 1917 & 40S 1945 & 40U 1948 [digitised as *Eucalyptus* 104 & 155 & 117]; **Ledger 1**: *Eucalyptus cinerea* 481084-86 [digitised as Ledger 1: 105, page 2]

Australia as a place' and in 1915 Marion Mahony Griffin commenced a project to compile detailed gardening specifications for native flora.¹⁵

The Griffins lived in Melbourne where the FCT design offices were located and the couple collected seeds from contacts and expeditions in city and country, just as Weston did in Sydney and Canberra. So prolific a supplier were they, that in their six years most cards note the source of their seed despatches only as 'FCD of D & C', for Griffin's official post as Federal Capital Director of Design and Construction. For instance Griffin sent *Leptospermum* seeds collected from sources ranging from the Victorian Railways Department, to the tiny hamlet of Narbethong.¹⁶

As the Plant Cards reveal, by the time his contract was terminated at the end of 1920, the Griffins had supplied a vast number and variety of seeds to Yarralumla Nursery, exotics as well as natives. These records show the mutual commitment of the Director and the Chief Afforestation Officer, in contrast with the more usual evidence of their difficulties, for instance in Weston's aversion to directives from Griffin. But an example like the urgent ministerial telegram to Weston where King O'Malley demanded to know, of Griffin's latest requirement, 'what German barbed wire red tape entanglement preclude your complying' is as misleading now, as it was pre-emptive then, Weston having already met Griffin's request, for another copy of a mislaid plant list.¹⁷ Their points of disagreement were real enough, but so are the records of their common achievement in planting the garden city.

While the Griffins' mutual enthusiasm for indigenous plants would be hard to match, with the influential encouragement of JH Maiden, head of Sydney's Botanic Gardens and a respected mentor, Weston readily incorporated natives in planting prominent places as well as in reafforestation. And that Weston could comply with Griffin's proposals even when he opposed them, has incontrovertible evidence in the two Canberra plantations Griffin wanted, both of exotics.

¹⁵ Christopher Vernon, 'The landscape art of Walter Burley Griffin', in Anne Watson (ed) *Beyond Architecture: Marion Mahony Griffin and Walter Burley Griffin* Sydney, Powerhouse Publishing, 1998, p.92; British Association for the Advancement of Science, *Report of the Eighty-fourth Meeting of the British Association for the Advancement of Science, Australia; 1914 July 28–August 31* (London, 1914)

¹⁶ **Cards Set 1:** *Leptospermum* 1 and *Leptospermum myrtifolia* 3-3A note receipts for 23 September 1916, 14 October 1918, and 24 March 1920 [digitised as *Leptospermum* 2, 17-18]

¹⁷ O'Malley to Weston 13 December 1915, Weston to O'Malley 14 December 1915, NAA: CP209/17,16; Gray pp. 84-85

The first is the Redwood plantation at Pialligo, a project on which Griffin insisted, against the advice of Weston who trialled these trees with seeds from suppliers in New Zealand and the USA in 1913-16. This showed that *Sequoia sempervirens* planted in the open gave poor results, while seedlings protected by Ti-tree screens and planted out in 1915 at Mt Stromlo and Westbourne Woods were thriving. A large plantation in the open was a different matter. At Griffin's insistence, in 1916-18 Weston obtained large quantities of seeds for *Sequoia sempervirens* and *Sequoia gigantea* from the USA and planted 120,000 Redwoods at Pialligo. The trees faced a losing struggle in the drought of 1918-19 and two thirds were lost; sixty years later there were 400 left. Weston successfully used *Sequoia gigantea* to border the driveway to the Nursery, in Westbourne Woods in 1919 and in Telopea Park in 1922, as well as in the grounds of early public buildings including the Acton offices and Canberra House in 1925, and Government House and the Hotel Canberra in 1926. Today the quiet haven of the remnant Pialligo Redwoods, along with Canberra's tallest Redwood planted by Weston at the Nursery, silently signifies the outcome of this confrontation.¹⁸

Another plantation was at Green Hills, within Griffin's Agricultural Reserve, and was for the Cork Oak planting Griffin wanted, with a view to establishing a local industry. It appears to have been Griffin alone who attempted to secure *Quercus suber* acorns from Spain in 1914 and who persisted in seeking sources within Australia once wartime made importation impossible. It was not until autumn 1916 that Griffin was able to secure a trickle of acorns, through the Melbourne Botanic Gardens search on his behalf in other public gardens in Victoria. Weston took delivery of these in Canberra and his careful attention produced the first seedlings planted out at the '(Green Hills Area) Cork Oak Reserve', in October 1917.

Griffin more than made up for this frustrating start and in the next five seasons the Nursery propagated thousands of trees from acorns mostly procured by him. The greatest quantities came from Mary Masson, whose husband held the foundation Chair in Chemistry at the University of Melbourne. In 1918 a sample of fourteen acorns from four cases consigned from Spain but lost at sea from the *SS Ismailia* gave disappointing results, while another shipment that year had to be offloaded after the first torpedoing of the *SS Boorara*. By 1920, when 9,600 Cork Oaks covered eight hectares of the Green Hills Reserve, the first 3,080 seedlings from Portuguese acorns were

¹⁸ Chapman, pp.5-7, 33, 35; Boden 1993 pp.90-91; Murphy p.26; **Cards Set 1: *Sequoia sempervirens* 1-1Q** [digitised as *Sequoia* 11-28] and ***Sequoia gigantea* 2-2F** [digitised as *Sequoia* 1-10]

growing at the Nursery, all that survived from 13,900 acorns shipped from Lisbon on the *SS Bulla* in 1919.¹⁹

Some Cork Oaks were planted elsewhere, for instance at Yarralumla Brickworks in 1922 and in 1926 in the first 'Presentation Avenue' (see 3.7 below), but the Plant Cards show most went to the plantation. It did not found the intended local industry, but is now a heritage-listed tribute to Griffin's vision and determination. The plantation is also a tribute to Mary Masson, as most of the trees are the progeny of the thousands of acorns she provided.

The next imported acorns to provide seedlings appear to be those Lindsay Pryor received from Portugal in 1946, with others organised by him from Morocco and Madrid indicating his revival of the worldwide sourcing and exchange of specimens of the Weston era.²⁰

3.3.c From the world

While Weston had little opportunity to travel overseas during his time at Yarralumla Nursery, but the Plant Cards show that the world came to him. As well as the botanical exchanges he fostered, seeds and stock were provided for the new national capital from around the globe.

In contrast, Pryor made extensive research trips from the end of the 1939-45 war, travelling to Japan less than a year after the surrender ended the war in the Pacific, and to Europe, North Africa and North America in 1947. His professional standing soon ensured more invitations by foreign governments than he could accept.²¹ He also had a particular postwar advantage in the extraordinary circumstance of the forced presence in Australia of Austrian botanist Dr Erwin Gauba. Apprehended by the British Military Forces in Iran, Gauba and his family were held in Loveday Internment Camp in South Australia, where the unstoppable scientist had begun collecting plants in the state's mallee region. After his appointment in Canberra Pryor helped the Gauba family settle there too by finding Gauba a post as botanist for the Department of the Interior. From 1950 Pryor at the Nursery and Gauba at the infant Botanical Gardens amassed a substantial herbarium, aided from 1955 by Robert Boden, also recruited by Pryor. This extraordinary team, joined by David Shoobridge in 1952 and nurseryman Percy Moore in 1954, was responsible for shaping the

¹⁹ Cork Oak Plantation, Federal Capital, Establishment of 1919-22, NAA: A1, 1922/7712; Cork Oak Plantations – acorns of *Quercus Suber* 1915-19, NAA: A192, FCL 1919/718; **Cards Set 1:** *Quercus suber* 26J & 26L [277 & 279]

²⁰ **Cards Set 1:** *Quercus suber* 26M & 26X 13 December 1946 [digitised as *Quercus* 280 & 291]

²¹ [Proposed] Visit to Chile by LD Pryor...1947, NAA: A1068, A47/14/5/6

second 'golden age' at Yarralumla Nursery and even when Pryor left the Nursery in 1958 the work continued.

In the arboretum he established where the suburb of Curtin developed, Pryor set up evaluation plots for a wide range of exotics, many of which he chose on visits to their native habitats. While in Amman in Jordan, Pryor admired the street plantings of *Albizia julibrissin* (Silk Tree) and recognised the potential of this species for Canberra's new suburbs. From 1948 he obtained stock from sources worldwide including Japan, Italy, China, the USA, and in 1961 and 1965 the USSR, despite the Cold War restrictions. Other species Pryor successfully trialled at his arboretum included *Koelreuteria paniculata* (Golden Rain Tree) which Weston had grown at Acton and Yarralumla and which now yielded seed from the trees there and at Hotel Canberra and The Lodge; and *Melia azedarach* (White Cedar) which Weston used little but which both Pryor and Boden sourced worldwide. Pryor first brought back seed from Iraq in 1953 to develop a cold-tolerant variety of this beautiful street tree, while Boden collected seed in Japan in 1964.

Pryor's arboretum also featured *Platanus orientalis* (Oriental Plane) for which he sourced seed worldwide, though his first seeds were gathered close to home in 1949, in Cowper Street Ainslie where it had been planted by Weston in 1927. Pryor also harvested *Celtis australis* (Nettle Tree) from a tree in Cowper Street for growing on to supply trees for new streets in Turner and O'Connor. In contrast he initially obtained *Fraxinus velutina* (Arizona Ash) seed in a botanical exchange with Tucson Arizona and from a USA supplier, but subsequently propagated seed from trees at Yarralumla Nursery and Westbourne Woods, and in the neighbouring Yarralumla streets, Musgrave and MacGillivray. Weston had planted these trees from seed he brought to Canberra with him in 1913, though only the genus and not the species was entered on the Plant Card.²²

In practice the jars of seeds comprising the seed bank at Yarralumla Nursery are Aladdin's lanterns, for when called on, the genus and the species emerge. Amongst Yarralumla Nursery's very first stock was the batch of *Cupressus sempervirens* (Roman Cypress) seed Charles Weston brought with

²² Robert Boden *Favourite Canberra Trees* Sydney, Kangaroo Press, 1993, pp.12-13, 48-49; **Cards Set 1:** *Celtis australis* 1R [digitised as Celtis 20]; *Fraxinus spp.* 1913 6 [digitised as Fraxinus 70]; *Koelreuteria paniculata* 1 1914 – 1E 1945 [digitised as Koelreuteria 2-7]; *Melia azedarach* 1-1A 1914-24 [digitised as Melia 2-3]; *Platanus orientalis* 1D & 1G [digitised as Platanus 18 & 21]; **Cards Set 2:** *Albizia julibrissin* 1943-65 [digitised as Albizia 4-8]; *Fraxinus velutina* 1947-65 [digitised as Fraxinus 40-43]; *Koelreuteria paniculata* 1945-65 [digitised as Koelreuteria 6-7]; *Melia azedarach* 1950-64 [digitised as Melia 1-7]; *Platanus orientalis* 1949-65 [digitised as Platanus 3-6]

him from the NSW government nursery at Campbelltown when he took up the Canberra post in May 1913. He wrote on the card recording this first deposit

Amongst *Cupressus*, this, with the possible exception of *Cup. Arizonica*, holds pride of place as a drought resister. Every encouragement must be given to its extended planting in the Federal Capital Territory.

The first seedlings were planted at the Nursery in 1915 and in Westbourne Woods and at Green Hills in 1917-18. In 2003 the seed from the progeny of these Roman Cypress was sown from the seed bank and hundreds of seedlings raised to regenerate the Green Hills slopes after the bushfires that destroyed south-western areas of Canberra that January.²³

3.4 FIRST STEPS

The beautiful and ornamental were not first on the planting lists for the garden city that Weston had been asked to compile in 1911-12. Instead the priorities were species for trials of plants suitable for shade and shelter and for food and fodder; and he subsequently included trees useful for firewood and commercial timber plantations. When he took charge as Chief Afforestation Officer in 1913, he was able to supply plantation trees for the much needed reforestation of the cleared hillsides surrounding the site of the proposed city.

3.4.a Shelter

Weston had realised on his first visit to the site in 1911 that a nursery would never flourish without windbreaks – indeed that everything planted out on the near treeless and frosty plain would need shelter to survive. At both Acton and Yarralumla he began with the planting of windbreaks for protection of the bare sites from prevailing westerly winds. He was at the temporary Acton nursery at the end of winter 1912 to supervise the planting of the first of the 350 Monterey Pine and other trees he had ordered for windbreaks. When he moved to Canberra in 1913 he brought Monterey pine cones with him and also collected more that winter from trees planted in the previous century at Bulgar Creek School near Mt Stromlo, and at Sullivan's farm.

