

Campsis radicans (Trumpet Flower)
del. Beverley Graham 1994

Campsis

Newsletter of the
Association of Friends of Botanic Gardens (Victoria) Inc.
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From the President

The 5th Annual Conference at Benalla was a great success and we congratulate our Friends there on a wonderful program. I open my comments in this way, not only because those congratulations are well deserved, but I want to remind those who attended that among the excellent papers presented there was one that is vitally important to all Friends groups—Dr Philip Moors' paper 'Strength in Numbers: the future for Victoria's Botanic Gardens'. Read the statistics carefully, learn them and, more importantly, make use of them!

The interests of Botanic Gardens in Victoria, their development, preservation, restoration, renovation and re-establishment will be assisted in the program we are preparing for the Associations' annual conference in 1996. One aim of the workshops being proposed will be to provide information on tax exemptions and combining with others in developing research potential.

The 1996 Conference will be held in the new City of Casey, which has the unique privilege of having two Botanic Gardens within its boundaries—Wilson Botanic Park, a new and developing garden at Berwick, which I have the honour to represent as a member of the Committee, and the Royal Botanic Gardens, Cranbourne, just beginning a new development phase. What a unique opportunity for visitors to see these two gardens.

Since the Benalla Conference your Committee has met in Ballarat, where they were very impressed by the new Robert Clark Conservatory, and in Berwick, where they were given a guided tour of the Wilson Botanic Park. The hospitality they received was greatly appreciated.

Max Pawsey

Friends of Hamilton Botanic Gardens

The William Guilfoyle plan for the Hamilton Gardens dated October 1881 included an ornamental lake, footbridge and fountain. The last footbridge, built in 1893, was demolished in 1960 and it is pleasing to see the completion of the lake rejuvenation, and the new footbridge and fountain, both based on earlier designs of the 1920s. The work also involved landscaping and placement of rocks and garden beds around the lake edge.

The official opening by Chief Commissioner Richard Walker will take place on 17 November.

The Friends are presently restoring a very old cast-iron archway before replacing it in an area in the Gardens often used for weddings.

Another very important feature of the Gardens, the Garden Cottage, is about to be restored externally to its original design of 1881.

Joan Hyslop

4th International Botanic Gardens Conservation Congress, Perth, September 1955

Two representatives of Friends of Geelong Botanic Gardens and Director Ian Rogers attended this Congress and although it was essentially designed for management it proved of great interest and relevance to Friends.

The Congress gave an overview of priorities and planning taking place in Botanic Gardens around the world. Three hundred delegates from 40 countries attended and delivered some excellent papers. The first day's program, 'Reaching out to the world', put us in touch with initiatives for plant conservation in Europe, the challenge facing major Chinese botanic gardens where they are particularly interested in conservation of plants with

medicinal properties, and the historic garden at Pisa, which works closely with the botanic gardens in Padua, Florence and Sienna. We heard of co-ordinated strategy to ensure the conservation of native and introduced plant collections practised in the U.S. The North American Plant Collection Consortium and Centre for Plant Conservation (a consortium of 25 gardens) was established in 1984 to house a national collection of endangered plants in cultivation. Rigorous scientific criteria are applied to all participating gardens.

In the U.K., besides collections held in botanic gardens others were cared for by specialist amateurs. A plant net existed to increase the use and awareness of plant collections in horticulture; high quality curation of collections was essential. The paper from Canberra was particularly interesting as it emphasised the importance of networks of regional botanic gardens. It was emphasised that each regional garden should collect, grow and display a representation of the flora and vegetation of its region from which interpretive and educational themes should be developed. A distinctive character creates special interest and appeal for visitors, and regional gardens should be assisted by the major botanic gardens. In 1992, because of the urgent need for flora conservation in Indonesia, a Network for Plant Conservation was established, with connections in Australia. New arid land botanic gardens in Australia included Port Augusta, Longreach and Alice Springs. Mention was made of developments in the Cameroons, in the Baltic States, in Utrecht and in Kenya.

