A REPORT TO ASSIST THE FUTURE MANAGEMENT OF CHILWORTH RESERVE BEECROFT

NOVEMBER 1992



Location:
York Street
Beecroft

Reference: 98 G 10
in Gregory's Street
Directory

This report is being written as part of the assessment for the Bush Regeneration Cert. at Ryde College of TAFE

Sheila Woods
November 1992

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Front Cover Drawing of Bower Bird by Julia Garnett.

INTRODUCTION AND AIM.

The main aim of this report is to promote the progressive restoration of Chilworth Reserve, so that it can be enjoyed and VALUED by future residents of Beecroft.

Chilworth was donated to the Wildlife Preservation Society in 1938, specifically for the protection of its flora and fauna. Hopefully this report will assist and encourage the adoption of a long term program of bush regeneration to :

- Conserve the areas that are still in good condition.
- Improve the quality of bushland affected by light to moderate weed infestations.
- Slowly tackle areas badly degraded having regard to their possible natural regeneration capacity, or the need for appropriate planting where conditions are permanently changed.
- Reintroduce a limited fire regime in the form of "pile burning" with the permission and co-operation of the appropriate authorities
- Gradually restore the whole area as close as possible to a healthy tall open forest community capable of regenerating itself.

See Map 1:
Chilworth Reserve forms part of a corridor of bushland known as Beecroft Reserve in west Beecroft. It contains a significant proportion of the forest in the area which is still in a viable condition. The reserve is divided into two areas by an unformed road, a smaller northern area and a larger southern area extending down to Devlins Creek. The southern area is affected by the proposed F2 tollway on its south boundary. (The road corridor shown on this map has been varied in the latest proposals to a more southern alignment which would impact less on the reserve than the corridor shown. Ref. North West Transport Links East E.I.S. by Maunsells Pty. Ltd. April 1992.)

This report will detail the condition of the smaller northern section of Chilworth Reserve where the author has been working as a member of a volunteer bush regeneration group for the past sixteen months.
While many people in the area care about their local bushland, the survival of the northern part of Chilworth Reserve is threatened, not by development, but by isolation and the lack of appropriate management to preserve the native flora. This has resulted in the progressive encroachment of exotic weed species, loss of diversity in the remaining native species and loss of regeneration capacity. Another important factor contributing to changes in the vegetation is the lack of fire. There is no record of fire in this area in the past fifty years.
Almost half of this part of Chilworth Reserve is severely degraded and its status as a flora and fauna reserve is therefore compromised.

Both areas of Chilworth need active management now if they are to be retained as natural bushland in the future. This report will contribute to the provision of information which can be used to assist such management.

A SHORT HISTORY OF THE RESERVE AND ITS CURRENT STATUS AND OWNERSHIP.

Quote from the Wildlife Preservation Society's Journal of April 1939:-

"CHILWORTH FLORA RESERVE.
Ranking in importance with our recently acquired Angophora Reserve, is a new area, which has come into our charge during 1938, through the far seeing and benevolent interest of the donors, Mr. and Mrs. C.B. Byles. THIS LAND ,SITUATED AT BEECROFT, ON THE RIM OF THE NORTHERN SUBURBS OF SYDNEY, IN A BEAUTIFUL FORESTED GULLY, CONTAINS A LARGE VARIETY OF THE NATIVE TREES AND SHRUBS OF A DISTRICT WHICH IS WORLD FAMOUS FOR ITS WONDERFUL FLORA."

The journal went on to promise a full description of the flora contained in the new reserve including photographs of some of the more outstanding trees. Sadly for us the Second World War interrupted these plans and no description of the reserve was ever made.

In 1942 the land passed from the Wild Life Preservation Society to the care and control of the local Council, now Hornsby Shire Council. Quote from the June 1946 journal of the Society:

"Chilworth Flora Reserve is mentioned in the last issue of our journal. ..... It ranks in importance - particularly from the standpoint of the plant ecologist - with The Angophora Reserve ..... In the case of each of these two bushland reserves it was found to be difficult for the society to exercise that supervision over them which was requisite. Bear in mind that the society possesses neither an office staff nor - what is most important in this case - any outdoor officers or rangers. Our difficulties were greatly intensified by the onset of the World War of course.
After the most serious and sustained study of the matter therefore your council decided to approach the local authorities - the shires of Warringah and Hornsby respectively - with a view to the transfer of the lands to these bodies, to be held in perpetuity for the benefit of the people, subject to the most stringent conditions surrounding their maintenance and preservation."

The transfer of title for Chilworth contained covenants to protect the land as a reserve specifically for the protection of fauna and flora. Minutes of the council meeting held on 12th November 1942 clearly state that the reserve was for the protection of the native fauna and flora and not a Recreational Reserve.

Other land dedicated as recreation reserve has been added over the years and enlarged the area now known as Chilworth reserve from the original 2.3 hectares to approximately 3.9 hectares

There is currently no Plan of Management for this area of bushland.

See Appendix 1 for more details on the history of the reserve.

GENERAL DESCRIPTION OF THE NORTHERN SECTION OF CHILWORTH RESERVE.

SIZE AND SHAPE: The northern part of Chilworth Reserve is approximately 1.3 hectares in area, roughly rectangular in shape, and is surrounded by development of various kinds on all its boundaries.

Map 1 shows the surrounding development and topography.
Map 2 shows the main features of the reserve.

TOPOGRAPHY: The creek runs diagonally through the centre from the north east corner to the south west corner. The land slopes moderately towards the creek on the north side and has a south easterly aspect. The land slopes more steeply on the south side and has a north westerly aspect. The only flat area is along part of the creek towards the south of the reserve where probable siltation and evident weed infestatation have caused the creek to spread over an area perhaps 15m wide in places.

TRACKS: Footpaths join Mary Street with both north and south York Street and the walk through the reserve to the north of the creek takes people through the best area of remaining bushland. These footpaths have been used by local residents over many years as a short cut to Beecroft Station and Beecroft Public School. Where the creek is crossed, the creek bank has been retained with a sandstone wall.

SOIL: # SEE MAP 1. The soil over most of the reserve is a light sandy loam with some small outcrops of sandstone rock. Areas where the soil is changed are:

* The creek, where, as mentioned above there is siltation in the southern half of the reserve and changes due to the effects of stormwater runoff on pH and nutrient levels.
* The east and southern side of the scout camp block where a bank has been formed by the dumping of clay fill and rubble. The bank is approximately 6m wide and 4m high at the south east corner. (This is on land owned by the Scouts, but forms the effective boundary between development and bushland.)
* There is evidence of disturbance and fill on the eastern boundary of the reserve next to residential development.
* An area of the north west corner of the reserve where stormwater runs off York St. directly into the bushland. The soil here is fill on the road edge and road base and sediment have been washed into the bush changing the pH levels of the surrounding soil.

SERVICE CORRIDORS: A service corridor for water and electricity runs along the northern boundary and another service corridor for gas, water and electricity runs down the western boundary in the unformed road. There is a sewer line down the south side of the creek. These are also areas of past major disturbance which have contributed to the reserve's present condition.

STORMWATER DRAINS: The main source of storm water is the creek. Its catchment is not large but includes the local Bowling Club and a residential area that is increasing in density quite dramatically. There are three other open drains, two of which flow directly into the creek, one from lower York St. and one from the end of Mary St. The other drain serves a short section of York Street and flows directly into the bushland in the north west corner of the reserve.

VEGETATION

The northern half of Chilworth Reserve still contains a "large variety of the native trees and shrubs of the district". The walk through the reserve north west of the creek is through tall forest trees with an understorey of various shrubs and carpeted with Soft Bracken Fern.

The dominant trees in the reserve are:- Eucalyptus pilularis (Blackbutt), Angophora costata (Smooth barked Apple) and Syncarpia glomulifera (Turpentine). Other trees which are common are Allocasuarina torulosa, Pittosporum undulatum and Elaeocarpus reticulatus. There are also a number of Eucalyptus gummifera in the area north of the creek including some large specimens. There are some very large specimens of Blackbutt, Angophora and Elaeocarpus in the reserve.

Common understorey plants include:-

Breynia oblongifolia
Calochlaena dubia (Soft Bracken Fern)
Ceratopetalum gummiferum (Xmas Bush)
Dianella caerulea (Blue Flax Lily)
Geitonoplesium cymosum (Scrambling Lily)
Lomandra longifolia
Lomatia silaifolia (Wild Parsley)
Notelaea longifolia
Persoonia linearis
Platylobium formosum var. parviflorum
Pseuderanthemum variablis
Zieria smithii

One of the features of the reserve is the size of the some of the specimens of Xmas Bush. One tree on the western boundary is approximately 12m tall and has a trunk of 30cms.

Other species of interest include:

- A Schizomeria ovata (Native Crab Apple Tree) on the north west bank of the creek towards the north of the reserve.
- A Trema aspera at the top of the bank at the back of the scout camp block.
- A large Bangalow Palm east of the creek to the south of the reserve.
- An Acmena smithii west of the creek to the south of the reserve

SEE APPENDIX 2 FOR A FULL SPECIES LIST. This species list was compiled by Jennie Lewis for Beecroft Reserve. Those species that have been found so far in this section of Chilworth reserve have been marked with:

N if found only north of the creek.
NS if found both north and south of the creek.
S if found only south of the creek.

Five metre quadrats have been marked out in the reserve to try and give a representative list of the species found in different areas and build up a picture of the condition of the reserve.

SEE APPENDIX 2 for a list of the species they contain, the approximate percentage of weed species present and the pH level of the soil. Map 2 shows the approximate position of the quadrats.

WEED INVASION: A DISCUSSION OF FACTORS INFLUENCING THE WEED INTENSITY PATTERN IN THE NORTHERN PART OF THE RESERVE.

SEE MAP 2 for the current pattern of weed intensity and compare it with MAP 3 showing the weed intensity in June 1991 when bush regeneration began in the reserve.

The area north west of the creek is dominated by native species. Only the margins are degraded by weed encroachment and these are now much improved by bush regeneration. The creek area and the area south east of the creek are dominated by weeds and have few native understorey species. The north east corner of the reserve could be described as total weed with just a few remnant Blackbutts surviving.

THE AREA NORTH WEST OF THE CREEK:

TREE CANOPY: The tree canopy north west of the creek is fairly intact. There are fewer and younger trees behind the scout camp block, an area that was part of the unformed Mary St. until it was added to the reserve in 1969. It seems likely that this land was cleared of its tree cover at some time in the past because of the absence of older trees.

SERVICE CORRIDORS: Corridors running along the north and west boundaries have of necessity required the digging of trenches, tree removal and periodic clearing. This disturbance has no doubt been largely responsible for the establishment of weed growth in these areas.

SCOUT CAMP BLOCK: A major disturbance affecting the north west of the reserve has been the bank made of fill and rubble built to extend the area of flat land next to the scout hall. Mention is made of extra land being "handed over" for a scout camp in the June 1960 issue of the Wildlife Preservation Society's journal. See Appendix 1. It appears that local residents used the area as an unofficial tip for unwanted clay fill and rubble, and garden and household refuse. The ground level around some of the trees has been built up considerably. The bank, until recently, was covered in Lantana, Balloon Vine and Wandering Jew which had encroached into the bushland for several metres. The Scout block has received little maintenance in recent years. It was used as a bottle recycling depot until a few years ago, and this has resulted in the liberal distribution of bottles in the adjacent reserve. Other bush weeds on this block included Madeira Vine, Bamboo and Cotoneaster. However the Scouts have been keen to see the area cleaned up and have supported the removal of these weeds. The area around the block is now in the process of regeneration after primary weed clearance.

STORMWATER: The north west corner of the reserve below the Scout Camp block receives stormwater runoff from a short section of York St. Until June 1992 this area supported a large stand of Lantana and Broadleaved Privet which completely obscured any view of the reserve from York St. After it was cleared, the path of the water flowing into the reserve was clearly defined by the stumps of the Privet. Roadbase and sediment continue to wash into the bushland, raising the pH levels of the surrounding soil. Some remedial measures could be taken here to lessen the impact of the stormwater runoff on the reserve.

THE DUMPING OF GARDEN REFUSE: There is no doubt this was a common practice for many years both on the Scout Camp bank and on the west boundary of the reserve in the unformed road. Fortunately it is not a current problem on this side of the reserve.

DISCUSSION OF THESE IMPACTS:
Despite these problems, the boundaries formed by York St Lane and the Scout blocks have advantages for the adjacent bushland. The unformed road down the west of the reserve as far as the footpath is effectively an expansion of the area of the reserve. The soil, although disturbed in the past, is almost all original and there is a substantial amount of remnant vegetation. Good regeneration of the part of this margin already weeded indicates that, if maintained, this area, while fulfilling its function as a service corridor, can also be an attractive and "bush friendly" buffer zone.
The Scout blocks have less impact on the reserve than a residential block because of low additional water runoff. The only building on these blocks is the Scout Hall itself. There are no other paved surfaces and the grounds are not watered or fertilized. If the Scout blocks can be maintained in a reasonably weed free state, they will not impact greatly on the adjacent bushland and it should regenerate well after weed clearance.

