

# From Ashes to Arboretum

After the 2003 firestorm ravaged Canberra's forests, the city turned to Walter Burley Griffin's vision – planting a national arboretum of rare tree species for the public and tourists to enjoy

BY DIANE GODLEY



PHOTOS: GETTY IMAGES; DIANE GODLEY



*Above: the blackened remains of a pine plantation. Below: thousands of rare, endangered and iconic trees from Australia and around the world are being planted*



**ON THE MORNING OF SATURDAY,** January 18, 2003, the people of Canberra awoke to the smell of smoke in the air and the sight of black ash falling from the sky. Four bushfires had been raging in Namadgi National Park on the south-west outskirts of the Australian Capital Territory (ACT) for ten days.

Overnight, the fires had combined, broken through containment lines and blown out to a 30-kilometre front. To make matters worse, strong, gusty winds were fanning the fire towards the city.

"We were fighting a losing battle – and we knew it," says Neil 'Coop' Cooper, the senior manager responsible for forest fire management at ACT Forests in 2003.

"Humidity was really low, at about four per cent, the temperature was forecast to reach above 40 degrees Celsius, and winds were gusting to over 100 kilometres an hour. There was no way we could break the fire, it was impossible. At best, we could steer it to try and save a few things."

Around 1pm, the fire jumped the Murrumbidgee River and 'ripped' uphill towards Canberra. It was later estimated that the fire was travelling at 20 kilometres per

hour. "By 2pm visibility in Canberra was literally zero."

After years of drought, the eucalypt forests surrounding Australia's capital city were a literal tinderbox just waiting for a spark. And when that spark came in the form of lightning strikes ten days earlier, there was no stopping the firestorm that followed.

By 2.45pm, the fire was torching the pine plantations around Mount Stromlo and racing towards the crest, where it eventually destroyed the historic observatory telescope complex. Pine forests surrounding the suburb of Duffy, in Canberra's western area, were ablaze, and the fire so ferocious firefighters were forced to retreat.

Around the same time, Cooper and a group of firefighters had been caught

in the fire. "I was getting a crew to safe ground when the fire came up behind us. I opened the car door and the wind almost snapped it off. We had to get through a paddock with no visibility and drive to where we thought the gate was.

"The flames were maybe 40 or 50 metres deep. We had to drive like hell to get through it. A lot of fire fronts you can drive through quite quickly, but this fire seemed to go on for an eternity. My car was

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*Experienced firefighter and forest manager Neil Cooper today;  
the burnt-out shell of the historic observatory telescope*

mortally damaged after that. When we got to the site of the present-day arboretum, all we could do was try and save the Cork Oak forest.”

And save the 100-year-old forest they did. “We’d been flogged all day. We needed one small win.”

By 3.30pm, the first houses in Duffy were lost. Eventually, nearly 500 homes across a dozen suburbs and rural communities were destroyed, most located near the pine forests. Thousands of people were displaced, and four people died trying to save their homes.

By 7pm that night, a cool wind change ended what many describe as Canberra’s worst-ever bushfire. “It’s hard to believe we didn’t lose any firefighters that day,” says Cooper, who is still emotionally scarred by the event today.

In its aftermath, the challenge was to rebuild a grief-stricken and shattered community.

**FOLLOWING THE BUSHFIRES**, the ACT Government consulted with Canberrans and town planning experts about how best to use the large tracts of blackened landscape that had once been leafy pine plantations. Later that year, it was decided to dedicate the site to an international arboretum.

Part of the intent was to symbolise the local community’s process of healing and recovery. The arboretum also connected with architect Walter Burley Griffin’s original plans and landscape designs for the city.

An arboretum, pronounced ‘arr-boor-eetum’, is essentially a botanical garden devoted to growing trees





*Clockwise from left: the 100-year-old Cork Oak forest; the sharp spiky leaves of the Monkey Puzzle in focus; atop Dairy Farmer's Hill*

for conservation, scientific research and educational purposes. “From the ashes of something terrible grew this world-class facility,” says Scott Saddler, director of the National Arboretum Canberra.