An increasing number of gardens saw public education as part of their rôle, one presenter asking what sort of education was appropriate for botanic gardens. Environmental education was vital in China, where botanic gardens needed both public and government support. I was especially interested to hear of the level of government and community support for the Royal Tasmanian Botanic Gardens, as stated in a recent report on the social, economic and environmental benefits of those gardens. The findings of the report could generally be applied to all Australian botanic gardens.

The topics of workshops included the rôles of volunteers, guiding, education and conservation helpers. We found these workshops of great value and most relevant to our own botanic gardens and the work of the Friends.

Jayne Salmon

Friends of the Warrnambool Botanic Gardens

The Council of the City of Warrnambool has accepted the Conservation and Development Plan prepared by S.F.Landscape Consultants in which there are many recommendations for the preservation and improvement of our Gardens. We feel that the Friends can undertake some of these tasks as our part in caring for the Gardens. We are planning to ask for supportive funding from local service groups so as to achieve these ends. The projects include more gas lights, preservation of the cannon and new seating. In November it is expected that the authors of the Conservation Plan and John Hawker will meet in Warrnambool with local Council staff and Friends to discuss the further implementation of the plan. It is hoped that some of the larger, more expensive recommendations can then be undertaken.

We look forward to receiving next year a gift of some 70 trees from the Royal Botanic Gardens as part of their 150th birthday celebrations. The labelling of trees is another project we are looking at.

Our annual fund-raising luncheon was held on 12 October with well-known gardening personality Jane Edmondson as our speaker. It was a great success and boosted our coffers to a very healthy level.

Lorraine and John Richardson are opening their lovely country garden *Hopkins Hill* at Allansford on Sunday 26 November for the Spastic Society. There will be a plant stall organised by the Friends.

Dawn Smith

Friends of the Ballarat Botanic Gardens

The Robert Clark Horticultural Centre has been completed and is in full use. The Conservatory has proved to be very popular with locals and visitors alike. The opening display featured our famed Begonias; later displays included Chrysanthemums; Cineraria, Primula and Cyclamen; Schizanthus and Daffodils, each planned to a new design, so that the Conservatory will always be different and interesting. In October it was the site of a fund-raising Gala Dinner, where more than 100 guests enjoyed an evening of fine dining and music in the unique flower-laden surroundings.

The proceeds are earmarked for the restoration of the Claxton Monument, the once-beautiful old fountain at the entrance to the Fernery.

The Community Resource Centre, adjacent to the Conservatory, has also been completed. This is the new home of the Friends and other horticultural groups, and includes the office of the Begonia Festival Committee. Our Spring Plant Sale, early in November, was held in the courtyard between the Centre and the nursery.

At the annual general meeting in April it was agreed to recognise the founding members of the original group by making them Honorary Foundation Members.

A training program for volunteer guides began in May; 15 enthusiastic participants are now practising their skills on other members.

It is expected that more work will be done in the Gardens towards the completion of the main drainage system. The reconstruction of the beds, the replanting of the perennials and the installation of drains in the Tilly Thompson Garden has been completed with funds donated by the Friends.

Joan Garner

The Robert Clark Centre

Robert Clark was born in Scotland in 1826; he first worked as a bookbinder and later as a compositor in England and Ireland. In 1854 he migrated to Australia to join his brother. For 18 months he stayed in Melbourne and then went to Ballarat. Having married in 1856 he moved to Talbot, where he was twice Mayor of the town. With others he published the local paper

and in 1865 moved back to Ballarat, where with one of his partners he launched the *Ballarat Courier*, which became one of the two leading newspapers of the city. He retained his association with the paper until his death in 1902.