THE CREEK AND SOUTH EAST AREA OF THE RESERVE:
The creek area is in the depressing state shared by most urban water courses, especially those with a sewer line down them. This creek has a sewer line down the south east side, partly on land that was added to the reserve in 1968. It is interesting to note that this additional land,(See Map 1 - Blocks 10 & 11), plus the unformed Mary Street, coincides with the most degraded area of the reserve.
There are very few native creek species remaining in the area of this creek. They have been replaced mostly by Privet. In the southern area of the creek there is a large stand of Canna Lilies and Ginger. These have formed their own wetland area by causing siltation as the water has slowed and diverted around them.

NUTRIENT RUNOFF:
The creek receives high nutrient runoff from the residential land in its catchment. The local bowling club also makes a contribution, as all the runoff from the greens ends up in the creek. The lawn clippings are disposed of by leaving them on the ground on land adjacent to the greens and the nutrients from their breakdown also leach into the creek.

TREE CANOPY:
South of the creek the tree canopy has been affected by weed species and parts of it resemble Wingham Brush before restoration began in 1981.

* The chief culprit is a vine, as yet unidentified, which has smothered and killed some of the large trees. The vine has crossed the creek and invaded the better area of the reserve but has not yet crossed the footpath or caused irreversible damage to the vegetation on the north side. (The vine has been propagated by Tein McDonald for the Sydney Herbarium to see if can be induced to flower for identification. #See Appendix 2 for a description of the vine.)

* Other vines adding to the destruction are Honey Suckle, a limited infestation of Madeira Vine near the creek and some very old and established Wisteria vines climbing a number of trees in the south east area of the reserve.

* There is a large stand of Coral Trees in the creek area in the south of the reserve which have displaced the native trees.

SOIL:
* There is evidence of fill near the boundaries of the residential blocks on the eastern side of the reserve. Further down the slope but well out of the creek the soil appears similar to other parts of the reserve. A few pH readings have been taken under all the weeds. These were around pH 5.0, similar to the soil north of the creek supporting more diverse vegetation. More work needs to be done on the assessment of this area as access needs determination and a machete.
Further to the south east where there is still a reasonable canopy but very few native understorey plants, the soil appears undisturbed and the pH here is also around 5.0, so some regeneration capacity could be expected.

DISCUSSION:
Apart from the installation of the sewer in the 1960's the reasons for the degraded state of the South east area of the reserve are only speculative, but it must have been the subject of major clearing and disturbance in the past. Some factors which could have affected this area are:

* The runoff from septic tanks until the sewer line was installed.

* Land upstream near the bowling club being used as a nursery in the past, Ref 1. may have been the source of some of the "escapes" including the unknown vine.

* The planting of some exotic trees in the bushland in the past. Apart from the Coral Trees, there is also a very large Pine sp. near the creek in the south of the reserve. Attempts were made to remove some of the Coral Trees in the 1960's but the efforts only resulted in helping their spread. Ref.1.

* The dumping of garden rubbish, which was a common practice, and garden runoff from the adjacent residential development which would contain high nutrient levels and weed propagules.

Reference 1. Personal communication with Mr John Noble 1992.
A local resident since 1949.

OTHER PROBLEMS AND IMPACTS.

ISOLATION: A major problem of this reserve is fragmentation. Until 1987 the northern part of Chilworth Reserve had a closer connection with the southern section in the form of a large privately owned block of land on the southern boundary, which was still in its natural state. (See Map 1 Block 5.) Unfortunately this block was completely cleared for a residential development in 1987. If part or all of this block could have been retained as bushland, a corridor could have linked the two parts of the reserve, to the benefit of both sectors.

LACK OF FIRE: One of the most significant factors affecting the plant communities of both sections of Chilworth is the lack of fire in the last fifty years. This has resulted in an increasingly dominant Pittosporum canopy, loss of species diversity and regeneration capacity. Few native species will grow under a dense Pittosporum canopy (Buchanan 1989), and weeds are favoured. No species of Acacia have yet been found in the northern part of Chilworth reserve and it seems likely that the lack of fire is the main reason for this deficiency. It is probably one of the most important issues to tackle in the long term management of both sections of this reserve, as even if weed species are controlled, the flora will continue to change because of the lack of fire.

An ordinary hazard reduction burn is probably out of the question because of the danger to nearby property and, in any case, a low intensity burn would not heat the soil enough to stimulate the germination of seeds with a hard seed coat such as the Mimosaceae and the Fabaceae (Buchanan 1989). The alternative is to have a series of hot pile burns as has been done in some other reserves in Sydney in the last few years. It would be important of course to document these fires in order to study their effect and plan other burns in the future.

TRACKS: Generally the footpaths in the northern section of Chilworth are in good condition. A steep section of the path running down to the creek from the Scout camp block has eroded and would benefit from some track maintenance. Tracks in the southern section of Chilworth need some rationlization as there are too many small tracks criss crossing the area. Some of these "ratruns" would be better closed off to leave larger areas of bushland undisturbed and encourage natural regeneration.

UNFORMED ROAD AREA: SEE MAP 1 This area is currently being developed as a turning area for a new residential development at the end of Kenwick Lane. Until around June this year it was weed infested and a good source of weed specimens for TAFE students. There are some trees left in the area, including two very large Blackbutts, and the area left over when the turning area is completed could be made into a little park. This would not only benefit the community but would also remove a major weed source for both sections of Chilworth Reserve.

A SUMMARY OF BUSH REGENERATION DONE IN THE RESERVE SINCE JUNE 1991.

See Appendix 3 for a detailed account of the Bush Regeneration progress made since June 1991.

Map 3 shows the weed intensity pattern in June 1991 when bush regeneration began. The progress of the bush regeneration work is indicated by the first area to be tackled being labelled A 21/6/91 and the second B 26/07/91 etc. Compare Map 3 with Map 2 showing the current weed intensity pattern.

A volunteer group of usually between 3 - 5 people has been working in the reserve on a half day weekly basis since June 1991. Approximately 550 hours have been worked up to the end of October 1992.

Work began in the area of the reserve least affected by weed invasion, a central core of bushland just north west of the footpath. See Map 3. It then moved to the next best area just south of the footpath. Work has now progressed to include most of the York St "Lane" margin and the area around the Scout camp bank. The natural regeneration of a short section of the lower York Street margin, Area "C", has been encouraging with a significant amount of regrowth of native creepers, ferns and groundcovers.

The main aim has been to enlarge the better core of the reserve and lessen the impact of weed proximity. Another aim has been to make more of the good area of the reserve visible to passers-by and counter the general impression of a degraded area of little value.

Some planting has been done in September and October 1992 on the Scout Camp Bank and road edge area in the north west corner. The plants came from the Hornsby Council Nursery, Cicada Glen Nursery, the Forestry Commission and the North Shore Group of SGAP. Some local species propagated from local stock by one of the volunteers have also been planted.

SEE Appendix 3 for a list of the species planted and their source.

PROPOSED PROGRAM FOR THE NEXT TWELVE MONTHS:

* Follow up work of the margin areas will be critical in the next six months as the warmer and wetter weather which usually occurs after December will undoubtedly cause a strong regrowth of weed species where primary clearance has been done.

* Other priorities include the further thinning of Pittosporum in areas A and B and chasing back the unknown vine where it is encroaching north of the creek.

* Further injection of missed Camphor Laurels hidden amongst the Pittosporum canopy. More of the Coral Trees can also be targeted.

* Only target weeding has so far been undertaken south of the creek, mainly of vines such as Wisteria and the unidentified vine which threatens the trees in that area. The priority for the next six months will be the consolidation of the areas already weeded, but next year more work will be done in the south east corner.

The strategy will be the clearing of woody weeds and some of the Pittosporum from small areas away from the creek and the boundaries, selecting areas where the soil pH is normal, the soil appears undisturbed and there are some native understorey plants in evidence.

Quadrats would be set up before work begins and the areas monitored to see what happens. As it would be difficult to remove all the material it might be best to use injection or stem scrape methods to kill weeds such as the Privets, Ochna, and Camphor Laurel. Groundcover weeds would be either handweeded and bagged or sprayed if appropriate.

* If permission could be obtained for some "pile burns" the non vegetative woody prunings could be stacked on a "raft" to dry out in an appropriate cleared area and then burnt. This would be another alternative which might have very interesting results.

* How the bush responds to the work will dictate the rate of progress made.

* Efforts will also be made to propagate more local plants for use where replanting is required.

SOME RECOMMENDATIONS FOR THE MANAGEMENT OF CHILWORTH RESERVE

* BUSH REGENERATION PROGRAM FOR THE SOUTHERN SECTION OF CHILWORTH RESERVE:

A proportion of the funds available for the management of this area should be spent on a bush regeneration program.

A professional team contracted to work one day a month, in the better areas of the southern section of Chilworth, for a 12 month period would have a big impact on the woody weed intensity and Pittosporum canopy. Maintenance work done now to conserve the existing viable plant communities would be of more long-term benefit to this part of the reserve than costly restoration attempts later. A team of four people working a 7 hour day for 12 sessions would be the equivalent of 336 hours of work which would cost approximately $8500.

Information gained from such a bush regeneration program would add to the knowledge of the area and assist efficient and appropriate management in the future.

* SEDIMENTATION BASIN FOR THE NORTHERN SECTION OF CHILWORTH:

A small sedimentation basin to trap the roadbase and sediments being washed into the north west of the reserve from York Street would greatly assist the regeneration of this corner of the reserve. The placing of some large logs across the stormwater channel has already proved beneficial. This innovation could be improved upon and made more effective using a few sandbags with access left for the deposited material to be taken away periodically.

* VOLUNTEER BUSH REGENERATION: It is recommended that Council continue to support its volunteer bush regeneration groups with supervision and training. The annual workshops currently organised by Hornsby Shire Council are very useful. They stimulate the interest of group members and encourage them to learn more about the bush and how best to care for it.

* FIRE: A research study into the response of the plant communities in this reserve to "pile burns" should be instigated in conjunction with both professional and volunteer bush regeneration programs.

* NEW PARK: An area of unformed road at the bottom of York Street and Kenwick Lane has recently been partly cleared of weeds to make a turning area for a new residential development. This area could be developed into a small park if tidied up and partly grassed and replanted. It would lessen the weed source for both sections of Chilworth reserve and add to the local appreciation of the adjacent bushland. It could also partly restore a native vegetation link of the north and south sections of the reserve

SIGNPOSTING AND TRACKS: It is recommended that the tracks in the southern section of the reserve be rationalised and appropriate signposting installed to encourage the use of routes which have the least impact on the bushland. An interpretive leaflet taking people on a guided walk through the area would help to foster an appreciation of Chilworth and its role as a Flora and Fauna Reserve. The leaflet could contain information about some of the plants and animals living in the reserve, and several of the trees and shrubs near the route of the walk could be labelled with their common and scientific names.

CONCLUSION

Chilworth reserve represents a valuable asset to the Beecroft area, both in terms of its role as a passive recreation area and as a flora and fauna reserve. It is a unique heritage from the past, which we have a responsibility to try and preserve for the future. The main aim of this report was to "promote the progressive restoration of the reserve so that it can be enjoyed and valued by future residents of Beecroft". The condition of this bushland has deteriorated greatly in the last 50 years and it is now clear that it needs active management if some semblance of the original plant communities are to survive the next fifty years. More than half the northern section of Chilworth is in a severely degraded state with few native understorey species surviving. The bushland in the southern part of Chilworth is in better condition but is still affected by weed invasion and lack of fire.

If the progress of this degradation is to be halted and reversed, an ongoing bush regeneration program is essential. This is the highest priority for the management of both sections of Chilworth Reserve.

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A PLAN FOR MANAGEMENT FOR SOUTH TURRAMURRA BUSHLAND. S.T.E.P.

Appendix 1.

The documentation in Appendix 1 was made available for this report by Mr John Noble a local resident since 1949. Mr Noble was a member of the Wildlife Preservation Society for many years and has played a leading role in the conservation of the bushland in this area. Petitioning instigated by Mr Noble lead to land behind the houses in Austral Avenue being gazetted as reserve in 1960. See the extract from Page 18 of Australian Wildlife June 1960 Vol 3 No:5.

Blocks 12,13 and 14 in Chilworth North, and block 545 in Chilworth South, were given to the Wildlife Preservation Society in 1938 by Mr and Mrs C.B. Byles. Mr and Mrs Byles were the parents of Marie Byles, a pioneer conservationist who also loved the local bushland and tried to make sure it would be protected in the future. The adjacent block 544 had been public reserve since 1901 and is now also known as Chilworth Reserve. In 1942 the reserve was handed over to the care and control of Hornsby Shire Council. Two additional blocks of land plus part of the unformed Mary Street were added to Chilworth North in 1968. We are extremely fortunate that this area was set aside for us in the past and we should do our utmost to fulfil the hopes of the Byles family and ensure its future maintenance and preservation.

