



FRIENDS OF THE NATIONAL ARBORETUM CANBERRA Inc.

D A T E S E P T E M B E R 2 0 1 0 | V O L U M E 1 0

Dear *Friends*

The highlight of the last three months was definitely the planting of the Friends Forest. So many people were involved, the forest was planted and is well on its way and, in addition, substantial funds were raised. See the full report in this newsletter. Congratulations to us all.

Now that our organisation is maturing it is time to do a stock take of our activities and ensure our strategies and budget are working together. Your Council meets every month to make sure we are on track and we held a specific planning afternoon in September to develop a draft three year strategic action plan. This plan will be circulated for your comments and ideas and will also be provided to the Governing Board of the National Arboretum Canberra to ensure that our activities are linked with the project and add value to the overall development of the Arboretum. It is planned to finalise the strategic plan by the end of 2010.

As many of you may have noticed in the most recent information for members, we have been working with the Governing Board and the Arboretum Project Team and this year they have adopted our suggestion to present information to the public during Floriade – at the Arboretum! What a step forward this is, to be able to open the gate on Sundays, see visitors accessing the site, and when our guides talk about the Arboretum they can simply point to what they mean, rather than to a photograph (although it must be said that the photos provided by our Council member, Linda Muldoon, are fantastic). It will also be fascinating to see how many choose to visit the site over the five Sundays of Floriade.

I wonder how long it will take to reach the 100,000th visitor to the site – not too long when you take into account the open days we have already supported, the guided bus tours we support all the time, and the

many other visitors. Remember to be part of the new and innovative volunteer training so you too can be promoting the Arboretum, at Floriade, and at any other time.

Anne Duncan gave a thought-provoking talk to our general meeting last month. Anne, is a member of the Arboretum's Governing Board, a past director of the Australian National Botanic Gardens, has 25 years experience in forestry and botanical projects and is now studying for her PhD at the ANU. She focused on the new developments for children's areas in botanic gardens and arboreta. Her talk was supported by pictures and we saw the new way forward is to relate the experience children and adults have so that the outcomes are not just providing information but really engaging people with new ideas about sustainability and the world of plants. With the plans to develop a children's play space at the Arboretum, as well as a child-friendly water wise garden, we look forward to contributing to these developments. Please remember to come to the general meetings so that you too can gather these very interesting ideas.

Our new membership pamphlet is on our website and printed ready for Floriade. It contains actual photos of our Arboretum (thanks again to Linda), rather than the aspirational photos used in the first pamphlet and also notes that more than 60 forests will be planted by the end of 2010. So the project is well on track for most of the planting being done by 2013. Next will be the construction of the Visitors Centre with its intriguing biosphere roof, and related works.

Looking forward to seeing you at the Arboretum!

Jocelyn Plovits

Chair





PLANTING THE FRIENDS FOREST

by Jocelyn Plovits

On 4 July 2010 more than 75 people gathered at the National Arboretum Canberra to create a significant event for the Friends: the planting of the Friends Forest of 190 Drooping she-oak (*Allocasuarina verticillata*) in Lot 96.

Led by Patron John Mackay AM and the Chair, Jocelyn Plovits, a forest of wonderfully evocative trees were planted. This particular tree was chosen in collaboration with the ACT Government's Arboretum Project Team and the Canberra Ornithological Group (COG), to provide a food source for the glossy black cockatoo. This bird is rare in the ACT and was recently nominated by COG as a threatened species (see summary of information below).

In addition to the people volunteering time to plant the trees, more than \$3,000 was raised to support the development of the forest. Many thanks to all of you who donated your time and to those who donated money. The list of donors (of time and money) will be posted on our website at canberraarboretum.org.au Of course there will be many more opportunities over the years to donate time to maintain the forest as well as money for its development.

It is expected the trees will develop over the next few years so that male and female trees can be easily identified. The Drooping she-oak is a round-headed, small to medium-sized tree from 5-10 metres tall. The species range is temperate south-east Australia and Tasmania, from the coast to inland locations. Like other casuarina/allocasuarina species, it is dioecious, with male and female flowers occurring on different plants; cones occur on female plants which are the food of the glossy black cockatoo.

This was a wonderful sunny, windless day. So many people were keen to be involved, with many children planting trees to ensure this legacy for the future. We will have to return, not only to maintain the forest but to see the cones which are expected to appear in approximately seven years and we hope to see the cockatoos feeding there too.