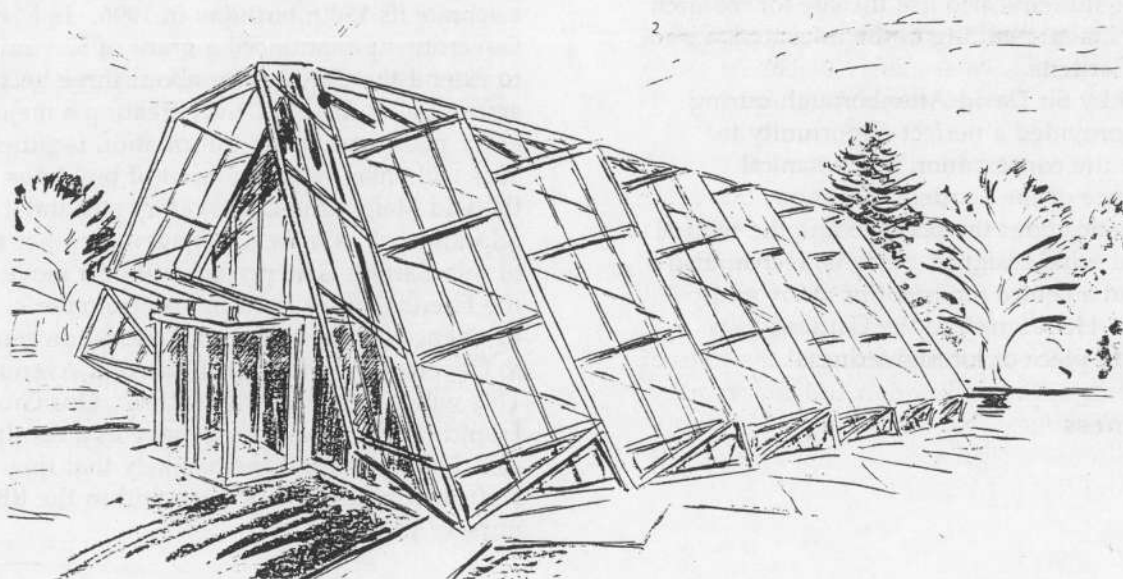
His grandson R.B. (Bob) Clark inherited a minority interest in the company when it was sold in 1990 and decided to do something for the people of Ballarat in memory of his grandfather. He established a memorial trust of \$2,000,000 for a project to benefit the people of Ballarat, and the Robert Clark Horticultural Centre is the fulfilment of that project. Before it could be completed Bob Clark died in Sydney in September 1994.

The Conservatory was described by its architect, Peter Elliott, as being 'derived from natural forms, crystalline and faceted, like a large transparent gemstone, held together by an intricate web of steel'. A free-standing, fully-glazed, walk-through building, it faces the Community Resource Centre. It is unlike any other public glasshouse in Australia, and one of very few in the world.

Unlike most conservatory buildings it is a large-scale version of a working nursery glasshouse, with a concrete floor and changing plant displays. Each display requires a different climate, so the building has to respond automatically to the plants' needs by controlling the conditions.

Council staff will mount four major shows each year, including the ever-popular tuberous begonias in February and March, with changing design themes for each display.

It is expected that the new Centre will be visited by more than 300,000 people each year.



Friends of the Royal Botanic Gardens, Cranbourne

The Royal Botanic Gardens, Cranbourne comprise 350 hectares, of which 200 hectares are remnant heathland and grassy woodlands. The site was acquired by the Victorian Government in June 1970 as a permanent reserve for the purposes of establishing a native flora botanic garden and passive recreation area. Since 1992 the Royal Botanic Gardens Board has managed the site and has actively co-ordinated its future development. In particular the RBG completed an overall Development Plan for the site (March 1995) and a Landscape Masterplan for the future Australian Garden (July 1995).

As part of the State budget, the Government made available \$1.83 million to assist the development of the RBG, Cranbourne over the next three years. The majority of this sum will be used to transform a 25-hectare area, previously sand mined, into a spectacular landscaped display of Australian plants. Some of the funding will be used to implement a new wetlands system along Wylies Creek. These projects represent a major phase of works for the Gardens, and will result in a significant passive recreation resource for the residential corridor of Cranbourne.

As part of the overall Development Plan, the existing indigenous vegetation will be retained in a conservation zone. To conserve the existing environmental values, ecological management and scientific research are ongoing concerns. To this end, regular small mammal and floristic surveys are undertaken, scientific reference areas have been established and an ecological fire management program is being developed. Several tertiary and post-graduate students also use the site for research projects that are adding to the information pool for the Gardens.

