The subsidiary fire lookouts of Western Australia

by Max Le Clercq

Edition: **01**

Introduction

Until then I had thought each book spoke of the things, human or divine, that lie outside books. Now I realised that not infrequently books speak of books; it is as if they spoke amongst themselves.

In light of this reflection, the library seemed all the more disturbing to me. It was then the place of a long, centuries-old murmuring, an imperceptible dialogue between one parchment and another, a living thing, a receptacle of powers not to be ruled by a human mind, a treasure of secrets emanated by many minds, surviving the death of those who had produced them or had been their conveyors.

from: The Name of the Rose, Umberto Eco

This is a book talking about a book. More precisely, it's a book talking about pages 58 & 59 of my earlier book '*The fire towers of Western Australia, and the Forests Department Conservators who made them happen (1920 -1970)'* - which is available for download here if the reader has stumbled across this text before having read the original work.

When writing the broad-ranging earlier book, I tried to prevent it from drifting off into tedium by delving so deeply into obscure topics that it lost its way as a work for people at all levels of expertise and interest to remain engaged with. In large part I think I succeeded in that endeavour, but it meant the mysterious topic of subsidiary, or 'secondary', fire lookouts was relegated to a somewhat superficial and cursory coverage.

This book seeks to redress that and may be thought of as being a work only for the serious, 'hard-core' reader who is not satisfied with what was written earlier.

In the Preface section to Don Stewart's '*Forest Administration in Western Australia 1929-1969*' he despairs:

"...it is hoped that this attempt has assembled and placed on record, much material which might otherwise be buried in old files, newspapers and reports, or lost completely, as has too frequently occurred with destruction of files and records".

Stewart wrote that lament concerning the destruction of Forests Department historical records more than half a century ago - this book therefore battles with a further 50 years of the same thing on top of whatever had already been lost/thrown out within the Department before 1969 as mentioned by Don. It makes for a daunting, nigh-on impossible task to do justice to the subject material in the midst of so much callous destruction and neglect.

As such, this book is more of a desperate attempt to try and write down what few scraps of the topic survive today before they also disappear into the ether forever, and less about trying to pass off what is offered as a neatly packaged compendium of fully known-about, researched facts from days long gone. The author is very sorry that he does not have more to tell the reader.

A pertinent opening question would surely be; *What exactly IS a subsidiary lookout?* Actually, greater understanding can be got by reworking that question to this one; *How did subsidiary lookouts come about?* This book examines the early years after the promulgation of the 1918 Act of Parliament which established the Forests Department, and takes the reader through a time of learning, innovation, and adaptation. 'What' becomes far easier to answer by tackling 'How' first.

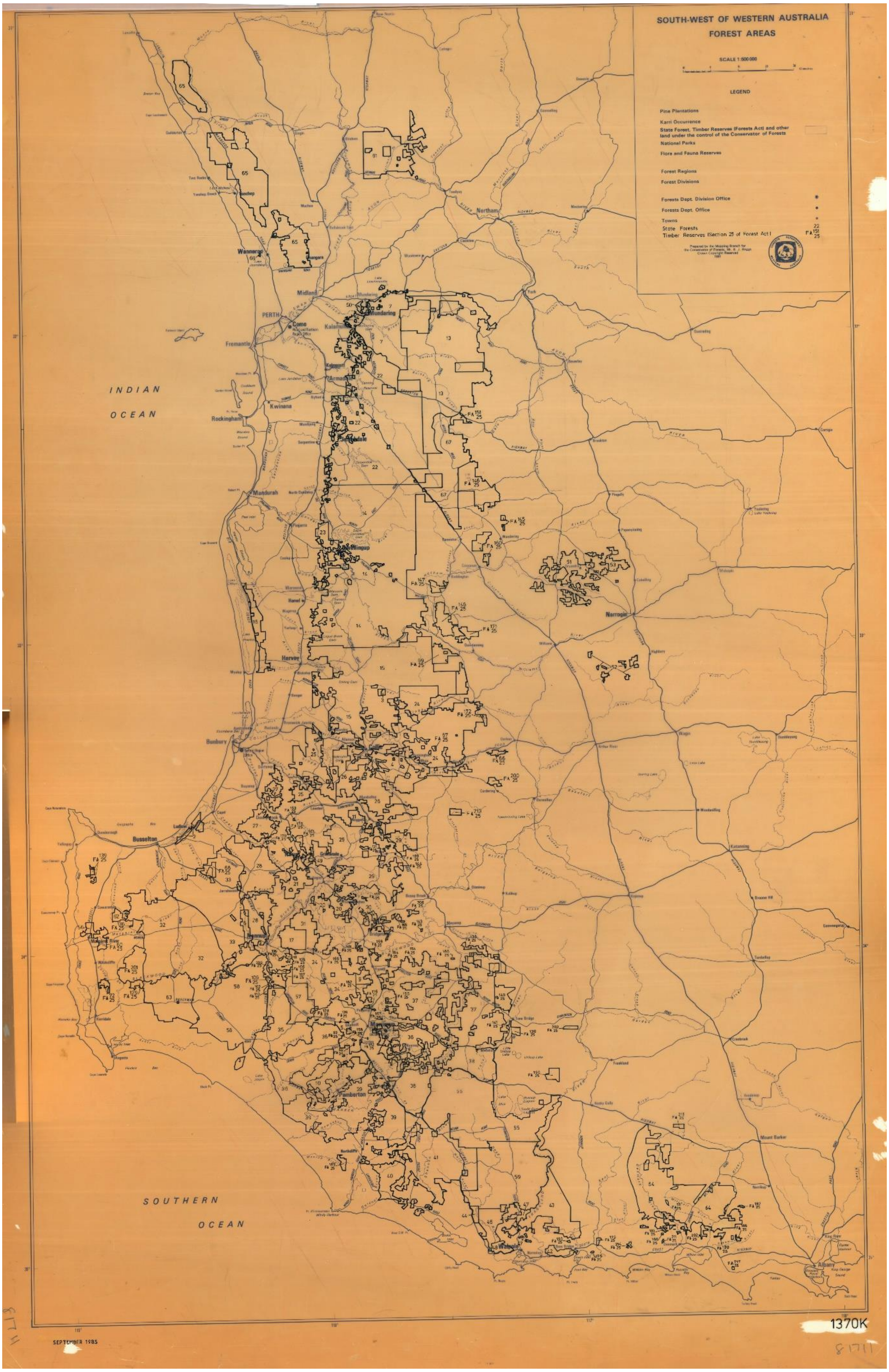
We commence with a discussion about the establishment of the State Forests and Timber Reserves, and then see where time and circumstance take us from there…

Front cover photograph:

Remains of the Congelin tree lookout (photo courtesy of Charlie Myres)

Chapter One

State Forests



SOUTH-WEST OF WESTERN AUSTRALIA
FOREST AREAS
SCALE 1:500 000
LEGEND
Pine Plantations
Karri Occurrence
State Forest, Timber Reserves (Forests Act) and other land under the control of the Conservator of Forests
National Parks
Flora and Fauna Reserves
Forest Regions
Forest Divisions
Forests Dept. Division Office
Forests Dept. Office
Towns
State Forests
Timber Reserves (Section 25 of Forest Act)
Prepared by the Mapping Branch for the Conservator of Forests
Crown Copyright Reserved
INDIAN
OCEAN
SOUTHERN
OCEAN
PERTH
Fremantle
Midland
Mundaring
Armadale
Kwinana
Rockingham
Mandurah
Pinjarra
Harvey
Bunbury
Busselton
Northam
Narrogin
Pemberton
Albany
Mount Barker
SEPTEMBER 1985
1370K

This seemingly incomprehensible map (from 1981) shows the delineation of State Forest and Timber Reserve assets in Western Australia. It is suggested that the reader obtains an electronic, easily 'zoomable' copy (free of charge) of the map so he or she can enlarge it as they wish by going to the following location and downloading it:

https://library.dbca.wa.gov.au/#record/148265

After the initial shock of seeing this packed-with-information document, the reader will begin to notice two things; (i) defined areas marked simply by a number (these defined areas may also have other indicated areas within them that carry no markings - those undescribed areas are private property), and (ii) other defined areas accompanied by the symbol;

F⩚

The symbol defines the designated area as government property (the arrow), and the 'F' that it is a forestry asset.

Next to that symbol are two levels of other numbers - the lower of the two is always '25' which relates to Section 25 of the Forests Act (the section governing timber reserves) and the upper is the official number of that particular timber reserve.

Why state forests can get away with just a simple number and timber reserves require that degree of cartographic rigmarole is a bureaucratic mystery the author has not the slightest interest in finding the reasons for but, in a nutshell, that's what the reader is looking at on the map - all Western Australian State Forests and all Timber Reserves in the south-west of WA as of 1981.

Numbers were issued chronologically, so not only does the map show you where the proclaimed State Forests are, it also gives you a clue as to how today's 'finished product' was assembled.

Coupled with the following list of State Forest establishment data, that 'clue' may be fleshed-out.

