

Campus History Walk

This walk plots the history of the Macquarie University campus from Sydney Turpentine-Ironbark Forest and the traditional custodians of the land, to thriving market gardens, to the development of the university. Many of the trees on campus have stories behind them. They are legacies of the passion, interests and dedication of staff and students who have gone beyond their normal jobs and research to make the university site the beautiful and fascinating campus it is today.

Use the grid references given for each station to find your way around the self guided tour using the campus map. This walk will take approximately 1.5 hours to complete.

1. Sydney Turpentine-Ironbark Forest, pre-1788 (bushland remnant, G21)

This bushland remnant is probably indicative of the appearance of campus prior to the arrival of the British in 1788. The traditional custodians of this land are the Dharug People. Today, bushland areas such as this are described as Sydney Turpentine-Ironbark Forest and can be found on the boundaries between shale and sandstone in higher parts of the Cumberland Plain. Sydney Turpentine-Ironbark Forest is listed as an endangered ecological community.

2. Market gardens, early 20th C (above the amphitheatre, L17)

The university campus was once a thriving district of market gardens, orchards and poultry farms. The Olive trees (*Olea europaea* subsp. *europaea*) and Persimmon (*Diospyros kaki*) are part of a legacy left by Italian market gardeners. It is said that the small stone building was built by an Italian during the Second World War and that he brewed sly grog which he sold to American servicemen. Numerous ornamental trees on campus including Pencil Pines (*Cupressus sempervirens*), Phoenix Palms (*Phoenix canariensis*) and Camphor Laurels (*Cinnamomum camphora*) also date to this time. Many of the market gardeners used fibres from New Zealand flax leaves to tie bundles of flowers and vegetables. Flax plants (*Phormium tenax*) grown originally by the Nati family have been retained in plantings adjoining the central courtyard. It is still possible to find rhubarb crowns and the occasional asparagus plant on campus!

3. The beginnings of a university, 1964 (Foundation stone, central courtyard, P19)

In 1964, market gardens, orchards and poultry farms covered much of the area of North Ryde that had been selected as the site for the new university. An aerial photograph taken at that time shows a surprisingly large area of natural bushland visible between market gardens on the north western corner of Talavera and Culloden Roads, a small patch at the corner of Balaclava and Waterloo Roads (near the site of the new railway station), and an extensive area of bushland adjacent to Christie Park on the northern side of Talavera Road (See Mansfield and Hutchinson, 1992). A dog racing track was situated between Waterloo and Talavera Roads, just between the present day amphitheatre and the lake. Architect-Planner Walter (Wally) Abraham was given the task of transforming market gardens into a university campus. Here you can see the University Foundation Stone which records commencement of university construction in 1964.

4. First plantings, 1967 (western junction of E7A and E7B, P22)

The very first plantings on campus appear to be a mixture of Jacaranda, Silver Birch and White Azalea on the southern side of E7B in April 1967. The Jacaranda and White Azaleas are still in existence. Brush Box (*Lophostemon confertus*, previously *Tristania conferta*) was selected as the most suitable tree for the university car parks. This tree of rainforest margins of northern NSW and Queensland was chosen for its ability to survive in hot, dry conditions where it could provide both shade and screening. The first planting (June, 1967) of 80 trees was in the F5 car park, followed in June 1968 by the planting of 150 trees in W4 (eastern side) car park.

5. Central Courtyard Gums, 1968 (central courtyard, O21)

There have been two major, formal plantings on campus. One hundred and twenty Lemon-scented Gums (*Eucalyptus citriodora*) were planted in the central courtyard of the university in July 1968. The formation is said to represent a *phalanx*, a unit of a legion of the Roman army with armed soldiers lined up, side by side, shields suspended on their left arms, so that viewed from the outside, it looks like a solid wall. Behind each line is another supporting the first, so that a general can plan the phalanx as deep and as wide as necessary to suit the terrain of a battle site (Karl Van Dyke, Museum of Ancient Cultures, Macquarie University).

6. Wally's Walk Plane trees, 1967-1970 (Middle of Wally's Walk, P21/Q21)

The second formal planting, the avenue of London Plane Trees (*Platanus X hispanica*, formerly known as *Platanus X hybrida*) that extends across campus from east to west, was planted between July 1967 and September 1970. In 1991 Wally Abraham was honoured by the university when he was awarded a Doctor of Science *honoris causa* and subsequently, in 2006, the avenue of Plane Trees was renamed "Wally's Walk" in recognition of Dr Abraham's contribution.

7. The mysterious Flooded gums, 1972 (University Creek, W22)

There are many Flooded Gums (*Eucalyptus grandis*) planted on campus and their presence is mysterious. Why plant Flooded Gums, rather than the similar, but local, Sydney Blue Gums (*Eucalyptus saligna*) whose populations are now listed as Endangered Ecological Communities? In 1972, Wally Abraham visited Buladelah State Forest on the north coast of New South Wales. He was so delighted with the appearance of these magnificent, fast growing eucalypts with straight, white trunks that he instructed Grounds Overseer Laurie Ezzy to plant 35 individual trees along the creek backing onto Robert Menzies College. They have subsequently been planted at numerous other locations across campus.