A visit by Sir David Attenborough during August provided a perfect opportunity to promote the conservation and botanical significance of the Gardens. He was enthusiastic about the plans to link the natural bushland with designed gardens, recreational space and a centre for scientific study and learning. He referred to the Gardens as 'a wonderful piece of foresightedness'.

Jill Burness

Albury Botanic Gardens

I was fortunate to attend the 4th International Botanic Gardens Conservation Congress and returned armed to the teeth with information and contacts. To have the chance to meet so many enthusiastic and knowledgeable people from all over the world in one gathering was a wonderful experience.

Over the next twelve months we will be establishing an education program for all the local schools, to be further developed according to the response. We are hoping that a portable classroom or a new education building will be erected in the grounds near the office. It would be used both as an education room and as a seminar room, and also as a meeting place for all the local landcare groups and horticultural groups. We have had a good response so far from all involved, and we look forward to the hard work that will be required over the next few years.

The Gardens are looking a picture, thanks to the efforts of our staff, and we are just finishing our plantings for the summer display. The large variety of salvias and the impatiens should make a great show.

We are well on the way to establishing a Friends group, which should be up and running by the New Year.

Paul Scannell

Friends of the Royal Botanic Gardens, Melbourne

The Royal Botanic Gardens in Melbourne has the pleasure of savouring in advance a gift to celebrate its 150th birthday in 1996. In May the Government announced a grant of \$2.9 million to extend the Gardens for about three hectares across Dallas Brooks Drive, creating a major entry plaza and visitor information facilities. This will entail refurbishment of buildings on the Old Melbourne Observatory site and relocation of LaTrobe's Cottage. Another result of this Garden Gate project will be a move for the Friends' office from the Astronomer's Residence (earmarked for an education centre) to Observatory Lodge on Birdwood Avenue. This will take place early in 1996. Our Growing Friends group also faces a move as a result of this development; it seems likely that they will shift their nursery to a space within the RBG nursery yard.

Three appointments have been made for work on the Garden Gate: Peter Elliott (architect, who designed the new Ballarat Horticultural Centre), Chris Dance (landscape architect) and Peter Lovell (conservation architect).

The Growing Friends, by far the greatest money-raising part of the Friends, took the record sum of more than \$27,000 at their October sale. And another record was set in September, when the Gardens received the gift of a new seed-raising house costing more than \$56,000. With \$15,000 of this amount coming from the Friends' Trust Fund this is the largest single gift made by the Friends. Featuring the very latest technology in automated temperature control and watering, shading and rolling benches, it will prove of great benefit to RBG staff and to the Growing Friends.

A second part of the Government's birthday gift will provide a big boost to RBG, Cranbourne, as mentioned by their Friends above.

An illustrated talk by Sir David Attenborough in August was undoubtedly the highlight of the Friends' activities for the year. Other speakers in our successful program since the last issue of *Campsis* were Herbarium mycologist Dr Tom May, Pacific Dunlop Research Fellow Dr Andrew Douglas, native plant authority Rodger Elliot, Landscape architect John Patrick, specialist nurseryman Stephen Ryan and RBG Director Dr Philip Moors (on birds in the Gardens). Botanical Illustrators have learned about plant names, ferns, seaweeds and orchids in their quarterly meetings.

Other Friends' activities included a film luncheon, a book launch, a cocktail party/exhibition preview, welcomes to new Members, day trips and interstate/overseas tours. A major tour to Europe, visiting places associated with Dr Ferdinand von Muehler on the 100th anniversary of his death, has been planned for May 1996.

Volume 6 of the Friends' *Botanic Magazine* was published in October.

Heather Ironmonger

Friends of Geelong Botanic Gardens

Chris Dance Land Design has presented the final draft of the Landscape Masterplan for the Geelong Botanic Gardens and Eastern Park. This will go before the Council of the City of Greater Geelong for approval at its November

meeting. The consultants concluded that the 19th century character of the Gardens requires more detailed analysis and maintenance. However, this should not diminish the Gardens' rôle as a contemporary facility for conservation of genetic resources and as a research and educational centre. The opportunity exists for the Gardens to play an important part in education in the community.