²³ **Cards Set 1:** *Cupressus sempervirens* 11-K11 [digitised as Cupressus 313-351]; Interview Michael Kidd Yarralumla Nursery 2004

An early priority was the planting of Westbourne Woods using a wide variety of trees including *Cedrus deodara* (Himalayan Cedar/Deodar), Cork Oak and mixed pine species, including *Pinus torreyana* (Torrey Pine) from one quantity of seed obtained from the USA in 1914. Westbourne Woods was a trial ground for a wide range of native and exotic species and Weston planted out a quarter of the original 160ha area between 1914 and 1918. Westbourne Woods is not only the oldest arboretum in the ACT but 'one of the most outstanding arboreta in the southern hemisphere'.²⁴

In 1921 the Federal Capital Advisory Committee recommended 'arboreal shelters' for Civic and the adjacent suburbs on the northern side and for the Power House industrial area and the neighbouring suburban subdivision on the south side of the city. Weston began work on the northern 'east-West Shelter Break' (Haig Park) in 1921 when 7,000 trees were planted in this huge 1,780 metre belt running from east to west and crossed by Northbourne Avenue. Weston laid out fourteen rows of evergreen and deciduous trees, Monterey Pine predominating with nearly 2,000 planted; his favourite 'drought resister', Roman Cypress, and Himalayan Cedar are also heavily represented. Most of the planting of the southern 'Waratah Parkway' (Telopea Park) was in 1922, shortly before the Molonglo River flooded that winter. According to Charles Daley, thirty years later wind pressure tests at Yarralumla, Acton and Duntroon showed a 25% reduction compared with 1922 readings.²⁵

Weston was insistent on shelter planting around the city's public buildings. During construction of the Hotel Canberra in 1924 he planned windbreaks to the west, southwest and northwest, pointing out the site was 'totally unprotected from the prevailing winds and what this means only those who have had an extended personal experience here can fully appreciate'.²⁶

3.4.b Food

Food plants were part of Weston's nursery work from the start, with vegetables grown at the Acton site supplying the Bachelors' Quarters and the Hospital. At Yarralumla from 1914 Weston trialled

²⁴ **Cards Set 1:** *Cedrus deodara* 2-2P [digitised as Cedrus 31-59]; *Quercus palustris* 16-16V [digitised as Quercus 173-96]; *Pinus torreyana* 36- 36A [digitised as Pinus 168-170]; *Pinus insignis [radiata]* May-August 1913 8-8E [digitised as Pinus 43-48]; Boden 1993, p.30

²⁵ **Cards Set 1:** *Pinus insignis [radiata]* 1919 8M - 1925 8V [digitised as Pinus 57-66]; ACT Heritage Register Entry 20063 Haig Park; CS Daley *As I Recall* Canberra, Mulini Press, 1994, p.70; John Gray pp.86-87

²⁶ Weston 1 April 1924, NAA: CP209/18, B13

29 varieties of wheat, nine varieties of barley and seven of oats. In March 1916 he recommended that the Commonwealth play a role in promoting fruit tree growing by establishing a demonstration orchard where spraying and pruning techniques could be shown to assist home gardeners. He had a large orchard planted at Yarralumla Nursery, including single plants of one hundred and twenty three different varieties of apple and a wide range of peaches, almonds, pears, apricots, plums and persimmons as well as small fruits and nuts, including strawberries, raspberries, pecans and filberts. The Acton site remained in use and tomato trials were conducted there in 1916.²⁷

Weston also investigated fodder plants, identifying the existing trees and grasses in the region from 1911-12 when he compiled his original lists. In a 1919 report on the reforestation of Mt Majura he identified a

‘Fodder-Tree Reserve’, [for] the planting of *Casuarina stricta* and Kurrajong for main slopes and ridges and of elms and robinia for the lower slopes and gullies. The area, once cleared of rabbit and stock would, for the most part, be one of seed sowing, *in situ*.

The records at Yarralumla note that *Sterculia diversifolia* (Kurrajong) seed from Queanbeyan was sown on Mt Majura in 1919 and that 8,000 Kurrajong were sown there in July 1920. Another tree useful for fodder Weston included in the Fodder Tree Reserve, and at Red Hill, was *Allocasuarina verticillata* (Drooping She-oak).²⁸

3.4.c Forests

Despite the early difficulties in propagating *Cedrus atlantica* (Atlas Cedar) in his first trials with purchased seed, in September 1915 Weston noted ‘excellent germination’ from cones gathered at Duntroon, the seedlings raised in the Nursery’s new bush house. There were similar early difficulties with Deodar, but by 1920 17,000 Atlas Cedar and 68,000 Deodar had been planted out with the Roman Cypress at the Green Hills and Mt Stromlo forestry plantations. Weston also planted the lower city-side slopes of Mt Ainslie and Black Mountain, where forty years later his mixed Eucalypt coppices served as a convenient study plot for forestry students. On the bare northern face of Mt Mugga he planted 34,000 Eucalypts in 1918-20. Of these, one sowing into the

²⁷ Boden 1996; List of fruit trees in Experimental Orchard 1916, List of trees, grasses, and acacias in river paddocks Westbourne Woods 1917, tomato trials Acton 1916, NAA: CP209/13; **Cards Set 1**: Orchard: Apple 115-1 [digitised as Apple 10-130]; Orchards-Miscellaneous 1-34 [digitised as Orchards 1-50]

²⁸ Boden 1993, pp.44-45; **Cards Set 1**: *Allocasuarina verticillata* 5-5F [30-36], *Casuarina stricta* 5 – 5F [digitised as *Casuarina* 30-36], *Sterculia diversifolia* 1E 1915 -1G 1921 [digitised as *Sterculia* 8-11]

Nursery seed beds was washed out by heavy rain; another set of potted trees suffered from a heavy frost while waiting to be planted out; and finally drought in the very hot summer of 1919 provided a severe proof of his emphasis on the need for shelter. Many trees were lost; among the survivors on Mt Mugga there are Argyle Apple trees on the crest of Hindmarsh Drive at Red Hill.²⁹

The establishment in 1925 of the Commonwealth Forestry Bureau with Charles Lane Poole as head and Weston made instead Superintendent of Parks and Gardens did not end Weston's forestry work in the Territory. He also had an ally in the maintenance of meticulous records. For several years the new Forestry Bureau relied on the Nursery, where thirteen acres were set aside in 1926 to raise their seedlings. Lane-Poole insisted to the Forestry officer posted there that

Nursery record cards will need to be kept up to date by you personally until some satisfactory system of record is supplied by the Parks and Gardens Branch. The seed order and receipts sheets also need frequent supervision. With each packet of seed supplied the Chief Nurseryman, he is given the card index number of the packet in this Branch. Any seed not sown in the first sowing is transferred to a new card and given a new number for the next sowing.

In 1925-26 quantities of seedlings raised and supplied to 'Forestry Branch' are precisely noted on the Nursery Plant Cards, but after Weston's departure recordkeeping for the Forestry work veers towards confusion. The National Archives holds a list of recording changes for the busy 1927 sowing program that shows these card numbers changing regularly. For instance, Weston's system was to allocate each species a number and each subsequent seed supply of that species a distinguishing letter following the number. But the number for a *Cedrus libani* (Cedar of Lebanon) seed batch originating from Coopers is changed on this master list from 4A to 4B – and the ten other cards for this species were numbered 3 to 3I. Another alteration was the renumbering of *Sequoia* when the genus name *Wellingtonia* was changed. These changes to the record-keeping system create fascinating chances for detective work, but can also puzzle contemporary users of the digitised Plant Cards.³⁰

²⁹ Boden 1993, pp.62-63 & 88-89; John Gray pp.92-98; Forestry students – two photographs NAA: A1200, L21511-12; **Cards Set 1:** *Cedrus atlantica* 1914 1-11 [digitised as Cedrus 2-11]; *Cedrus deodara* 1913 2 – 2E [digitised as Cedrus 31-36]; *Eucalyptus cinerea* 1914 40 – 1919 40G [digitised as Eucalyptus 97-105]

³⁰ Memo 'CLP/JS' 31 Aug 1927, list of card numbers 17 August 1927, Memo Chief Forestry Officer 16 August 1927, NAA: CP209/17, Bundle 1/12; Eucalypts etc. 1913-21, NAA: CP209/13; **Cards Set 1:** *Cedrus deodora* 2K 22 April 1925 [digitised as Cedrus 41]; *Cedrus libani* 3 18 August 1913 – 31 8 May 1928 [digitised as

Among the wealth of Yarralumla Nursery records held in the National Archives are detailed cost sheets of Nursery work for Forestry purposes during the years before the new Forestry Bureau developed its own nurseries at the main forestry settlements. The cost sheets show *Populus deltoides* (Eastern Cottonwood) raised for a firebreak trial at the Uriarra forestry settlement, and for Pierces Creek thousands of *Pinus coulteri* (Big-cone Pine), Monterey Pine, *Pinus jefferyi*, *Pinus laricio* (Black Pine), and *Pinus ponderosa*. Weston's forestry research did not neglect native trees and Eucalypts were among the trials undertaken at the Acton nursery where he determined that there were 'only 3 kinds in the running', *E. macarthurii* (Macarthur's Gum), *E. globulus* (Californian Blue Gum) and the species named after JH Maiden, *E. maidenii*. In his first years in Canberra he regularly sent Eucalypt specimens he had collected but could not identify to Maiden in Sydney. Observation of trees growing well in various situations in the region was an effective trialling method, as well as a lesson in identifying species and varieties, and Maiden's expertise greatly benefited Weston's work.

One specimen Weston found 'on the Yass-Queanbeyan Road near Gungahlin' appeared to be a new species that Maiden named *Eucalyptus westonii*. With no Plant Card, it does not appear to have been a tree Weston found useful, or beautiful. On his retirement in 1926, Weston had evaluated more than 200 species of indigenous trees and shrubs and had also conducted Eucalypt hybridisation trials, the progeny thought to be the trees still growing behind the old 1930s glasshouses at the Nursery. Maiden told the Royal Society of NSW in 1919 that Weston was the first to succeed in direct crossing of species with his cross pollination of a White Gum with Yellow Box (*Eucalyptus melliodora*).³¹

Twenty years later, Lindsay Pryor resumed the Eucalypt experimentation and intensive forestry trialling work of the Weston era, and the establishment of extensive shelter planting. This was driven by his own research interests and the scientific outlook he shared with Weston; but it was fuelled by the Menzies Government's restarting of the stalled development of Canberra. For this work Pryor established an arboretum on the Cotter Road, on a site now serving as equestrian

Cedrus 60-69]; *Sequoia gigantea* 2-2F [digitised as Sequoia 1-10]; *Sequoia sempervirens* 1-1Q [digitised as Sequoia 11-28]

³¹ Nursery operations – Yarralumla, 1926-29 NAA: CP209/17, Bundle 1/12; **Cards Set 1:** *Populus deltoides* 8-8Z [digitised as Populus 71-97], *Pinus insignis* 8- 8x etc [digitised as Pinus 43-71], *Pinus laricio* 14 &14A [digitised as Pinus 82 & 84], *Pinus ponderosa* 28H-28J [digitised as Pinus 133-135]; *Eucalyptus globulus* 45-45T [digitised as Eucalyptus 219-241]; *Daily Telegraph* 8 November 1919 cited in Murphy p.25

paddocks adjacent to the suburb of Curtin. He tested eucalypts and exotics for shelter and for landscaping and introduced the planting of eucalypts on the slopes up to the hilltop reserves, with deciduous exotics in the valleys and plains beneath. The beautiful autumn vistas from Red Hill, O'Connor Ridge and Mount Ainslie are a realisation of the original design intention, while the bush walking tracks in these areas are a popular amenity.

The Arboretum named in honour of Lindsay Pryor has a curious history, characteristic of the closely interwoven histories of the national capital and its Nursery. The 26-hectare site on the northern shore of Lake Burley Griffin directly opposite Government House was not started for experimental nor forestry purposes, but at the behest of the Governor-General. It was planted by Pryor in 1954-57 after Governor-General Sir William Slim had requested improved northerly views from Government House. Robert Boden and nurseryman Peter Sutton carried the plants across to the site for the original planting; Boden was responsible for later plantings.

This was by no means the first time there were special vice-regal directives to the Nursery; for instance the Ledgers reveal that in 1948 the previous Governor-General, Sir William McKell, received large consignments of Eucalypts through the Nursery. Where these were planted is at present unknown.³²

In 2001, three years after Pryor's death, the area he had planted out was officially named the Lindsay Pryor National Arboretum and a masterplan for management of this attractive and historic amenity is currently being developed.

3.5 PLANNING

3.5.a Across the city

When Weston drafted his first planting layout for the central city in 1913 he sent it to JH Maiden, responding to Maiden's surprise at the dominance of exotics with changes evident in the final plan dated 1928. By then the planting of King's, Constitution and Commonwealth avenues and the triangle they formed was complete, Parliament House had been officially opened, and public buildings including Albert Hall, Hotel Canberra and Hotel Kurrajong, and East and West Blocks

³² Information from Susan Parsons 11 October 2011; **Ledger 1**: Entries 48409-48417 [digitised as Ledger 1: 102, page 7]

were also in use. These elegant buildings sat amongst Weston's equally elegant, if equally infant, landscaping featuring Roman Cypress, a Giant California Redwood, Atlas and Himalayan cedars, *Ulmus parvifolia* (Chinese Elm) and *Libocedrus decurrens* (Incense Cedar), this last also featuring in suburban Gipps Street in Barton and Tench Street in Kingston.