THE GLOSSY BLACK COCKATOO

Summarised from information provided by the Canberra Ornithological Group

The glossy black cockatoo, generally the smallest of the black cockatoos, with an average length of 48cm and wingspan of 90cm, an inconspicuous crest, dull black plumage and two bright red/orange-red panels on the tail (male) and irregular yellow patches around the neck and head, and orange-red and black barred tail panels (female).



Arrivals



Waiting for planting



Instructions from Curator Adam Burgess



Getting organised



Their flight is buoyant with shallow, effortless wing-beats. Individuals often fly at considerable height when travelling between feeding areas. They are strong fliers and can average over 45km an hour in sustained flight. They have distinctive calls that are soft, wavering and plaintive, a disyllabic *kaa-er* and a harsh alarm screech (Crome & Shields 1992; Cameron & Cunningham 2006).

HABITAT

The glossy black cockatoo characteristically occurs in low densities in woodlands and forests of eastern Australia, in a variety of habitats from coastal woodlands and dry eucalypt forests, to open inland woodlands and forested watercourses, reflecting the distribution of key *Casuarina* and *Allocasuarina* species on nutrient deficient soil types. The drier forest types with intact and less rugged landscapes are preferred by the species (Tanton 1994; Higgins 1999).

ECOLOGY

The glossy black cockatoo is probably the most specialised member of its family, feeding almost exclusively on seeds extracted from the wooden cones of species of *Casuarinas* and *Allocasuarinas* (she-oaks). They use their massive, strong bills to extract seeds by crushing and shredding cones held in their claws. The bill is used to remove the tough outer hull while the cone is rotated in the left foot. The exposed seeds are then stripped away and eaten. The art of opening a casuarina cone is apparently learned behaviour, as immature birds frequently seem to have trouble manipulating the cones into the correct position. Occasionally, glossy black cockatoos may eat insect larvae and have been observed feeding on seeds of some eucalypts, angophoras, acacias and hakeas. (Crome & Shields 1992; Department of Environment & Climate Change, NSW website; Cameron & Cunningham 2006).



Glossy Black Cockatoo Photo: Richard Fisher



Patron and Chair plant 1st tree



Generations of Paynes



Planters spreading out over the site



Successfully planted

Arboretum photos by Linda Muldoon



OBITUARY

DR ROBERT WILLIAM BODEN OAM

8 JUNE 1935 - 29 AUGUST 2009

Information collected by Jocelyn Plovits

Some people you meet are inspirational and Robert was such a person. I was lucky enough to meet Robert in 2004 when he assisted the judges for the National Arboretum competition with his expert advice on trees. He later joined the Tree Group, chaired by Prof Peter Kanowski, which advised the National Arboretum Canberra in implementing the winning design. His calm, thoughtful manner and the way he shared his considerable learning was most welcome by the project team and his enthusiasm, especially for the Wollemi forest, was persuasive to us all.

But our collaboration with Robert was at the end of his wonderful career as a champion for trees and horticulture generally.

He is recognised in many ways. He was awarded his PhD by the ANU for his work on the ecological effects of changing rural land-use patterns in the Canberra region.

On his 70th birthday, in June 2005, he unveiled a plaque in his honour on the Eucalypt Lawn, of the Australian National Botanic Gardens which reads: 'To celebrate the work of Dr Robert Boden, Director of the Australian National Botanic Gardens 1979 -1989, A life dedicated to trees and amenity horticulture with a special interest in the Eucalypts'.

In June 2007 he was awarded an OAM in the Queen's Birthday Honours List, for service to horticulture, particularly through contributions to the development of the Australian National Botanic Gardens, and preservation of the natural environment.

Robert positively supported the developing Arboretum. In November 2005 he attended the very first Arboretum

Open Day. He joined us to watch the cork plantation being harvested and the Portuguese dancing.

As a member of the Tree Group, Robert's research focused particularly on species of oak from the International Union for the Conservation of Nature Red List of Threatened Species and he had correspondence with William (Bill) Funk of Mereweather Arboretum, Dunkeld, Victoria, who has 18 oaks from the IUCN List in cultivation.

It was a special moment at the Arboretum when Robert planted a *Quercus palustris* 'Freefall' in a grove contributed by Engineers Australia on 19 May 2009 to commemorate their 90th anniversary. Robert had developed this particular cultivar.

Robert visited the Arboretum many times. He was pleased with the progress of the Camden white gum (*Eucalyptus benthamii*) which was the first forest planted in the Arboretum.