Publicity for the Gardens has been greatly increased this year through co-operation between the Friends and Geelong Otway Tourism. The Gardens feature in an excellent brochure, *Historic and Country Gardens of the Geelong Region*, which is available throughout Victoria.

The Friends will celebrate their tenth anniversary in November with an evening gathering in the Gardens.

Two members of the Friends' committee and Director Ian Rogers attended the 4th International Botanic Gardens Conservation Conference in Perth in September. The rôle played by Friends' groups and volunteers was discussed in training sessions and workshops. The conference, attended by delegates from 40 countries, was extremely stimulating. We were able to meet Friends of Kings Park and enjoyed an excellent guided walk with a very knowledgeable voluntary guide through the Gardens and the nursery. We came home with renewed enthusiasm for our own Gardens and the Friends organisation.

Jayne Salmon

Friends of Benalla Botanic Gardens

We have settled down to a relatively quiet existence after the annual conference in Benalla last April. It was a pleasure to host this event. Our sincere thanks to all who attended and made it such a successful gathering. Thanks also to the several groups and individual people who wrote to express their appreciation to the organisers of the conference. We hope that everyone who attended gained something worthwhile and enjoyed their brief sojourn in Benalla. Our best wishes go to the Friends of Wilson Botanic Park for the success of their 1996 conference.

The second major restoration of our Gardens' Rotunda, built in 1911, was substantially complete at the time of the conference, and it is now resplendent with the completion of the

tuckpointing of the brickwork. The work will be officially 'opened' on 12 November, during Rose Festival week. The Friends contributed \$12,000 towards this work, the Council bearing the balance of the cost, approximating this amount.

After the conference we decided to visit the Renmark establishment of well-known rosarian David Ruston, who spoke at the conference. His property covers about six hectares and contains about 40,000 roses of 3,500 varieties. Thirty-eight people made the visit, which took place over the weekend of 20–22 October.

The creation of our new municipality, the Shire of Delatite, has brought the need to develop a new relationship with the Commissioners and new staff. This has proceeded very well indeed.

At our annual general meeting in August David Sutherland was elected President, and Brian Chandler as Secretary. Our speaker was Peter Brennan, a landscape and gardens consultant who has had a long association with the Benalla Gardens.

Brian Chandler

Friends of the Gisborne Botanic Gardens

The Gisborne Botanic Gardens were begun in 1992 by the former Shire of Gisborne; the master plan was drawn up by Environmental Design Group. The 4-hectare site on Jacksons Creek is to comprise almost entirely New Zealand flora, partly in recognition of Gisborne's sister city of Gisborne in that country. The Gardens are now administered by the Macedon Ranges Shire, which is responsible also for the botanic gardens at Kyneton and Malmsbury.

The Friends were formed in February 1995, and we have achieved a great deal in eight months. We have 30 financial members and a very healthy bank account; ten others are interested. We have become incorporated and have a patron, Lady Ramsay, who is most enthusiastic about the Gardens. Our activities so far include Stephen Ryan speaking on New Zealand native plants, several propagation and potting-up days, a stall at the Gisborne market and a spring planting day in the Gardens.

Concerns were raised during the council amalgamation process about the future of the Gardens and this led to a briefing of the Commissioners and newly-appointed Chief Executive Officer and senior staff by the

Gisborne Botanic Gardens Advisory Committee and members of the Friends. There was a very positive response, with the result that money has been set aside in the budget for the continuing development of the Gardens, in particular for the sinking of a bore for the future water supply for the Gardens. The Shire is hoping to have the Gardens officially opened in March or April next year, in conjunction with the Royal Botanic Gardens, Melbourne sesquicentenary.

So far the Shire and two LEAP schemes (Landcare and Environment Action Program) have created two ponds in the creek, put in paths, built an information shelter and a bridge, landscaped a large garden bed and planted more than 300 trees and shrubs. Acquiring stock for the Gardens is proving to be a challenging task, so the Shire's parks and gardens staff are very keen to hear from anyone who has New Zealand plant material (cuttings or seed) that they are willing to donate.

The Friends are very keen to hear of other Friends' activities and would like to visit other Gardens. We also welcome visitors to our Gardens, though there is not yet a lot to see! Write to us at PO Box 564, Gisborne 3437 or telephone me at 054 286 057.