Along King Edward Terrace Weston's *Platanus x acerifolia* (London Plane Tree) now form a shady green tunnel from verge to verge. On Commonwealth and King's avenues his Chinese Elms were from the 1960s partly replaced by *Ulmus procera* (English Elm), as suggested by William Holford, a key figure in the replanning of Canberra. Along King George Terrace in front of Parliament House Weston gave Eucalypts pride of place, including the graceful *Eucalyptus maidenii*, an equally graceful acknowledgement of Maiden's inspirational influence in planting the city.³³

The grounds of the Hotel Canberra and the Albert Hall, prominently situated on Commonwealth Avenue, retain important associations with the Weston era, for instance in the magnificent twin Atlas Cedars at the front of the Albert Hall, planned by Weston and planted by Bruce in March 1928. Extensions to the rear of the Hotel Canberra in 1950 and 1988 removed some of the Weston trees, while construction of a carpark in the early 1950s destroyed the garden and recreational layout between the Hotel and the Albert Hall, a vital element of the complementary roles of these two founding buildings. Similarly, concreting to extend the northern terrace of Albert Hall eliminated half of the symmetrical series of Weston's Roman Cypress along the Albert Hall terraces. The splendid survivors on the southern terrace, like their sister trees in the Hotel Canberra grounds, still signify the intended landscape of this key civic precinct of the national capital.³⁴

Weston's planting layout for the parliamentary precinct within Griffin's radial Commonwealth and King's avenues can be seen today, with many of the trees he raised at Yarralumla Nursery, their heritage significance acknowledged. In their first years his trees were living surveyors' pegs marking future roads and parks apparent only on plans. Similarly the southern and western radial avenues from Griffin's Capitol Hill, named after Australia's capital cities, were for some years lanes of trees rather than actual roadways. On the southside the Manuka end of Telopea Park and on the northside City Hill and Haig Park remain key Weston features. Weston trees are still evident in the

³³ Plan Showing Permanent Planting at Government Group Canberra 1928, NAA: A12708, D124; Boden 1993, pp.12-13, 41, 66-67, 94-95; **Cards 1:** *Cupressus sempervirens* 11L [digitized as Cupressus 326], *Libocedrus decurrens* 1E & 1G [digitised as Libocedrus 8 & 10]; *Ulmus chinensis* 10F [digitised as Ulmus 82]

³⁴ Boden 1993, pp.62-63; *Albert Hall Conservation and Landscape Management Plan 2007*; AE Bruce Diary 1928, NAA: CP209/2, NN

settings of Telopea Park School and Ainslie Public School and their surrounding suburbs. They are enhanced by Pryor's work at the same sites, at the Lake end of Telopea Park for instance. At Ainslie Public School, where a new Primary School had been built in 1938 and two new wings had been built onto the 1927 building in 1948, Pryor's aim was 'to give some balance to the buildings, principally in the use of Planes at the rear and other deciduous trees adjacent to the two bike sheds'. This planting is now part of the site's heritage registration.³⁵

As well as the landscaping of Civic Centre, the two southside shopping centres at Manuka and Kingston were part of the planting of the Weston era. At Manuka, trees from this era include *Liquidambar styraciflua* (Sweet Gum) and London Plane trees; the pruning of the Plane trees to confine their crowns in the small setting of the Lawns dates from Lindsay Pryor's visit to Japan in 1946, where he saw this technique widely employed. Pryor introduced the magnificent specimens of Oriental Plane to Green Square in Kingston, and to London Circuit, in 1954. The holly in Kingston's Green Square had been replaced in 1949 with *Fraxinus augustifolia* (Desert Ash) to provide more shade and reduce the visibility hazard for the increasing car traffic.³⁶

Symmetry is also an element of the street planting tradition Weston introduced for the first residential subdivisions, not only in the pattern of planting along streets, but in mirrored patterns across the city. Instances include Weston's combination of *Prunus cerasifera* (Cherry Plum) and Roman Cypress along broad Wentworth Avenue in Kingston and across the city, in Ainslie's Lister Crescent and tiny Toms Crescent. Cherry Plum also borders the Kingston side of Telopea Park and Fortitude Street in Red Hill, and Macarthur Avenue in O'Connor, indicating Pryor's inclusion in his landscaping of the Weston motifs.

Atlas Cedar forms the northern street border of Telopea Park; on the northside the tree borders Ainslie Avenue in Reid. *Robinia pseudoacacia* (Black Locust) in Gipps Street Barton and Gooreen Street Reid and Argyle Apple in Investigator Street Red Hill and Henty Street Braddon show the same cross-city pattern. Pryor mirrors other favourite trees, like the White Brittle Gum on Mugga Way in Red Hill, planted also on the verge plantations of Northbourne Avenue and of Antill Street in

³⁵ Parks & Gardens Consultative Committee Minutes 21 July 1949, NAA: A 431, 1951/572; Ainslie School ACT Heritage Places Register No.50, 2000

³⁶ Boden 1993, pp.94-95; Boden 2000; Parks & Gardens Consultative Committee Minutes 4 August 1949, NAA: A 431, 1951/572; **Cards Set 1: *Liquidambar styraciflua* 1-1J** [digitised as Liquidamber 2-10]

Dickson. This tree also features on the central plantation of Captain Cook Crescent, with Weston's Atlas Cedar on the verges, an association Pryor considered his most successful avenue planting.³⁷

The conflict between the constantly increasing use of cars and the garden city design emerged between the wars when Hobday as Superintendent of Parks and Gardens was part of a 'Visibility Committee' resolving hazards like low-branching or bunched street plantings. With the resumption of housing construction in the late 1930s Hobday stoutly defended the planting design that defined Canberra's streets, stressing the 'vital importance' of cooperation in town planning. His argument derived from the removal of street trees to install driveways, with one instance on Canberra Avenue in Griffith where 'a new entrance necessitates the removal of the best specimen tree in this Section, which by the way, happens to be a 'presentation tree' planted about 1926' (see Section 3.7 below).³⁸

If Weston's was the task of planting a new city, Pryor's responsibility was planting the city anew. Under the Menzies Government, elements of the Griffin design were implemented. Most significant for the landscape of the city was the decision to build at last the ornamental lake at its heart. The key speaker at the 1951 Jubilee Town Planning Congress in Canberra, eminent UK town planner William Holford, was invited by the Government to report on the planning and development of the national capital. Pryor's work in the 1950s prepared for the subsequent development of Canberra's 'Y' form with satellite towns at Belconnen and in the Woden and Tuggeranong valleys, implemented by the National Capital Development Commission established in 1958.

The Parks and Gardens Consultative Committee – also known as the Advisory Committee – in 1947 consisted of Pryor, architect Malcolm Moir, Forestry School head Max Jacobs and GH Romans. Pryor's replanting of Northbourne Avenue became a cause of conflict over a decision that provision for parking was to be made along the median strip at the city end of Northbourne Avenue. Pryor's compromise, allowing for parking either side of a 'single central line of Eucalypts at 60ft centres up Northbourne Avenue at least to Cooyong Street', was firmly rejected. The Department of the Interior's Traffic Advisory Committee insisted there could be no planting at all along the median strip so as to provide for 'future central high speed traffic laneways' on Northbourne Avenue. In

³⁷ **Cards Set 1:** *Cedrus atlantica* 1 1914 – 1K 1926 [digitised as Cedrus 2-13], *Eucalyptus mannifera* ssp. *maculosa* 61C & 61F 1922 & 1927 [digitised as Eucalyptus 348 & 351]

³⁸ Visibility Committee – Parks & Gardens matters 1937-40, NAA: A659, 1939/1/10527; Hobday to Secretary Canberra Services Branch 13 Oct 1939, NAA: A292, C19521

1949 Pryor reported that the street planting of Northbourne Avenue was half completed, with the only obstacle a possible shortage of good stock of *Crataegus smithiana* (Hawthorn), planted alternatively with White Brittle Gum on the verges, while on the median plantation his two rows of *Eucalyptus blakelyi* (Blakely's Red Gum) marched triumphantly onwards.³⁹

Robert Boden points to street tree planting as one of 'Pryor's great contributions to the Canberra landscape' with suburban streets planted at a rate of 1,000 trees each year during his term. For all the new streets in Turner and O'Connor not already committed to other species, Pryor emphasised deciduous trees like Chinese Elm, Oaks, and *Celtis* for which he obtained species from Argentina and Italy, though the Nettle Tree grown from Weston's original trials seem to have been more widely used than other *Celtis* species. He planted the street bordering Haig Park on the north (Greenway Street) with Snow Gum and also proposed for Haig Park 'more lines and other designs of Lombardy Poplar to be included as far as possible in future'. In North Ainslie and Kingston, Officer Crescent and Gosse Street were planted with *Quercus lusitanica*; in Braddon and Kingston, Nettle Tree was planted along Donaldson Street and Eyre Street; and in Ainslie and Griffith, Lang Street and Carstenz Street were planted with the Golden Rain Tree Pryor tested in his Curtin arboretum. North Ainslie's Cobb Crescent was planted with *Fraxinus oxycarpus* (Claret Ash), Hawdon Street with *Quercus cerris* (Turkey Oak), and Rutherford Crescent with the 'Double Pink' Hawthorn *Crataegus oxyacantha* var. *rosea*.⁴⁰

Holford's report to the NCDC on landscaping the Lake then under construction and the NCDC's appointment of Richard Clough as landscape architect in 1959 resumed this work anticipated in Weston's early plantings along the shoreline contour marked on Griffin's 1918 plan. Under David Shoobridge as Director of Parks and Gardens, Yarralumla Nursery produced all the plantings for each section of the lakeside. The landscaping included the present recreation area of Weston Park which became a peninsula as the Lake filled, and the shoreline of Westbourne Woods.

In the Commonwealth Bridge – Hotel Canberra section, where the Royal Canberra Golf Club links and clubhouse had been, Lombardy Poplar was planted west of the Albert Hall and Hotel Canberra,

³⁹ Hince 1994 Appendix 2; Matthew Higgins 1992 106; Boden 1993, pp.62-63, 84-85; Correspondence between Max Jacobs and HE Jones of the Traffic Advisory Committee March 1947 and Minutes of the Parks & Gardens Advisory Committee 21 July and 4 August 1949, NAA: A 431, 1951/572. This Hawthorn was a spontaneous hybrid noticed at the Nursery by Hobday and widely used by Pryor, Hince p.218

⁴⁰ **Cards Set 1:** *Celtis* 1 - 6 [digitised as Celtis 1-34]; Minutes of the Parks & Gardens Advisory Committee 21 July and 4 August 1949, NAA: A 431, 1951/572

today evoking the avenue of poplars that had marked the road across the river at Lennox Crossing, all now submerged. The landscaping of this key precinct included a plantation of Monterey Pine and *Pinus canariensis* (Canary Island Pine) north and west of Albert Hall, with Incense Cedar planted within the southwest cloverleaf approach to the southwest of Commonwealth Avenue Bridge. Around the entire lakeside, native and exotic species were combined in formal and informal arrangements on a scale achieved nowhere else in Australia, so that 'Canberra itself became a new urban experiment, resulting in a new 'bush-capital' aesthetic'.⁴¹

When Pryor had outlined his work plan to the Parks and Gardens Consultative Committee in October 1945, the first item was his strategy to ensure design and species of plants would be ready for planting in tandem with construction of the lake system. At the February meeting, committee member and Forestry School head Max Jacobs proposed the Royal Canberra Golf Club be offered an exchange of their Acton course, which would eventually be under the lake, for a site further along the western shore, within Westbourne Woods. A keen golfer and Club member, Jacobs was closely involved with this plan and the preparatory work for the new golf links including felling of trees to form the fairways. This preparation was completed by 1949, although the Club did not secure the lease for some years and moved from the Acton course in 1962 with construction of the Lake underway.⁴²

Under the NCDC the shape of Canberra was radically altered, not only by Lake Burley Griffin but in the layout to the 'Y' plan formed by the satellite city centres of Tuggeranong, Woden and Belconnen. The creation of new suburbs in existing dry forest involved planting out hundreds of new streets and parks, like everywhere else in Canberra achieved with trees and shrubs raised at Yarralumla Nursery. The landscaping included ornamental lakes for the new centres, with for instance *Pyrus ussuriensis* (Manchurian Pear) featuring in John Knight Park at Lake Gininderra. As Robert Boden pointed out, burgeoning conservation awareness meant increased attention to retaining existing trees in new developments and also increased interest in using indigenous plants. From the 1970s some suburban streets were planted exclusively with Eucalypts and in home gardens Wattle, Grevillea, Melaleuca and Bottlebrush flourished.⁴³

⁴¹ **Cards Set 2:** *Pinus canariensis* 1947 –64 [digitised as Pinus 13-14], *Pinus radiata* 1946-65 [digitised as Pinus 66-68], *Populus nigra* [digitised as Populus 22-23], *Libocedrus decurrens* [digitised as Libocedrus 2 & 3]; Godden Mackay Logan *Weston Park Conservation Management Plan* 2010, S.2.10.2

⁴² *Royal Canberra Golf Club Jubilee History 1926-1976* Canberra, RCGC, 1977, p.33; Minutes Parks & Gardens Advisory Committee February & October 1945, quoted Murphy pp.80-85

⁴³ Boden 1993, p.13, 66-67;

3.5.b Down the years

The Yarralumla Nursery records hold thousands of untold stories of the connections between the two major figures at Yarralumla Nursery, expressed across Canberra in the life generated by their work. Ainslie's Lister Crescent Roman Cypress were grown from seeds Weston germinated from a fine specimen tree at Duntroon in 1920 which produced thousands of young trees he planted out in 1923-27, the most intense period of planting the garden city. The fixed deadline for the transfer of the battalions of public servants necessary for the national capital to become the seat of government meant trees often preceded houses along suburban streets. The Duntroon Roman Cypress provided trees to all three of the first residential subdivisions in the 1920s, Ainslie, Blandfordia and Eastlake. The trees Lindsay Pryor and David Shoobridge grew from the seeds collected in Lister Crescent in May 1949 and June 1965 were thus third generation progeny of the Duntroon tree.