Like us all, Robert had a great interest in the Wollemi pine. He visited Mt Annan Botanic Gardens to see plantings there, admired the advanced specimen planted in honour of Dr John Banks at the ANU Forestry Courtyard and reviewed James Woodford's book 'The Wollemi Pine' in the *Canberra Times* in 2000. He planted a Wollemi Pine, in the Wollemi forest at the Arboretum, in June 2007. His prediction was right, the Wollemi are doing well. All these trees remind us that Robert cared for trees in every corner of the ACT.

Robert attended the inaugural meeting of the Friends' group in September 2007, so he has a special connection to our organisation.

He will be missed by all tree lovers.



FOREST TALK

CARERS ACT

In June 2010 our donation to Carers ACT was handed to Dee McGrath, CEO of Carers ACT by Jocelyn Plovits. The donation, of \$950.00, was one third of the funds collected during the Festival of the Forests ACT 2010. Dee noted how useful these donations were to meeting the goals of Carers ACT.



SPECIAL FACTA WALK

Dr Ken Eldridge (1934 – 2010) played a leading role in conserving Westbourne Woods when they were included in the National Estate in 1987 after provisional listing in 1981 and in introducing the interpretive walks that have been held on the 2nd Sunday of every month since 1981. He also played an important role in the selection of species for the National Arboretum (more information in next newsletter). The monthly walk on 10 October 2010 will commemorate Ken's achievements.

CHERRY BLOSSOM

As you can see from the photo by Adam Burgess, the Yoshino Cherries (*Prunus x yedoensis*) in Lot 5 are about to burst into bloom.



MASKED LAPWING

Another harbinger of spring, the masked lapwing (*Vanellus miles*) is back, nesting near the main gate to the Arboretum. Remember, these birds defend their nest by swooping.





DRAGON'S BLOOD TREE, *DRACAENA DRACO*

by Jocelyn Plovits

The dragon's blood trees of the National Arboretum Canberra have been in the news recently for all the wrong reasons.

The *Dracaena draco* should be in the news. It is a threatened species from the Canary Islands and was selected for planting at the Arboretum because it could survive in our climate, and in our soils and is worth preserving. It is growing well in a small forest of 30 trees in Lot 7A. It is related to the *Agave* and *Cordyline*, having lily-like flowers and is drought tolerant. They are planted high on site to reduce the exposure to frost while young. Their space-age like covers will not be needed in a few years when they have acclimatised (see photos right).

Its common name refers to its red sap - apparently dragons have red blood. In ancient times people used the sap to ward off evil spirits, and for medicines.

All visitors coming to the new Visitor's Centre will pass by this forest and be able to see, as the trees grow in the coming decades, the distinctive domed-topped appearance and regularly arranged swollen branches. Some describe the look as being like an umbrella.



Young dragon's blood trees



Mature dragon's blood tree



The trees are slow-growing and the straight trunk will grow for about 10 years before flowering occurs and the long leaves are lance-like and grey green. We will have to wait for another seven years to see the first panicles of off-white flowers in spring.

Some specimens in Australia are more than 100 years old, including those at the Sydney Botanic Gardens and the Waite Arboretum in South Australia (The Friends of the Waite Arboretum developed a sign using the dragon's blood tree because it is so distinctive and it is also the logo for the Geelong Botanic Gardens). The age of the trees can be estimated by counting the number of branch points to reach the canopy.

These trees may reach a considerable age, with a specimen in Tenerife famous for centuries before it was blown down in 1868 when it was 21m tall and had a massive ground level girth of 24m. It may have been more than 600 years old. Sources claim some trees in that area could be more than 1,000 years old.

It is not just our trees which experienced adversity. In Autumn 2008 the Friends of the Waite Arboretum reported the decapitation of one of the trees at their site. In January the entire canopy of the tree was stripped by two long-billed corellas. The birds removed all the leaves and were chewing and shredding the branch stumps when they were discovered in the act. It was concluded

that they were after the relatively soft fleshy crown. Fortunately, this was an exceptional event and none of the other dragon's blood trees were affected.

Although 12 trees were stolen from our Arboretum, five were recovered and replanted in their forest. The other trees will be replaced.

Photos at the Arboretum by Linda Muldoon 2010

REFERENCES

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dragon's blood tree. Photo: Zyance



dragon's blood tree bark. Photo: Frank Vincentz



THE WORLD OF ARBORETA

by Max Bourke AM

This is the first of a series with information about arboreta around Australia and the world.

WESTONBIRT – THE NATIONAL ARBORETUM, GLOUCESTERSHIRE, UK

Situated three miles south of Tetbury on the Bath Road this arboretum is the same size as the National Arboretum Canberra. But there the similarities end.