Melanie Kinsey

Friends of Wilson Botanic Park

Apart from the Botanic Park development there are several features of the site on which Wilson Botanic Park is being established that make it unusual or even unique. On a regional scale the exposed quarry rockface not only shows the core of one of the fault volcanoes in its structure, but is now the only exposed rockface of older basalt visible in or within 70 km of Melbourne. Because all other sites have now been filled with garbage this site is vitally important for geography and geology students, and for researchers in schools and universities throughout and near Melbourne.

On a national and international scale, the early research turned up information about a 1902 thesis by Henry Deane at the University of Melbourne, which showed that below the basalt flows were mudstone and sand layers formed more than 22.5 million years ago. This material was laid down under fresh-water conditions over millions of years; climatic changes caused it to go into and out of swamp conditions many

times, forming mudstone layers interspersed throughout decomposed granodiorite sands, which varied in depth from 15 to more than 30 metres between the basalt and the old silurian bedrock of Melbourne.

The mudstone layers are largely made up of leaf and pollen fossils which display the whole evolution of the Australian plant species, from the Antarctic beech to the dry environments that caused the leaf cells to develop lids to retain moisture, thus evolving the eucalypt and other species. Henry Deane's thesis contains sketches of his leaf fossil finds, but in the absence of today's dating techniques the work appears to have ceased.

These finds are the earliest discovery of eucalypt-species fossils in eastern Australia. Some work has been carried out by palaeobotanists and palynologists, but much more is still to be done, including accurate dating of the mudstone layers. The finds make Wilson Botanic Park unique in the world. It is probably the only Botanic Park developed over the site of fossil finds showing the evolution of the country's native plant species.

Max Pawsey

Friends of the Botanic Gardens, Adelaide

The Palm House has been re-opened. Its present rôle is to display plants from Madagascar. These were chosen as they are under threat in their native habitat; many are native to nowhere else, which gives them considerable botanical interest; and since their origin is Gondwana, they have links with our own flora. The south-west corner of Madagascar was singled out, partly because it is semi-arid. This means that little watering will be required and the building will be kept in a drier condition than hitherto, thus postponing the next restoration.

Many Madagascan plants come into the category of vegetable curiosities. This is mostly due to the strategies they use to save water in a harsh environment, strategies well known to people who know anything about Australian arid-land plants. We are all familiar with bottle trees, with plants that hang their leaves downwards in the heat of the sun, and with

leaves reduced or covered with wax or hairs. All these characteristics and more will be on show in the Palm House, sooner or later.

Extracted from the Friends' October-December Gazette

Association of Friends of Botanic Gardens (Victoria) Inc.

President: Max Pawsey

Vice-President: John Harper

Secretary: Lawrence Cohn

Treasurer: David Baumgartner

Immediate Past President: Brian Chandler

Committee: Philip Ayton, Joan Garner, Ian Rogers, Jayne Salmon

Members of the Association

Albury City Council

Central Goldfields Shire (Maryborough Botanic Gardens)

Corangamite Shire (Camperdown Botanic Gardens)

Friends of Ballarat Botanical Gardens Inc.

Friends of Benalla Botanical Gardens Inc.

Friends of the Castlemaine Botanical Gardens Inc.

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Friends of St Arnaud Queen Mary Botanic Gardens

Friends of Sunraysia Oasis Botanic Garden

Friends of the Warrnambool Botanic Gardens

Friends of Wilson Botanic Park Inc.

Macedon Ranges Shire (Kyneton Botanic Gardens)