SF Number	Unofficial Name	Created	Original Acreage
1	*Stirling Estate*	27/6/19	1406
2	Ludlow	27/6/19	1736
3	Harris River	15/5/20	537
4	Collie	29/10/20	35840
5	Jarnadup	12/11/20	700
6	Cambray	15/11/22	6326
7	Mundaring	28/11/24	77400
8	Karramindie	8/5/25	1930
9	Yornup	4/9/25	6650
10	Big Brook	27/8/25	7200
11	Noggerup	13/11/25	7550
12	Coolilup	26/11/27	1750
13	Mundaring*	30/6/26	220510
14	Dwellingup	6/8/26	337580
15	Harris River*	23/7/26	186276
16	Myalup	23/7/26	3846

17	Ellis Creek	6/8/26	8335
18	Nannup	6/8/26	1108
19	(not proceeded with)	-	-
20	Greenbushes	3/6/27	14190
21	Mullalyup	18/3/27	17425
22	Jarrahdale	26/10/27	282800
23	Marrinup	22/6/28	17550
24	Muja	22/6/28	134300
25	Wellington	22/6/28	56460
26	Mumballup	22/6/28	59200
27	Boyanup	22/6/28	47100
28	Jarrahwood	22/6/28	89360
29	Wilga	22/6/28	134900
30	Hester	22/6/28	11390
31	Nannup*	21/12/28	17730
32	Blackwood	19/4/29	166130
33	Millbrook	19/4/29	120040
34	North Donnelly	19/4/29	82850
35	Barlee Brook	19/4/29	69800
36	Donnelly	19/4/29	95300
37	Palgarup	19/4/29	193100
38	Tone	13/4/29	133400
39	Warren	19/4/29	115700
40	Gardner	19/4/29	22950
41	Shannon	19/4/29	69000
42	Walpole	19/4/29	7890
43	Frankland	19/4/29	6077
44	*(north of Walpole)*	19/4/29	4252
45	Boranup	19/4/29	5930
46	Gladstone	9/10/31	5760
47	West Frankland	9/10/31	2490
48	Keystone	9/10/31	5440
49	East Kirup	9/12/32	3446
50	Zamia	10/8/34	2575
51	Lol Gray	7/12/34	12400
52	Highbury	27/9/35	3372
53	Montague	28/6/35	6476
54	Greenmount	1/2/35	6180
55	Lake Muir	21/10/38	171750
56	Keenan	23/8/40	3580
57	South-East Nannup	16/7/43	25500
58	Milyeannup	20/8/54	119000
59	Granite Peaks	29/4/55	142000
60	Hamel	7/1/55	152
61	Julimar	6/7/56	81500
62	North-East Margaret River	21/6/57	3500
63	South Blackwood	11/10/57	61500
64	Denmark Catchment	28/3/58	95900

65	Gnangara - Moore River	6/3/59	148200
66	*Chudalup*	3/4/59	2200
67	Youraling	31/5/63	94500
68	*Lake Leschenaultia*	3/5/63	815
69	*Mullaloo*	22/11/63	1770
70	*Peel*	7/5/65	1733

*** = Additional area to an already existing forest with the same name**

Lane Poole
Kessell
Stoate
Harris

As can be seen, sixty-nine areas of varying size have over the years been declared as state forest. As this was a case of the Lands Department administratively carving areas out of the whole and giving them a classification - and this being done by surveyors who have a natural proclivity for thinking in terms of straight lines (unless a natural feature like a watercourse or coastline can be incorporated into the designated boundaries), they are very much bureaucratic entities which will have no direct relationship with how the new 'owner' will choose to sub-divide them. Thus, as the Forests Department would go on to create divisions and districts which best suited the terrain and their own internal requirements, a State Forest is something the reader should know about but not fret about - their designations and especially their boundaries (when directly abutting another State Forest) play no real part in the Forests Department story once having been created - forestry imperatives are not held hostage by arbitrary 'internal' straight lines created by the Lands Department.

For interest, in the above list the reader can see which forest areas came into existence under which particular Conservator's reign courtesy of the shading.

Note should be made that apart from Karramindie (SF 8 - the only state forest declared in the Goldfields), no official name was ever legislated for these areas despite unofficial names having a degree of common usage within the Forests Department. The names in red, italicised lettering have an even vaguer linkage to the areas they purportedly represent, and do not appear on any Forests Department listing of the forests (they are instead defined in terms of block names or similar).

'Original acreage' is in most (if not all) cases <u>not</u> the area represented on the 1981 map - small additions and excisions have been made over time, and the full history of these adjustments are recorded in ledgers retained in the DBCA Library archives should the reader ever be interested in pursuing the story of changes to any particular forest's boundaries.

We come now to the subject of Timber Reserves, and the best place to open is with Section 19 (Classification of Forest Lands) of the Forests Act:

19. (1) The Conservator shall, with the approval of the Minister, cause a classification of the forest lands of the State to be made for the purpose of determining which of the lands are suitable to be –

(a) permanently dedicated as State Forests: or

(b) reserved from sale as timber reserves

(2) The Conservator shall cause plans to be prepared of the lands so classified showing the quantity of timber growing thereon, and indicating those portions which, in his opinion, do not carry or are not likely to produce marketable timber.

In effect, a Timber Reserve can be thought of as a way of putting a claim on the lands in question which prevents anyone else getting their hands on them. Decisions may be taken at a later time (whether envisaged at the declaration time or not) to turn them into a State Forest - with all of the preparatory and ongoing work such a designation requires by law. Looking at the map the reader can see that today's 'timber reserves' are, in the main, patches of bush isolated from the main, contiguous band of forest area. In many instances today they are further named as 'nature reserves', but at the time it was no doubt hoped that over the years additional lands may have been acquired which might have made some of them part of a larger whole.

In the case of a timber reserve declaration;

"***The Governor may, by Order in Council, reserve from sale any Crown land as a timber reserve; and may revoke in whole or in part any such reservation***" (Section 25 (1) of the Act).

This is parliament-speak for saying that timber reserve declarations are matters which do not require a parliamentary vote - just the Minister agreeing to say what the Conservator asks him to say and putting the procedural necessities in place. State Forest dedications *do* require parliamentary scrutiny and, ultimately, legislative acceptance.

So, that is the story of how lands came to be in place waiting for the Forests Department to 'do their thing'. The next chapter talks about how the Forests Department then started doing that 'thing'.

Chapter Two

The Forests Department goes to work

The Forests Department's job was to take charge of the afforested lands, repair the damage wrought by years of indiscriminate logging practices, and create a sustainable and healthy resource that would - in theory - last for perpetuity. To fund this multi-decade endeavour the Act provided a revenue source which would allow this to occur. From the money collected by the Crown (i.e., the state government) from forestry activity, three-fifths (60%) would be allocated to a government 'cost centre' called the Reforestation Fund. This would be the Department's 'piggy bank' it would support its activities with. A consequence of this model's structure is to tie the Forests Department to the health and wellbeing of the industry it will get its funds from - when it does well, the Department does well. A good idea in theory, providing no Great Depressions ever come along…

A footnote to this story is that in 1954 (still many decades in the future at this stage) that figure would be negotiated upwards by then Conservator Bluey Harris to nine-tenths (90%). The ruthlessness and persistence of Harris as a 'deal-maker' is covered more fully in my earlier book.

So, let us unpack the trail of this money from Forests Department bank account right back to its genesis. A product is sold and (mostly) shipped away from Western Australia at a port - after the producer firstly pays the government for the pleasure to do so. The product got to the port by being transported on the Western Australian Government Railways (WAGR) network from a sawmill either adjacent to the WAGR network or somewhere very close to it and is a long, long way from the aforementioned port. It was turned into 'product' after having first been logged and then brought to this sawmill from 'the bush'. The reader will appreciate at this point that, from the consideration of revenue creation, not all forest is necessarily created equal. If there is no sawmill, and there is no railway line waiting to be utilised, then there is no money coming from that tree. It's just a tree.

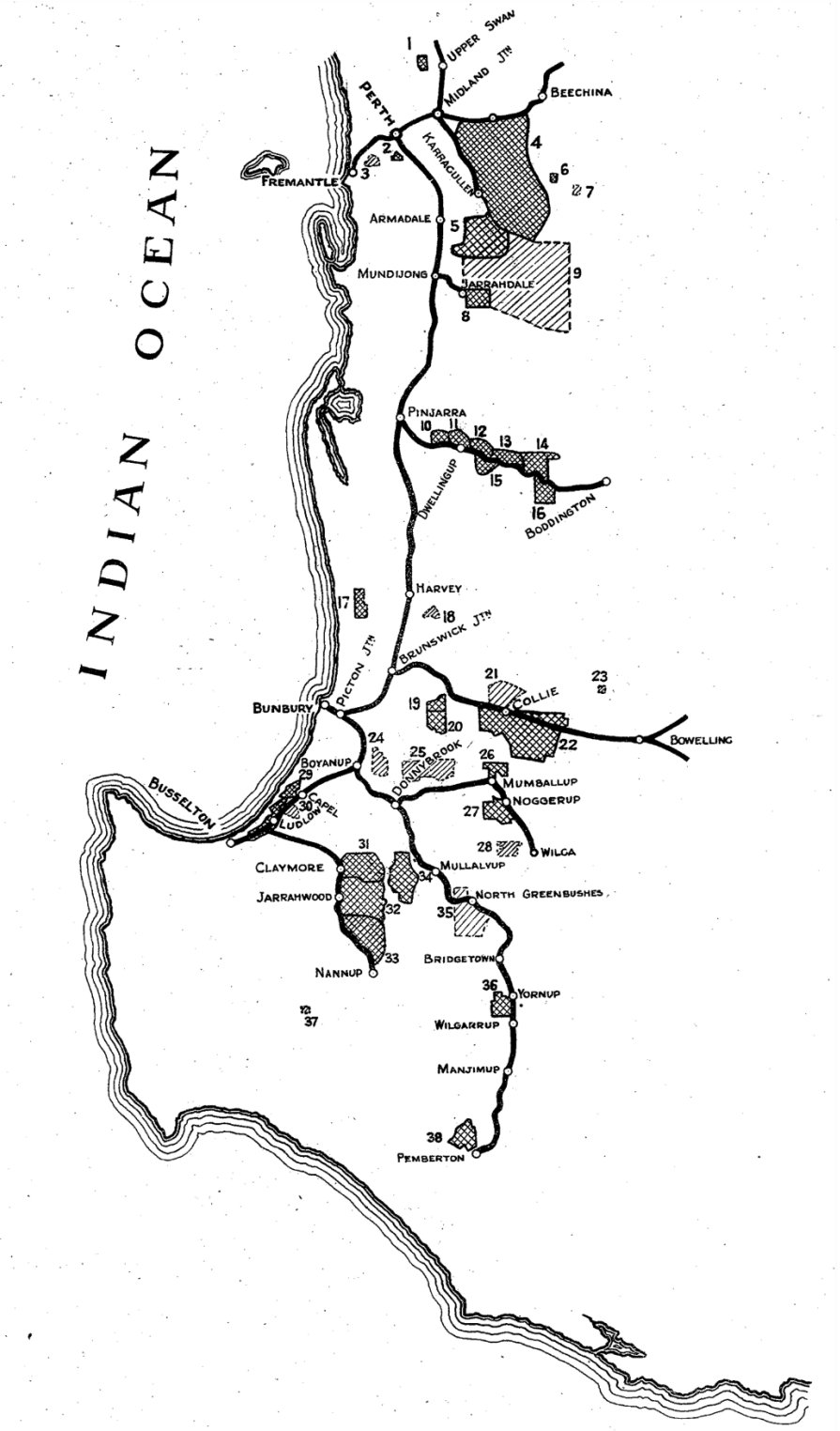
This point was made very succinctly by then Conservator Kim Kessell in his opening remarks of the 1925-26 Annual Report:

It is not sound economic policy for the Forests Department to leave accessible heavily cut-over forest near railway lines and large centres of population and spend public funds on remote forests, merely to avoid raising an issue which must be finally settled sooner or later. The following extract from "A Discussion of Australian Forestry" by the late D.E. Hutchins (page 2) sets out the considered opinion of the most eminent Forester who has made a study of Australian conditions:-

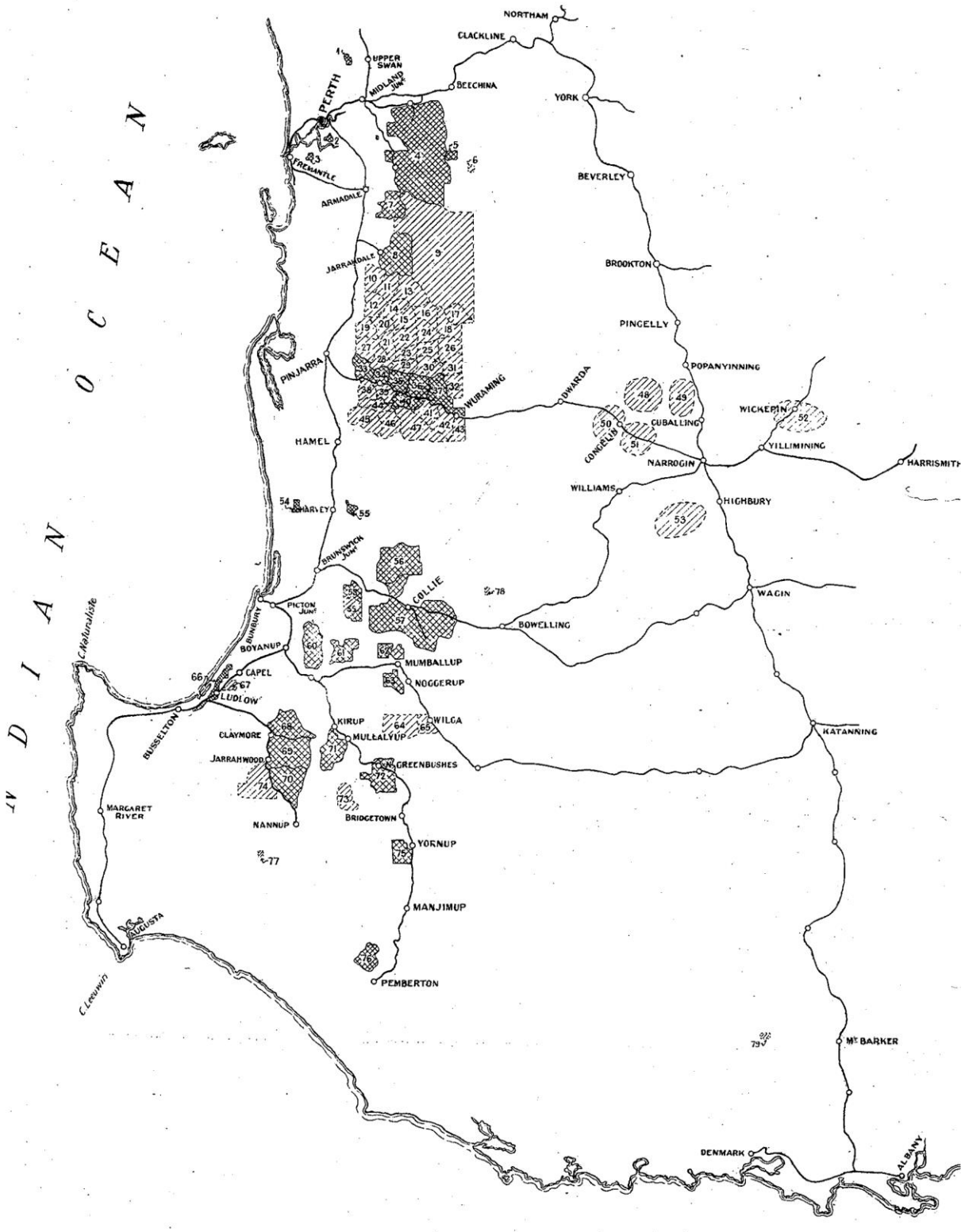
"Not long ago an eminent French forester was showing me on a large-scale wall map the situation and value of the various State forests in France. He wound up a very interesting talk on the subject with this remark: 'These forests, said he pointing to those near Paris, 'financially are carrying on their backs those others' pointing to the Alpine forests. It is not that many of the Alpine forests are not much better than those near Paris, but it is the timber on the spot which gives their value to the suburban forests of Paris. Thus, in demarcating forests it may be laid down as an axiom that the first consideration is that of accessibility. Here the want of forest demarcation has hit the Eastern states of Australia severely. Of the four million acres which Victoria has set aside as national forest, not much above a quarter of a million is of much economic use today. This position is being rectified, but necessarily at some cost. The softwood forests are being laid down in accessible situations, and some of the accessible hardwood is being brought back. We have seen that Forestry may give employment to 30 men as against one man on sheep, but this is with the proviso that the forest timber is close to its market. It cannot walk 1,000 miles to its market, feeding itself on the way like a flock of sheep, yet this is the popular 'backwoods forest' idea of Australia.

The Forests Department needed (under the Act) to have parliament-approved five-yearly 'Working Plans' for the areas under its control. The following are two maps (from the 1926-27 and 1927-28 Annual Reports) showing the state of Working Plan development at that time:

1926-27:



1927-28:


NORTHAM
CLACKLINE
UPPER SWAN
MIDLAND JUNC
PERTH
BEECHINA
YORK
FREMANTLE
ARMADALE
BEVERLEY
JARRAHDALE
BROOKTON
PINGELLY
PINJARRA
POPANYINNING
WUBURMING
DWARDA
WICKEPIN
CUBALLING
CONGELIN
YILLIMINING
HAMEL
NARROGIN
HARRISMITH
WILLIAMS
HIGHBURY
HARVEY
BRUNSWICK JUNC
COLLIE
WAGIN
PICTON JUNC
BUNBURY
BOWELLING
BOYANUP
C. Naturaliste
MUMBALLUP
CAPEL
NOGGERUP
LUDLOW
BUSSELTON
KIRUP
WILGA
KATANNING
CLAYMORE
MULLALYUP
JARRAHWOOD
GREENBUSHES
MARGARET RIVER
NANNUP
BRIDGETOWN
YORNUP
MANJIMUP
AUGUSTA
C. Leeuwin
PEMBERTON
Mt BARKER
DENMARK
ALBANY
INDIAN OCEAN

They require a bit of explanation:

The lines on the maps are mainline WAGR tracks, not roads for vehicular traffic (which were far less prolific at the time than they are today - the reader needs to remember that this is in the infancy of motorised transport in Australia). The close proximity between planned-for areas of forest at that time and the WAGR network should be quite apparent. Cars and trucks and any roads they could drive upon were (a) rare, (b) a luxury, and (c) extremely primitive in terms of their capabilities.

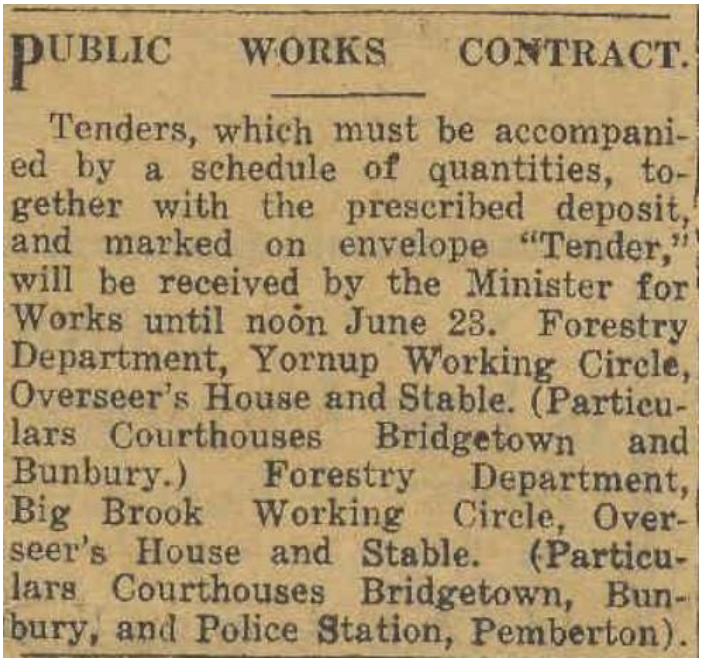
Cross-hatched areas are those where a Working Plan has been completed (and approved by parliament). Single-hatched areas are those where Working Plans were currently in preparation or awaiting parliamentary approval. They will become known as 'Working Circles'.

Numbering is from top-to-bottom on the map and does not equate to the Working Plan number used for the particular area. The numbers relate to an index of the plans on another page of the Annual Report. The use of different numbers for the same areas between the two years should be noticeable.

Each Working Circle is to employ one or more overseers and a variable number of men under the overseer's control to undertake the work required by the Working Plan for that area.

If the reader has taken note of the earlier section on State Forest declaration (or read my earlier fire tower book covering this time period), they will understand we are in a time when things are happening pretty quickly. The changes in only one year for the areas between the railway line heading eastwards from Perth (passing Mundaring) and the Pinjarra-Narrogin line further south should tell you that.

As mentioned, planned forestry activity had as one of its requirements a physical, continual presence of those doing that particular activity. As such, advertisements like the one below (from June 1925) were regularly inserted in the newspapers of the time:



PUBLIC WORKS CONTRACT.

Tenders, which must be accompanied by a schedule of quantities, together with the prescribed deposit, and marked on envelope "Tender," will be received by the Minister for Works until noon June 23. Forestry Department, Yornup Working Circle, Overseer's House and Stable. (Particulars Courthouses Bridgetown and Bunbury.) Forestry Department, Big Brook Working Circle, Overseer's House and Stable. (Particulars Courthouses Bridgetown, Bunbury, and Police Station, Pemberton).