Similarly, acorns from the *Quercus palustris* (Pin Oak) trees planted in this same period in Torrens Street in Braddon, raised from acorns Weston had brought with him from the Campbelltown Nursery, were harvested by Pryor from 1946. If the records at Yarralumla Nursery have as much to yield as do such historic trees, then determined detection might discover a trail from the 1913 Weston acorns to the Pryor Pin Oaks planted in La Perouse Street and Stuart Avenue in Griffith. Despite its habit of holding its browned leaves through winter until they are replaced with new spring growth, the Pin Oak has become one of Canberra's most outstanding trees. The city even has its very own cultivar. In 1965 Robert Boden took cuttings from Pin Oaks he had observed defoliating early and grew these on at the Nursery, taking buds from the apical shoot at the crowns for grafting. This created the 'Freefall' cultivar that obligingly defoliates in autumn with other deciduous trees.⁴⁴

Trees give their own clues to their origins. The multi-stemmed characteristic of Weston's Atlas Cedars at Manuka Circle between Flinders Way and Captain Cook Crescent suggests these trees are all related to one multi-stemmed antecedent. As Weston sourced most of the Atlas Cedars raised at Yarralumla Nursery from seed collected at Duntroon, including those planted in the 1926-27

⁴⁴ Boden 1993, pp.21,25, 78-79, 88-89; **Cards Set 1:** *Cupressus sempervirens* 11L October 1920 [digitised as *Cupressus* 326]; *Quercus palustris* 16-16B 1913-27 & 16T-16U 1946-47 [digitised as *Quercus* 173 -76 & 194-95]; **Cards Set 2:** *Cupressus sempervirens* 49724 May 1949 & 651950 June 1965 [digitised as *Cupressus* 54 & 46]

'Presentation Avenue', the records support the inference. Although this makes these trees historically interesting, it also makes them vulnerable, as theirs is not a form of growth considered suitable for trees close to traffic intersections.⁴⁵

3.6 PRIVATE POLITICS

Throughout the city's first century Yarralumla Nursery has supplied both advice and plants to home gardeners, support continuing today. The Nursery has thus been both teacher and conductor, ensuring the underlying harmony of every suburban garden with the overall design and species selection of the whole garden city. This 'orchestration' has continued from the very first suburban gardens in the 1920s to the newest ninety years later.

3.6.a Free for all

Historians have provided various dates for the commencement of Yarralumla Nursery's plant issue scheme, a question complicated by directives such as the FCC's in 1925 that surplus stock could be given to city and country leaseholders but otherwise plants were to be sold within the Territory. The question of the start of the practice of issuing plants can be settled by the Plant Cards. The trail of intriguing clues buried in the older Cards leads to the conclusion that the policy is as old as the Nursery. That plants were supplied on request even before Canberra had householders and home gardens suggests that the policy of providing free plants from the Nursery originally had a public relations purpose, prior to its educative and coordinating intent.

For instance, early distributions recorded on the Plant Cards include a Peach tree raised at the Acton nursery and provided to P Jolly in 1919. The following year Almond seedlings raised at the Nursery from a 'most prolific' 80-year-old tree growing near the Tuggeranong Homestead creek, and another growing at Yarralumla Homestead, were given to *Queanbeyan Age* editor WE Gale, and to RMC medical officer Lieut-Colonel Henry Stoker for his family's Duntroon residence. A dozen of each tree was also given to Mary Cunningham, who had lived at Tuggeranong from 1889 until the Commonwealth acquired the property in 1913, when she and her husband moved to Lanyon. The year she received the 24 Almond trees, presumably for planting at Lanyon, was their last there, as after Jim Cunningham's death in 1921 his widow moved to Sydney. In his eight years at RMC, Dr

⁴⁵ Lawrence and Boden, p.10

Stoker received numerous trees, including Deodar grown from the magnificent Yarralumla Homestead tree and Atlas Cedar grown from the Duntroon tree.⁴⁶

Plants were regularly supplied to Members of Parliament; in July 1923 the new MHR for Kooyong John Latham received 36 trees and plants and Western Australian Senator Edmund Drake-Brockman received 31 trees, both consignments including two Deodar duly recorded on Plant Card 2G. Neither parliamentarian lived in the ACT, nor visited other than the brief stay at Yarralumla Homestead afforded parliamentarians and their families to encourage their support for the Herculean work of creating a seat of government on the windy and remote Limestone Plains. These plants might have been intended as gifts for constituents, unless the parliamentarians' own home gardens in Melbourne and Perth were the destinations. On 3 August 1922 pairs of Atlas Cedar, Cork Oak, Kurrajong, *Platanus occidentalis* (Buttonwood) and *Arbutus unedo* (Irish Strawberry Tree), three Chinese Elm and three Western Yellow Pine were among a large consignment of plants despatched to Prime Minister WM Hughes. The destination of these plants seems likely to have been the new house the family had just bought in the suburb of Lindfield in Sydney, after Hughes had once more cannily changed his electorate, this time from Bendigo back to North Sydney. Some of these trees could have been gifts for his new constituents of course, but the species bordering the house today are evidence of the intended destination of others.⁴⁷

In these early years the issue of trees and plants was widespread. In 1922 Weston recorded the distribution of 6,884 trees and shrubs, comprising 475 to the Hume Reservoir then under construction by the NSW Department of Public Works; 1,122 to the Royal Military College, and 5,287 to householders within the Territory. A despatch list for 1923 shows local recipients included Mr Dunn at the Powerhouse, Mrs Gillespie at Queanbeyan, Mr Cole at Civic Centre, Mrs Campbell at Woden, and Mrs Morrison at Tharwa. From 1925, when the trickle of transferring public servants first began to flow, the free trees, shrubs and flowers issuing from the Nursery flowed even faster and not only to those required to make their homes in the new city. This was a national public relations exercise with organisations and individuals around Australia receiving the bounty. So

⁴⁶ **Cards Set 1:** *Amygdalis persica* 12D [digitised as Amygdalis 96], *Amygdalis communis* 4A & 4B [digitised as Amygdalis 2 & 3], *Cedrus atlantica* 1I [digitised as Cedrus 11], *Cedrus deodar* 2E [digitised as Cedrus 36]; *Queanbeyan Age* 2 December 1921; Murphy p.73

⁴⁷ **Cards Set 1:** *Arbutus unedo* 1D [digitised as Arbutus 10], *Cedrus deodora* 2E & 2G [digitised as Cedrus 36 & 38], *Pinus ponderosa* 28G [digitised as Pinus 132], *Platanus occidentalis* 2B [digitised as Platanus 4], *Quercus suber* 26A & 26M [digitised as Quercus 267 & 280], *Sterculia diversifolia* [digitised as Sterculia 12], *Ulmus chinensis* 10F [digitised as Ulmus 82]. Sir William Hughes, no longer prime minister, Dame Mary and their 9-year-old daughter Helen moved into 14 Nelson Road in November 1924.

generous and widespread was this distribution that Yarralumla Nursery served as Australia's national plant nursery, an expectation that proved hard to shift.

While the onset of the Depression and the contraction of development imposed cutbacks at the Nursery, for recipients the hard times were as much an argument to continue as to limit the well-established national plant issue. Finally in 1932, under the new Government of Joseph Lyons, the Department of the Interior drew the line and declared that from the following year plants would only be available to residents of the ACT. As Alexander Bruce did not maintain the same detailed record on the Plant Cards as Weston, the trail must detour to departmental correspondence to discover how reluctantly the benefit was yielded. The end of the practice also signifies the end of its implicit purpose of persuading the case for the national capital.

3.6.b The plant issue scheme

Soon after the policy line was drawn Labor Opposition MHR Frank Forde applied to Minister for the Interior JA Perkins for 5 dozen tulip bulbs. The Minister requested Alexander Bruce to comply, but advised no further supply should be made. When the new Teachers College at Armidale asked in February 1934 for plants as there were no funds for landscaping their grounds they were refused, as was MHR JA Lawson a month later when he asked for 1,000 trees to distribute in his Blue Mountains electorate. The Goulburn Orphanage was more fortunate, their original appeal for tulip bulbs to Prime Minister Lyons having been mislaid before the cutoff. Gympie's Town Hall was also squeezed in when they advised their request, twelve months before the ban, had not been processed and three Almonds, two Flowering Plums, and an Arizona Cypress were despatched in July 1934. Bathurst Council was also fortunate, the city's Memory Drive deemed within the new rules in April 1934, but the following month the Armidale NSW arboretum was turned down, the local MHR vehemently protesting that the Yarralumla Nursery plants were 'one of the few advantages which the suffering taxpayers can get from Canberra'.

Not even former FCC head Sir John Butters' request on behalf of Barker College for 100 Roman Cypress 'which I had propagated myself a few years ago' was obliged. The RAN base at Garden Island on the other hand, as a Commonwealth establishment, was supplied further plants in the winter of 1934 including wattle and their specified 'flowering peaches light and dark pink'. Jim Martin, manager at Lanyon for TA Field and Co was also sent the 60 Cypress he requested, pointing out that Lanyon was providing gravel for Canberra road construction. The refusal that most clearly

points to the policy change was that of 18 July 1934 from an interstate visitor who requested four Arizona Cypress, having admiringly noted the specimens planted between Parliament House and the Hotel Canberra as he walked across on a recent visit.

Ten years before, a visitor admiring a Canberra tree could have had a forest of seedlings. The Nursery's bounty was so widely and generously distributed in its first twenty years that the modest place was in effect an advocate for the national capital during the critical period in which it was established not just on its site, but in the national imagination. But now the Depression years decreed that the garden city must stand on its own ground.⁴⁸

So from 1933, apart from occasional specific Commonwealth needs, only the new gardens of ACT householders were issued with free plants from the Nursery. The supply kept up with the demand until the spread of the city gained rapid pace during Pryor's term. In 1956, when it became impossible to keep up with the accelerating demand of the spreading suburbs, the Nursery's scheme of issuing free plants for new houses was modified. For the next four years each new home garden was entitled to a reduced but still abundant quota of 20 trees and 60 shrubs; in 1960 this was adjusted to 10 trees and 40 shrubs. Suspended in 1981 under Malcolm Fraser's government 'Razor Gang' review, the plant issue scheme was reinstated by Bob Hawke's government in 1985.

3.7 PUBLIC CEREMONY

The rich history of ceremonial planting in Canberra reveals how embedded is the principle that 'mixing one's labour with the soil' establishes an interest, in this case in the creation of a city for a nation. The home gardeners of the suburbs, like the spade-wielding visiting dignitaries and delegations, were all part of planting Australia's newest city. In 1925 when Sydney businessman WB Carmichael launched his scheme to encourage community organisations throughout Australia to plant 'trees or avenues of trees' in Canberra, he made explicit 'the object of creating a greater public interest in our National Capital'. His call, published in the interstate dailies in 1925, pointed at the very least, to an antidote to the usual sarcasm and criticism of the infant city, particularly in the Melbourne press. The FCC embraced the idea, reserving the whole median strip of the northern section of the road from Canberra to Queanbeyan, as 'Presentation Avenue'. Weston's planting of

⁴⁸ Parks & Gardens Plants, trees, shrubs, bulbs, supplies to persons and public bodies Part 1, 1933-1935 NAA: A1, 1938/30587

Acacia baileyana (Cootamundra Wattle) further along this main road had already earned it the name of the 'Golden Mile'.

How the tree planting idea took hold is evident in the long list of societies 'widely representative of the people of Australia' that so rapidly filled this first 'Presentation Avenue'. Included is Carmichael's own Highland Society of New South Wales, who planted a *Sorbus aucuparia* (Rowan Tree) at the northwestern end of the Avenue, one of the few presentation trees not raised at the Nursery. Although as Butters pointed out the Nursery trees would normally be provided free, so as not to 'spoil the effectiveness of the whole scheme' the sponsoring bodies paid for them. The Nursery supplied for instance the 104 trees planted by a delegation from the Commercial Travellers' Association on 15 August 1926; the NSW Town Planning Association's 58 trees planted on 21 August; the two poplars planted by the English Speaking Union's Victorian branch; and the Millions Club's 39 trees planted by representatives on 11 September. In August 1926 an Institution of Engineers delegation planted 36 trees of their 96 sponsored trees on the sections around Manuka Circle, among them the designer of the Sydney Harbour Bridge JJC Bradfield whose Atlas Cedar at Section E10 was next to a *Juniperus chinensis* (Chinese Juniper) planted by his colleague Harvey Dare. Local IEA members also provided trees, with Director of Works Bill Potts planting the indigenous conifer *Callitris calcarata* and also a Macarthur's Gum at Section D 41 and 40. The second tree was on behalf of FCC chairman John Butters, who despite his strong role in the scheme and in selling it to his IEA colleagues, was away on the day. The presentation plantings on Canberra Avenue in 1926 also included 28 *Casuarina cunninghamiana* (River Oak) from the Nursery.⁴⁹

By 1927 when the first area was fully planted with the sponsored trees and officially named Canberra Avenue, a section of road on the north side of the city known as Pialligo Avenue was in turn reserved and designated 'Presentation Avenue' (now Limestone Avenue). On this median strip, where 73 Kurrajong had been planted in 1926 and 1927, the portion between Batman and Girrawheen streets was allocated to the Australian Natives Association. On 25-27 August 1928 members worked hard to plant out 179 Kurrajongs and 82 Eucalypts, with the Nursery planting the rest, 116 wattles, a week later. By December, ten Kurrajongs had been stolen and thirty of the other trees had died, but some survivors stand today between the ANA's memorial white seats. Rotary Clubs Australia wide also participated in the Presentation Avenue scheme, and continued this investment throughout the city. On 2 April 1935 Rotary Club founder Paul Harris and Mrs Harris

⁴⁹ Melbourne *Argus* 31 October 1925; **Cards Set 1: *Acacia baileyana*** 3-3W [digitised as *Acacia* 26-53], *Casuarina cunninghamiana* 2E [digitised as *Casuarina* 10]; Boden 1993, pp.82-3; Butters to Carmichael 8 September 1925, quoted in Lawrence and Boden p.4; Photograph NAA: A3560, 2331

marked their visit to the national capital by planting Atlas Cedar 'Friendship Trees' in front of Telopea Park School and Ainslie Public School.⁵⁰

