INFORMATION SHEET 7

FORESTS DEPARTMENT WESTERN AUSTRALIA — PRODUCTION, PROTECTION, RECREATION, CONSERVATION



# FIRE LOOK-OUT TOWERS

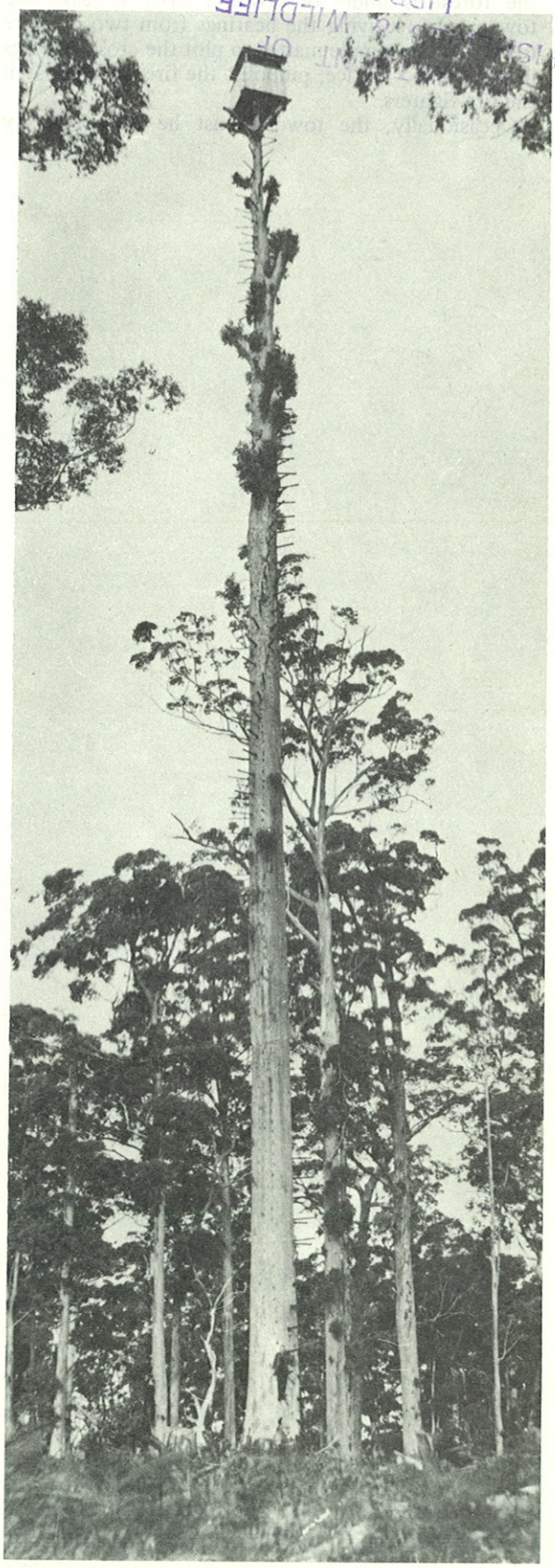
G. VAN DIDDEN

One of the essentials of fire control is a system which provides for a rapid detection and positioning of fire outbreaks. This enables a rapid despatch of fire-fighters, thus restricting damage to a minimum. Detection techniques vary in different countries, but the main system employed in Western Australia relies on skilled observers working from specially constructed look-out towers.

The first of these was built at Mt. Gungin in 1921, and at present some 49 towers have been established throughout the forest area. These vary from simple structures built on high ground, to wooden trestle towers up to 43 m in height or steel towers up to 61 m high. Some have even been built in the tops of tall karri trees. The tallest of these is Gloucester Tree, 56 m high, and situated some 3 km from Pemberton.

The look-outs are manned continuously from early morning until evening throughout the fire season (usually mid-September to mid-May). Aided by powerful binoculars, the observer scans the tree-tops

The original Mt. Gungin fire look-out tower built in 1921 and situated some four miles south-east from Mundaring Weir. The towers on Mt. Gungin and Mt. Dale (1921) were the first built by the Department.



"Going up in the world" – the Gloucester Tree look-out.

for the warning signs of smoke. Each tower is equipped with direction-finding equipment and a properly oriented plan to enable the bearing of a fire to be plotted simply and rapidly. As soon as the faintest wisp of smoke is sighted, a bearing is taken and the District Office notified by either telephone, radio or radio-telephone system. This method is certainly much easier than the system used in the early 1920s, which relied on a heliograph transmitting messages in morse code!

Look-outs are placed so that, whenever possible, the forest is under observation from at least two towers. On receiving the bearings from two or more towers, it is a simple matter to plot the cross-bearings in the District Office, pinpoint the fire, and despatch the fire-fighters.

Occasionally, the towers must be supported by secondary detection systems. These have included patrol on horseback, ground observation from hill tops or reconnaissance by vehicle. The most important nowadays is aircraft spotting. During periods of poor visibility and in particular after lightning storms, an officer is sent up in a light aircraft to spot fires. If smoke is sighted it is plotted on to a map of the forest and its position is radioed to the Divisional Office. Another source of information which has often been of considerable assistance is provided by members of the public.

Our fire look-out towers are of considerable interest to visitors and picnickers in the forest area. The more popular are at Dryandra, Mt. Gungin, Mt. Dale and Gloucester Tree. In the latter, some 5,000 signatures were recorded in the visitor's book during the last fire season (1972).