Whilst not claimed here to be in any way exhaustive, this is a listing of Working Circles which were associated with tender advertisements for overseer's accommodation and stabling that the author has uncovered for this early phase of forestry operations development, presented on a yearly basis:

1925: Bartons, Cuballing, Karragullen, Gnangara, South Perth, Collie SW ('Mungalup'), Collie N, Yornup, Big Brook

1926: Noggerup, Mumballup, Shotts, Harvey Weir

1927: Jarrahdale E, Dwellingup, Mullalyup, Collie-Cardiff, Claymore

1928: Worsley, Mundaring Weir, Kirup, Wuraming, Curara, Dwellingup (additional to the 1927 advertised building work), Montague, Bombala, Congelin, Contine, Duncans, Mt Wells, Cambray (3 houses), Highbury

1929: Cundinup

1930: Myara, Lesley, Clinton, Lyalls Mill (2 houses), Hovea

1932: Keenan

Some tenders appeared in newspapers several times over successive months - the year quoted here may not be the year in which erection was completed and/or occupancy commenced. Tented accommodation was widely used by the Forests Department during the 1920s - a Working Circle may have conceivably gotten under way before all required permanent buildings were constructed.

Just who was envisaged to be occupying the isolated houses springing-up around the forested area was addressed in this following newspaper article from August 1925:

JARRAH REFORESTATION

Positions for Bushmen

The Conservator of Forests (Mr. S.L. Kessell) is of opinion that an interesting indication of the activities of the Forests Department was contained in an advertisement which had just been issued. Applications were being invited for the positions of district foresters, assistant foresters, and resident overseers. The positions of forester and assistant forester as advertised showed very little departure from the accepted classification of service, except that salaries were slightly increased, but the position of resident overseer was a recent development made necessary by the inauguration of reforestation work. The department was endeavouring to obtain the services of thoroughly practical men with experience as bush workers in the jarrah forest. These men would be provided with houses in the forest, and it was the intention of the department to supply a limited area for a small orchard and grass paddocks. This concession should prove an added inducement to take up the work when considered in conjunction with the wages offered.

"The basis of reforestation work," said Mr. Kessell, "must be the complete economic utilisation of mature timber, and the ringbarking of over-mature, useless trees and unmarketable species. If tree-marking and ring-barking are to be carried out with a minimum of waste, the men responsible for the

work - who will be the resident overseer, in charge of an area of 5,000 to 10,000 acres, must be a practical man who has experience in falling and sleeper hewing. The expansion of regeneration work in the jarrah bush should provide openings for men who, after following bush occupations for many years, have a desire to settle down in permanent work where they can live in reasonable comfort with their wives and families. The department cannot afford to sit back and postpone action until the apprentices now in training are ready to take over the more responsible positions."

As we will discover shortly, the key words in this article are *"…with their wives and families."*

Often referred to in historical works on the Western Australian forests as 'hilltop lookouts', the truth is a bit more complex than that romantic term. As Don Stewart describes in his 1929-69 treatise of forestry administration (p.13):

Each overseer was provided with a house, with the shed and stables in a cleared and pastured paddock, together with a horse, spring cart, saddle, and tools etc. He attended fires on horseback with a rake, axe, waterbag and rations. The house was desirably located on high country giving some view over the forest under his control. More frequently however, it was located on lower ground where well water could be obtained, and arable land cleared for a horse and cow paddock. Usually two houses were grouped together to serve two adjacent blocks, and the two occupants worked together, or with an employee.

Funds were too scarce for provision of any but the most essential of new houses.

It was an opportunity however for the shifting of houses at minimal cost, as practically all expenditure was on labour. Many additional houses were purchased at very low cost by acquisition from abandoned group settlement locations, particularly where they had been added to the property of an adjoining settler who was already housed.

It is time to pause briefly and to look at just where we are, and where we're going…

Chapter Three

Evolution and Inevitability

Although written in a style many modern readers will no doubt find jarring (or perhaps merely at best, quaint), the following section from a newspaper item printed in July 1929 (so, almost four years since the earlier Kessell interview reported above) will give the reader some idea of how things are moving on. The article is by someone using the *nom-de-plume* "Seedling"; an example of the sort of garrulous, roving correspondent quite popular in those times who would go off on jolly, rambling adventures to places far, far away and wax lyrically and with much colour about all that was seen and experienced to an enthralled urban readership:

Presently in a clearing on the roadside, we came to some neat and comfortable four-roomed cottages, with bathroom and wash-house all complete under one roof, each house set in a good-sized block of ground; and a well, supplying water for all such dwellings represent the Forest Department's new move to create village settlements, to provide permanent homes for their workers in the bush, to give them and their families the social intercourse and the educational facilities that would be impossible if each man were to live in lonely isolation in the heart of the forest.

"Is it true that a man can't get a job in the Forests Department unless he has five children?" was the question asked anxiously by a sturdy workman in the bush. The strong, healthy forest workers are noted for the size and bonny looks of their families. Two of them have recently been racing neck and neck at the head of the field with ten fine children each, but now one of them has proudly forged ahead with an eleventh.

The Forests Department rejoices over all this, because the more the children on these small settlements, the easier is it to obtain a school for them. If there be already a school in the district, that is all to the good.

Also - and in less flowery terms, the time period is described in the 1928-29 Annual Report:

A "Block" of 5,000 to 15,000 acres, depending on quality classes, has been adopted as an administrative unit and each Block is placed under the control of a resident working overseer who himself carries out silvicultural and fire-control work on his own Block, with the aid of one or more casual employees.

A number of Blocks may be united under the one Working Plan and the same central fire-control organisation, but the overseer is encouraged to regard the care and protection of the whole forest on his Block as his particular responsibility. The number of Blocks on which work has started in the Jarrah forests is 48, and 58 houses have been erected for the accommodation of overseers and workmen.

As a first measure, when it is proposed to commence operations on any Block or group of Blocks, roads of access are opened up. Old tracks or tramway formations cleared by timber getters are made use of as far as possible. The length of bush tracks cleared and maintained for traffic exceeds 1,000 miles. Steps are also taken at an early stage to connect overseers with fire lookout towers and district offices by bush telephone lines. One hundred and eighty-seven miles of telephone line have been constructed and the system will be considerably extended during the coming year. An economical type of tree-line construction with earth circuit adapted to local conditions has been standardised and is giving excellent service.

While adhering as far as possible to the principle that the overseer shall be provided with a comfortable house, small cultivation paddock and orchard on his own Block, it has been found necessary to group the buildings to an extent so that school facilities for his children shall be available within reasonable distance, and opportunities for social intercourse provided. Four of these forest settlements have been established to date.

In time the Forests Department settlement would become the standard way that accommodation would be arranged as (a) the forest road network underwent ongoing improvement and expansion, (b) cars and trucks would become more commonplace, and (c) fewer workers from an earlier era who still yearned for a life of contented, comparative solitude could be sourced from the available pool of potential employees to undertake such an existence. It also needs be mentioned here that (perhaps in keeping with the norms and attitudes of the day) wives - despite not being mentioned *at all* in these above-quoted written passages - are involved in this equation too, as a time-honoured maxim of men who have successful marriages is that if your wife isn't happy, you'll never be either.

A case, perhaps, of the best-laid plans of mice, men, and Conservators running up against reality…

The author knows of another forestry researcher - a former Forests Department officer (who has already published books and articles) who has an interest in these settlements. As such, I will refrain from any further discussion of this particular topic here in hope of one day getting to read an authoritative book of his on the subject. Should that fail to ever appear, I will consider attempting to fill the knowledge gap myself at a later date.

There are other parts of the jigsaw beginning to collide with the direction the Forests Department had been taking since its inception. One of those is the whole concept of individual Working Plans. A useful idea a few years previous when land granted to the Forests Department was minimal, widespread, and it was exceedingly important from a public relations point of view to show those sceptical as to why a Forests Department should even be in existence (and gave such people a parliamentary vehicle to peruse, nit-pick, and quibble), Working Plans needed to be renewed at five-yearly intervals under the Act. By the late 20s, not only were plans being needed for new areas as they progressively came online with ever more State Forest being proclaimed, but the existing areas were now requiring new drafts to cover their next five years. We are rapidly getting to the point where the whole Working Plans section could crash and burn simply because of the amount of new and repeating work being required to satisfy administrative necessities. The reader is asked to look again at the map from 1927-28 shown a few pages above - a total of twenty-three new proposed administrative areas have been added to the map in the small area between Jarrahdale and Wuraming in the course of one year alone; with each of those needing a detailed multi-page plan approved by parliament as well as houses, men, horses, saddles, spring carts, paddocks and orchards, etc. The situation is quickly getting out of hand.

Returning back to something shown previously in this book (p.7) as an example; fourteen State Forests totalling 1,092,419 acres were proclaimed just in the month of April 1929 alone - using an average Block size of 10,000 acres as given in the 1928-29 Annual Report, this is a potential 100+ Working Plans, men (or more correctly, families), houses, horses, etc. The Forests Department risked drowning in its own success if it didn't undergo a rethink.

Fortunately, Kim Kessell was an extremely able and far-thinking Conservator, and in 1927 and 1929 respectively the first General Working Plans for Karri (Working Plan No. 40) and Jarrah (Working Plan No. 60) were made as a way of broadening the plan concept into something more attuned to the ever-increasing lands coming under Forests Department control. The original Lane Poole idea for localised Working Plans would gradually lapse and be replaced by a wider planning regime using districts and divisions.

Something often not given sufficient weight in modern accounts of these times are the massive upheavals wrought by the years immediately preceding and during the Great Depression, and the long-lasting effects that followed it. Don Stewart (born 1907) graduated from the Australian Forestry School in 1929 and joined the Western Australian Forests Department the same year. A better forestry man to describe the period in his work '*Forest Administration in Western Australia 1929-1969*' would be hard to find. Don wrote his manuscript when the metric system of measurements was being introduced in Australia, hence the references here to units not used in the times he is describing:

Following the peak production year of 1927-28 when some 596,000 cubic metres of sawn timber were produced, of which 206,736 cubic metres were sleepers, a fall in export orders caused reduced production in the ensuing two years. The industry then employed some 5,000 men. The calamitous drop to less than 141,600 m^3 in 1932 and 1933 led to widespread unemployment and the closing of more than 60 per cent of the sawmills, while those remaining operative (17 on Crown forest including six run by the State), worked part-time for appreciable periods. Gradually as confidence returned and orders increased the mills re-opened and production increased from 1933 to 1938 when 404,976 m^3 were produced. In 1929-30 most of the hauling was by horse teams or, in the big timber country of the Warren district, by steam haulers on which heavy steel cables were pulled out by horses or bullock teams. Many of these teams were disbanded when the mills closed and contractors sought other work. The re-opening of the mills saw the beginning of tractor haulage in 1936 and 1937 particularly at sawmills previously closed for some years as at Palgarup and Mornington (Millars) and Yornup (Bunnings).