Appendix 1. contains:

* Photocopied extracts from copies of The Wildlife Preservation Society's Journal, "Australian Wildlife". Reference is made to Chilworth Reserve in the following issues:

Vol. 1	No: 5	April	1939
Vol. 2	No: 1	June	1946
Vol. 3	No: 1		1956
Vol. 3	No: 4	June	1959
Vol. 3	No: 5	June	1960
Vol. 4	No: 1	May	1961

* A copy of the certificate of title when the reserve was transferred from the Wild Life Preservation Society to Hornsby Shire Council in 1942.

* Copies of Council records on the status and ownership of the reserve.

* A letter written in 1986 by Mr John Noble to the Beecroft Cheltenham Civic Trust to canvass the addition of two privately owned blocks of land which were still in their natural state to Chilworth Reserve. (See Map 1 blocks 5 and 6) Block 5 has since been completely cleared of all its natural vegetation.

B E E C R O F T

MARY STREET - "CHILWORTH RESERVE"

Lots 12, 13 & 14, Section 2, C.1059 2030R
C.T. Part Vol.5010 - Fol.160
AREA: 1a 3r 9½p = 7,322.4 m²
TENURE: Freehold *
ENCUMBRANCES: Right of Footway C.722792
ASSESSMENT NO: 17437
LEGAL DOCUMENT NO: 461

* There is little doubt that the Wild Life Preservation Society of Australia transferred the land to Council on the understanding that it be kept as a Reserve for native flora and fauna. The transfer is dated 7.8.42.

Lots 10 & 11, Section 2, C.1059 2030R
C.T. Vol.6379 - Fol.240
AREA: 1a 0r 3½p = 4,135.5 m²
TENURE: Crown Land R.86473 for Public Recreation notified Gazette No.112 of 20.10.67 - Folio 3879

Council appointed Trustee - Gazette No.38 of 22.3.68
ENCUMBRANCES: Nil but appears to be subject to sewer line vide: G.812556
ASSESSMENT NO: Not assessed
LEGAL DOCUMENT NO:

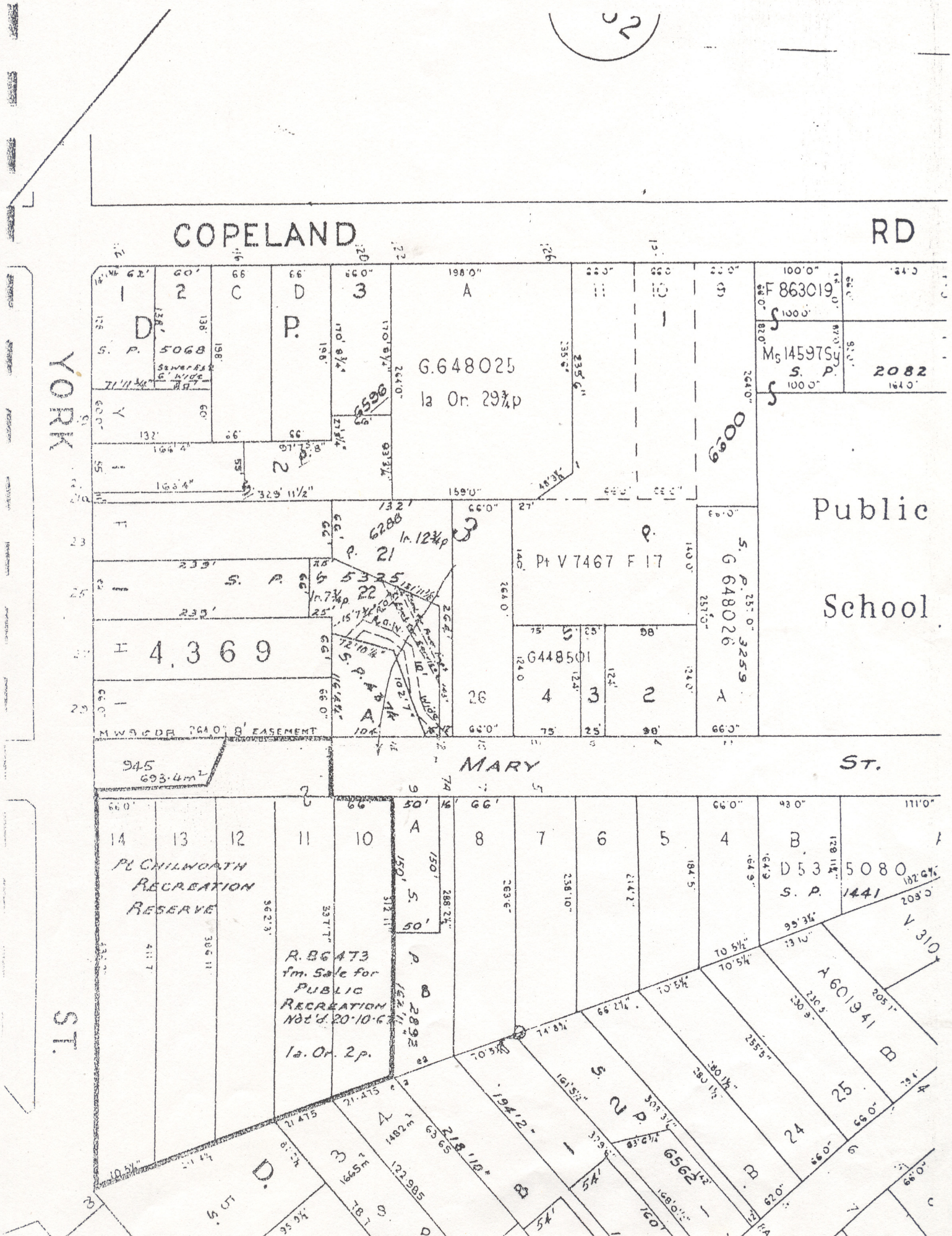
Closed Road (Mary Street) Gaz. No.144 of 22.11.68 - Folio 4635/6 added to R.86473 (above) Gaz. No.6 of 17.1.69 - Folio 149
vide: D.P.540837
S.C.C. Easement - Gaz. No.54 of 19.5.72 - Folio 1901/2

Note: Part of the above closed road was revoked from R.86473 vide: G.G. 12.3.1982 - p.1074, to become Lot 945 in D.P.41085 leaving an area of 925.1 m² to be added to the original 4135.5 m² of R.86473, making a total of 5060.6 m².

'C' Riding.

1/3

83



COPELAND
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YORK
ST.
Public
School
MARY
ST.
G.648025
1a Or. 29¾p
F 863019
Ms 14597Sy
S. P.
2082
Pt V 7467 F 17
G 648026
G448501
4,369
945
693.4m²
Pt CHILWORTH
RECREATION
RESERVE
R.86473
fm. Sale for
PUBLIC
RECREATION
Not'd. 20-10-67
1a. Or. 2p.
D 53 5080
S. P. 1441
A 601941

166 Appn. No.

CHILWORTH RESERVE C/T 510/160. COVENANT ON TRANSFER.

Wales. [CERTIFICATE OF TITLE.]

84559 2

For Grant Particulars see Schedule hereunder.

1. THAT the transferree (which expression shall include the Council for the time being of the shire ormunicipality within which the said land is situated shall not allow the said land hereby transferred to be used oherwise than as a reserve for the protection of the faunaand flora and shall permit the public to have access thereto subject to such terms and conditions as the transferree shall from time to time determine --

2. THAT the transferree shall not at any time lease mortgage charge or otherwise alienate the said lands ---

REGISTER BOOK.

VOL. 5010 FOL. 160

David George Stead of Watsons Bay Fisheries Economist William George Kett of Elizabeth Bay Optometrist and Thistle Yolette Harris of Vaucluse Lecturer Transferees under Instrument of Transfer No C722792 are now the proprietors of an estate in fee simple as Joint Tenants Subject nevertheless to the reservations and conditions if any contained in the Grants hereinafter referred to and also subject to such encumbrances liens and interests as are notified hereon in Those pieces of land situated at Beecroft in the Shire of Hornsby Parish of Field of Mars and County of Cumberland more full particulars of which are set forth in the following Schedule which said pieces of land are shown in the plan hereon and therein edged red and were originally granted respectively by the Crown Grants mentioned in such Schedule

Schedule referred to

No. of Allot.	No. of Sec.	No. of Pos.	Area	Name of Grantee	Date of Grant	Original Reference Vol.	Original Reference Fol.
13 & 14	2	—	One acre thirty nine and one half perches	William Auerbach	26th August 1890	983	13
12	2	—	Two roods ten perches	Arthur Heaphy	27th August 1891	1027	162
—	—	5115	Three acres three roods thirty four perches	Frederick Mason	14th March 1901	1351	13

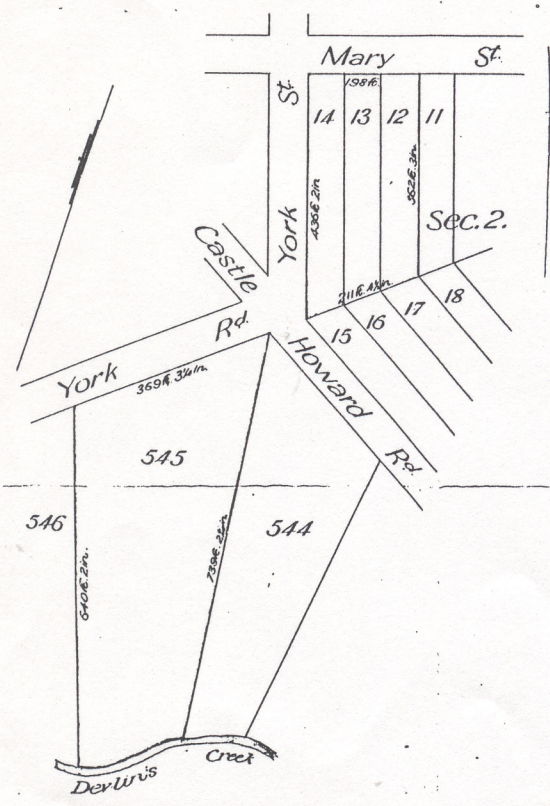
In witness whereof I have hereunto signed my name and affixed my Seal, this Twenty fourth day of January 1939.

Signed in the presence of J H Hedgard

Roy W Willis

Registrar General

Persons are cautioned against altering or adding to this Certificate or any notification thereon.



Total Area: 5a.3r.3½p.

Scale: 200 feet to one inch.

C722792

Notification referred to

Right of footway over Allotments 12, 13 and 14 of Section 2 above described as reserved by the above mentioned Instrument of Transfer No C722792

Roy W Willis

Registrar General

No. C[illegible] CAVEAT dated [illegible] by the Registrar General.
Produced [illegible] 193[illegible]
entered [illegible] 1937
at [illegible] o'clock in the [illegible] noon.

Roy W Willis

REGISTRAR GENERAL

The within Caveat No C722794 is hereby withdrawn
Dated 22nd October 1942

Roy W Willis

REGISTRAR GENERAL

No. D152081 TRANSFER dated 7th August 1942 from the said David George Stead, William George Kett and Thistle Yolette Harris to the Council of the Shire of Hornsby of the land within described
Produced 1st September 1942 and entered 22nd October 1942
at 12 o'clock in the noon.

Roy W Willis

REGISTRAR GENERAL

2. CHILWORTH FLORA RESERVE.

Ranking in importance with our recently acquired Angophora Reserve, is a new area, which has come to our charge during 1938, through the far-seeing benevolent interest of the donors, Mr. and Mrs. C. B. Byles. This land, situated at Beecroft, on the rim of the northern suburbs of Sydney, in a beautiful forested gully, contains a large variety of the native trees and shrubs of a district which is world famous for its wonderful flora. Not only was this bushland a free gift to the Society, but Mr. Byles has also kindly undertaken to pay the transfer costs, so that the Society will not be saddled with any charges at the outset, which might militate against its effective control and maintenance in the future.

As the transfer has only just been officially completed and we desire to do full justice to a description of the area, we shall withhold a detailed discussion on it till a later date, when we shall hope to give a full description, including some mention of the types of trees and shrubs there, and the nature of the land and its environs. We also hope to obtain and publish some photographs of sections of this bushland and some of the more outstanding trees.

It is intended that the area, which has been named "The Chilworth Flora Reserve," shall be officially dedicated at an early date, to be held by the Society as a close preserve for fauna and flora in perpetuity.

As this land will be held entirely for the public benefit, we are hopeful that the Council of the local Shire will be able to see its way to relieve the Society from any financial commitments as regards payment of rates—in the same kindly way already shown by the Shire of Warringah in regard to the Angophora Reserve, where, as mentioned elsewhere, the Council, has upon our payment of rates being made, reimbursed us by donation of an equivalent amount.