Ceremonial plantings were a feature of the national capital from the start, with significant sites like the immediate parliamentary precinct reserved for special dignitaries. In October 1926 when the Speaker's Chair was presented to the House of Representatives by visiting Empire Parliamentary Association delegates, the Marquess of Salisbury, Leader of the House of Lords, and Labour's Chief Whip in the House of Commons Arthur Henderson planted Lombardy Poplars in the House of Representatives courtyard, while other delegates planted Cypress in the grounds.⁵¹

Other ceremonial plantings that preceded the opening of Parliament House included the tree brought from Western Australia by a contingent of schoolboys of the Young Australian League who celebrated their visit to the imminent national capital, and Australia Day 1927, by setting their gift in the ground in front of Parliament House on 24 January 1927. The opening of Parliament in the new Parliament House on 9 May that year was naturally marked with more ceremonial planting of trees, Elizabeth the Duchess of York planting a *Salix alba* var. *caerulea* (Cricket Bat Willow) and a native White Brittle Gum near the corner of National Circuit and Canberra Avenue, the entry to the first 'Presentation Avenue'. Her husband planted an Atlas Cedar at Government House and one English Oak and one *Araucaria bidwilli* (Bunya Pine) on opposite sides of Kings Avenue, near State Circle. on the corner of Kings Avenue and State Circle. The Governor-General planted a Beech and a Casuarina at Acton and Prime Minister Stanley Melbourne Bruce an English and an Australian tree on the then Darwin Avenue. All six sites were chosen for their significance in the landscape and intended to be developed as coppices, at the suggestion of the Curator of the Royal Botanic Gardens at Kew for a worthy 'Royal or English vista'. Today only York Park offers evidence of the intended multiple planting, though not in coppice form: within five years of the Royal ceremony on 10 May 1927 the work of turning the Duke's Oak into a plantation fell to unemployed men, their work paid from Depression relief funds.⁵²

For these ceremonies the six English trees 'for authenticity' were supplied by Kew Gardens and the natives by the Nursery, but for most ceremonial plantings, including gifts of foreign governments,

⁵⁰ **Cards Set 1:** *Sterculia diversifolia* [digitised as *Sterculia* 13]

⁵¹ Photograph NAA: A3560, 2414; *Canberra Times* 12 October 1926

⁵² Daley, p. 100; *Sydney Morning Herald*, 11 May 1927; Duncan Marshall, Robert Boden, Alan Mann & Alison Rowell *Heritage Management Plan York Park North Oak Plantation* Canberra, National Capital Authority, 2008, pp.21-28

the plants were raised by or tended at Yarralumla Nursery. In 1959 the Nursery received the gift of *Ginkgo biloba* (Maidenhair Tree) from schoolchildren in Matsudo City in Japan, and sent the return gift of Eucalypt seeds on behalf of Canberra children. The Japanese seed was germinated and the seedlings raised at the Nursery before being planted at schools; the Ginkgo at Ainslie Primary School is presumably one of these trees. Yarralumla Nursery similarly nurtured Australia's gifts to grow in soils worldwide, like the Cootamundra Wattle planted in Argentine's Peace Garden established in La Planta in 1938.⁵³

A history of one hundred years of ceremonial plantings nationally and internationally would be a fascinating one. The small slice served here shows the role of Yarralumla Nursery in the orchestration of the landscapes of the national capital extended from domestic backyards to the grandest public gardening moments too

⁵³ Lawrence and Boden p.10; John Butters 'Presentation and Memorial Tree Planting' FCC Third Annual report 1927; NAA: A1501, A2251/2; **Cards Set 2: *Ginkgo biloba*** 29 June 1959 [digitised as Ginkgo 2];

4. CONCLUSION

For one hundred years the garden city of Canberra has been nourished and shaped by Yarralumla Nursery, from the first forestry work to the broad scale landscaping of parks, civic buildings, street trees and public works; and from the initial testing of grains, fodder crops and grasses to the blooming of suburban gardens.

The purpose of the records maintained by Charles Weston from 1913 and by Lindsay Pryor and his team from 1944 was scientific and operational; as these are also records of government they play their part in the national accounting of investment in public work. The careful recording of data on experimentation and propagation in these two periods retains its importance to botany and to forestry and horticulture today. From the point of view of the history of Australian government, the records at Yarralumla Nursery are key evidence of how the national capital, conceived in the Commonwealth Constitution and imagined as the exemplar of the world's newest democracy, became both international garden city and Australian bush capital.

The Plant Cards, Ledgers and seed bank at Yarralumla Nursery are an invaluable record of the collection, gift and exchange of plants and seeds around the world and across Australia. They show two distinct thirteen-year eras as high points in the history of Yarralumla Nursery, in scientific work, in production and in clothing the city. The Weston era from 1911 to 1927 and the Pryor era from 1944 to 1958 were extraordinarily productive periods in all three areas.

Seed and plant exchanges nationally and internationally are of considerable biodiversity significance and the records at Yarralumla Nursery link Australia to a century of world botany. Analysis and use of these records has been crucial in the development of Canberra's International Arboretum, just as it was in the creation of Weston's and Pryor's arboreta. The exchange of plant material means that the ACT is a sanctuary for now endangered plants, like Torrey Pine, a tree so extremely rare even in its home location in coastal California that the ACT stand is of real importance. Similarly the White Cedar trees grown from the Iraqi variety collected by Lindsay Pryor in Mosul in 1953, are thriving examples in Canberra of this now rare cultivar .

Yarralumla Nursery continues to play a special local role not undertaken by the Australian National Botanic Gardens, nor any other nursery. The seed bank of species significant to the national capital is essential in maintaining the integrity and legibility of the garden city landscapes as living history. A vivid example can currently be seen on the slopes above Yarramundi Reach where hundreds of young Roman Cypress are growing strongly on the bared hillsides. The replanting of this area after the severe bushfires in January 2003 destroyed south-western areas of Canberra, has created a 'time travel' glimpse of the city's surrounds as they looked when the young Roman Cypress Weston planted in 1917 were growing as vigorously. Eighty-six years later, the seeds for the regeneration of these blackened hills came from the Yarralumla Nursery seed bank, from the very same forest families of the first 'Green Hills' plantation.

The patterns of planting established by Charles Weston and by Lindsay Pryor in the landscaping of the national capital remain today, as does the core area of the original Nursery. The first shade house was built there in 1925 for the thousands of seedlings for the Parliament House precinct; the newest glasshouses and shade houses were built in 1987 for the three million plants that grace the new Parliament House. Now an ACT Government agency, the Nursery continues to have a national role despite its commercial structure, for instance as one of the Australian nurseries contracted to landscape the Homebush Bay site of the 2000 Olympic Games. The Nursery continues to supply the plants for new landscaping, for instance the 9,000 trees grown for Gungahlin's housing development. These trees – and all the householders in Canberra's newest suburbs currently choosing their free trees and shrubs – are part of the unbroken history of a garden city as it enters its second century.

The heritage value of Yarralumla Nursery as well as Westbourne Woods and Weston Park have been recognised over the past twenty years, with Westbourne Woods and the Nursery included on the former Register of the National Estate in 1987 and 1992. In 2011 all three were entered on the ACT Heritage Register; the records at Yarralumla Nursery have also been nominated for heritage registration. Digitisation of the Plant Cards and Ledgers is an important step in enhancing awareness not only of these records, but of the heritage of Westbourne Woods, Weston Park and Yarralumla Nursery and their part in the history of Canberra.

These records are also a key to those held in the National Archives and the Territory Records Office: together they release the extraordinary story of Yarralumla Nursery and the clothing of the city.

The evidence they provide reinforces Margaret Hendry's assertion that 'Public landscaping under two men, Charles Weston and Lindsay Pryor, governs the appearance of the city today'. In reading the Cards and Ledgers though, many different recording hands make manifest the contribution of so many to the planting of the ACT.⁵⁴

An understanding of the value of the records at Yarralumla Nursery has depended on an appreciation of their horticultural amenity and scientific value. The digitisation of the Plant Cards and Ledgers records makes more widely accessible the valuable information they hold. Now their role towards the realisation of an ideal city can be revealed and the roots of the history of Canberra's first hundred years unearthed.

⁵⁴ Margaret Hendry 'Canberra – a city within the landscape' *Landscape Planning* 6, 1979, pp.271-83; *Canberra Times* 28 November 1996

BIBLIOGRAPHY

- Boden, Robert *Favourite Canberra Trees* Sydney, Kangaroo Press, 1993
- Boden, Robert, 'Turning a New Leaf', *Canberra Times* 19 March 2000
- Chapman, Bruce *A Field Guide to Arboreta in the Australian Capital Territory* Canberra, RAIPR, 1984
- Cosgrove, Carol 'Weston's Legacy', *Heritage in Trust*, Summer 1999, pp. 17-19.
- Daley, CS *As I Recall* Canberra, Mulini Press, 1994
- Freeman, Peter et al *Canberra Croquet Club Conservation Management Plan* 2005
- Freeman, Peter et al *Albert Hall Conservation and Landscape Management Plan* 2007
- Friends of ACT Arboreta Westbourne Woods Canberra, Royal Canberra Golf Club, 2011 (revised edition of Tony Rout and Ken Eldridge *Westbourne Woods* 1983)
- Gibbney, Jim *Canberra 1913-1953* Canberra, Australian Government publishing Service, 1988
- Godden Mackay Logan *Weston Park Conservation Management Plan* 2010
- Gray, John "Charles Weston and the Greening of Canberra" NCA Fact Sheet www.nationalcapital.gov.au
- Gray, John, 'TCG Weston, Horticulturalist and Arboriculturalist: A critical review of his contribution to the establishment of the landscape foundations of the Australia's National Capital', PhD Thesis, University of Canberra, 1999
- Gray, John, 'Charles Weston: Pioneer of Afforestation and Conservation at the National Capital', *Canberra Historical Journal* NS 44, 1999, pp.9-18
- Hendry, Margaret, 'Canberra – a city within the landscape' *Landscape Planning* 6, 1979, pp.271-83
- Hince, Bernadette *A Pryor commitment: Canberra's public landscape 1944-1985* Report for ACT Landscape, Public Works & Services, 1994
- Lawrence, TFC & Robert Boden *The Trees of Manuka Circle* Canberra, IEA Canberra, 1995

- Maiden, JH *Critical revision of the genus Eucalyptus Vol. 7 Part 61* Sydney, NSW Government Printer, 1929
- Marshall, Duncan, Robert Boden, Alan Mann & Alison Rowell *Heritage Management Plan - York Park North Oak Plantation* Canberra, National Capital Authority, 2008
- Mulvaney, Michael , 'The history of ornamental tree and shrub planting in the Canberra region', *Canberra Historical Journal* NS 20, 1987
- Murphy, GP *Parks and Gardens in Canberra* Canberra, Department of the Capital Territory, 1979
- Murphy, Greg 'Thirty Green Years, 1921-1951' *Canberra Historical Journal* NS 4, 1979
- Murphy, Greg 'Canberra's Redwood Plantation' *Canberra Historical Journal* NS 22, 19
- Murphy, Greg 'Canberra's debt to Charles Weston' *Canberra Historical Journal* NS 35, 1995
- Proudfoot, Peter, 'Arcadia and the Idea of Amenity', *Journal of the Royal Australian Historical Society* 72, 1, June 1986, pp.3-18
- Proudfoot, Peter, 'Canberra: Landscape, Politics and Public Life', *Meanjin* 47, 3, Spring 1988, pp.427-38
- Pryor, LD *Trees in Canberra* Canberra, Department of the Interior, 1968
- Pryor, LD, 'TCG Weston's Contribution to the Canberra Landscape', *Australian Parks and Recreation* August 1982, pp.47-52
- Pryor, LD & J Banks *Trees and Shrubs in Canberra* Sydney, Little Hills, 1991
- Selth, PA(ed) *Canberra Collection* Kilmore Vic., Lowden Publishing Co., 1976
- Somers, A (ed) *Early Ainslie Gardens* Canberra ACT Monaro and Riverina Branch AGHS, 2004
- Taylor, Ken *Canberra - City in the Landscape* Canberra 2006
- Thomas, Kyle 'ANA's avenue of trees and commemorative seats in Limestone Avenue', *Canberra Historical Journal*, NS 26, September 1990, pp. 47-49
- Thoms, Kyle, 'The Australian Natives Association's avenue of trees and commemorative seats in Limestone Avenue', *Canberra Historical Journal* September 1990
- TotalCare Projects 'Yarralumla Nursery administration office demolition', 1999