As Forests Department revenue was closely dependent on the prosperity of the timber industry and varied with its consumption of logs from Crown sources, there was a calamitous drop in income in 1931 and the ensuing years. The Reforestation Fund was rapidly exhausted, employees were retrenched, and many officers and timber inspectors were retrenched or offered wages employment at a lower rate. New appointments ceased and salaries were cut 20 per cent.

The final colliding piece of the jigsaw to be mentioned is really a consequence of the two other pieces just discussed - to wit, the rapid increase in the number of 'proper' fire towers which started at this time (and are covered in depth in my earlier fire tower book).

However, the danger of forest fires doesn't go away just because of economic catastrophes, over-worked Working Plans departments, or organisational restructuring, so if you're no longer seeking to pursue a policy of isolated, individual overseer's houses scattered through the bush - with localised fire detection intended to be one of their functions, it follows logically that this work will need to be performed by other means. A form of 'cause-and-effect' situation if you will.

Chapter Four

Dryandra – a ‘case study’

The Great Southern Railway

Prior to the construction of Fremantle Harbour the town of Albany, some three hundred miles and a five day coach journey to the south, was the main deepwater port for the colony of Western Australia. The lack of adequate port facilities with good transport links to the growing agricultural districts was hampering development in the colony. The building of the Eastern Railway and other public works was stretching the colony financially. Proposals were therefore put forward in 1880 to build a railway under the land grant principle to connect the port of Albany to the rest of the colony. In September 1881, the Colonial Secretary requested the Legislative Council to vote £600 for the purpose of securing information concerning the country through which the railway would pass.

Mr. Fraser, the Surveyor General, suggested in a report: "...that in consideration of European Capitalists constructing a railway of similar class to the New Zealand lines of 3 ft. 6 in., and undertaking settlement of not less than say 5,000 people in the colony, the Crown should grant in fee two million acres of land to be selected by them between Beverley and King George's Sound."

Numerous offers to construct the line came forward. A Tasmanian Syndicate offered to build the line provided the Government would guarantee 3.5% interest on £1,000,000 for 25 years. The net profit above 7% on capital would be divided between the Government and the Syndicate. The Government was to have option of purchase at any time on giving one year's notice. Much as the Government wanted the line, the offer was considered to be too one-sided.

Colonel McMurdo offered to construct the line to Albany then on to the South Australian Border in return for 10,000 acres per mile. Mortgage bonds were to be issued to the value of £4,000 per mile upon which the Government should guarantee 3% interest for 30 years. In lieu of stamp duty and taxes, the Government was to receive 10 per cent net earnings yearly. The Company was also to bring in 40 selected immigrants per mile of line. This plan, however, lapsed.

The offer of Sir Anthony Horden a wealthy New South Wales business man of great vision, and one who had untold faith in the possibilities of Western Australia and of the Albany area in particular, was finally accepted. Mr Hordern formed the Western Australian Land Company in London with a capital of £300,000 and a debenture issue of £500,000 to build the line from Albany to the then Government Railway Terminus situated at Beverley. Unfortunately he died aboard the mail steamer "Carthage" on his way back from England in 1886. Thus he did not live to see the benefits gained from his mighty efforts. His name has been perpetuated in Albany by the erection of a red granite column in a conspicuous place at the intersection of four main arteries in the town. He had in mind many great schemes including the erection of a large College of Agriculture and an extensive experimental farm; such was his faith in the future of the area. Mr. Hordern's contract was transferred to the Western Australia Land Company by the Legislative Council in 1888. The terms of the concession were that the Company was to receive a subsidy of 12,000 acres of land per mile, to be selected east and west of the line within a belt 40 miles wide on each side. A further proviso limited the concession to only one half of the frontage for 20 miles of continuous length. The Company was also required to bring in 5,000 English immigrants, and on the landing of each one the Company was to receive £10 per head. The line was to be from Beverley to Albany - a distance of 243 miles.

Construction of the Line

Millar Brothers of Melbourne secured the contract to build the line at a cost of £1,550 per mile. The first sods were turned at Beverley and Albany simultaneously on 20th of October, 1886 by Lady Broome and the Governor Sir Frederick Broome respectively. The line was constructed to 3' 6" gauge using 46lb rails with a ruling grade of 1 in 50. The line was constructed through generally undulating country; therefore there were no major civil engineering works on the line. From Albany the line rose to 1315 feet north of Narrogin before falling to 649 feet at the northern terminus at Beverly some 241 miles from Albany.

Work proceeded at a good pace although the loss of two vessels carrying materials slowed things up to a certain extent. The final spike was driven on 14th of February, 1889 at a point 122 miles from Albany by Mr T.W. Powell, Chairman of the WA Land Company. It is recorded that the first trial passenger run took place from Albany to Mt. Barker on 13th of April, 1889. A number of passengers were invited to make the return trip free of charge.

The official opening of the G.S.R. took place on 1st June, 1889. A special train left Albany on 31st of May, arriving at Beverley next morning. A train conveying Governor Broome and party arrived from Perth about the same time and both trains coupled together and travelled to York where a lavish banquet had been arranged. Shortly after the line was opened an attempt was made to derail the mail train between York and Beverley on which Lady Broome was travelling. A woman was later arrested in connection with the incident. However she was considered to be of unsound mind.

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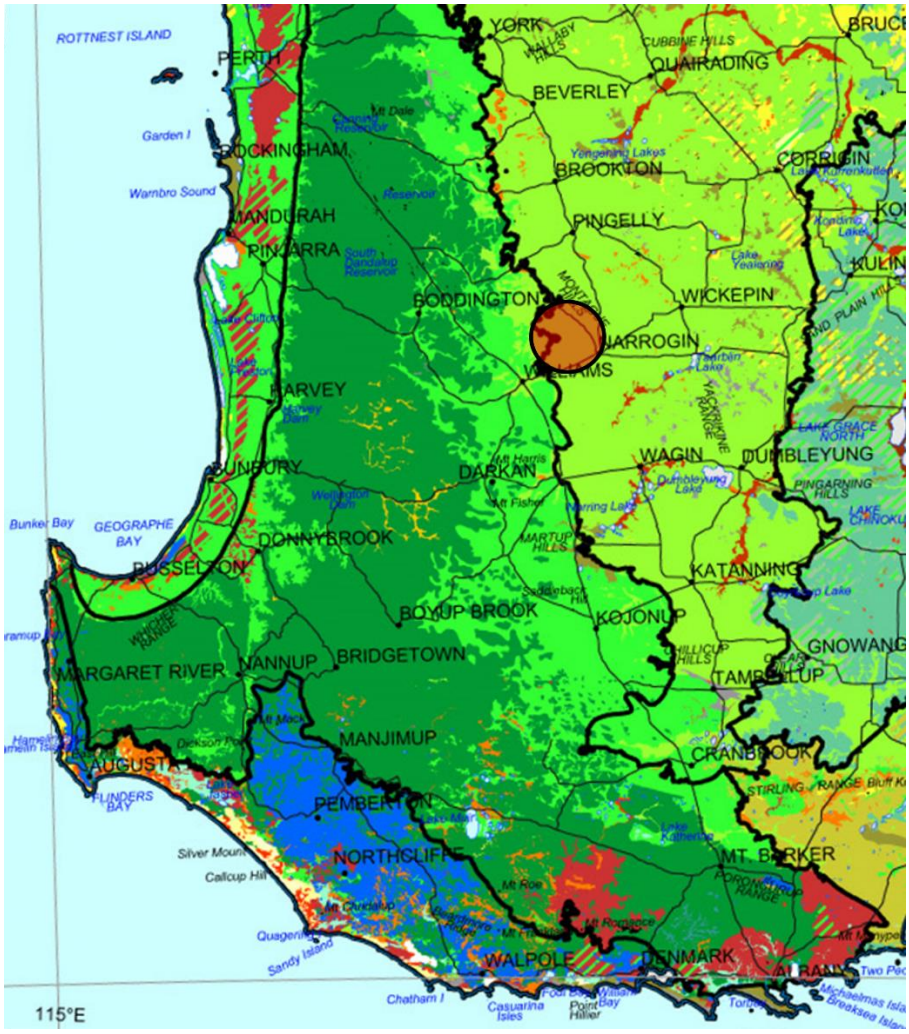
For reasons the author has never been able to work out, discussion about the Dryandra area from a fire lookout perspective has always seemed to involve a good deal of confusion emanating from any non-Western Australians the author has communicated with about the topic over the years. Unsure if this is congenital among all non-Western Australians or not, I have chosen to make the explanation of this region's subsidiary lookouts quite a deal more holistic than would otherwise be needed with just Western Australians for the benefit of any Easterners reading this too - hence opening with notes on the creation of the Great Southern Railway. The reason for that should soon become clear.

Also, choosing the Dryandra area as my "case study" will allow the reader to understand why they've had to patiently wait until page 23 of this book reading about things other than subsidiary lookouts, and wondering what all this is about - a number of the previously-canvassed topics will swirl through this localised discussion, and all will hopefully begin to explain itself.