In this short reference to the Chilworth Flora Reserve we desire to record the grateful thanks of the Society, and the thanks of that large section of the community interested in the preservation of typical bushland areas, to Mr. and Mrs. Byles, for their timely gift. May we also record our thanks to the Solicitors, M. B. Byles and Co. of Sydney and Eastwood, for the great trouble that they have been to, in preparing the deeds and arranging the necessary matters in connection with the transfer of the land, only charging the Society bare out-of-pocket expenses.

3. THE ANGOPHORA RESERVE.

A description of this Reserve was given in our last issue of "Australian Wild Life." The Angophora Reserve is an area of land at Avalon, a few miles north of Manly, N.S.W., acquired by the Wild Life Preservation Society, and set aside for all time as a Big Tree National Monument for the particular preservation of a

great Angophora or Sydney
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is well placed in beautiful b
array of other species of tre
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tion to various public organ
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and many complimentary re
verbally, by correspondence a
as to the value of the Reserve
ness of our organisation in pu
profitable use.

The official opening and
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monument. He urged all p
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Society, and Mr. David G. S
sised the unique value of the
Monument, with a combinati

AUSTRALIAN WILDLIFE
Vol. 1 No 5
April 1939

AUSTRALIAN WILD LIFE

JOURNAL OF THE
Wild Life Preservation Society of Australia



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Price: 1/3 TO NON-MEMBERS.

Vol. 2. No. 1
June, 1946.

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Wild Life Preservation Society of Australia

Twenty-Ninth Report

Covering the Years 1939-1945, and Presented to a GENERAL MEETING of Members of the Society, held at Sydney, 30th October, 1945.

The following Report covers practically the whole of the seven years period, from the beginning of 1939 until the present date. At the Annual Meeting, held on 9th March, 1939, the Report furnished related to the year, 1938. This was published in No. 5 of our Official Journal *Australian Wild Life* during April, 1939. On 23rd September, 1942, a General Meeting of Members was held, but no formal Report was presented for publication. At this meeting your Secretary furnished members with an outline of the Society's work following the last Annual Meeting, and during the War period, up to that time. The grave difficulties surrounding the pursuance of our particular conservation work, under the shadow of the World Calamity, were emphasised, though it was indicated that a great deal of routine work had been done, and was being continued, while urgent problems of Wild Life Preservation and cognate matters were dealt with as far as possible. Your President supplemented these remarks, and was followed by several members of Council and other members. There was a unanimous feeling manifest that little could be done beyond holding things together until the happy advent of more auspicious times for the performance of constructive work. This did not imply, of course, that we would not do our utmost to continue our educational and general fauna and flora protection and preservation work, which we would carry on as assiduously as possible under the circumstances.

In the Report which follows, as presented under its sectional and individual headings, it will become clear to members and friends that, notwithstanding the unprecedented difficulties referred to, we have been able to achieve quite a considerable amount of success in the pursuit of our duties in various departments of our work—notably in items of general protection and preservation, or those associated with Sanctuaries and National Parks, and proposals for overhead comprehensive administrative measures.

Recently there have been many signs of a public awakening in Australia in regard to conservation matters. If fostered as it should be, by Commonwealth and State authorities—and notably through the educational institutions—it should lead to a great rise in public understanding of such things, with a consequent integration of knowledge in every branch of conservation effort, and its widest diffusion in the minds of the people of Australia. It can hardly be over-emphasised, in this connection, that Conservation—in all its diversified forms—is one and indivisible. This applies to no country

and Regeneration, Forestry and Fisheries, Control of Pest Plants and Pest Animals and suchlike matters."

This concludes our short account of this urgent matter, which we regard as being of paramount importance to the present and future of conservation work in this country. We do not propose to let it rest here, but will take every opportunity that may present itself of reviving our proposals wherever possible.

2. ANGOPHORA RESERVE, AVALON. CHILWORTH FLORA RESERVE, BEECROFT.

Angophora Reserve at Avalon, New South Wales, is described in *Australian Wild Life*, No. 4 (1938), and a further reference was made in the last issue, published in April, 1939. This is an area of bushland, of which the prime arboreal feature is a great example of the Sydney Red Gum, *Angophora lanceolata*—actually the largest known living specimen—situated at Avalon, a few miles north of Manly, N.S.W. The block of land containing this great Angophora —as well as a diversified flora within a small compass—was acquired by the Society by purchase during 1937 ; the prime objective being to save, for the people, the great tree referred to. The area was fenced, with a view to keeping out straying cattle. Every effort was made to preserve the little bushland in its arboreal setting. No paths or tracks were made or allowed, other than a foot pad winding through from the gate to the Big Tree.

The **Chilworth Flora Reserve** is mentioned in the last issue of our Journal. This came into our charge, through the kindness of the donors, Mr. and Mrs. C. B. Byles, during 1938. It ranks in importance in many ways—from the point of view of flora preservation, and particularly from the standpoint of the plant ecologist—with The Angophora Reserve. The land is situated at Beecroft, on the rim of the Northern suburbs of Sydney, in a beautiful forested gully, containing a large variety of the native trees and shrubs of a district which is world-famous for its wonderful and varied sandstone flora.

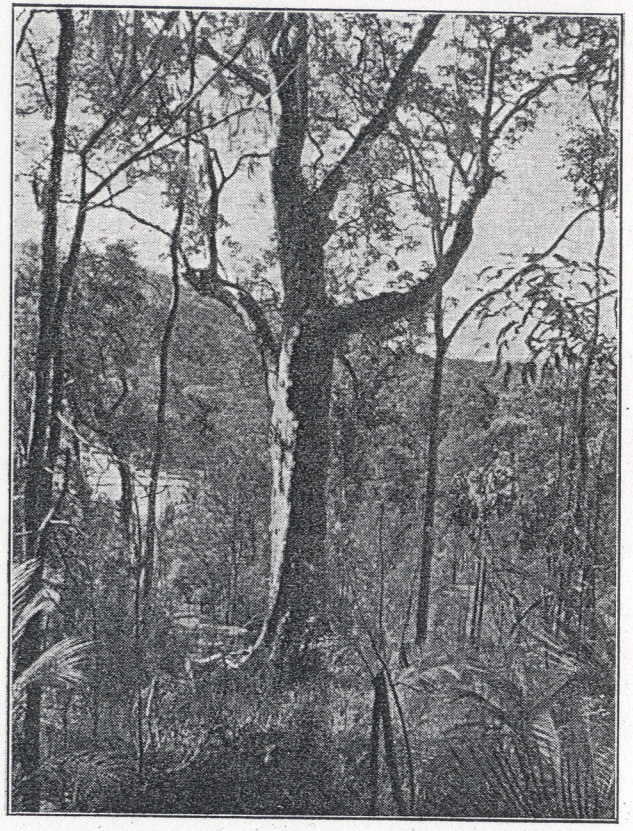
In the case of each of these two bushland reserves it was found to be difficult for the Society to exercise that supervision over them which was requisite. Bear in mind that the Society possesses neither an office staff nor—what is most important in this case—any outdoor officers or rangers. Our difficulties were greatly intensified by the onset of the World War, of course.

After the most serious and sustained study of the matter, therefore, your Council decided to approach the local authorities—the Shires of Warringah and Hornsby respectively—with a view to the transfer of the lands to these bodies, to be held in perpetuity for the benefit of the people, subject to the most stringent conditions surrounding their maintenance and preservation. It should be emphasised here, that, as far as the Chilworth Flora Reserve was concerned the concurrence of the donors was first obtained.

Following negotiations with the Councils of the Shires named, and upon their agreeing to the Society's conditions, your Council decided at its meetings held on 29/4/1942 and 13/5/1942 to effect

the transfer forthwith. For the information of members we include the substance of the Official Resolutions of Council, which were as follows :—

That the Trustees of the Society execute a transfer of the land comprised in Certificate of Title volume 4828, folio 108 to the Council of the Warringah Shire, and, in the case of the Hornsby Shire, Certificate of Title volume 5010, folio 160 ; such transfer to contain covenants to hold the said land upon trust



THE BIG TREE AT ANGOPHORA RESERVE, AVALON.
—*Photo.*: E. S. DAVIES.

as a reserve for the protection of fauna and flora and shall permit the public to have access thereto upon such terms and conditions as the said Council may determine and that the Council shall not lease mortgage or charge or otherwise alienate the said land.

The important substance of the Covenant in each case is as follows :—

(a) That the land shall be maintained always as near as possible to the primitive condition.
(b) That no building shall be erected upon it.
(c) That only dead or decayed timber shall be removed.

(d) That no road or paths other than necessary tracks shall be made on the reserve either now or in the future.

We now appeal to members and friends and the general public to do their utmost in co-operation with the Shire Councils to see that these conditions are maintained in perpetuity.

3. SANCTUARIES AND NATIONAL RESERVES.

For convenience of reference these are dealt with here in alphabetical order, rather than in any order of relative importance. In this connection it is worthy of mention that it is quite often difficult to gauge exactly the relative importance of any one Sanctuary or National Reserve, in comparison with another. Sometimes a reserve —in order of size or faunistic or floristic value—while not outstanding when compared with some of the greater areas, will be of first class importance to its particular locality.

(a) **Burragorang Valley Preservation** : Early in 1941 the Tree Lovers' Civic League of Kuring-gai (N.S.W.) passed on to this Society an appeal made by a body called The Burragorang Defence League, whose object was to prevent the construction of the Warragamba water supply dam, with its concomitant flooding of the valley, and consequent covering of certain properties there. In our reply to the representations made it was pointed out, inter alia, that this Society was originally responsible for having the valley declared a sanctuary. Our reports and public references clearly indicated our living interest in the area ; but, at the same time, we were not competent as a body to offer any opinion as to what was or was not the most desirable course to follow in public water conservation, and so could not either oppose nor support the Water, Sewerage and Drainage Board's proposals.

Actually the creation of a dam here would be in the best interests of the preservation of many native birds, whatever its primary purpose, from the broad public standpoint.

Later on, in the same year, representations were made to this Society, in the same connection, first by the Burragorang Valley Preservation League and second by the Citizens' Council on National Water Reserves—both bodies being primarily concerned with the maintenance of the valley for private occupation. In reply, we stressed the Society's position—that we were unable to take sides in this matter, as our title suggested, we are solely connected with Fauna and Flora Conservation ; our Constitution being very explicit on that.

The Burragorang Valley sanctuary (sic!) has been a very old thorn in the Society's side, as some of our past Reports indicate. Though nominally a sanctuary and wild life refuge for many years, a great deal of destruction has taken place, both of fauna and flora ; very largely by the numerous visitors from the cities who have put up at the various accommodation houses. A very great amount of land-surface erosion has also taken place, and is likely to continue under present conditions. The Water Board does have Rangers on its properties, including their catchment areas, and they prohibit

catching, shooting and trapping of animal life, while encouraging a regeneration of a great deal of the flora (to assist in holding the surface of the ground, of course, and not actually for flora conservation). Each dam that appears also makes an additional area for water birds, for which there are so few permanent sanctuaries in this country of such periodical aridity. Such public work, therefore, whatever its ultimate object, undoubtedly benefits both fauna and certain important elements of the flora.

(b) **Era Lands Proposed Resumption** : The Era lands, which lie between National Park (N.S.W.) and Garawarra Park are at present privately owned. Mainly concerned with the destruction of the flora and fauna, which has been going on continuously for a number of years, the Sydney Bush Walkers have been working for some time past to bring about a resumption of the lands by Government, with a view to the preservation of the area. As a mark of their earnestness in their endeavours they actually subscribed a considerable sum of money, as a contribution towards purchase cost. During last year this Society was approached by the Sydney Bush Walkers, with a request for a subscription towards this partial guarantee fund.

While we felt, as in all such cases, that the Crown should carry out such important resumption in the public interest unaided by assistance from private individuals or organisations, we agreed that the gesture of paying for part of the land might encourage Government to take up the whole area—not a large cost all told. Council therefore decided at its meeting in August, 1944, to guarantee a substantial part of the amount which was being subscribed.

From information received later on in the year it appeared that the necessary sum of money to enable the resumption to be effected might be included in the year's public estimates, but " owing to a reduction in the estimates " this sum was not included. We are hopeful however that the matter will be favourably reviewed in the current estimates, 1945-46. It is very important that this land should be held for public use and recreation and as an extension of the preserves of National Park and Garawarra.

(c) **Forest Reserves ; Proposed Opening to Shooting** : From time to time, this Society has had to combat proposals that such-and-such a Forest Reserve should be thrown open to gunners. Always this is proposed in " the public interest," of course, and the most specious arguments are advanced to support the intentions of the self-sacrificing people who make the suggestions, and who will be prepared to go to any length, in their efforts to " rid the country of pests," and so on ! An outstanding case is the following :

In June, 1941, a correspondent of the *Sydney Morning Herald*, writing under the heading " Bush Shooting Reserves," pointed to a lack of " use " of a number of Forest Reserves ; particularly to a State Forest Reserve between Narandera and Leeton (N.S.W.). The letter was filled with the most specious excuses for the throwing open of this and similar areas to one of the greatest pests that Australia has ever known—the wandering promiscuous shooter. The

> natural gem. Its custodians seem competent to deal with most illegal pickers of flowers and with people proposing to dump rubbish or destroy the Chase in other ways. If the North Shore Aero Club is allowed to clear and occupy a portion of the Chase, not only that land but also land adjoining it will be despoiled. It will also create a dangerous precedent for other people, requiring land for other purposes, to apply for parts of this area of natural bush.