ACT Government

www.tams.act.gov.au/live/yarralumla_nursery/nursery_history

APPENDIX 1: YARRALUMLA NURSERY CHRONOLOGY

- 1911** Federal Capital Territory established
April & October: **TCG Weston** visits to establish Acton temporary nursery
30 April: City design competition launched
- 1912** Feb: **Weston** visits to inspect ploughing and irrigation work
23 May: WB Griffin winning design announced
17-22 Aug: **Weston & Maxwell** on site first planting
- 1913** 12 March: Canberra foundation ceremony
5 May: Afforestation Branch of FCT established, **Weston** starts work in Canberra as Chief Afforestation Officer
8 May: earliest entry on Propagation Cards
Weston selects Yarralumla site
- 1914** June: 400 acres (160 ha) designated for permanent nursery
May: Griffins arrive in Australia
1 September: first trees planted in arboretum (Westbourne Woods)
- 1915** office buildings, equipment storeroom, cutting, potting and seed storage sheds and horse stables completed at Yarralumla
May: stock transferred from Acton, buildings underway
14 August: cottage at Yarralumla first occupied by the **Hobday** family
24 November: heavy frost damage
- 1915-20** windbreaks and entrance borders established
- 1916-17** experimental orchard established
- 1920** 31 December **Walter Burley Griffin** contract terminated
- 1921** FCAC Report recommends shelters for Haig Park; Westbourne Woods; Powerhouse; Telopea Park
- 1922** **Hobday** appointed Chief Nurseryman
27 July: Molonglo flood
- 1924** **Charles Lane-Poole** appointed Commonwealth Forestry Officer
Chief Nurseryman's cottage completed, **Hobdays** moved in cApril
December: FCC established
1 162 942 trees had been planted
- 1925** 27 May: Highest Molonglo flood recorded
14 October: Afforestation Branch became Parks and Gardens Branch of FCC, **Weston** Superintendent
- 1926** 2 August: IEA delegation plants first 'presentation' trees, in Manuka
AE Bruce appointed Weston's Assistant
20 November: **Weston** retired
- 1927** **AE Bruce** appointed Superintendent Parks & Gardens

7 April **Charles Lane-Poole** apt Inspector-General of Forests
11 April: Commonwealth Forestry Bureau established & Forestry School opened, **Charles Lane-Poole** Principal
9 May: Opening of Parliament House, **TCG Weston** awarded MBE

- 1930s** Plant issue restricted to ACT residents & Commonwealth purposes
Glasshouses (3?) built behind old stables
Boiler house and adjoining timber framed water tower built
Alexander Bruce resigned 1935, **Hobday** Superintendent
- 1944** **JP Hobday** retired
13 June: **Lindsay Pryor** appointed Superintendent P&G
- 1945** **JP Hobday** died
late 1940s: laboratory built (refurbished 1996)
- 1949** Royal Canberra Golf Club course preparation in Westbourne Woods
12 September: PM Ben Chifley launches Canberra Botanic Gardens
- 1954** **Tom Sharp** Chief Nurseryman retired, **Percy Moore** appointed & moved into cottage
- 1955** **Jack Moore** appointed
Robert Boden appointed
- 1956** Plant issue scheme modified – 20 trees + 60 shrubs per leaseholder
- 1958** Office building to the south of wholesale nursery built, outside fenced area eucalypts
Lindsay Pryor resigned (ANU) **David Shoobridge** Director P&G
- 1960s** Glasshouses, propagation house built, pond with sculpture feature built behind old stables
- 1960** Pialligo annex established 30 ha for deciduous trees
plant issue scheme modified – 10 trees + 40 shrubs
- 1961** Construction of Lake Burley Griffin began
- 1962** Royal Canberra Golf Club occupy Westbourne Woods
- 1965** Forestry School moved to ANU
- 1966** second stage office building
- 1967** **Percy Moore** & **Jack Moore** resigned
Mackenzie Clay appointed Chief Nurseryman
- 1970s** recreation facilities Weston Park, cycle track
- 1970** **Mackenzie Clay** resigned/retired
Vance Russell appointed Chief Nurseryman
PM John Gorton officially opens Canberra Botanic Gardens

- 1971** Department of Interior announced plant issue scheme continue & Nursery not operate on a commercial basis¹
- 1972** Whitlam Government changes Parks & Gardens Branch to City Parks Administration
- 1973** **Vance Russell** resigned/retired
Frank Grossbechler appointed Chief Nurseryman
- 1974** 16 November: Nursery closed for re-stocking
- 1975** April: Nursery re-opened
1974-75 financial year 410,000 plants produced at a cost of \$446,000²
1 November: Nursery closed for re-stocking
- 1976** 6 April: Nursery re-opened
May: **Eileen Poke** caretaker for 17 years retired
- 1978** October: Nursery closed for re-stocking
- 1979** Nursery re-opened
Robert Boden first Director of National Botanic Gardens
3 November: Nursery closed for re-stocking
- 1980s** YN area reduced to about 13ha, lakeside shoreline added to Weston Park
- 1981** 31 July: plant issue scheme stopped under recommendations of Fraser Government's Review of Commonwealth Functions
- 1985** 3 August: Plant issue scheme reinstated by Hawke Government
- 1987** 11 August: Westbourne Woods gazetted to Register of the National Estate
12 August: **John Huitker** production manager 26 years retired
- 1987-88** Two aluminum framed double gable-roofed glasshouses built by Department of Housing & Construction
Nursery has 3 000 000 young plants under shadecloth for new Parliament House
- 1988** New Parliament House opened
- 1989** Kingston Depot moved from Jardine Street to Nursery
- 1991** May: YN to Interim register of the National Estate
- 1992** **Frank Grossbechler** retired
YN operating as a Trust, minimum government funding
- 1992** 30 June: YN gazetted to Register of the National Estate (12ha)
- 1993** Boundary altered to place the English Garden in Weston Park

¹ *Canberra Times* 19 June 1971

² *Canberra Times* 3 June 1976

August: Nursery ins contract to supply 9 000 trees for new housing development at Gungahlin

- 1995** Expansion of Golf Course by 9 holes – Westbourne Woods further reduced
- 1996** major re-structure in ACT Government cutbacks
Nursery office moved from outside fence into refurbished old buildings in centre of Nursery
- 1997** June: **Peter Martinello** retired – longest employee 37 years
12 October: Y Gallery & Oaks Brasserie opened
- 2001** 17 May: Fire caused \$300 000 damage to YN and Garden Centre
Kingston Depot destroyed, also 1929 Chevrolet truck
14 September: YN and Garden Centre re-opened after rebuilding
- 2004** Yarralumla Nursery celebrates 90th birthday
- 2011** Yarralumla Nursery, Westbourne Woods and Weston Park entered on ACT Heritage Register
Michael Kidd retired

APPENDIX 2a: RECORDS AT THE NATIONAL ARCHIVES OF AUSTRALIA

These records consist of files, photos, maps and plans that are the records of government prior to the granting of limited self-government to the ACT in 1989. Some records have been transferred to the custody of the ACT Archives – see APPENDIX 2b.

A selection of records is listed here. Not included are the many relevant photographs in the Mildenhall series (A3560) and the Department of Information series (A1200). A selection of these images is reproduced in Appendix 3: Reference Picture Album.

BARCODE & ACCESS	SERIES	ITEM	ITEM TITLE & DATE	FORMAT
	A1	1922/77/12	Cork Oak Plantation, Federal Capital. Establishment of, 1919-22	Digitised
	A1	1924/25489	Horse chestnut trees for Canberra, 1924	File
	A1	1930/11383	Parliamentary gardens & lawns - transfer of control to Parks & Gardens, 1930	File
837766	A1	1938/30587	P&G Plants, trees, shrubs, bulbs, supplies to persons and public bodies Part 1, 1933-1935	File
56512	A192	FCL1919/718	Cork Oak Plantations - a corns of Quercus suber, 1915-19	Digitised
	A192	FCL1921/1285	Proposed tree planting lake shore, 1921	File
59252	A192	FCL1922/260	Cottage for Nursery Foreman, 1921-23	
	A202	13/153	Photos of the 8 principal designs for the layout of the FCT sent to Governor-General, 1912-13	Photos
	A202	13/4007	Approaching Kew for seed etc, 1913	File
	A292	C18996/T1	Treeplanting – Presentation Avenue by the ANA, 1927-39	File
716835	A292	C19521	Parks & Gardens – cooperation in town planning, 1939-42	7pp
	A292	C25420/T1	National Capital Development – design and layout of recreational areas, 1991	File
	A361	DSG18/742	Quince fruit Acton for RMC, 1918	File
	A361	DSG18/264	Plantation Areas - Red Hill, Cork Oaks & Mt Pleasant, 1918	
60822	A361	DSG22/897	Mr T. G. C. Weston Officer-in-Charge Afforestation Branch, 25 October 1922	Letter
60835	A361	DSG22/1033	Cottages – stable quarters Yarralumla – John Hobday, 1919-24	Correspondence
65875	A414	51	Official Residential Area Blandfordia	Correspondence & plans
65878	A414	53	Cottages for Director of Afforestation & staff at the Nursery, 1921-23	
	A430	G1231	Tennis courts, Hotel Canberra (late bowling green), 1932-46	File
	A431	1946/524	Appointment of tree surgeon, 1946	File
	A431	1946/1011	Exchange of seeds between Cile and	File

			Australia, 1946-47	
	A431	1946/1042	Sequoia area at Duntroon, 1 April 1946	File
68053	A431	1946/1294	Parks & Gdns programme of work to be carried out in absence of Supt, 1946	File
68077	A431	1946/1421	Tulips - Yarralumla Nursery Diseases etc 1940-47	File
	A431	1946/2386	New Braddon - planting of trees, 1944-46	File
	A431	1947/584	Parks & Gardens experimental area, district of Woden ACT, 1945-46	File
	A431	1948/373	Plantations & treeplantings city area, 1935-49	File
	A431	1948/821	Hotel Canberra trees, 1946-48	File
	A431	1948/1768	Ainslie School - layout of grounds, 1943-49	File
	A431	1948/2271	Cork plantation Green Hills, 1951	File
	A431	1949/1122	Supply of shrubs and trees to tenants, 1941-50	File
	A431	1950/1124	Canberra town planning, transfer to Dept Interior, 1950	File
	A431	1950/1237	City plan - variation of design Part II, 1936-40	File
271015	A431	1951/572	Parks & Gardens Consultative Committee 1938 -51	File
271016	A431	1952/391	Organisation Parks and Gardens Section 1938-53	File
	A431	1953	Parks & Gardens Section - development of main city avenues, 1949-52	File
	A431	1954/650	Tree planting - Presentation Avenue - donation of trees by various bodies, c1954	File
4730121 NYE	A466	1922/1710	T C C Weston, Officer in Charge, Afforestation Branch - re cost of removal from Gordon to Canberra, 1922	File
78877	A659	1939/1/105 27	Visibility Ctte - Parks & Gardens matters, 1937 - 1940	File
169420	A792	1917/1901	1917	File
	A859	P&G287	Seed collection outside ACT, 1948-52	File
	A860	1/37	Royal visit, 1952-54	File
172788	A981	ARG 7	Request by Director Parks & Gardens for specimens of national flowers and Coat of Arms, 1936-39	File of corresp, newscuttings, leaflets
194358	A1068	A47/14/5/6	Visit to Chile by LD Pryor ..1947	File
11778230	A1550	K14142	Horticulture 1966	File
203759 Open	A1606	A22/1 ATTACHMEN T E	Honours. Weston, TGC, 1926-27	File
7421541 NYE	A2445	M9407	Department of Works ACT. Yarralumla Nursery, glasshouse heating Part 'A'. 2 May 1958	Mechanical drawings & plans
7421542 NYE	A2445	M9404	Department of Works ACT. Yarralumla Nursery, glasshouse heating Part 'B'. 2 May 1958	Mechanical drawings & plans
7697776 Open	A2617	Section 91/16329	Parks & Gardens - glazing bars - new glass house at the nursery Yarralumla, 1946	Architectural plans
7229995 Open	A2617	Section 195/17297	Canberra housing - residence for nursery staff Yarralumla Canberra - type 229, 1947	Architectural plans

7697790 Open	A2617	Section 91/25788	Parks & Gardens – Yarralumla Nursery – proposed additions to toilet block to form male and female staff shower rooms, 1948	Architectural plans
7697752 Open	A2617	Section 91/17526	Parks & Gardens – new lavatory accommodation - Yarralumla Nursery, 1948	Architectural plans
7697774 Open	A2617	Section 91/24638	Parks & Gardens – depots – Northbourne Avenue & Yarralumla Nursery – improvements for employees, 1957	Architectural plans
7697776 Open	A2617	Section 91/25036	Parks & Gardens – site plan of proposed office block - Yarralumla Nursery, 1957	Architectural plans
7697782 Open	A2617	Section 91/25400	Parks & Gardens – boiler house – Yarralumla Nursery, 1958	Architectural plans
7697789 Open	A2617	Section 91/25537	Parks & Gardens – office block – Yarralumla Nursery – details of laboratory fittings, 1958	Architectural plans
7697784 Open	A2617	Section 91/25531	Parks & Gardens – proposed office block – Yarralumla Nursery, 1958	Architectural plans
	A3032	PC35/6/1	Development of Civic Centre and City Hill-general file, 1922-49	File
	A3032	PC45/1	Consultative Cttee for P & G Conference, 1944-46	File
5032238 NYE	A6664	L100	Grid and contours, near Yarralumla Nursery & Yarralumla Creek, 1912-1980	Level plans of the ACT region
11713855	A7973	INT408/3=4	Trees & shrubs 22 May 1955	Digitised
11713869	A7973	INT408/5-7	Trees & shrubs 22 May 1955	Digitised
11717469	A7973	INT916/1-7	Trees & shrubs 22 Sept 1966	Digitised
11717476	A7973	INT916/11-14 & 18-21 & 29-30	Trees & shrubs 22 Sept 1966	Digitised
3144121	A9778	C4/3/35	Soil survey 1949	
	A11952		Outward corresp relating to the establishment and subsequent management of the ACTs parks and gardens, 1912-28	
8210019 Open	A12708	D.124 SHEET 1	Plan Showing Permanent Planting at Government Group Canberra: Division of Parkes: Scale: 60 feet to an inch: D.124 Sheet 1: Commonwealth of Australia, Federal Capital Commission: [Previous reference no.s: O.16, V24 crossed out: Description: Linen planting plan, showing layout and species for areas of Government Group including Kings and Commonwealth Avenue. Probably prepared under supervision by T.C. Weston], 1928	Plan. digitised
353922	CP209/2	NN	AE Bruce Diary 1928	Bound diary
	CP209/2	NN	AE Bruce Diary 1935	Bound diary
	CP209/2	NN	AE Bruce Diary 1942	Bound diary
	CP209/11		Parks & Gardens, 1917-24	File
07001665	CP209/12	1	TC Weston – General Notes 1911	Folder alpha dividers
	CP209/12	2	TC Weston –daily notes 6 April 1914 – 29 Dec 1914	File
	CP209/12	3	TC Weston – diary 1913	Bound diary
247103	CP209/13		Papers, notes, records, corresp relating to various gardening and nursery matters, c1913-21	Whole series: Files 'Eucalypts etc'; Eucalypt specimens, grasses, weeds

				etc ; Order lists; Lists eg grasses to be sown Mt Stromlo, weeds, frost damage, landholders June 1915, map Pialligo plantation etc
354009	CP209/16		Instructions received by Officer in Charge of Afforestation from Federal Capital Director of Design and Construction - Re botanical species, supply, planting of etc, 1915-20	Digitised 248pp
354020	CP209/17	Bundle 1/12	Nursery operations – Yarralumla, 1926-29	Box with one folder
	CP209/23		Plant testing record, c1913	
354047	CP209/26		Operations of permanent nursery, 1923-24 & 1924-25	Whole series in box, plant lists, File 1923-24; File 1924-25
	D4256		Quarantine forms, alphabetical by title, c1954-	
	E1448		Folders of records relating to rice investigations, 1950-64	Folder
3347417 Open	M77	38	Postcard of Yarralumla Nursery in Wadsworth Photographs of Canberra & district, 1913-16	Photograph

APPENDIX 2b: RECORDS AT THE TERRITORY RECORDS OFFICE

These records include files, photos, maps and plans among the records of government prior to the granting of limited self-government to the ACT in 1989, which have been transferred from the National Archives of Australia.