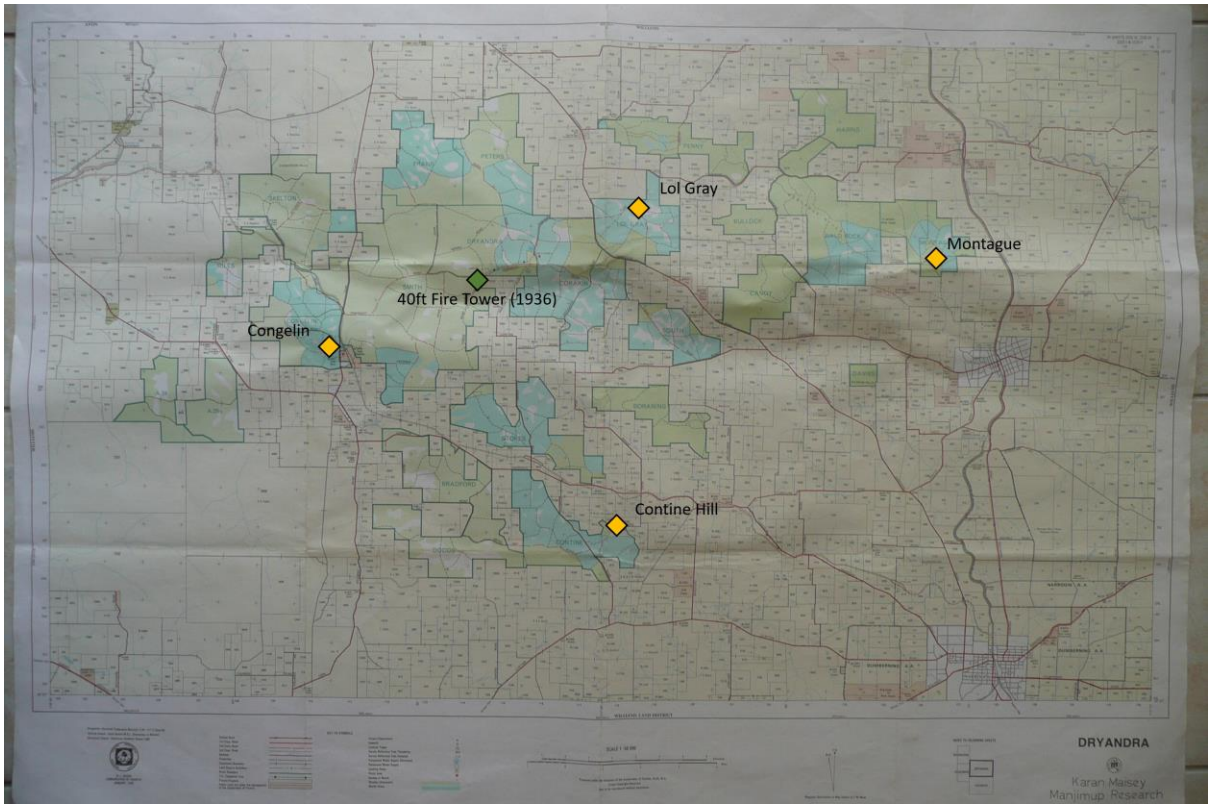
A portion of a map showing the (best guess) pre-European vegetation mosaic of Western Australia (using the work of J.S. Beard and others) appears below. The Dryandra area is the circled section north-west of Narrogin. The dark green of the map is jarrah/marri forest, the lighter green to the east is a thinner jarrah/marri woodland mixed with wandoo, and the still-lighter green-yellow to the east of that is a wandoo/other mixed gum woodland. The karri forest zone is the blue area. As can be seen, at Dryandra we are in an area vastly different to the jarrah forests of the Darling Scarp or the tall karri forests of the south, and the reader's thinking needs to be cognisant of that fact. Black lines show the demarcation of IBRA (Interim Biogeographic Regionalisation for Australia) regions.



As told in the piece above on the establishment of the Great Southern Railway (GSR), a significant amount of land was given away to the company either side of the line by the government in lieu of payment for the construction. This land would be on-sold to settlers, and so settlement for agricultural purposes developed rapidly through the woodlands both sides of the railway line. Being woodland and not forest, it would be far easier to clear than any jarrah lands. Also, this was an area home to a tree called the brown mallet *(Eucalyptus astringens)* which had been found by German scientists to have a very high tannin content in its bark which could be extracted for commercial use. Annual trade in mallet bark rose from 138 tons in 1903 to the industry's all-time peak of 20,700 tons only *two years* later in 1905. In total, nearly 130,000 tons of bark had been stripped and shipped by 1925. It was exploitation on a colossal scale, with agriculture following along behind after the land had been denuded of this form of windfall cash.

By the mid-20s only a patchwork of rocky higher areas poorly suited for agriculture (compounded in many cases by also being habitat to *Gastrolobium* and *Oxylobium* 'poison plants' - feared by settlers because of their lethal effects on non-native fauna if ingested) remained, and these were to become the subject of the newly-formed Forests Department's interest in the area concerning brown mallet.

A map of the area made at a time much later is shown below. It is a very useful map, as it shows the locations where brown mallet has been re-established over the years (shaded turquoise).



Returning to page 15 of this book it can be seen that the first overseer's residence (advertised at the time as "Cuballing") at Lol Gray would have been erected in 1925. Overseer's residences at Montague, Congelin, Contine Hill and Highbury (which covered other reserves south of the Williams-Narrogin railway - and is south of this particular map) were all advertised for erection in 1928.

In accordance with the practice of the time, all would be sited in such a way as to be fire lookouts for those areas under the resident overseer's control. Once connected by telephone, it can be seen that they would be able to act as a form of network by supplying any cross-bearings if the source of the fire activity couldn't be pinpointed from just the single, original sighting.

So, a very effective form of 'hilltop lookout' system as envisaged by Charles Lane Poole. Unlike the jarrah areas, these 'Blocks' would not be contiguous with one another, with definite (and obvious) cleared farming lands between them. The stark, regular outline of the reserve boundaries contrasted against the agricultural zones and could also assist in pinpointing any fires, as it would not take too long to become familiar with the layout of those straight-line boundaries compared with trying to 'read' an area stretching out in front of you if observing the jarrah forest from a lookout - where trees were 360° all around the viewing area, and stretching in all directions to the visible horizon with few discernible features to assist in positioning smokes.

Over three sessions between November 1991 and May 1992 (totalling 7½ hours) John Currie, a former forester at Dryandra, gave an extended interview about his life and times in the Western Australian Forests Department to the Battye Library. The section of that interview pertaining to fire lookouts at Dryandra is given below. It opens with the later 1936 40ft fire tower before turning to the originally-built subsidiary lookouts.

Not edited except to correct a few minor typographical errors, it is the most charming of reads, and an invaluable first-hand account from someone who was there at the time…

INTERVIEWER: *Let's move back into talking about Dryandra. If we move back to talking about Dryandra and forestry there, could you tell me about the system of fire towers at Dryandra and how they worked?*

JC: *Yeah, well the first fire tower that was put up* (Author's note: the 40ft standard plan lookout tower) *was made out of well-hewn timber. The forester there, Forester Smith who was Captain in the VDC* (Author's note: Volunteer Defence Corps)*, he squared all the timber with a broad axe, some of the beams out of wandoo mainly, some of the beams were 30 or 40 feet long and quite large in cross section, 10" x 5".*

The only thing wrong with the wooden towers - the white ants used to go up through the centre of the legs which were wandoo poles and they go right from the ground and tunnel right up to the top of the tower, so that in the end we had to switch to the steel towers. But it was a shame to see the old wooden tower beams which Forester Smith had squared with a broadaxe just pulled into a heap and burned up. It was really a crime I suppose you'd say, to see this beautiful wandoo timber burnt up.

INTERVIEWER: *Where was this particular tower?*

JC: *Well, the tower was erected on the highest point closest to the settlement. It was about three miles from the settlement you could see it from that lookout point, we could contact Contine which was about 13 miles across. There was an overseer's station there and he used to, or the wife as a rule used to take cross bearings and relay them by telephone to the lookout tower.*

INTERVIEWER: *Where were the other towers?*

JC: *The original idea was to erect houses on high points. And the overseer was in charge of five or six hundred acres and each house erected on these high points had a direction finder. Sometimes we climbed a tree and cut the top off and built a little platform on top and a direction finder was installed there.*

One of the women at the...do you want this bit? One of the women at the Lol Gray tower, regularly had a baby every year. So, she finished up with fifteen children. She was expected to climb the lookout and give bearings. I remember in one instance we queried Mrs. Giles' bearing. We said that bearing is not right Mrs. Giles. And she, Mrs Giles said "well if you don't like it, she said, I'm not going up that bloody tower again for you or anybody". And that was that. We had to take her word for it. I

can imagine her in the family way climbing up a ladder of about, well I suppose it would be 20 feet off the ground, or 30 feet, and taking bearings from a direction finder on top.

INTERVIEWER: *Can you describe the fire tower at Lol Gray, the way it used to be?*

JC: *Well, the fire tower was erected on the highest point and it was put up on top of a powder bark wandoo, cut the top off and then built an enclosure with the tree itself forming the central point where the direction finder was located.*

(end of tape - new tape inserted)

INTERVIEWER: *You were telling me about the fire tower at Lol Gray and how it was built.*

JC: *Yeah, well the ladder was made from two fairly straight poles with steps let in to the poles. You had to climb up there and it had a railing on each side. When you got up the top you had to crawl through a hole onto a platform on top. And the direction finder was actually the top of the tree which had been cut off and the direction finder was screwed onto the top of the tree, actual tree. The platform on top was surrounded by, with wooden rails, to stop you falling off I suppose. Mrs. Giles didn't think that was very secure and she was, it was a bit of a job for her to get up when she was about nine months pregnant, just about ready to go into hospital to climb up this ladder and have to take bearings from the top.*

INTERVIEWER: *Why were the women given that role if there were children around to help?*

JC: *Well, most of them had young families, young children and actually the Lol Gray tower was the only one, no, no there was another one at Congelin, cut and made from a tree which had been cut off the top and a framework built with a platform, a wooden platform. And the direction finder was actually screwed onto the top of the tree.*

INTERVIEWER: *How did other women react to that role?*

JC: *Well, they didn't like it I can tell you. Particularly the outstations at Congelin and Highbury and Montague that's three of the distant outstations. They didn't like the idea of climbing up the tower to give bearings. It was a rather hazardous job.*

INTERVIEWER: *How did you know they didn't like it?*

JC: *Well, they'd naggle their husbands till they would leave the job or apply for a transfer. None of them particularly liked climbing up their rickety constructions and taking bearings.*

INTERVIEWER: *Was it a regular activity that these women would have to do? It wasn't just a one-off here or there?*

JC: *No, well we got quite a number of fires during the burning season. See, when the season opened, the farmers would all set alight to their clearings and there would be fires popping up everywhere around the area.*

INTERVIEWER: *Would you say that any of the foresters who worked with you or for you would have left because their wives would have been that upset with the process?*

JC: *Well, the overseer at Montague, we had to close that down because we couldn't get overseers with, that's married overseers, to stay for more than a few weeks before the wife would nag them to get out of it. None of them like the isolation of these outposts.*

INTERVIEWER: *Would you say that it was the isolation that they didn't like or was it their role that they'd have to climb this tower or was it a combination?*