These protests resulted in enquiries being brought before the Minister for Lands who ascertained "that the Trustees of Kuringgai Chase had refused a request from the North Shore Aero Club to construct an aerodrome within the Chase."

We commend the action of these friends of conservation in bringing this matter prominently before the notice of those in authority and would suggest that similar action in the future may result in preventing further alienation of badly needed park areas.

(g) Proposed Blue Mountains National Park

We are still awaiting the Minister's decisions on this matter, following the completion of the Surveyor-General's report.

(h) Morton Primitive Reserve

The proposal by the Fauna Protection Panel that this area be dedicated as a Faunal Reserve has been rejected in favour of retaining the area in its present state under the control of a Trust.

(i) Warragamba Catchments

Representations have been made to the Metropolitan Water Sewerage and Drainage Board for sanctuary areas to be set aside for water birds, particularly when the catchment areas for the Warragamba scheme are being finally determined. The Board has replied that they will let us know what arrangements can be made when the areas are being determined.

(j) Angophora and Chilworth Reserves

These reserves, handed over to Warringah and Hornsby Councils respectively by this Society, are still watched over carefully by the Society and both Councils have recently agreed to undertake necessary repairs and improvements in the areas which we have brought to their notice.

(k) Wentworth Falls Railway Dam Reserve

For several months we have been pressing the Department of Railways to erect a notice in a conspicuous position on the Wentworth Falls Railway Dam Reserve in an endeavour to stop the shooting of birds which is reported to take place frequently. Through the interest and persistence of one of our members, Miss P. M. Brown, it is hoped that this notice will soon be erected.

(l) Victorian National Parks

The Victorian National Parks Association keeps us informed on matters concerning their parks in a monthly newsletter. Quite recently (November, 1955) a deputation representing eight major organisations interested in the establishment and maintenance of National Parks interviewed the Minister concerned asking for a

National Parks Act to be set up u
to administer the National Parks.
the proper care of these parks w
present Committee of Managemen
to be provided immediately for t
mittee. The Minister gave the de
National Parks Act would be intr
of Parliament. While no firm assu
funds was made, this request was sy

We congratulate the Associa
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(Organisations, including this
are at present pressing for similar l
fact pointing to the desirability o
in matters concerning conservation.

In the December Newletter the

> "The naturalist, the conser
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> natural condition and to conserv
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> unique, and nothing can replac
> become extinct. Nothing could
> of our distinctive birds if throug
> out. Neither the Lyrebird, nor m
> the much altered habitat which w
> This change in habitat is inevitab
> hence the need to set aside are
> vegetation and habitat in Victoria."

(m) Queensland N

Queensland National Parks A
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Daisy. Queensland has received a
National Park on Tambourine Mou
dedicated on Palmerston Highway.
248 reserves totalling 788,000 acr
number is due to the system of gaze
descriptions of many of the islands
of these being in the Whitsunday
Hinchinbrook-Dunk Island group (1

During 1955 Mr. Crosbie Mor
broadcasts to National Parks. He u
fauna in natural surroundings in N
reserved as examples of the origina

(n) Tasmania Na

An area of 50,000 acres at Lake
been reserved as a National Park.

(o) Western Australia

Learning that there was likely t
in the Kimberley district, your Secre

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1956

(b) Chilworth Reserve, Beecroft

Although this area no longer belongs to your Society who handed it over to Hornsby Council some years ago, we still take an active interest in its maintenance. We have been trying for some time to arrange for appropriate signs to be placed at the entrances to the Reserve. Mr. B. U. Byles, of the New South Wales Forestry Commission, whose parents donated the land to your Society, has had appropriate notices prepared and these will soon be ready for erection. Members of the Hornsby-Asquith Fauna and Flora Protection Society will help to do this and it is hoped that some arrangement may be made whereby this Society can help to maintain the Reserve.

(c) Proposed Reservation at Bird's Eye View Estate

In our last report we referred to a magnificent stand of Flannel Flowers on an area which formed part of Bird's Eye View Estate, near Wamberal. During 1958 we were delighted to hear that the Gosford Shire Town Planning Committee had recommended the setting aside of 40 acres of this estate for public recreation. Your Secretary wrote to the Gosford Town Clerk expressing the hope that Council would accept the Planning Committee's recommendation. She also sent the following letter which was published in the Gosford "Times."

> It was very welcome news to us to learn that the Gosford Shire Town Planning Committee had recommended the reservation of 40 acres of the Bird's Eye View Estate, Wamberal, for recreation.
>
> If this recommendation succeeds Gosford will be fortunate in possessing a small wild flower area scarcely to be surpassed on the east coast, an asset which is becoming more valuable almost daily on account of the encroachment of buildings onto so many bush areas.
>
> Those of us who have worked over the years to retain something of the extraordinarily beautiful and interesting bushlands would like to convey our congratulations and thanks to those who have had the forethought to make this move.

Mr. John D. Ward, member of your Council, also had the following letter published in the Gosford "Times."

> Our attention has been drawn to a recent news item in your paper regarding a recommendation from the Gosford Shire Town Planning Committee that 40 acres of the Bird's Eye View Estate be reserved for public recreation.
>
> Our members know this area well as it contains many rare species of native flora. We congratulate the Gosford Shire Town Planning Committee and wish them every success with their recommendation.

(c) Stony Ridge Reserve, Warringah

We are very pleased to report that the Stony Ridge Reserve at Deewhy, consisting of seven acres which was handed over by the Warringah Council to the Manly-Warringah Fauna and Flora Protection Society, is now fenced. Government had donated £1,000 towards the fencing which speaks well for the vigour of this Society. Many plants of types naturally indigenous to the area have been planted and the ground kept clean and tidy. We look forward to this as one of the first of the Native Botanic Gardens, many of which we hope to see established soon.

(d) Wombin B

Not long prior to his death
your Society for many years, dona
adjoining his home in Nelson Rd.
the purpose of a bushland reserve
fence on the side facing Nelson S
many beautiful trees in the area
consultation with Mrs. Bryce th
Town Clerk, Kur-ring-gai:

> This Society has been inte
> over to Ku-ring-gai Council by t
> President for many years. Mr.
> of preserving this area for all t
> were able to accept the gift. Ma
> taken to ensure that the area fulfi
>
> These are:—
>
> (a) Removal of fence facing N
> with a small gate to permit e
> (b) Construction of small path
> walk through without harm
> (c) Erection of notice over gat
>
> WOMBIN BUS
>
> Dedicated in perpetuit
> for the e
> Please come in but do n

(e) New Sanctu

Two new Fauna sanctuaries
this year—Lake Corella at Ma
Dam at Mt. Isa.

(f) Bateau Bay

We have worked in co-ope
Flora Protection Society in an at
set aside at Bateau Bay as a Re
sandy coastal country producing
the choicest species including Fla
Gompholobiums, Melaleucas, Co

An attempt to prevent the
to erect a building within the
building has not yet appeared.

In November, 1958 your S
the Gosford District Fauna an
Bateau Bay Progress Association
and the Deputy Surveyor Gene
to reservation. Following this a
indicating that certain small sec
Recreation and the Preservation

AUSTRALIAN WILDLIFE
Vol 3 No 4 June 1959

Chestnut-Breasted Finch (*Donacola castaneothorax*). Rare.
Red-Browed Finch (*Aegintha temporalis*). Rare; breeds.
Diamond Firetail (*Zonaeginthus guttatus*). Rare.
Australian Pipit (*Anthus australis*). Rare.
Australian Raven (*Corvus coronoides*). Regular; breeds.
Black-Backed Magpie (*Gymnorhina tibicen*). Rare; breeds.

Introduced Birds

Domestic Pigeon (*Columbia livia*). Common.
Indian Turtle Dove (*Streptopelia chinenis*). Common; breeds.
Mallard (*Anas platyrhyncha*). Rare; inter-breeds with Black Duck.
Red-whiskered Bul-bul (*Pycnonotus jocosus*). Regular; breds.
Skylark (*Alauda arvensis*). Rare.
Starling (*Sturnus vulgaris*). Common.
Common Myna (*Acridotheres tritis*). Common; breeds.
Greenfinch (*Chloris chloris*). Rare; breeds.
Goldfinch (*Carduelis carduelis*). Regular; breeds.
Sparrow (*Passer domesticus*). Common; breeds.
Spice Finch (*Lonchura punctulata*). Rare.
Black-headed Mannikin (*Lonchura atricapilla*). Rare.

SUMMARY

One hundred Native Species of birds recorded from the Park of which number approximately 40 species have nested, or are presumed to have nested, within the Park area.

Twelve Species of exotic or introduced birds recorded, of which some eight species have been found nesting.

(m) Chilworth Reserve and Adjoining Area

We have reported from time to time our efforts to have this reserve maintained in a proper fashion. This year your Secretary addressed the following letter to the Town Clerk, Hornsby:—

"Some years ago this Society handed over to Hornsby Shire the area of land in Beecroft known as the Chilworth Reserve, to be retained as a natural sanctuary. We have, of course, still retained an interest in it and are at present somewhat concerned about the lack of fence round the property and the absence of any sign to indicate its purpose. May we suggest that the Council:—

"(a) Fence the York Street frontage as this is a trafficable road and the original fence is almost non-existent.

"(b) Erect a number of notices to indicate the nature and purpose of the reserve. I would suggest two on the Mary Street frontage, one at the foot of Welham Street and one in Kirkham Street. I would suggest some such wording as the following:—

CHILWORTH RESERVE
Held in perpetuity for the preservation of
fauna and flora.
Please help us to maintain this
reserve in its natural state.
Hornsby Shire Council.

"I am informed that a small section of the reserve has been handed over for a Boy Scout Camp. Would it not be a good plan to invite the Scoutmaster and his troop to become Honorary Rangers of the area. Mr. B. U. Byles, who lives nearby and whose parents originally gave the Chilworth area to this Society, would be willing to help in showing the scouts the way in which they could best be of assistance in this regard."

AUSTRALIAN WILDLIFE VOL 3 NO 5 JUNE 1960

In reply to enquiries regarding more exact details of requirements, Mr. Byles supplied these.

Mr. J. F. Noble, member of this Society for many years, also sent us a copy of a petition and letter he had sent to the Cumberland County Council in an attempt to have an area between the Railway Bridge and Pennant Hills Golf Links bordering Chilworth Reserve and Devlins Creek set aside for public recreation, protection and preservation of fauna and flora.

The petition was most favourably received in the district, and Cumberland County Council's reception of the request was most encouraging, according to Mr. Noble. We supported the request with a letter to the Cumberland County Council.

(n) Proposed Bowling Green in Rushcutter Bay Park

On hearing of the proposal by some interested persons to have a Bowling Green established in Rushcutter Bay Park, your Secretary wrote to the Lord Mayor of Sydney, Alderman H. F. Jensen, congratulating him on his opposition to the proposal and expressing the hope that he would succeed. He did.

(o) Mountain Sanctuary at Dandenong

Members will recall that Mr. William Ricketts, well-known Australian sculptor, has bequeathed his property at Mt. Dandenong, known as the Mountain Gallery Sanctuary, to this Society and that a notice to this effect has been erected on the property. Mr. Ricketts has been absent from Mt. Dandenong for some months and we have had reports of vandalism at the Sanctuary. We wrote to Mr. Rickett's solicitors, who replied that neighbours were watching the property and that the Olinda Police had been asked to assist. We also had a letter from Mr. Ricketts at Alice Springs asking what safeguards could be taken to assure that the Sanctuary would not be sold in the event of the Wild Life Preservation Society of Australia winding-up its affairs. We have written suggesting an agreement to ensure perpetuity. Mr. John Hetherington of the "Age" newspaper has also written enquiring into the future of the Sanctuary.

(p) Proposed Reserve at Bilpin

Mr. E. Constable, Botanic Gardens, Sydney, asked for our co-operation in an endeavour to secure reservation of a small area on the Mountain Lagoon Road, Bilpin, at present under lease, in order to preserve a patch of the almost extinct Acacia mollissima (Syn A. pubescens).

We obtained a plan of the area and Mrs. M. G. Wilson, Mr. J. G. McKern, Mr. E. Constable and your Secretary visited the area and located the appropriate spot. A request for withdrawal from sale of a little under one acre has been submitted, supported by evidence of the rarity of the plant from Mr. R. H. Anderson, Chief Botanist, and is now under consideration by the Lands Department.