The records at Yarralumla Nursery will be transferred to the Territory Records Office.

A3032, PC45/1 National Capital Planning and Development Committee - Consultative Committee for Parks and Gardens Conference, 1944-46

A859, PG329 Town Planning - Blossom and autumn parks, 1948

1961/037 Yarralumla Nursery - Heating of Glasshouses

1965/184 Free Issue of Trees & Shrubs - General & Policy - Request for Trees General

National Capital Development Commission 1971/350 Yarralumla Nursery plant material 1971-72

National Capital Development Commission 81/1286 Yarralumla-City Parkes [sic] Administration, Nursery – Planning

National Capital Development Commission 81/680 Westbourne Woods Arboretum. Yarralumla

National Capital Development Commission 71/462 Landscaping – Railway bridge Ipswich St. Fyshwick

National Capital Development Commission 81/778 Massed exotic display landscape development plan

National Capital Development Commission 82/689 Canberra Railway landscape planting - Honeysuckle Quarry screening

National Capital Development Commission 84/759 City Parks Administration – Horticultural Services Unit – Pest control technical prescriptions

APPENDIX 2c: OTHER COLLECTIONS

1. Australian National University Archives

Relevant material includes some records of the Australian Forestry School, founded in 1926 as an agency within the Commonwealth Forestry Bureau, later the Forestry and Timber Bureau. In 1964 the School became part of the Australian National University eg:

- Photographs of trees and forests from MR Jacobs collection (AA1975/55)
- Glass lantern slides of trees and forests in ACT, NSW and overseas, c.1950s (AA1975/56)
- Notes and correspondence about growth and yield of *Pinus radiata*, *Araucaria cunninghamii*, *Eucalyptus resinifera* and *E. grandis* by NW Jolly, CE. Lane Poole and MR Jacobs
- Papers and publications collected by MR Jacobs, 1939–1957 (AA1975/118)
- Personal and career records of graduate foresters from the Adelaide Forestry School, other Forestry Schools, and the Australian Forestry School, 1929–1940s (A3083)

2. Australian National Botanic Gardens

Former Department of the Interior files and other material in the ANBG collection was not investigated for this report. This collection includes records dating from 1 July 1933.

3. National Library of Australia

A wide range of relevant material can be found listed on the Library's online catalogue including copies of reports, published material, and manuscripts and oral history interviews eg:

Lindsay Pryor Papers 1935-94, NLA: MS Acc01/22, 25, 27, 33

Higgins, Matthew, Interview with Lindsay Pryor in the Namadgi oral history project 1990, NLA: ORAL TRC 2572/4

Higgins, Matthew, Interview with Lindsay Pryor 1992, NLA: ORAL TRC 2835

4. ACT Heritage Library

As well as relevant published and unpublished material, this collection has copies of photographs, maps and documents sourced elsewhere, including records held in the National Archives eg:

Yarralumla Nursery Plan of Replanted Areas 1932, ACT Heritage Library: MAPS C5BB20

APPENDIX 3: REFERENCE PHOTO ALBUM

This is intended as a resource for locating relevant historic photographs, chiefly those in the held by the National Archives of Australia in the Mildenhall series (A3560) and the Department of Information series (A1200) which includes photographs taken for Lindsay Pryor, some of which appear in his *Trees of Canberra* (see Part 8 below).

CONTENTS:

- 1. THE NURSERY AT ACTON**
- 2. YARRALUMLA NURSERY 1920s**
- 3. YARRALUMLA NURSERY 1933**
- 4. THE GARDEN CITY 1926-29**
- 5. CANBERRA STREETS 1927-37**
- 6. CANBERRA 1946-59**
- 7. NURSERY WORK 1950-70**
- 8. LINDSAY PRYOR'S *TREES OF CANBERRA* GALLERY 1960s**
- 9. PARKS & GARDENS - PRYOR, GAUBA, BODEN**
- 10. AUSTRALIAN NATIONAL BOTANIC GARDENS**
- 11. PLANT ISSUE**



Figure 1: Mrs David Miller, wife of FCT Administrator, Kurrajong Hill 1915
NAA : M1483, 16/3



Figure 2: Lindsay Pryor book cover, 1962 NAA: A7973, INT1050/1

1. THE NURSERY AT ACTON

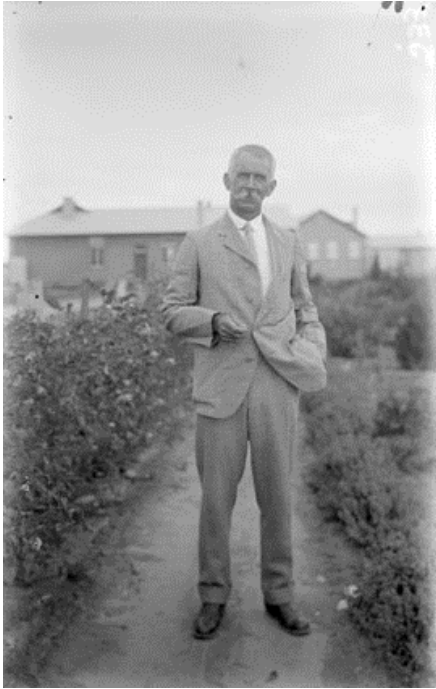


Figure 3: Charles Weston NAA: A3560, 233



Figure 4: Nursery at Acton 1921 NAA: A3560, 483

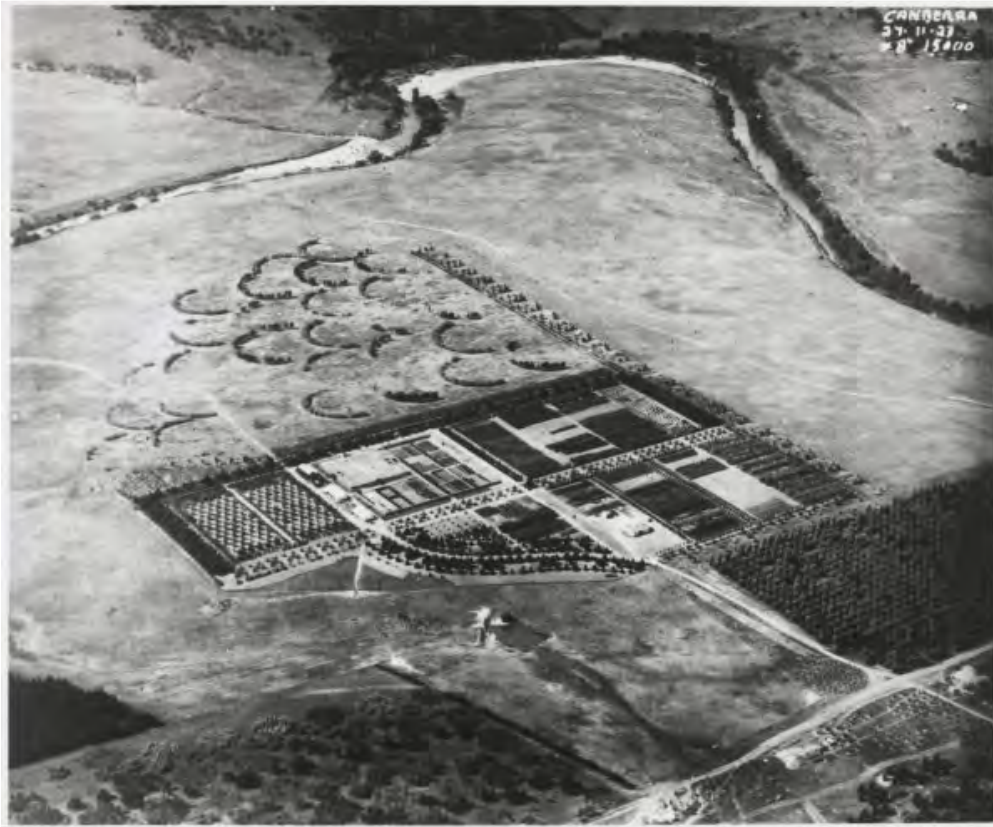


Figure 5: Nursery at Acton 1921 NAA: A3560, 484



Figure 6: Nursery at Acton 1921 NAA: A3560, 481

2. YARRALUMLA NURSERY 1920s



National Library of Australia

nla.pic-an11030057-79-v

Figure 7: Yarralumla Nursery 27 November 1923 NLA



Figure 8: Thomas and Minimia Weston (centre) with their three daughters (front and in car) & John Hobday behind Weston, Yarralumla Nursery office c1923 *Yarralumla Nursery collection*



Figure 9: Nursery 1926 NAA: A3560, 2021



Figure 10: New shade house, with trees for Parliament House, July 1926 NAA: A3560, 2024



Figure 11 Cypress Trees 1928, NAA: A3560, 3804



Figure 12 Nursery 1928, NAA: A3560, 3807



Figure 13 NAA: A3560, 3813



Figure 14 NAA: A3560, 3809



Figure 15 John Hobday at Nursery March 1928, NAA: A3560, 3835



Figure 16: Californian Redwood at Nursery 1928, NAA: A3560, 3843



Figure 17: Yarralumla Nursery 1920s NAA: A3560, 3836



Figure 18: Eucalypts March 1928 NAA: A3560, 3818

3. YARRALUMLA NURSERY 1933



Figure 19 Nursery orchard in 1933, NAA: A3560, 7154



Figure 20 John Hobday in the shadehouse 1933, NAA: A3560, 7201

4. THE GARDEN CITY 1926-29



Figure 21: Commonwealth Avenue from West Block, 1928 NAA: A3560, 4302



Figure 22: Parliament House from Hotel Canberra 1928, NAA: A3560, 4335



Figure 23: Roman Cypress and Black Locust on City Hill, c1929 NAA: A3560, 416



Figure 24: City Hill, London Circuit, Northbourne Avenue & Haig Park 1928, NAA: A3560, 4888



Figure 25: Alexander Bruce (R) with Secretary for Dominion Affairs Leo Amery planting tree near Hotel Canberra November 1927, NAA: A3560,7573

5. CANBERRA STREETS 1927-37



Figure 26: Pin Oaks on Torrens Street Braddon 1927,
NAA: A3560, 6588



Figure 26a: Pin Oak Seedlings at Nursery
ACTHL: Fitchett Collection



Figure 27: Spring 1932 NAA: A3560, 6298

6. CANBERRA 1946-59



Figure 28 a & b: Forestry School class at Black Mountain
Scribbly Gum, Brittle Gum and Stringy Bark coppice NAA: A1200, L21511-12



Figure 29 a & b: Poplars in autumn (Max Dupain visit) 1946, NAA : A1200, L7612-13



Figure 30: Pine trees Cotter Road,
October 1951 NAA: A7973, INT281

7. NURSERY WORK 1950-70



Figure 31: 1953 NAA: A7973, INT408/1



Figure 31a: Black plastic bagging CT 28 October 1970

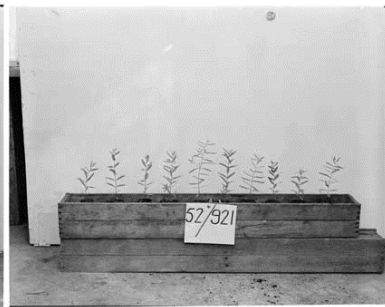
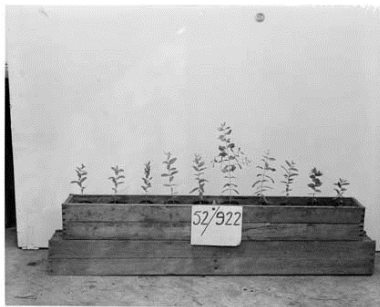