8. Crazy cottages, 1964-2009 (Aquatic Centre, L15)

Many of the cottages that had been home to farmers were retained and used for myriad purposes. A red brick cottage on the site now occupied by the swimming pool, housed plant growth cabinets and computing staff (punch cards, of course) and was lovingly referred to as 'The Castle' or 'Nottingham Castle' due to the number of staff from the University of Nottingham, in the United Kingdom, recruited by plant physiologist Professor Fred Milthorpe. A white cottage, demolished in 2009 to make way for the new library, housed the Architect Planner's Office. The university workshop was located in cottages on the corner of Epping and Balaclava Roads. The university grounds staff had their base in a cluster of small, weird and wonderful cottages, in the bushland on the northern side of Talavera Road. A cottage opposite Christie Park was used as an animal house, and another closer to the creek was used for early experiments in methane generation. Groundsman David Melville lived in a cottage close to the site of the present Shell Service Station on Epping Road and for many years he grew cut flowers for the university council offices and the library.

9. Biological science garden, 1974 (Biology courtyard, O25)

In February 1974, Professor Frank Mercer and Alison Downing, from Biological Sciences, worked with the Architect Planner to design a courtyard garden, enclosed within the E8 buildings. They aimed to provide a garden for the enjoyment of staff, students and the community, and a garden that was also a valuable resource for teaching. In 1978, following months of hard work and fund raising by staff and students, a tree planting day celebrated the opening of the Biological Sciences Courtyard Garden (now the Frank Mercer Garden). Chancellor Professor Percy Partridge, Deputy Chancellor Judge Lincoln, Vice-Chancellor Edwin Webb and Deputy Vice-Chancellor Samuel Cohen all planted trees. Architect-planner Wally Abraham and his wife Felicity donated tree ferns from their Kiama property. Garden beds were designed for particular purposes, a fern bed, a pond for algae and mosses, a garden for monocotyledons, another for dicotyledons, a dry land bed initially planted with cacti and succulents now with cycads, and yet another to showcase plants from the Ericaceae, including Heaths, Rhododendrons and Azaleas. There was tremendous support for this garden from staff and students in Biological Sciences, the Plant Physiology Unit

of CSIRO, Earth Sciences and the university administration. In the 1990's, Professor Mark Westoby worked with Buildings and Grounds to have sails and seating installed in the courtyard as well as sculptures representing fossil fish. For many years ecologist Dr Barbara Rice co-ordinated maintenance of the courtyard gardens, a role that has just recently been taken up by ecologist Dr Wade Tozer.

10. Extension of the Biological Sciences Garden, 1979 onwards (Biology Garden Extension, O27)

Following the success of the Biology courtyard garden, the biology staff, encouraged by Wally Abrahams and his team, worked together to extend the garden into the area adjoining the courtyard, and planted a mix of native and exotic trees, including California Redwood, Champak, Star Magnolias, Cork Oaks, Macadamia Nuts, She Oaks and Eucalypts. Cycads and Australian native trees and shrubs were planted on the sunny, northern side of buildings E8A and E8B. From time to time, remedial work on the buildings required their removal but invariably the gardens were replanted soon after. Rainforest trees were planted on the eastern side of the courtyard extension, now just across the road from the new Macquarie Hospital, and included Red Cedars, Queensland Black Beans, Lace Barks, Bangalow Palms, Bamboo, Kauri Pines and also the endangered *Araucaria bernieri* from New Caledonia.

11. Many trees have story, 1980 - present (N side of E8A/B, N25)

Many of the trees on campus are linked to research projects of students and staff, with multiple examples along Science Road. Ossie Osborne planted the row of *Eucalyptus deanei* along the roadway in front of Building E8B. He also planted the row of *Hibiscus* species, originally grown for plant physiologist David Bishop from CSIRO, opposite the University Workshop. Ecologist Ian Wright contributed three *Eucalyptus amplifolia* trees planted along the northern side of E8A. *Lomandra longifolia* (Mat Rush) planted adjacent to the road nearby were planted for ecologist Frank Burrows. They were grown from seed collected from plants from localities all the way from Tasmania to North Queensland. Gynea Lilies (*Doryanthes excelsa*) on the northern side of E8A (more near E8C) were rescued by staff of Biological Sciences from bushland near Waterfall prior to the construction of the Southern Freeway, in a mission planned by Laboratory Manager Sam McKay. Plant physiologist Jann Conroy worked on *Eucalyptus grandis* in the context of climate change and three of her trees were planted on the north-western corner of E8A by work experience student Christopher Burrows.