1/12

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of recovery were
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erosion damage.
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year, to put drains
s to carry off the
the larger mounds

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such unsupervised
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escens) should be
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molissima (rare wattle)

arantee of perpetua-
ardist lessee, Mr. J.
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outside the boundary

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c purpose, and they
tment of Lands with

We feel that, since we have obtained the interest of the lessee of the adjoining property, Mr. J. Sunderland, in the preservation of this Wattle, that there should be adequate protection offered, once the area has been set aside.

The Illawarra Natural History Society has asked the Minister for Lands not to allow the erection of a telemast and other ancillary plant on the Reserve, notwithstanding that it was agreed to make some 20 acres surrounding the Trigonometrical Station available for this purpose, at the time of dedication.



An Encouragement to Conservation.
Photo: Marie B. Byles.

(d) Beecroft Reserve (Chilworth)

Chilworth Reserve is still concerning us. Mr. B. U. Byles has now completed and erected attractive notices on the Reserve, (see accompanying photograph) which should help to preserve it. He is also investigating the best methods of making firebreaks in the Reserve, with Mr. R. C. Dickens of Asquith-Hornsby Fauna and Flora Protection Society. Hornsby Council has not agreed to fence the area as requested, stating that "Council is of the opinion that the suggested fencing would detract from the natural attributes of the Reserve." We have repeated our request for a fence.

(e) Blackbutt Reserve, Newcastle District

In August, 1960, your Secretary was a guest of the Newcastle Fauna and Flora Protection Society in a visit to Blackbutt Reserve. This magnificent area of 140 acres is being looked after by the Newcastle Society. One section of it, originally a densely treed

from: Australian Wild Life
Journal of the Wild Life Preservation
Society of Australia
Vol. 4 no. 1 May 1961

1/14

30 Fiona Rd.,
Beecroft.
2119.

17.4.'86.

Hon. Secretary,
Beecroft Cheltenham Civic Trust.
P.O. Box 37
Beecroft.

Dear Sir, Subject; A Possible Extension to Chilworth Reserve.

For as long as the Castlereagh Expressway has been a project of the Department od Main Roads I have been deeply concerned for the inevitable loss of much of the Devlin's Creek Reserve in Beecroft - Cheltenham (at least 20% of the reserve), much of it good quality bushland.

Since the road reservation is almost wholly within open space reserve the cost to the government has been minimal, but to the local people the loss will be great and irreplaceable. With a view to achieving some minor redress to the position I would like to suggest that the Trust might be interested to take up the following proposal.

The accompanying sketch shows in red hatching xxxxx that Chilworth Reserve is associated remotely from the Devlin's Creek Reserve by the width of Castle Howard Rd. and two adjacent proper--ties. Reference to the sketch indicates that were it possible for lots 4 and 5, shown in broken red hatched lines, to be acquired by the appropriate authority and rezoned open space an obviously desirable continuity of reserve environment could be established. The present natural status of the two blocks is basically unchanged from that of many years ago, and would be a valuable addition to the reserves.

I am informed that Mr. R.Allen, the owner of Lot 4 xxx xxx has no intention of selling during his lifetime - he is elderly and occupies the original Byles family home on the site; and that lot 5 which was purchased by Mr and Mrs David Comgus of Wagga may not be offered for sale for some time. I understand the purchase price was $150,000.

It would therefore seem to be most opportune to propose that the possibility of the above acquisitions be investigated and supported with the object of securing a very small compensation for the people for the considerable loss of area from their reserve from road construction.

Perhaps the Trust in representing the people of Beecroft and Cheltenham could embrace the task of persuing this objective with significant support.

Yours faithfully,

(J.F.Noble).

APPENDIX 2 QUADRATS

See Map 2 for Quadrat location.

QUADRAT 1. Located on the lower York St margin near the footpath.
3 / 10 / 92
Percentage weed cover less than 10%.
pH = 5.5 - 6.0

Species List: Native.

1		Breynia oblongifolia	
6		Calochlaena dubia	Soft Bracken Fern.
2		Ceratopetalum gummiferum	Xmas Bush.
1		Clematis aristata	Clematis.
5		Dianella caerulea	Blue Flax Lily.
1		Doodia aspera	Rasp Fern.
		Eustrephus latifolius	Wombat Berry.
		Geitonoplesium cymosum	Scrambling Lily.
		Glycine clandestina	
		Kennedia rubicunda	Dusky Coral Pea.
2		Lomatia silaifolia	Wild Parsley.
10	S	Omalanthus populifolius	
		Oplismenus aemulus	
		Oxalis sp.	
2		Pandorea pandorana	Wonga Wonga Vine
2	S	Pittosporum undulatum	Pittosporum
		Plectranthus parviflorus	
		Pratia purpurascens	White Root.
		Pseuderanthemum variabile	
2		Pteridium esculentum	Bracken Fern.
		Smilax glyciphylla	Sarsparilla.

Weed Species

5		Begonia sp.	Begonia sp.
1	S	Camphor Laurel	Cinnamomum camphora
1	S	Flowering Peach	
3		Honey Suckle	Lonicera japonica
1		Impatients	
6		New Zealand Xmas Bells	
2	S	Ochna	Ochna atropurpurea
		Panic Veldt Grass	Ehrharta erecta
2		Petty Spurge	Euphorbia peplus
		Salaginella c	Salaginella c
		Wandering Jew	Tradescantia albiflora
		Wild Strawberry	Duchesnea indica

In October 1991 this area was dominated by a 2m Camphor Laurel, a 4m Pittosporum and Wandering Jew. The weed cover was about 80%.

QUADRAT 2. Located west of the footpath in the northern sector.
11/10/92 L= large VL= very large S= small
Percentage weed cover less than 10%.
pH = 4.5 - 5.0

Species List: Native.

	Acianthus sp.	Terrestrial Orchid
1	Allocasuarina torulosa	Forest Oak
1	Angophora costata	Redgum
	Calochlaena dubia	Soft Bracken Fern.
2 L	Ceratopetalum gummiferum	Xmas Bush.
	Dianella caerulea	Blue Flax Lily.
	Elaeocarpus reticulatus	Blueberry Ash
1 VL	Eucalyptus pilularis	Black Butt
	Eustrephus latifolius	Wombat Berry.
	Geitonoplesium cymosum	Scrambling Lily.
	Lomandra longifolia	
	Lomandra obliqua	
	Lomandra sp.	
	Lomatia silaifolia	Wild Parsley.
	Marsdenia rostrata	Common Milk Vine
	Marsdenia suaveolens	
	Oplismenus aemulus	
	Patersonia fragilis	Wild Iris
20 S	Pittosporum undulatum	Pittosporum
	Platylobium formosum var parviflorum	
	Polyscias sambucyfolius	
	Pseuderanthemum variabile	
	Smilax glyciphylla	Sarsparilla.

Additional Native Species in the vicinity

Entolasia marginata	
Imperata cylindrica var major	Blady Grass
Panicum simile	
Persoonia linearis	
Persoonia pinifolia	
Syncarpia glomulifera	Turpentine

Weed Species

S	Camphor Laurel	Cinnamomum camphora
S	Ochna	Ochna atropurpurea
	Passionfruit	Passiflora edulis
S	Prunus sp.	Prunus sp.

QUADRAT 3. Located approx 5 metres west of the creek, near Schizomeria ovata 11/10/92

Percentage weed cover less than 25%.
pH = 5.5

Species List: Native.

	Acianthus sp.	Terrestrial Orchid
	Calochlaena dubia	Soft Bracken Fern.
1	Eucalyptus pilularis	Black Butt
	Lomandra longifolia	
	Marsdenia rostrata	Common Milk Vine
	Maytenus sylvestris	
1	Notelaea longifolia	
	Omalanthus populifolius	
6 L	Pittosporum undulatum	Pittosporum
2	Syncarpia glomulifera	Turpentine
1	Illawarra Flame Tree (not local species)	Brachychitom acerifolius

Weed Species

1	Camphor Laurel	Cinnamomum camphora
	Large leaved Privet	Ligustrum lucidum
	Ochna atropurpurea	Ochna
	Palm sp.	Palm sp.
	Passionfruit	Passiflora edulis
	Prunus sp.	Prunus sp.
	Small leaved Privet	Ligustrum sinense
	Unidentified Vine	
	Wandering Jew	Tradescantia albiflora

QUADRAT 4. Located approx 8 metres north-west of Canna clump.
23/10/92
Percentage weed cover less than 25%.
pH = 5.0

Species List: Native.

Breynia oblongifolia	
Calochlaena dubia	Soft Bracken Fern.
Dianella caerulea	Blue Flax Lily.
Elaeocarpus reticulatus	Blueberry Ash
Entolasia marginata	
Eustrephus latifolius	Wombat Berry.
Geitonoplesium cymosum	Scrambling Lily.
Lomandra longifolia	
Lomandra sp.	
Lomatia silaifolia	Wild Parsley.
Marsdenia suaveolens	
Notelaea longifolia	
Omalanthus populifolius	
Oplismenus aemulus	
Panicum simile	
Pittosporum undulatum	Pittosporum
Smilax glyciphylla	Sarsparilla.
Tylophora barbata	

Additional Native Species in the vicinity

Acmena smithii	
Morinda jasminoides	
Platycerium bifurcatum	Elk Horn
Pyrrosia rupestris	Rock Felt Fren
Rapanea variabilis	Mutton Wood

Weed Species

Camphor Laurel	Cinnamomum camphora
Coral Tree	Erythrina x sykesii
Ginger	Hedychium gardneranum
Ochna	Ochna atropurpurea

QUADRAT 5. Located about 5 metres south-east of creek.
23/10/92
Percentage weed cover greater than 75%.
pH = 5.0

Species List: Native.

Angophora costata	Redgum
Eucalyptus pilularis	Black Butt
Eustrephus latifolius	Wombat Berry.
Geitonoplesium cymosum	Scrambling Lily.
Syncarpia glomulifera	Turpentine

Weed Species

Coral Tree	Erythrina x sykesii
Fish-bone Fern	Nephrolepis cordifolia
Honey Suckle	Lonicera japonica
Lantana	Lantana camara
Large leaved Privet	Ligustrum lucidum
Small leaved Privet	Ligustrum sinense
Spider Plant	Chlorophytun comosun
Wandering Jew	Tradescantia albiflora

QUADRAT 6. Located near the creek east of the Schizomeria ovata.
23/10/92
Percentage weed cover greater than 95%.
pH = 6.5

Species List: Native.

Calochlaena dubia	Soft Bracken Fern.
Geranium homeanum	Wild Geranium

Weed Species

Chickweed	Cerastium glomeratum
Elephant's Ears	
Honey Suckle	Lonicera japonica
Lantana	Lantana camara
Unidentified Vine	
Wandering Jew	Tradescantia albiflora
Wild Tobacco	Solanum mauritianum

QUADRAT 7. Located in the far south-east corner of the reserve.

Percentage weed cover 100%
pH =

Species List: Native.
Nil

Weed Species

Bamboo	
Lantana	Lantana camara
Morning Glory	Ipomea indica
Potato Vine	Rumex sagittatus
Wandering Jew	Tradescantia albiflora

A DESCRIPTION OF THE UNIDENTIFIED VINE.

The vine is a vigorous woody climber which can climb high into the canopy of quite large trees and eventually kill them. It has been observed 15m up some of the large blackbutts in the south east half of Chilworth (North), where it has taken over a large area. The stems can also extend many metres over the ground where they root at the nodes.

See the drawing on the opposite page.

Leaf arrangement	opposite with the two leaflets.
Tendrils	In place of the third leaflet is a tendril that divides into 3 at the end with hooks at the tips.
Leaf type	compound.
Leaf size	mature leaflets 5 - 7cm long 4 - 5cm wide
Leaf shape	ovate with blunt tip
Leaf margin	entire
Leaf colour	mid green both sides
Hairiness	No hairs on leaves or stem.
Stem	Develops into strong woody stem up to 3cm in diameter.
Flowers	None observed to date.

It seems to respond well to cutting and painting with neat Glyphosate where the stems are a substantial size and to stem scrape on smaller vines.

The underground structure of the primary root has not been dug up for examination.

SCOUT HALL BANK STARTED 26/3/93

Site dominated by Lantana, Honeysuckle, Jasmine, Fishbone fern AND WANDERING JEW!

SPECIES NOTED 16/3/95 41.

TREES: Angophora costata, Eucalyptus gummifera, pilularis, saligna P, Allocasuarina torulosa, Syncarpia glomifera Omalanthus populifolius, Pittosporum undulatum.

SHRUBS: Acacia sp.?P, Acacia longifolia P, Breynia oblongifolia, Bursaria spinosa, Ceratopetalum gummiferum P, Hakea sericea P, Persoonia linearis, Prostanthera ovalifolia P, incisa P, Trema aspera, Zieria smithii.

HERBS: Centella asiatica, Commelina cyanea, Dianella caerula, Dichondra repens, Geranium homeanum, Helichrysum sp P, Lomandra longifolia, Pseuderanthemum variable, Sigesbackia orientalis.