JC: *Well, the two outstations at Montague and Congelin were built on, the houses were built on high points and miles away from anywhere, I suppose. The nearest town would be, at Montague would be five miles away. So that they were more or less isolated. Schooling is another point that is difficult to, for the children to get to school, until they brought in the school bus system. And they had to travel up to 30 or 40 miles to go to school, the central school in Narrogin. Originally these small schools scattered around with ten or twelve pupils and from and educative point of view weren't very satisfactory. And we had one at Dryandra who believed in self-expression. And if the children wanted to go out and play well, they just got up and went out. I went up there one day to see this particular teacher and he had one child inside and the rest were out in the bush playing (laughs). I won't mention his name.*

INTERVIEWER: *Did you say anything to this teacher?*

JC: *Well, yes, he was... We had to put him off and he came down by plane, but he finished up walking carrying his suitcase 13 miles I think it was to the nearest station. There were quite a few funny incidents with the school teachers in these isolated positions. The one at Dryandra said he came to me and said he couldn't possibly teach there because the children brought fleas and there were fleas in the school. So, he turned it in. He decided to give it away. I was that mad, I had to just let him pack his trunk and let him walk into the nearest siding which was 13 miles away.*

INTERVIEWER: *Did the children have fleas?*

JC: *Oh, some of the, the Dryandra school was the one of the first schools to take Aborigines. And some of the Aboriginal children had fleas. And the schoolteacher herself at the Dryandra school, the schoolteacher lived two or three miles from the school, and she used to come to school in an old T-model Ford. And her husband used to keep pigs and they had plenty of fleas. She brought a load of fleas with her every time she came to see us at Dryandra. And it got so bad that you had to de-flea yourself every time you got into bed. Pull all the fleas off your legs and then jump into bed quick (laughs).*

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Lol Gray lookout has, in recent times, become a sort-of 'celebrity' subsidiary lookout. In Roger Underwood's book *'The World's Tallest Tree - sylvan musings of an old forester'* (ISBN: 978-0-9942271-3-3) he tells the story of how he came across the dilapidated remains of the lookout tree and, together with fellow retired forester Jack Bradshaw, restored it to its former glory in 1986. Being quite near to the picnic area which was the site of the old overseer's house it has been viewed and photographed countless times since and is often mentioned in the same breath as the other Western Australian fire lookouts (although it comes from an entirely separate genetic lineage - as this book seeks to show). When first constructed in the late 1920s it looked like this:

There is nothing inherently special about the Lol Gray tree to justify the celebrity status - the reader will have already seen a modern-day photograph of a tree lookout on the front cover of this book. That was positioned near the Congelin overseer's house but, never having been restored or shown the loving care that was bestowed on the Lol Gray site in the 80s, it lacks the photogenic appeal to gain comparable fame (or a place on supposedly authoritative listings of WA fire lookouts).

To further skew the story of the subsidiary lookouts of the Dryandra area, the remaining three overseer's lookouts at Montague, Contine Hill and Highbury are even less photogenic than Lol Gray is (and thus less likely to be invoked when telling the story) - as these photos from Contine show:

Not really terribly ‘sexy’ - but an example of just what subsidiary lookouts were, nonetheless. Just exactly what was at Montague and Highbury in the period is now lost forever, as both sites (whilst still there with remnant indications of what the site was like when occupied) don’t contain enough contemporary visual clues to unravel the arrangement of whatever lookout infrastructure was used. Presumably they were variations of the same form of raised, rocky platforms as at Contine Hill, or maybe even veranda-mounted structures like Cundinup (see below).

To wrap up the Dryandra story and reintroduce other material mentioned earlier in this book, the Dryandra blocks themselves subsequently went from timber reserves to State Forest as stated on page 7 of this book - Lol Gray (SF 51) in December 1934, Montague (SF 53) in June 1935, and Highbury (SF 52) in September 1935. Clearly, this switch to dedicated State Forest had an impact with regards to the longer-term thinking of the time - Dryandra received a new, state-of-the-art 40ft fire tower in January 1936 (position shown on the earlier map), and the area itself also became home to one of the early settlements, and in so doing this negated much of the earlier thinking behind a system of ‘hilltop lookouts’ and the use of dispersed on-site personnel overseeing the countryside. As such, it’s a very good area to be a ‘case study’ of subsidiary lookouts, as it existed in the times of Charles Lane Poole’s Working Circles through to the more advanced forms of centralised forestry management in Western Australia now becoming commonplace.

However, the arrival of the 40ft tower located close to the new Dryandra Settlement didn’t immediately lead to the removal of the earlier outstations. The history of each of them is now largely confined to (undated) random individual memories and anecdotes as no formal documentation describing their collective history and usage has ever been located by the author. However, as a sign that they definitely continued to perform some sort of fire detection function is evident in this entry from the 1963-64 Annual Fire Report for the district:

Contine station on watch before and after theses dates (Author’s note: the dates on which the main fire tower was manned that season - 28/10/63 to 25/3/64) *on odd days of considered high hazard & throughout the season for cross bearings.*

This reference shows that at least Contine had a life that extended long beyond the introduction of the centralised 40ft fire tower in 1936. Presumably some or all of the others also served a function as ‘outstation’ accommodation into the 40s, 50s or beyond with the fire observation function that included.

Out of historical interest, the reader may have noticed the mention of the Millar brothers in the earlier section on the construction of the Great Southern Railway. Having been enticed to Western Australia for this project, they went on to have considerable impact on the direction of the Western Australian timber industry.

Chapter Five

Subsidiary Lookouts

Having now taken the reader through examples of subsidiary lookouts, it's perhaps about time to answer that niggling question that was asked way back in the Introduction: *What exactly IS a subsidiary lookout?*

The term itself has a few appearances in the Forests Department Annual Reports through the 1930s. It needs to be placed in the context of fire towers being the means by which 'proper' fire detection was supposed to be achieved, although until this 'proper' approach was realised over a far greater area than was the case at the time then this sort-of thing 'would just have to do'. Fire towers were things that had a dedicated employee manning them for set hours during each day of the defined fire season. Subsidiary lookouts, by comparison, were set up where fire detection wasn't the only - or indeed the major, reason for their existence. Also, any bearings coming in via the Forests Department's internal telephone system weren't from specialist 'towermen' but, as the narrative so far indicates, from wives (or possibly their children) who were part of the overseer's family.

In my earlier book '*The fire towers of Western Australia, and the Forests Department Conservators who made them happen (1920 -1970)'* I trace how, over time, a 'network' or 'grid' of fire towers slowly spread over the forested areas of Western Australia. 'Subsidiary lookouts' are creatures from those times prior to the establishment of that particular network.

Ellis Creek

The following is correspondence received by the author in relation to old lookouts in the general Nannup area. Thanks are due to Charles Gilbert for supplying the information.

"The Ellis Creek mill closed about 1925 and around 1930 a small detachment of Forest Department workers were located in the area about 1 mile to the east of the mill site. At the rear of their cottages was a large red gum tree (marri) which bent and leaned to the north. A makeshift ladder and offset and angled steps were nailed to the trunk giving access to the heights of the tree. I have been told it may have had use as a temporary firewatch tower and also that it may have been used for aircraft recognition during WWII."

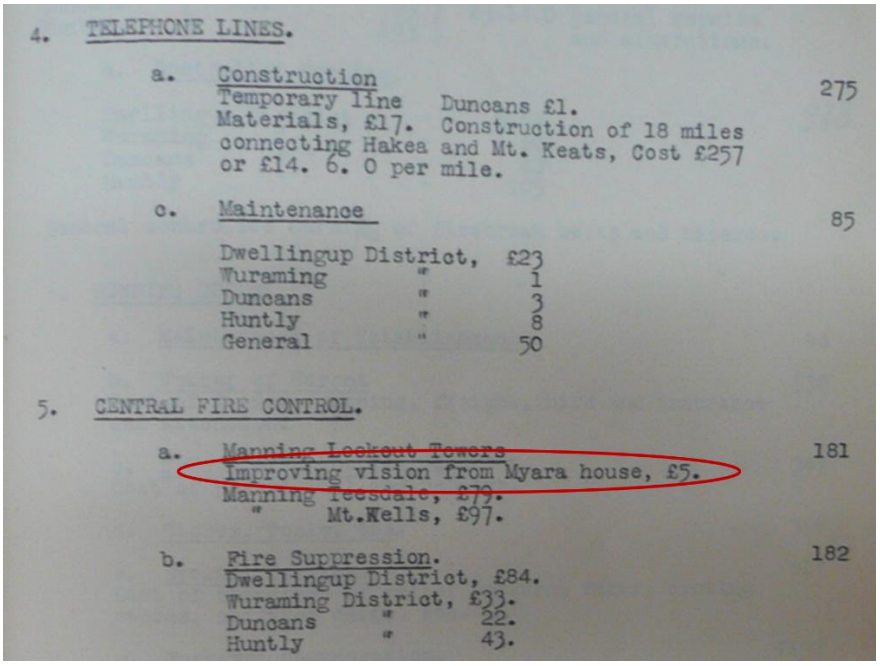
Ellis Brook (Creek) was the subject of Working Plan No. 64 from 1930 - so Charles' recollections are accurate. No further information has ever been located by the author, nor any contemporary photograph.

Myara

From a newspaper article entitled "In the Jarrah Country - Fire Control Methods" from December 1932:

Now and again, however, the observer (Author's note: at Mt Wells Tower) *may notice an unusually large volume of smoke at some particular point, and suspicions aroused, he will immediately ring the district officer, who, for definite location, will have cross-bearings taken instantly by other look-out stations on either high points, as, for instance, at Myara, a sub-station 22 miles away to the west of Mt Wells, from which reports are also regularly coming in.*

The Myara overseer's residence also appears in this later 1930s entry in a Detailed Annual Report:



4. TELEPHONE LINES.

a. Construction 275
Temporary line Duncans £1.
Materials, £17. Construction of 18 miles
connecting Hakea and Mt. Keats, Cost £257
or £14. 6. 0 per mile.

c. Maintenance 85

Dwellingup District, £23
Wuraming " 1
Duncans " 3
Huntly " 8
General " 50

5. CENTRAL FIRE CONTROL.

a. Manning Lookout Towers 181
Improving vision from Myara house, £5.
Manning Teesdale, £79.
" Mt.Wells, £97.

b. Fire Suppression. 182
Dwellingup District, £84.
Wuraming District, £33.
Duncans " 22.
Huntly " 43.

The reader will also see reference made to a telephone line from Hakea to the Mt Keats Tower - strongly suggesting it also had lookout capability, although no references have ever been found about this in the records searched.

