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PROJECT TEAM

Project Supervisors

Mr J. Evans (CALM)

Mr B. Williamson (ABA)

Fire Protection Advisors

Mr J. Smart (CALM)

Mr G. Styles

Mr J. Evans

(Project Supervisor).

BMA Engineer

Mr S. Gow

Rigging Contractor

R.M. Lee & Son

Steeplejack

Mr P. Withers

Riggers

Mr D. Edbrooke

Mr P. Stenard

Mr R. Lynch

Mr P. Masters (CALM)

Mr J. Jackway (CALM)

Mr M. Court (CALM)

Mr K. Mucjanko (CALM)

Recreation Master Plan

P & M Tooby Pty Ltd

Mr A. Sands (CALM)

Mr A. Hill (CALM)

Site Survey

Mr J. Towie.

WARREN BICENTENNIAL TREE

OFFICIAL OPENING

2nd December
1988

by the

**HONOURABLE
BARRY HODGE,
M.L.A.**

Minister for
Conservation
and Land
Management



Australia
1788-1988



FIRE LOOKOUT TREES - A BRIEF HISTORY

For the first 50 years of forestry in this State our bushfire early warning system depended on a network of look-out towers. They were built about 40km apart on prominent hills in the forest and were staffed continuously throughout the summer. By means of triangulation from two or more towers they could pinpoint a fire within 200-500 metres.

The karri forest posed a special problem. With few prominent hills and forest giants towering 70-80 metres above the ground, the task of building a tower to overlook the forest was formidable. It was a young forester Don Stewart (later to become Conservator of Forests), who in 1937 thought of using the trees themselves as Look Out Towers.

The first tree tower was built on a large marri tree at Alco near Nannup.

Big Tree was the first tower erected on a karri tree, and was later followed by Gardner (1 and 2), Pemberton, Gloucester, Beard, Boorara and Diamond. Today only Gloucester, Boorara and Diamond remain and Gloucester is the only tree tower safe to climb.

In all, 13 towers watched over the karri forest. Not all were built on trees, and several trestle towers were constructed along the fringe of the karri forest and one, Mt. Frankland, is a cabin built directly on bare granite rock.

Today's "towerman" is a pilot flying high in the sky, visiting each and every new smoke and reporting fire size and behaviour, likely development and the presence or absence of fire fighters.

Key towers are still maintained for emergency use and are used 2-3 times each fire season when spotter aircraft break down or weather conditions make flying impossible.

The Warren Bicentennial Tree joins the tower

Height: 60 metres
Girth: 5.5 metres
Age: 200 years
View from the top: 40km radius
Cabin Weight: 2 tonnes
No. of climbing pegs: 130
Distance the cabin can sway in high winds: 1.5m radius
Distance to rest platform: 25m
No. of people on the top viewing platform at any one time: 5
Platforms in the cabin section: 5

network that watches over the forest, performing the vital role of fire detection and protection of the southwest forests and towns from the terror of wildfire.

THE BRIEF

The brief called for the development of a replacement lookout tower for the deteriorating Gloucester Tree. The immediate function of the replacement tree will be as a tower back up to CALM's aircraft surveillance and fire detection system.

A long term care and maintenance program for the Gloucester Tree is underway to maintain its focus as a tourist climbing tree. This may extend the climbing life of Gloucester Tree from 5-20 years.

The new lookout tree site must anticipate tourist pressure following the closure of Gloucester Tree as a public climbing tree.

A suitable location, a suitable karri tree and appropriate lookout design was needed to satisfy both the immediate function of fire detection and the longer term function of recreation.

SELECTION

The tree had to meet certain criteria. It had to:

- be located close to Pemberton;
- provide sweeping views of the coast and forest from the tree top;
- be a large vigorous tree in the prime of life with good crown configuration and a long clear trunk;
- be located in an area that could be developed to withstand heavy tourist traffic;
- eventually meet tourist climbing needs as well as the fire detection function.

The search for a suitable tree began in forests within a 10 kilometre radius from Pemberton.

Contour maps, aerial photographs, ground surveys and helicopter inspection were used to narrow the field. Eight trees warranted closer inspection and the Warren Bicentennial Tree was the only tree to meet all the selection criteria.

Local forester John Evans and the *steeplejack climbed the tree for a closer inspection of the trunk and tree canopy. He declared the tree was as good as it looked, and the measurements were passed to the BMA to design a cabin.

CONSTRUCTION

The idea was to nestle a cabin in the crown and remove as few branches as possible. This would maintain the tree's ability to photosynthesize and minimise the possibility of rot and disease entering the treetop.