Figure 32: Eucalypt trials 22 May 1955 NAA: A7973, INT408/1



Figure 33 Quarantined seedling from Japan, 1966
NAA: A1501, A6399/1



Figure 34: Gift Ginkgo trees 1960 NAA: A1501, A2251/2

8. LINDSAY PRYOR'S TREES OF CANBERRA GALLERY –1960s

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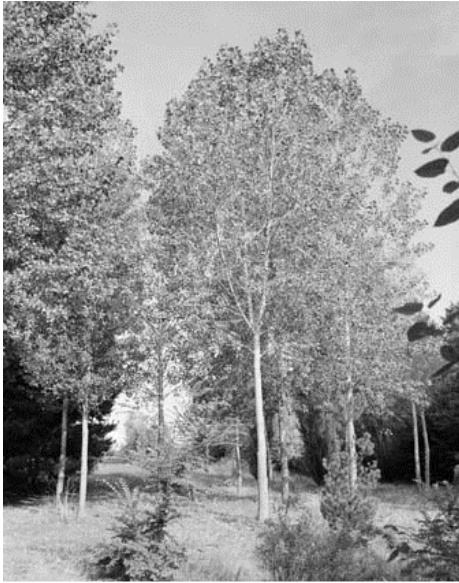


Figure 33: NAA: A1200, L38060



Figure 34: Scotch Pine NAA: A1200, L3806



Figure 35: Argyle Apple NAA: A1200, L38062

Figure 36: Single seed juniper NAA: A1200, L38069



Figure 37: Pagoda Tree W NAA: A1200, L38063



Figure 38: False Acacia NAA: A1200, L38066



Figure 39: Torrey Pine in Westbourne Woods *NAA: A1200, L38071*



Figure 40: Red Stringy Bark *NAA: A1200, L38073*



Figure 41: Incense Cedar Old Parliament House 1961



NAA: A1200, L38064 & L38068



Figure 42: Blue Gum (*Eurabbie*)Teloepa Park 1961
NAA : A1200, L38003



Figure 43: Yunnan Poplar Teloepa Park 1961
NAA: A1200, L38009



Figures 44a & b: Silk Tree Griffith shops 1961 NAA : A1200, L37994 & L38001



**Figure 45: White Cedar Babbage Crescent 1961
NAA: A1200, L38004**



**Figure 46: Cootamundra Wattle Telopea School 1964
NAA : A1200, L46265**



**Figure 47: Roman Cypress at old Hospital
1961 NAA: A1200, L37995**



**Figure 48: Albert Hall 1965 NAA: A7973, INT811/21
1961 NAA: A1200, L37995**



Figure 49: Zelkova Telopea Park 1961
NAA: A1200, L37997



Figure 50: European Aspen 1961
NAA: A1200, L38077



Figures 51 & 52: Acton golf course 1961 - the Monterey Pine and the Weeping Willow were removed for construction of Lake Burley Griffin. NAA: A1200, L38006 & L38010



Figure 53: Turkey Oak Helamon Street Braddon 1961
NAA: A1200, L38007



Figure 54: Desert Ash Chapman Street 1961
NAA: A1200, L37996



Figure 55: Holm Oak 1961 *NAA: A1200, L37990*



Figure 56: Flowering Plum Liverside Street 1964
NAA: A1200, L46266



Figure 57: Golden Rain Tree 1961
NAA: A1200, L37993



Figure 58: Mossy Oak National Circuit 1961
NAA: A1200, L37999



Figure 59: Spanish Oak Suttor Street 1961
NAA: A1200, L38002



Figure 60: Argyle Apple Henty Street 1961
NAA: A1200, L38005



Figure 61: Oriental Plane Tree Green Square Kingston 1961
NAA: A1200, L38008



Figure 62: Manna Gum (*Eucalyptus viminalis*) 24 January 1962 NAA: A7973, INT626/1& 6



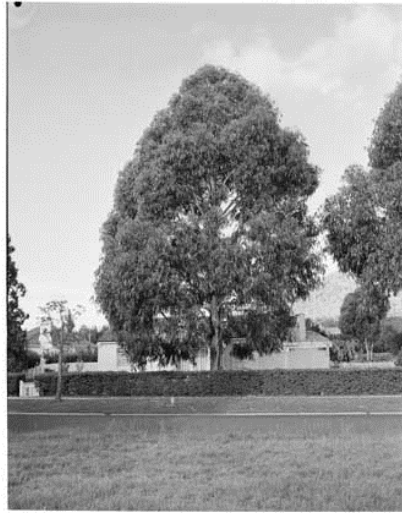
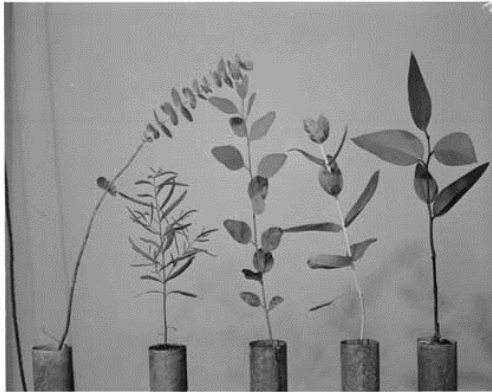
Figure 63: White Peppermint (*Eucalyptus linearis*) 24 January 1962 NAA: A7973, INT626/7
Figure 64: Yellow Box 24 January 1962 NAA: A7973, INT626/9



Figure 65: Willow-leaved Peppermint (*Eucalyptus nicholli*) 24 January 1962 NAA: A7973, INT626/10
Figure 66: White Brittle Gum 24 January 1962 NAA: A7973, INT626/12



Figure 67: Snow Gum 24 January 1962 NAA: A7973, INT626/15



Figures 68a & b:
Seedlings of Argyle Apple, Red-spotted Gum, Yellow Box, Eurabbie, Snow Gum NAA: A7973, INT626/20
22 September 1966 NAA: A7973, INT916/12



Figure 68d: *Eucalyptus maculosa* grafted onto *Eucalyptus bicostata* 24 January.1962 NAA : A7973, INT626/21
Figure 68c: *Eucalyptus bicostata* (Eurabbie) 24 January1962 NAA: A7973, INT626/4

9. PARKS & GARDENS PEOPLE



Figures 69a-c: Lindsay Pryor 1961 NAA: A1200, L38078 & L38058 & L39550



Figure 70: Dr Erwin Gauba (front row, second from left) and fellow Loveday internees 16 March 1943 AWM



Figure 71a: Robert Boden & Snow Gum variety *nana* 24 January 1962, NAA: A7973, INT626/16
Figure 71b: Robert Boden, Michael Kidd and staff in Westbourne Woods 2004 Author collection

10. AUSTRALIAN NATIONAL BOTANIC GARDENS



Figure 72a: Prime Minister Ben Chifley & Postwar Reconstruction Head HC Coombs at London's Kew Gardens April 1946, NAA: M2153, 6/1



Figure 72b: PM Ben Chifley planting English Oak, Canberra Botanic Gardens September 1949



Figure 73a: Official opening of the Botanic Gardens 1970, NAA : A1500, K25964



Figure 73b: Commemorative plaque NAA : A1500, K25966

11. PLANT ISSUE



**Figure 74: Collecting free plants Yarralumla Nursery
18 June 1970. Copy held by ACTHL: 000231**



**Figure 75: Frank Grossbechler 1 May 1981
Copy held by ACTHL: 009046**



**Figure 76: Free plant issue 31 July 1981
Copy held by ACTHL: 000218**

APPENDIX 4: INDEX OF TREES

Trees & shrubs referred to in the report are listed by their most common names. The botanical names follow, as given on the digitised records, with any variations eg in spelling [shown in brackets].

Photographs of trees referred to in the report appearing in the Reference Picture Album (Appendix 3) are also indexed here.

Almond	<i>Amygdalis communis</i>	24, 34, 36
Arizona Ash	<i>Fraxinus velutina</i>	21
Arizona Cypress	<i>Cupressus arizonica</i>	36, 37
Atlas Cedar	<i>Cedrus atlantica</i>	24, 28, 29, 30, 33, 35, 38, 39
Big-cone Pine	<i>Pinus coulteri</i>	26
Black Locust	<i>Robinia pseudoacacia</i>	24, 29 & Figure 23
Black Pine	<i>Pinus laricio</i>	26
Bottlebrush	<i>Callistemon</i>	17
Bunya Pine	<i>Araucaria bidwilli</i>	39
Buttonwood	<i>Platanus occidentalis</i>	35
Californian Redwood		
	<i>Sequoia gigantea</i>	19, 25, 28 & Figure 16
	<i>Sequoia sempervirens</i>	19, 25
Canary Island Pine	<i>Pinus canariensis</i>	32
Casuarina		16, 17, 39
	Drooping She-oak <i>Allocasuarina verticillata</i> [was <i>Casuarina stricta</i>]	24
	River Oak <i>Casuarina cunninghamiana</i>	16, 38
Cedar of Lebanon	<i>Cedrus libani</i>	25
Cherry Plum	<i>Prunus cerasifera</i>	29
Chinese Elm	see Elms	
Claret Ash	<i>Fraxinus oxycarpa</i>	31
Cootamundra Wattle	<i>Acacia baileyana</i>	38, 40 & Figure 46

Cork Oak <i>Quercus suber</i>	19-20, 23, 35
Cricket Bat Willow <i>Salix alba</i> var. <i>caerulea</i>	39
Deodar see Himalayan Cedar	
Desert Ash <i>Fraxinus augustifolia</i>	29 & Figure 54
Eastern Cottonwood <i>Populus deltoides</i>	26
Elms 12, 24	
Chinese Elm <i>Ulmus parvifolia/chinensis</i>	24, 26, 31, 35
English Elm <i>Ulmus procera</i>	28
English Oak <i>Quercus robur</i>	14, 39 & Figure 72b
Eucalypts	14, 24, 26, 27, 28, 30, 32, 38 & Figures 18, 32, 40, 62-68
Argyle Apple <i>Eucalyptus cinerea</i>	17, 25, 29 & Figures 35, 60, 68a
Blakely's Red Gum <i>Eucalyptus blakelyi</i>	31
Californian Blue Gum <i>Eucalyptus globulus</i>	26
Macarthur's Gum <i>Eucalyptus macarthurii</i>	26, 38
Maiden's Gum <i>Eucalyptus maidenii</i>	26, 27
<i>Eucalyptus stellulata</i>	16
<i>Eucalyptus westonii</i>	25
Snow Gum <i>Eucalyptus pauciflora</i>	17, 31 & Figures 67, 68a, 71b
White Brittle Gum <i>Eucalyptus mannifera</i> ssp. <i>maculosa</i>	14, 26, 29, 31, 39 & Figures 28a-b, 66, 68d
Yellowbox <i>Eucalyptus melliodora</i>	26 & Figures 64, 68a
Flowering Plum <i>Prunus mume</i>	36 & Figure 56
Ginkgo <i>Ginkgo biloba</i>	40 & Figure 34
Golden Rain Tree <i>Koelreuteria paniculata</i>	21, 31 & Figure 57
Hawthorn Double Pink <i>Crataegus oxycantha</i>	31
Hawthorn Red Mexican <i>Crataegus Smithiana</i>	31
Himalayan Cedar <i>Cedrus deodara</i>	23, 24, 28, 35
Incense Cedar <i>Libocedrus decurrens</i>	26, 31 & Figure 41
Irish Strawberry <i>Arbutus unedo</i>	35
Jefferys Pine <i>Pinus jefferyi</i>	26
Juniper	
<i>Juniperus californica</i>	8
<i>Juniperus chinensis</i>	38
Kurrajong <i>Sterculia diversifolia</i>	24, 35, 38

Lombardy Poplar	<i>Populus nigra</i> var. <i>italica</i>	31, 32, 38, 39
London Plane	<i>Platanus x acerifolia</i>	28, 29
Lusitanian Oak	<i>Quercus lusitanica</i>	31
Manchurian Pear	<i>Pyrus ussuriensis</i>	32
Monterey Cypress	<i>Cupressus macrocarpa</i>	11
Monterey Pine	<i>Pinus insignis/radiata</i>	11, 22-3, 26, 32 & Figure 51
Montezuma Cypress	<i>Taxodium mucronatum</i>	8-9
Native Cypress Pine	<i>Callitris calcarata</i>	38
Nettle Tree	<i>Celtis australis</i>	21, 31
Oriental Plane/Chinar	<i>Platanus orientalis</i>	21, 29 & Figure 61
Peach	<i>Amygdalis persica</i>	24, 34, 36
Pin Oak	<i>Quercus palustris</i>	33 & Figures 26-26a
<i>Pinus radiata</i> see Monterey Pine		
Roman Cypress	<i>Cupressus sempervirens stricta</i>	21, 22, 23, 24, 28, 29, 33, 36, 42 & Figures 23, 47, 48
Rowan	<i>Sorbus aucuparia</i>	38
Silk Tree	<i>Albizia julibrissin</i> [Albizzia on some records]	21 & Figures 44a-b
Sweet Gum	<i>Liquidambar styraciflua</i> [Liquidamber on some records]	29
Ti-tree		17, 18, 19
	<i>Leptospermum juniperinum</i>	17
	<i>Leptospermum myrtifolia</i>	18
Torrey Pine	<i>Pinus torreyana</i>	23, 41 & Figure 31
Turkey Oak	<i>Quercus cerris</i>	31 & Figure 53
Wattles	<i>Acacia</i>	32, 36, 38
Western Yellow Pine	<i>Pinus ponderosa</i>	26, 35
White Cedar	<i>Melia azedarach</i>	21, 41 & Figure 45