GRASSES: Microlaena stipoides, Poa affinis, Digitaria sp, Entalasia marginata, stricta, Oplismenus aemulus.

FERNS: Calochlaena dubia, Adiantum formosum.

CREEPERS: Cayratia clematidia, Clematis aristata, Geitonolesium cymosum, Hardenbergia violacea P, Kennedia rubicunda.





ROYAL BOTANIC GARDENS SYDNEY

National Herbarium of New South Wales

Sheila Woods
18 Grace Avenue
Beecroft 2119

Inquiry No: 73a
Contact Officer: T. James
Identifications Botanist
Telephone: 231 8155

Date: 8 February, 1994

Dear Sheila Woods,

In reply to your inquiry of 19 January the following identification is supplied:

Pithecoctenium cyanchoides - Monkeys Comb, from Argentina and Uruguay, not known commonly in cultivation and the first record of it as being naturalised.

Thank you for your inquiry.

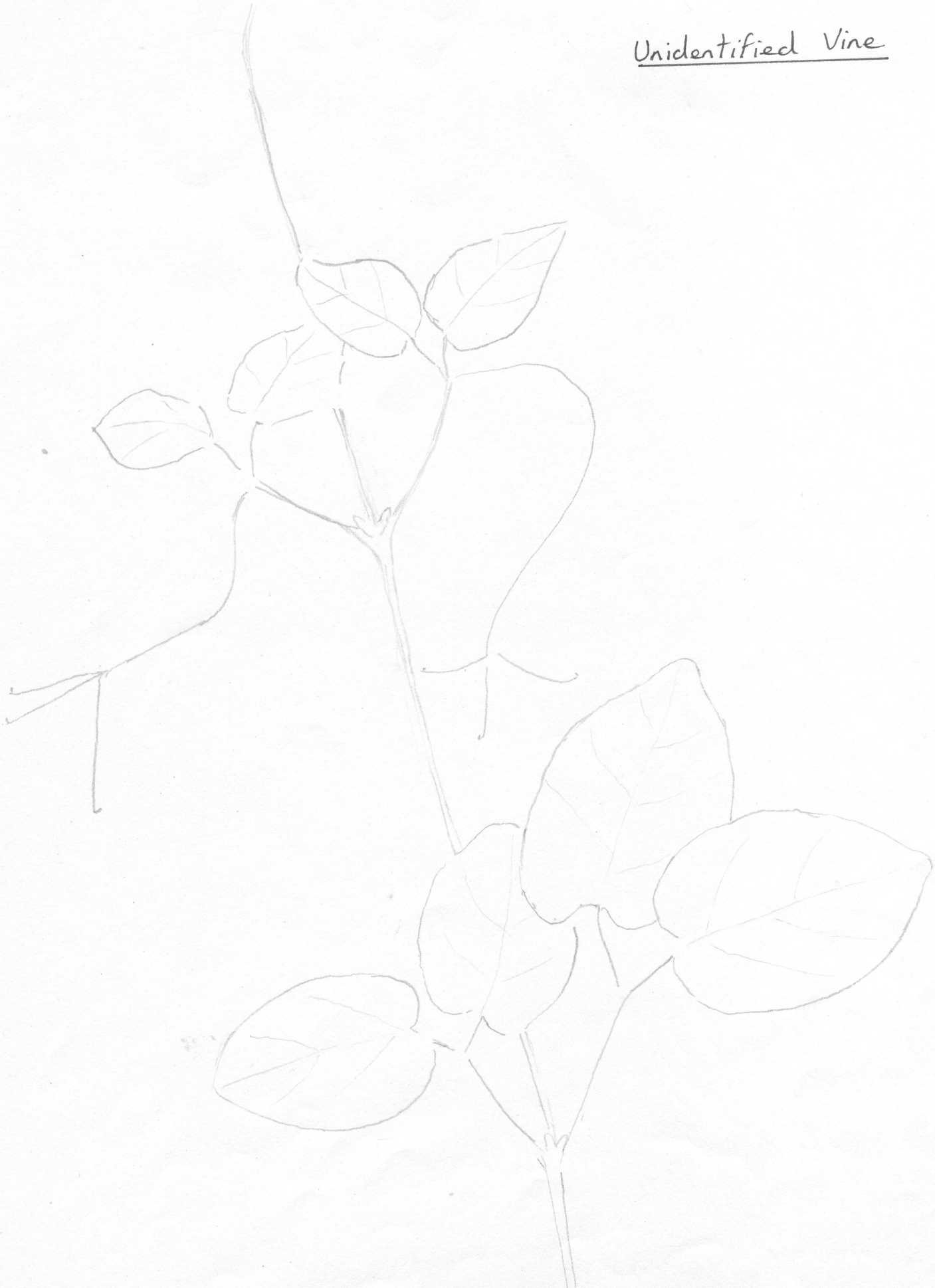
Yours sincerely,

Louisa Murray

Louisa Murray
Senior Technical Officer
for Professor Carrick Chambers
Director

PS. Thank you for the beautifully pressed specimen.

Unidentified Vine



FLORA OF BEECROFT RESERVE

COMMON NAME	GENUS	SPECIES	
TREES			
Redgum	Angophora	costata	NS
Old man banksia	Banksia	serrata	
She oak	Allocasuarina	littoralis	
Forest oak	Allocasuarina	torulosa	N
Blueberry ash	Elaeocarpus	reticulatus	N
Red bloodwood	Eucalyptus	gummifera	N
Blackbutt	Eucalyptus	pilularis	NS
Peppermint gum	Eucalyptus	piperita	
Red mahogany	Eucalyptus	resinifera	
Sydney blue gum	Eucalyptus	saligna	
Strangling fig	Ficus	henneana	
Bleeding heart tree	Omalanthus	populifolius	NS
Pittosporum	Pittosporum	undulatum	NS
Muttonwood	Rapanea	variabilis	N
Crabapple	Schizomeria	ovata	N
Turpentine	Syncarpia	glomulifera	NS
Red cedar (hist.)	Toona	australis	
Water gum	Tristania	laurina	
Lilly Pilly	Acmena	smithii	N
CREEPERS			
	Billardiera	scandens	
Wild grape	Cayratia	clematidia	S
	Cissus	antarctica	
	Clematis	aristata	N
	Comesperma	volubile	
Wombat berry	Eustrephus	latifolius	NS
Scrambling lily	Geitonoplesium	cymosum	NS
	Glycine	clandestina	N
	Hardenbergia	violacea	N
	Hibbertia	dentata	
	Marsdenia	suaveolens	N
	Morinda	jasminoides	N
Wonga wonga vine	Pandorea	pandorana	N
	Parsonsia	straminea	
	Sarcopetalum	harveyanum	
	Smilax	australis	
Sarsaparilla	Smilax	glyciphylla	N
	Tylophora	barbata	N
Common milk vine	Marsdenia	rostrata	N
	Kennedia	rubicunda	N
MOSSES			
	Dawsonia	polytrichoides	
	Hypnodendron	vitiense	

BY JENNIFER LEWIS

GRASSES

	Anisopogon	avenaceus
Barbed wire grass	Cymbopogon	refractus
	Digitaria	sp.
Tufted hedgehog grass	Echinopogon	caespitosus
Forest hedgehog grass	Echinopogon	ovatus
	Entolasia	marginata N
	Entolasia	stricta
	Eragrostis	philippica
Blady grass	Imperata	cylindrica var. major N
	Microlaena	stipoides N
	Oplismenus	aemulus NS
	Oplismenus	imbecillis
	Panicum	simile N
	Stipa	ramosissima
Kangaroo grass	Themeda	australis
	Poa	affinis N

OTHER HERBS

Flannel flower	Actinotus	helianthi
	Alternanthera	denticulata
	Caesia	vittata
	Centella	asiatica
	Commelina	cyanea
	Cyperus	exaltatus
Blue flax lily	Dianella	caerulea NS
	Dianella	revoluta
	Dichondra	repens N
	Drosera	peltata, auriculata
	Gahnia	sp.
	Goodenia	hederacea
	Goodenia	heterophylla
	Helichrysum	scorpioides
	Hydrocotyle	acutiloba N
	Juncus	usitatus
	Lagenifera	bellioides
	Lepidosperma	laterale
	Lepidosperma	urophorum
	Lomandra	filiformis var. filiformis *
	Lomandra	gracilis *
	Lomandra	longifolia NS
	Lomandra	multiflora
	Lomandra	obliqua N
	Opercularia	aspera
Wild iris	Patersonia	fragilis N
	Plectranthus	parviflorus N
	Polygonum	strigosum
White root	Pratia	purpurascens N
Self-heal	Prunella	vulgaris
	Pseuderanthemum	variabile N
Small fan flower	Scaevola	albida
	Senecio	lautus
Indian weed	Sigesbackia	orientalis
Trigger plant	Stylidium	graminifolium N
Fringed lily	Thysanotus	tuberosus
	Veronica	calycina
Native violet	Viola	hederacea
Aust. bluebell	Wahlenbergia	gracilis
Grass tree	Xanthorrhoea	resinosa

* POSSIBLY

SHRUBS

Coast myall	Acacia	binervia
Green wattle	Acacia	decurrens
	Acacia	linifolia
Sydney golden wattle	Acacia	longifolia var. longifolia
	Acacia	longissima
Sweet wattle	Acacia	suaveolens
Sunshine wattle	Acacia	terminalis
Prickly Moses	Acacia	ulicifolia
	Amperea	xiphoclada
	Austromyrtus	tenuifolia
Hairpin banksia	Banksia	spinulosa
	Bauera	rubioides
	Bossiaea	obcordata
	Breynia	oblongifolia 2
Blackthorn	Bursaria	spinosa
Blackwattle	Callicoma	serratifolia
	Cassinia	aculeata
	Cassinia	denticulata
Christmas bush	Ceratopetalum	gummiferum 2
	Clerodendrum	tomentosum
	Comesperma	ericinum
	Daviesia	ulicifolia
	Dillwynia	retorta
	Dillwynia	tenuifolia
Hop bush	Dodonaea	triquetra 2
	Epacris	pulchella
Native cherry	Exocarpus	cupressiformis
Sandpaper fig	Ficus	coronata 2
Cheese tree	Glochidion	ferdinandii
	Gonocarpus	tetragynus
	Grevillea	linearifolia
	Hakea	salicifolia
	Hakea	sericea
	Helichrysum	diosmifolium 2
	Hibbertia	empetrifolia
Drumsticks	Isopogon	anemonifolius
Tickbush	Kunzea	ambigua
Native currant	Leptomeria	acida
Tea tree	Leptospermum	attenuatum
	Leucopogon	ericoides
	Leucopogon	juniperinus 2
	Leucopogon	lanceolatus var. lanceolatus
	Logania	albiflora
Wild parsley	Lomatia	silaifolia 2s
	Lomatia	myricoides

	Maytenus	sylvestris N
	Melaleuca	sp.
Jam tarts	Melichrus	procumbens
	Micrantheum	ericoides
Mistletoe	Muellerina	eucalyptoides
	Notelaea	longifolia NS
	Olearia	microphylla
	Pavonia	hastata
Geebung	Persoonia	laurina
	Persoonia	levis
	Persoonia	linearis N
	Persoonia	pinifolia N
	Petrophile	pulchella
	Phyllanthus	gasstroemii
	Phyllanthus	thymoides
	Pittosporum	revolutum
	Platylobium	formosum var. N parviflorum
	Platysace	lanceolata
	Polyscias	sambucifolius N
	Pomaderris	discolor, sieberi
	Pomax	umbellata
	Poranthera	corymbosa
	Poranthera	microfolia
	Pultenea	daphnoides
	Pultenea	flexilis
	Styphelia	longifolia
	Trema	aspera N
	Woolsia	pungens
	Xanthosia	pilosa
	Xanthosia	tridentata
	Xanthosia	vestita
Woody pear	Xylomenum	pyriforme
	Zieria	smithii N

FERNS

Maidenhair fern	Adiantum	aethiopicum
Giant maidenhair fern	Adiantum	formosum N
	Adiantum	hispidulum
Birds nest fern	Asplenium	australasicum
Necklace fern	Asplenium	flabellifolium
Gristle fern	Blechnum	cartilagineum
	Cheilanthes	sieberi
	Christella	dentata
Tree fern	Cyathea	australis
Tree fern	Cyathea	cooperi
	Culcita	dubia NS
Rasp fern	Doodia	aspera N
		caudata var caudata
Filmy fern	Hymenophyllum	cupressiforme
	Hypolepis	muelleri
	Lindsaea	linearis N
	Lindsaea	microphylla
	Pellaea	falcata var. falcata
Bracken fern	Pteridium	esculentum N
Rock felt fern	Pyrrosia	rupestris N
Cockscomb fern	Schizaea	bifida
	Schizaea	dichotoma
	Selaginella	kraussiana *
Umbrella fern	Sticherus	flabellatus