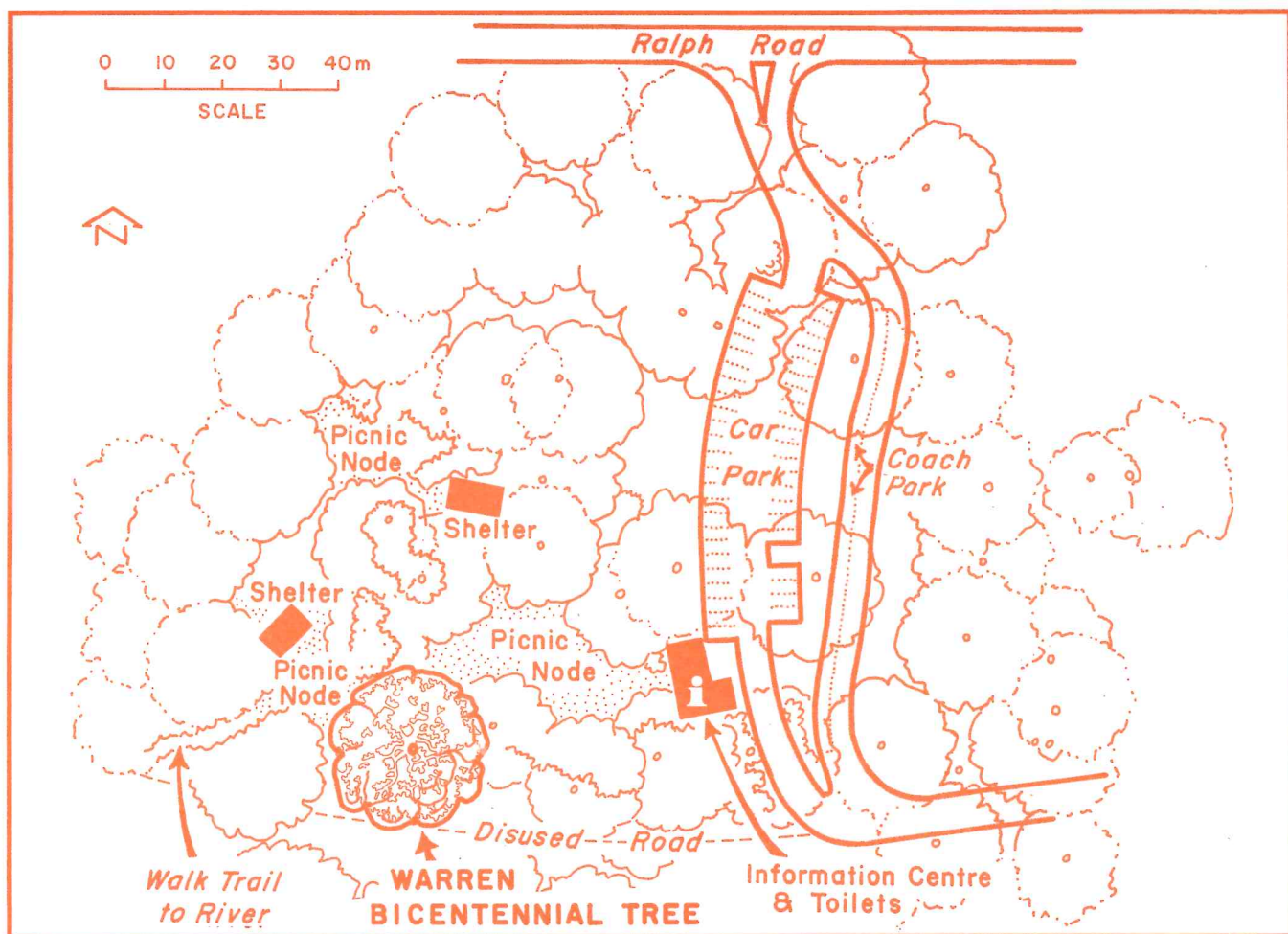
The design is completely open, enclosed only by wire mesh for safety. This reduces the wind resistance on the two tonne cabin.

Constructing the galvanised steel cabin was done in stages. Sections were built at the base of the tree, taken apart and each piece hauled up. They were then reassembled at the treetop.

A neighbouring karri had a number of dead branches that were removed by precision blasting.

A halfway staging platform and viewing platform below the cabin and all enclosed with wire mesh are also in place. Spiral pegs and the climbing cage provide safe access to spectacular views of the karri forests, farmlands and coast - but you have to climb the tree to really appreciate the sight.

* Steeplejack: person qualified to carry out construction and supervision at heights. Works with riggers, usually on highrise construction and radio masts. At present there is only one steeplejack in Western Australia.



THE WARREN BICENTENNIAL TREE - PLANNING FOR THE FUTURE

To complement the experience of seeing or climbing this magnificent fire lookout tower the Department will construct a range of recreation facilities.

The master plan above shows the location of the information centre, car parks, sheltered barbecue sites, picnic tables and toilets in relation to Warren Bicentennial Tree.

Visitors will be able to enjoy the other features of Warren National Park by following the walk trails or scenic drives which radiate from the site.