Currently 44,000 rare, endangered and symbolic trees from Australia and around the world are growing across 250 hectares.

Selected by an expert panel, the trees were chosen for their conservation status, symbolic nature and aesthetic value; some for their outstanding seasonal colour, others because they provide habitat for

Australian native wildlife. But most importantly of all, they had to be able to cope with Canberra’s very cold and frosty winters and hot, dry summers.

**IN 2007**, the first four forests were planted, one comprising the Australian threatened species Camden White Gum (*Eucalyptus benthamii*), another the critically endangered Wollemi Pine (*Wollemia nobilis*) – a tree thought to have disappeared 100 million years ago before it was discovered in forests near Sydney in 1994. Fewer than 100 mature Wollemi



**From left: a Lone Pine and one of the few plantation pines that survived the fire; sculpture made from old farm tools; the Smokebush is representative of the fire**

Pines are known to exist in the wild.

In 2008 a further 18 forests were sown, including the threatened species Monkey Puzzle (*Araucaria araucana*) from Chile – named so because the spiky leaves left monkeys puzzling over how to climb them – and the critically endangered Saharan Cypress (*Cupressus dupreziana*), a tree that only grows in limited areas of the Sahara Desert in south-east Algeria. The arboretum currently has the largest stand of these trees anywhere in the world – including the Sahara.

In 2013 the arboretum was opened to the public. Currently, there are 94

mostly monoculture (single-species) forests growing, including 31 threatened species, two of which are extinct in the wild – the *Toromiro* from Easter Island and *Franklinia* from the US.

“This is the only arboretum in the world of this calibre. In other arboreturns you might walk 30 metres and see 30 different trees. This is the only monoculture arboretum,” says Saddler.

Many of the trees are still young. However, two forests, Himalayan Cedar (*Cedrus deodara*), planted in 1921, and Cork Oak (*Quercus suber*) in 1917, are over 100 years old and

were originally grown as part of Griffin's vision of an arboretum.

"Once the trees have canopies, there will be pathways through every forest to give you a better understanding of that species of tree," says Saddler. "There will also be seats, picnic areas and fitness equipment to entice people out of the visitor's centre [where you get sweeping views over Canberra] to walk through the forests."

To encourage visitors in the meantime, 12 kilometres of trails are being added to the existing six and, when completed, will provide pedestrian access through 80 forests. Because the arboretum is located on a hilly site, the dual-purpose trails will be built with only a five per cent grade, making them suitable for the very young, old and people in wheelchairs.

Today, the arboretum gets 12,000 visitors a week, or over 3.7 million a year. "As part of the original master-plan for the arboretum, they were hoping for one million visitors a year," says Saddler. "We're now the second most visited institution in Canberra, after the War Memorial."

Which brings us to the Lone Pines (*Pinus halepensis*). The commemorative Lone Pine at the War Memori-



***"It's a tranquil place," he says as magpies take up a chorus. "It's also a place for scientific walks"***

al was grown from seed brought back from the battle site of Gallipoli in 1915. Horticulturists took seeds from it to grow the arboretum's Lone Pines.

**HAS THE ARBORETUM** hit its mark as far as healing the local community? "Yes, I think so," a proud Saddler tells me from atop Dairy Farmers Hill. We are sitting under the canopy of one of the few remaining

plantation pines that survived the fire and taking in the panoramic views over Canberra and the surrounding countryside. "It's a tranquil place," he says as magpies take up a chorus. "It's a place of reflection. But it's also a place where students can come on research and scientific walks."

"The exciting part for me as director of the arboretum is that we're leaving a legacy for future generations," says Saddler.

The bushfire that raced through this site, destroying nearly everything in its path, will not be forgotten. A forest of Purple-leafed Smokebush (*Cotinus 'Grace'*) is a symbolic reminder of the fires. In autumn, the large purple leaves turn a bright red and orange, while in summer, the small flowers appear like puffs of smoke above the branches. **R**