ORCHIDS

	Acianthus	caudatus var. caudatus N *
	Caladenia	catenata var. carnea
Beardy	Calochilus	campestris
Helmet orchid	Corybas	aconitiflorus
	Cryptostylis	erecta N *
Hyacinth orchid	Dipodium	punctatum
	Microtis	parviflora
Greenhood	Pterostylis	acuminata

* POSSIBLY

WEEDS FOUND IN BEECROFT RESERVE

Scarlet Pimpernel	Anagallis	arvensis	
Madiera vine	Anredera	cordifolia	NS
Moth vine	Araugia	hortorum	N
	Asparagus	densiflorus	NS
Cobblers peg	Bidens	pilosa	N
Illawarra flame tree	Brachychiton	acerifolium	NS
Balloon vine	Cardiospermum	grandiflorum	NS
Camphor laurel	Cinnamomum	camphorum	NS
Spider plant	Chlorophytum	comosum	S
	Cotoneaster	sp.	N
	Digitaria	sanguinalis	
Wild strawberry	Duchesnia	indica	N
Panic veldt grass	Ehrharta	erecta	N
Crofton weed	Eupatorium	adenophorum	
Mist flower	Eupatorium	riparium	
Petty spurge	Euphorbia	peplus	N
Wall fumitory	Fumaria	muralis	
	Gnaphalium	americanum	
Silky oak	Grevillea	robusta	N
Wild ginger	Hedychium	gardneranum	NS
Cats ear, flatweed	Hypochoeris	radicata	N
Dizzy lizzies	Impatiens	sp.	NS
Lantana	Lantana	camara	NS
Large-leaved privet	Ligustrum	lucidum	NS
Small-leaved privet	Ligustrum	sinense	NS
Honeysuckle	Lonicera	japonica	NS
	Myrsiphyllum	asparagoides	
Fishbone fern	Nephrolepis	cordifolia	NS
Ochna	Ochna	serrulata	NS
Wild olive	Olea	africana	
	Oxalis	incarnata	NS
	Paspalum	sp.	NS
	Passiflora	caerulea	
Passionfruit	Passiflora	edulis	NS
Kikuyu grass	Pennisetum	clandestinum	N
Ribwort, rib grass	Plantago	lanceolata	N
Japanese knotweed	Polygonum	capitatum	
	Prunus	serratifolia	NS
Buttercup	Ranunculus	sp.	
Indian hawthorn	Rhaphiolepis	umbellata	
	Rhus	succedanea	NS
Blackberry	Rubus	vulgaris	NS
Sandalwood tree	Sapium	sebiferum	
Paddys lucerne	Sida	rhombifolia	NS
Sow thistle	Sonchus	oleraceus	NS
Parramatta grass	Sporobolis	aficanus	
Wandering Jew	Tradescantia	albiflora	NS
Nasturtium	Tropaeolum	majus	NS
	Verbena	bonariensis	NS
Coral Tree	Erythrina x sykesii		NS
Morning Glory	Ipomea indica		S



Chilworth Reserve
(North)

Walking through
the reserve from
lower York Street.





The end of York Street

North west corner of Chilworth (North)

20/6/92



Same site after clearing by Council

24/6/92

Note the drain.



3½ months later

October 1992



A small sedimentation basin here would help to minimize the effects of stormwater runoff into this corner of the reserve



Branches placed across this slope have been displaced by the force of a short storm.

Photo taken 23/10/92

Branches have now been securely pegged.

← Note roadbase material washed down slope.



The extent of Weed Invasion on the north east quarter of Chilworth (North

Photo taken looking south-west from Schizomeria ovata

1/11/92



Photo taken looking south from north-east corner.
Dead vine is the location of Schizomeria ovata

2/9/92



Site for possible new park in unformed road area.
See Map 1 Area "P"

Photo taken at the end of York St. Lane looking west.

Blackbott on extreme left is the same tree seen on extreme right of photo below.



Current view of the north-east margin of Chilworth (Soot

Photo taken from the same position as the one above but looking south

VOLUNTEER BUSH REGENERATION IN CHILWORTH RESERVE:-

A group of four volunteers began working in the reserve in June 1991. Long-term Beecroft resident and conservationist Mr John Noble requested our group work in this reserve because, as a member of the Wildlife Preservation Society, he had been involved in trying to care for it for many years. The group had been working for three years in another area of Beecroft Reserve with Jennie Lewis, a member of the Australian Association of Bush Regenerators. Regular revision of Jennie's area was to be continued, but the weekly half day working sessions were transferred to Chilworth Reserve.

Permission was first obtained from Hornsby Shire Council and an open letter about the group was distributed to local residents by the council. Mr Peter Kemp and Miss Karen Matthews from the Parks and Gardens department visited the reserve soon after work commenced and it was agreed that the best approach would be to tackle the good areas first.

See Map Number 3 for details of the weed distribution and intensity in June 1991.

JUNE 1991

An area to the north of the footpath labelled "A" was worked on first. It was only lightly affected by weeds, mainly those that invade undisturbed bushland, such as Ochna, Camphor Laurel and Passion Fruit vine (perhaps dropped by local possums). There were also scattered small and large leaved Privets, but not large ones. Small plants were pulled out by hand and larger ones cut and painted with neat Roundup. A number of the Ochnas are regrowing one year later so the latest technique of stem scrape and treatment with 1 in 3 Roundup will be employed on revision of this area. Some Wandering Jew was removed on the track edge to the north of the reserve.

During the first weeks some other trouble spots were targeted, such as very large old wisteria vines on some of the still living trees to the south of the creek. These were cut and the lower section painted with Roundup.

JULY TO NOVEMBER 1991

After about 4 sessions of work attention was switched to the area labelled "B" just south of the footpath. There were more weeds here, including those already mentioned, plus some Lantana, Ginger, Honey Suckle and Wandering Jew near the lower York Street entrance to the footpath.

Perhaps fortunately for members of the group, the full extent of degradation was not at first realized, as the main footpath runs through the best area and gives a pleasant illusion of tall forest trees with a carpet of soft bracken fern underneath. However this area still needs thought as to its long-term management, as a lack of fire and an increasing Pittosporum canopy could be inhibiting the regeneration of some of the species that used to be in the reserve.

NOVEMBER AND DECEMBER 1991.

In November 1991 it was decided to weed a short area of the York Street margin labelled "C". A significant amount of remnant vegetation was evident and the work would improve the York Street entrance to the reserve. The residents living opposite the entrance had created a natural landscaped area in the unformed road outside their house which was "Bush Friendly".

Just north of this site was an old pile of garden refuse which initially the group used and added to, but the surrounding area was weeded so that it was tidy. In October 1992 a 5m quadrat was marked out on part of this weeded area. See Appendix 2 for a list of the species found there compared with what was observed in November 1991.

Area "C' was worked on by the group for just over two months and yielded a long list of weeds. Honeysuckle, Fishbone Fern, Wandering Jew and New Zealand Xmas Bells were particularly time consuming and there were also many small and broad leaved Privets, and more Wisteria and Ginger. However within a few more months the regeneration of native groundcovers and Soft Bracken Fern had transformed this small area. Surviving shrubs included Xmas Bush, Breynia and Notelea. Trees uncovered included Allocasuarina torulosa, Blueberry Ash and Turpentine.

At the end of December a Schizomeria ovata (Native Crab Apple) was discovered by the creek (SEE Map 3 for location). It was covered by the vine that has taken over the south side of the creek and killed several of the large trees. It is still unidentified but has been propagated for the Herbarium for the purpose of identification.

It was decided to try removing it using techniques described for Wingham Brush, the vine having transformed this part of the reserve to something resembling the Brush before its restoration began i.e. tying the woody stems into bundles and cutting and painting the ends with almost neat ® Roundup. Ref Buchanan 1989.

JANUARY AND FEBRUARY 1992.

The Schizomeria was freed of its burden of vines which had bent it right over. Honeysuckle was another threat and was treated in a similar fashion.

In January, ten Lomandra longifolia and three Xmas Bush were planted near the York Street edge of Area "C". The plants were tube stock and came from Sally Fisher's nursery "Cicada Glen".

At the end of January another letter was circulated to local residents to update them on the progress made and the plan for the coming year. Two copies were laminated and placed at the York and Mary Street entrances to the footpath. Essentially the plan was to maintain the area already weeded and slowly tackle more of the degraded margins of the reserve. It was also planned to target the vine where it was growing on living trees and try to arrest its spread north of the creek.

Hornsby Council also erected a new sign near the York Street entrance to indicate that Bush Regeneration was being undertaken and that volunteers were required. There had been no response to the first letter distributed in June.

FEBRUARY TO MAY 1992

At the beginning of February with Area "C" under control, the group moved its attention to a large area of Lantana at the rear of the Scout Camp block. See Map Area "D".

It was not practical to carry the Lantana out and so it was just cut and left on the ground using secateurs and loppers and painting the main stumps with ® Roundup. Previous experience at the other site in Beecroft reserve had shown that, given regular monitoring to prevent regrowth, this method, while not ideal, did lead to good regeneration after time. During this period work was divided between revision of Areas "A" "B" and "C", targeting the vine and working on the Lantana. The large bank at the back of the Scout camp block was covered in Lantana and Balloon Vine but was left until 1st Beecroft Scouts could be consulted on its removal.

JUNE 1992:

A new member joined the group in response to the laminated sign we had put up near the footpath entrance.

Work began on Area "E" on the western margin where stands of lantana were obscuring the view of the good part of the reserve from York Street Lane. Work here progressed at a rapid rate with the help of the new member. Other weeds encountered and removed included the two Privets, Camphor Laurel, Cotoneaster, Monsteria, Ginger and Wandering Jew.

The effect of this work was been quite dramatic and local residents have commented favourably on the new view of the reserve. This margin now has few woody weeds but the three metres closest to the road edge still have much Wandering Jew under the Soft Bracken Fern. The area will need regular follow up, but it is adjacent to the good part of the reserve and the soil is still original, so good regeneration is expected to occur quite quickly, as it has in area "C". There are some very large specimens of Xmas Bush along the York St. Lane edge, including some that are much bigger than adjacent Pittosporum.

One working session in June was devoted to thinning out some of the Pittosporum in Area "A".

On 23rd. June a large area of Lantana was removed from the road edge area near the scout hall. Area "F". The Lantana was a major eyesore and dominated the landscape at the end of York Street. This work was undertaken by Hornsby Shire Council after consultation with Mr Peter Kemp from the Parks and Gardens Department. A bobcat was used for the job and broken bottles were also cleared from the scout camp block where there used to be a bottle recyling depot.

When the lantana was removed a drain was uncovered which took the runoff from a short section of York St and this was responsible for the intense weed growth. There were some very large Broadleaved Privet behind the lantana exactly where the water flowed into the bush.

JULY TO OCTOBER 1992.

The group had never worked at such a rapid rate and the work done by Council was something of a challenge to follow up. In July a number of other people came to help and several Wednesday mornings were worked in addition to Friday. Tein Mcdonald worked with us one morning and it was very helpful and reassuring to have her advice. In the following months the area was weeded and the road edge mulched and replanted with local species. Regular follow up will be required but the job does not look as big as it did at first.
In terms of public relations the clearing of this area has been a great success, mainly because more local residents can see the progress being made. The Beecroft Civic Trust History Group had a fund raising activity which involved the donation of plants for bush regeneration and the group gained yet another member.

LIST OF SPECIES PLANTED ON THE ROAD EDGE AND SCOUT BANK:

	SPECIES	SOURCE
6	Allocasuarina torulosa	Council Nursery
4	" "	Forestry Commission
1	Banksia serrata	SGAP
1	" "	Council Nursery
3	" "	Forestry Commission
	Calochleana dubia	Tx from Chilworth
3	Clematis aristata	Forestry Commission
6	Ceratapetalum gummiferum	Council Nursery
3	Dianella caerulea	Hornsby Area
	Dichondra repens	Tx from Beecroft Area
3	Hakea sericea	Beecroft Area
5	Hardenbergia violacea	Forestry Commission
2	Hibbertia dentata	SGAP
	Hydrocotyle acutiloba	Tx from Beecroft Area
10	Lomandra longifolia	Council Nursery
19	" "	Cicada Glen Nursery

Techniques used included:

Hand weeding for species such as -	Small Privets Asparagus Fern (Knife) Passion fruit Very small Ochna Small Camphor Laurel Honey Suckle Ginger (Mattock and knife) Wandering Jew
Cut and Paint	Medium Privets " Camphor Laurel Large Honey Suckle vines Lantana stumps
Large Vines e.g.	Honey Suckle Wisteria Unidentified Vine Balloon Vine
Stem scrape	Ochna 1/3 Roundup Madeira Vine Neat Roundup Some Small-leaved Privet
Injection	Large Privets " Camphor Laurel Coral Tree
Spraying	Kikuyu on road edge Other annual weeds " " Wandering Jew on scout bank New Zealand Xmas Bells
Mulching	On road edge.