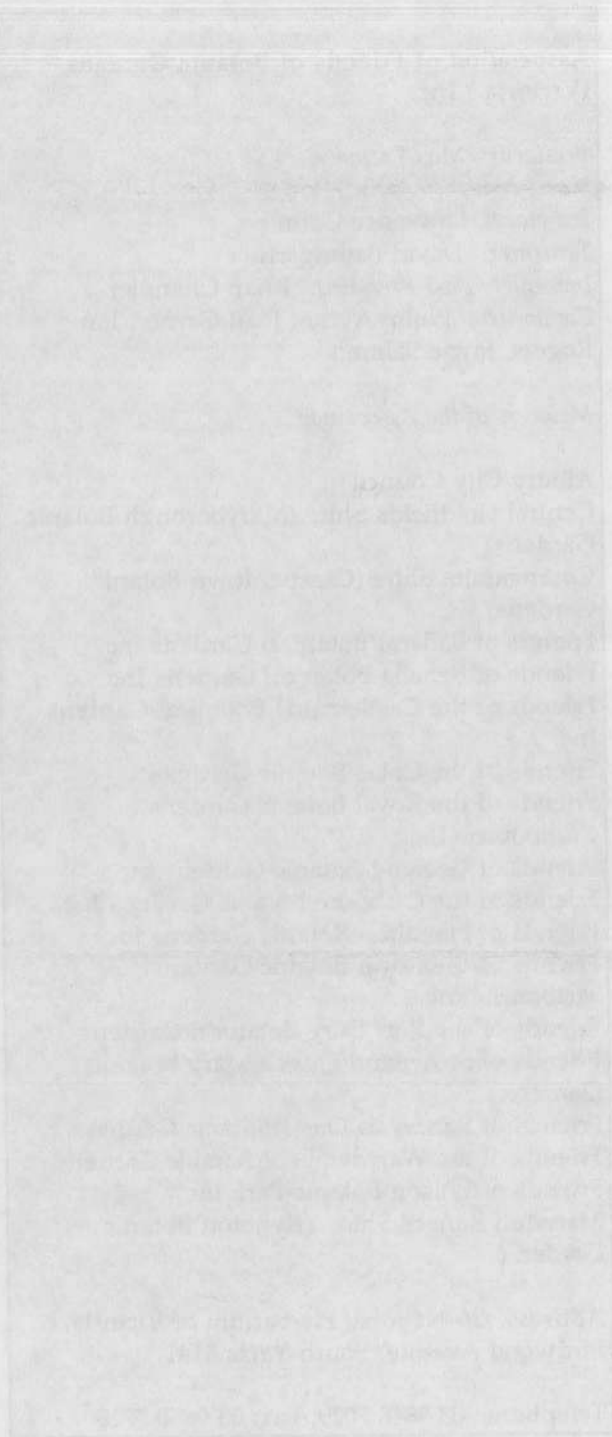
Address: C/- National Herbarium of Victoria,
Birdwood Avenue, South Yarra 3141

Telephone: 03 9848 7029, Fax: 03 9650 7723

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leaves reduced or covered with wax or hairs. All these characteristics and more will be on show in the Palm House room or later.

Extracted from the Friends' October-December Gazette



times, forming undulating layers interspersed throughout deep-seated granitic sands. When raised to depth there is to more than 50 yards between the base and the old granite bedrock of Madagascar.

The undulating layers are largely made up of sand and pollen fossils with depths the whole evolution of the Antiferian plant species from the Antiferian beach to the day of the present. That caused the last cells to develop life in their position, thus covering the surface and other changes. Henry Deane's fossil remains evidence of his last fossil beds, but in the absence of today's being compared, the work appears to have ceased.

These finds are the earliest discovery of evolutionary fossils in Madagascar. Some work has been carried out by paleontologists and paleobotanists, but much more is still to be done, including some dating of the Madagascar layers. The first Madagascar fossil was in the world. It is probably the only Madagascar fossil, but the size of fossil beds showing the evolution of the country's native plant species.

Max Harvey

Friends of the Botanic Gardens, Adelaide

The Palm House has been re-opened. The present site is in a highly visible position. These were chosen as they are under threat in their native habitat, many are native to nowhere else, which gives them considerable botanical interest and since the origin is Government, they have links with our own flora. The south-west corner of the Palm House was a site, but partly because it is a site of Government, the building will be kept in a state of repair, but the building is a permanent structure and the building is a permanent structure.

Many botanical plants from the site are in the category of valuable specimens. The 12 months of the early 1900s saw the loss of many of the plants and animals which were well known to people who knew nothing about Australian and plant life. The are all familiar with plants, with plants that were then known downwards in the heat of the day, and with