12. Earth Sciences Garden, 1982 (Earth Science Garden, Q22)

In 1982, inspired by the plantings in the Biology courtyard, palaeontologists John Talent and Ruth Mawson worked with biologists Frank Mercer and Alison Downing to develop the area adjacent to the Earth Sciences buildings – E5A, E5B and E7B – as an evolutionary garden. The concept was to divide the courtyard into two sections, so that the gardens on the northern and western side were planted with *Laurasian* (predominantly) northern hemisphere species, such as *Magnolia*, Camellias, and Dawn Redwood (*Metasequoia glyptostroboides*). The gardens on the eastern and southern sides were planted with *Gondwanan* (predominantly) southern hemisphere species, such as *Macadamia*, Norfolk Island Pine (*Araucaria heterophylla*) and South African Proteas. The pathway through the central area of the courtyard was titled "Wallace's Line", a reference to the line drawn through south-east Asia, separating Laurasia from Gondwana. Professor Jim Rose, then Head of the School of Earth Sciences, was pivotal in the garden's development and staff and students raised much of the funding required for landscaping and purchase of plants. A feature of the courtyard are massive rocks, including Devonian limestones full of marine fossils, Permian tree trunks from Queensland coal mines and sandstone cores from Warragamba Dam. The two courtyard gardens established by the Schools of Biological Sciences and Earth Sciences, have contributed significantly to the rich diversity of trees on campus and provide a valuable resource for teaching and research. In 2009, geologist Richard Flood arranged for John Talent and Ruth Mawson to plant a Wollemi Pine (*Wollemia nobilis*) in the garden to acknowledge their contribution to the courtyard.

13. Ground Managers (Centre of campus, M21)

There has been a succession of Grounds Managers at Macquarie University, all of whom have made unique contributions to the campus (more details are provided online www.mq.edu.au/arboretum).

Roger Nancarrow was appointed Grounds Manager in 1990 and initiated the first sustainable work practices used in grounds management at Macquarie. He negotiated with the constructors of the M2, making arrangements to have all felled trees chipped and the woodchip dumped in the university's northern car park, all 20,000 cubic metres of it! He worked to improve and redevelop degraded areas of campus with well chosen trees and shrubs. Michael Maroney is the current Grounds Manager and he was appointed in 1995. He has a background in parks and gardens management and a great love of trees, palms and cycads. Today Michael works with a small, specialised team of 4-5 groundsmen, leaving general grounds maintenance to contractors.

14. The Lake and Mars Creek, 1991 (overlooking the lake, L19)

Construction of the lake on the northern side of campus adjacent to the Graduate School of Management (GSM) began in 1991, together with construction of the second stage of MGSM. The area is signposted as a *Flora and Fauna Reserve*. Lotus (*Nelumbo nucifera*) have been planted in the lake and native reeds, including *Restio tetraphyllus*, along the north-western shore line. The Lotus provide a spectacular display of pink blooms during the summer and the native reeds provide refuge for the many waterbirds that inhabit the lake and its surroundings. Since 1997, significant work has been done along Mars Creek to clear weed infested areas, stabilise creek banks, build containment structures such as water holding basins (ponds) and landscape the area with suitable trees and shrubs.

15. Bushfires, 1994 (top of courtyard main stairs, P21)

Looking north from the top of the stairs you can see past the boundary of the university and into the University Ecology Reserve which adjoins Lane Cove National Park. The proximity of the university to the park has meant that there is always a need to be vigilant in bushfire season. In 1994 bushfires burnt right up to the edge of Talavera Road and cinders ignited dry grass around the Biology glasshouses, which were located at the site of the present Graduate School of Management. In 2001, black smoke enveloped the university as fires again raged through Lane Cove National Park. Helicopters drew water from the university lakes. The noise of the helicopters, the black smoke, occasional leaping red and yellow flames and the heat generated by the fire created vivid memories for many staff. The university supported the fire fighting mission by pumping massive quantities of water into the lakes to keep the water levels high. Following each bush fire, staff and students from Biological Sciences monitored the ecological processes in the bushland. Completion of the M2 Motorway in 1997 has provided a barrier that gives significant bushfire protection to the university campus.

16. Commercial Development, 2000-present (Macquarie University Hospital, P28)

In recent years many new buildings have appeared on campus. The landscaping of the surrounding areas has been undertaken by commercial landscape design companies who appear to have followed the original guidelines set down for landscaping the campus. Most of the plantings are of native species, the trees are mostly Eucalypts or their close relatives. Shrubs include Bottlebrush (*Callistemon*), Grevilleas and *Westringia*. Plantings also include many species of native grasses, sedges, rushes and lilies. Gynea Lilies, *Doryanthes excelsa*, and their close relation *Doryanthes palmeri*, have been popular with the designers: these huge plants are spectacular, with long, broad, green, strappy leaves and huge heads of crimson flowers on stems 3 to 4 metres long. And again, following the early guidelines, there are occasional deciduous trees to provide colour in autumn. The university also maintains a strict tree replacement policy. When trees are removed for building construction, suitable replacement trees must be sought and planted elsewhere on campus. In recent years the guidelines have been updated to focus more on native plants and to increase the number of plants sourced locally.

17. Sustainability, 2008-present (Major bush regeneration site, M17)

In 2008, the university established a *Sustainability Group*, led by Leanne Denby, to manage relevant sustainability issues on campus, to co-ordinate appropriate action to improve remaining areas of native bushland, to minimise weed invasions, particularly along creek beds and to manage a tree planting program to enhance and extend the existing landscaped areas. A volunteer bush care group, coordinated by John