The land has been settled since Roman times and has been a tree collection for 200 years. The plantings of some 3,900 taxa (different species and cultivars) represented by 18,500 trees began in 1829 when Robert Stayner Holford returned from Oxford University amid the excitement of the plant hunters. This was particularly so with the return from North America of David Douglas with 210 new species of trees to Britain. The douglas fir *Pseudotsuga menziesii* and the western yellow pine, *Pinus ponderosa* were among those specimens. One of the original douglas firs is in this collection along with a Monterey pine, *Pinus radiata*, were also collected by Douglas. Douglas later died in 'mysterious/tragic' circumstances in a pit trap in Hawaii.

The average rainfall is 850mm. There are 27km of footpaths on the 240 ha.

After WW II the arboretum fell into decline and in 1961 it was handed over to the Forestry Commission under the supervision of internationally respected dendrologist Alan Mitchell who helped rebuild it. National collections of *Salix* (the willow genus, 260 taxa) and *Acer* (the maples, 180 taxa) are maintained here and these latter are absolutely breathtaking when the leaves are full coloured. There is also a Wollemi pine, doing very well in 2007!

Around 300,000 visitors pass through the gates each year, which are open all year.

More information: www.forestry.gov.uk/westonbirt



The thriving Wollemi Pine behind its sign sponsored by Stihl!



One of the grand Allées of old growth trees looking towards the (now) Westonbirt School.



BONSAI COLLECTION ATTRACTS 100,000TH VISITOR

Since moving to its temporary pavilion in Commonwealth Park in September 2008 the National Bonsai and Penjing Collection of Australia has become a popular attraction for locals and visitors alike.

The Collection currently displays 32 deciduous, evergreen, conifer and native trees, including a desert ash and a Japanese grey bark elm, both dating to 1951 and a fresh-water paper bark from 1968. All of the exhibits have been either donated or are on loan to the collection.

The 100,000th visitor was Mr Edmund Mortimer, from Gungahlin, a first time visitor.

"I was cycling by and it was a lovely surprise to find such a beautiful collection" Mr Mortimer said.

Another visitor, Aidan Crees of Turner said, "It's a very

Canberra thing to find such a gem tucked in behind the trees".

Chief Minister, Jon Stanhope said, "The government recognised the value of the exhibition to the community and had allocated funding for a dedicated pavilion at the National Arboretum". He went on to say that even in its temporary home in Commonwealth Park, this stunning collection has proven to be a popular attraction and I have no doubt that its reputation as an iconic collection will continue to grow when it moves to its new home at the National Arboretum for the official opening in 2013.

Grant Bowie, Curator of the Collection noted that the purpose-built pavilion would enable the collection to expand its high quality display and attract new exhibits. It would also be the location for the Arboretum in Miniature project, where many of the 100 Arboretum forests will be represented in miniature versions.



Aidan Crees and Edmund Mortimer 100,000th visitor



HOW DO YOU MAKE A BONSAI?

Bonsai and penjing artists use cultivation techniques such as grafting, root reduction, pruning and repotting to produce tiny trees that mimic the shape and appearance of full sized trees, to evoke landscape memories.





UPDATE YOUR DETAILS

We have noticed that a number of email addresses and street addresses are out of date, so if you have recently changed your address or email address, please email Colette Mackay, our Secretary on j-cmackay@hotmail.com.au with your new details.

MEMBERSHIP APPLICATION FORM

Yes, I/we wish to become a Friend(s) of the
National Arboretum Canberra

Date: / /

1. Title

First Name

Last Name

2. Title

First Name

Last Name

Address

.....

..... Postcode

Tel (h) (w)

e-mail

Do you agree to the use of your e-mail for
AGM notifications? Yes ☐ No ☐

Membership arrangements (please indicate)

Single \$25 ☐

Household \$30 ☐

Concession \$10 ☐

Association or Club \$50 ☐

Corporate Friend \$2000 ☐

Payment details for members:

Cash ☐ Cheque ☐ Direct Deposit ☐

Cheques payable to the Friends of
the National Arboretum Canberra Inc.

For direct deposit: Westpac, Petrie Plaza, ACT
Account: Friends of the National
Arboretum Canberra Inc.
Account BSB No: 032719
Account No: 375379

Please make sure to record your name when making a
direct deposit so that your membership can be identified.

Annual membership falls due in December each year.
Gift memberships available.

Send applications and questions to:
The Secretary
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CONTACT US

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