Cundinup

In his book "*Forestry Through the Fifties - a young forestry officer's journey with the Western Australian Forests Department*" (ISBN 978-0-85905-981-7) Kevin Coate devotes part of the story to his forestry roots. He writes:

My grandfather, Bill Merritt, was the first appointed forestry overseer, Cundinup. He knew the area well from his sleeper cutting days in the Maryvale area in 1909-10, about 15 miles from the lookout house. Claremont builder John Herron completed building the new overseer's house and stables before summer 1929 at a cost of £815/4/-.

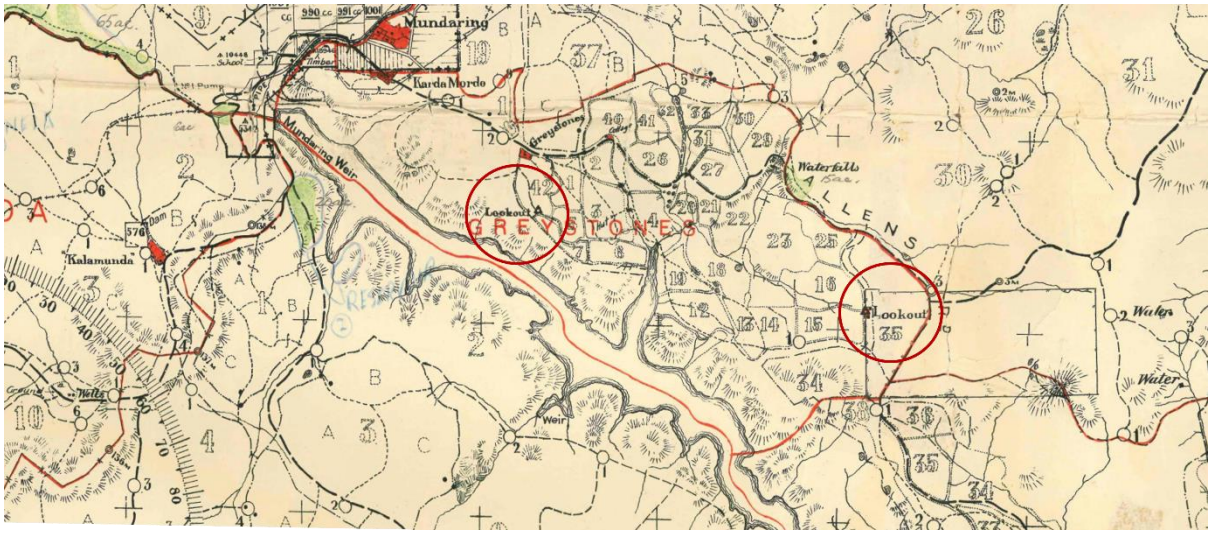
Strategically located, the overseer's house was also the forestry observation station for spotting bushfire smoke; it had a direction finder on the west-facing veranda to determine bearings. Any sightings were to be relayed by phone to the Kirup and Jarrahwood forestry offices.

The Merritt family became self-sufficient and cultivated a large vegetable garden that met their needs. Their meat was mostly native animals hunted by my three uncles aged ten to thirteen years, who were excellent shots; they had a small shotgun and hunted without adult supervision.

The exact location where this building was is unknown, but Kevin also mentions that the children walked "3.5 kilometres" to attend school - and that old school still stands in Cundinup today.

Two Mundaring-area lookouts

The following is part of a 1938-issued, 40-chain map of the area north of the Mundaring Weir:



Two lookout symbols appear (circled in red).

The author has tracked down other (extremely rare) maps from the 1930s, and only this particular map has symbols and the word “Lookout” at places where no fire tower was ever known to be constructed. Why these sites were designated and recorded will probably remain forever a mystery. Maps drawn in later years omit them.

A clue to the more westerly of the two may be found in this whimsical piece which found its way into the newspaper in the mid-20s:

The Sketcher

ALONE ON MOUNT DALE

(By J. Perry.)

My thoughts grow hazy. Here I am, like Alexander Selkirk, monarch of all I survey; and I'd give it all for a bath and a cool drink. But such luxuries are not for forestry employees on watch tower duty.

Ah! There's a flickering dot of light in the distance steadies and becomes motionless as I look. My own helio is already set up, and sighted on the spot where the dot of light shines I tap out: "Dash, dot, dot, dash." The tiny pinpoint of light flickers in acknowledgment. Alert and watchful once more; even that wee dot of light reminds me there are other people in the world, though they be 12 miles distant at Greystones. True it is not I in whom they are personally interested, all alone on Mt. Dale though I be. What they signal for is not to inquire if little Sammy is well and fit, or if he'd like a cool drink. No, indeed! Their quest is; "How's things?" Is their area clear of fire? Life! Just everybody for themselves.

I relapse into thoughts and am just spending riotously a portion of the Tatt's ticket which one always hopes to win, when a wisp of smoke rises. A bearing taken on it with the theodolite, in conjunction with one taken simultaneously from Mt. Gunjin lookout tower, places it outside the area. I have just located the fire on the map when the telephone rings. "Hullo! Hullo! Dale, this is Barton's speaking. Howdy?" "All clear on the area," I reply. "It's pretty warm. Say, Bill, when you're on Dale did you see any butterflies?" "Sure thing, Sam, you can always see them when you've been there four days; you can't see them yet; you've only been up two days." "Well, I can, any way, big black and white ones." "Oh, my lad, they are there all the time. It's the coloured ones that turn up after four days. Well, so long Sam. Good luck."

Having entered up the calls, helio, and telephone, in the time message book, and taken another survey of the country, spread out for miles below the lookout tower, I pick up the only book there I have not read, and try again to get up an interest in the impossible characters. Jessie, the simple country maiden, rejects with scorn the Lord of the Manor, in favour of the noble-hearted ploughman, etc., etc. Oh. drivel! and I've five more days to put in. I'll be reading the ads. of purple pills 'ere those five days are gone. Oh, well, it's all in a life time, and a rest cure at that. Next week some other poor blighter will take my place. There's the view; that's worth a good deal; from Mt. Bakewell in the east, far past Chidlow's in the north, away over Rottnest in the west, and bound by the Jarrahdale range to the south. It is a fine panorama.

The State forest, over which we keep watch for fires, is quite a small part of the view, occupying only one of the four sides of the tower, which consists of a small open-sided hut, mounted on a 25ft. tower. It is equipped with a theodolite and map for finding and locating fires; a heliograph for communicating with any of the Forests Department employees in the State forest, and a telephone connection to Mt. Gunjin lookout tower, to Barton's forest station, and to forest headquarters at Mundaring Weir itself. Thus communication can be established any time between forest headquarters and any employee in the bush.

I have often thought (and Dale is a rare place for finding time to think) that an enforced term of fire-fighting would perhaps have more effect as a deterrent on a man who maliciously sets miles of country aflame than imprisonment. Consideration, then, for those who have to fight the fire, might sway them more than the fact that it is their own wealth they are burning when they light the country for miles.

The afternoon draws in. A final "all clear" has been flashed to the helio substation at Greystones, Barton's forest station and headquarters have been given the same message by telephone. A final "so long" to Gunjin and down I go to the hut below the tower for tea. Quickly the sun sinks. lt is dark now, and the wind that ever blows on Dale murmurs in the trees around the hut; a brush rustles by. Away on the western horizon Rottnest lighthouse is blinking, the only sign of civilisation - about 40 miles away I think.

The hard-hit hero of some of our modern best-sellers, who retires to an obscure spot to "find himself" should assuredly come to Dale. No one will ever interrupt him, and there are many thousands of large stones in the granite ridge that forms the backbone of the hill under which he could prosecute his search.

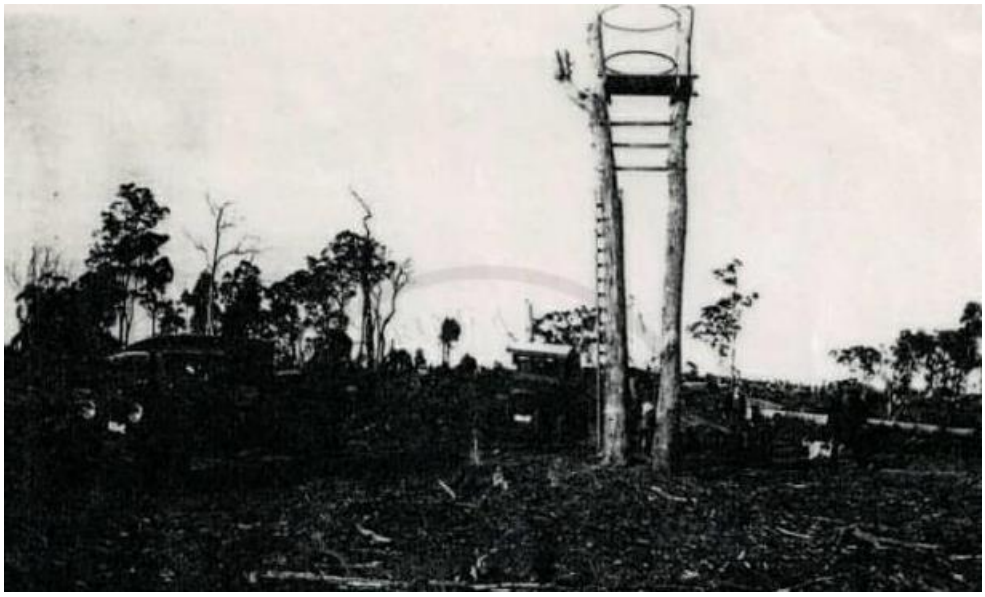
Western Mail, 2 April 1925 (p.34)

It will be noted by the reader that the lookout symbol on the map is only a very short distance south of Greystones - suggesting this was the point that “little Sammy” was directing his heliograph message to all those years ago from Mt Dale tower (off the map, away to the south-east).

Beyond this, nothing is known about these sites. Presumably back in the 1930s they were common knowledge in the Mundaring area - but it seems no-one ever thought it necessary to write down what that common knowledge was.

Sawyers

Only a short distance north from the two previous lookouts there once existed this structure:



We have this photo courtesy of a series of photos taken during the construction of the 26ft Sawyers fire tower in 1934. Presumably taken at the top of the hill where the 26ft tower was to be erected (the vehicles in the photo are carrying the poles and other assorted bits and pieces for the job), it shows clearly that Sawyers Tower actually replaced an already existing structure. What we don’t know is whether this was erected by Forests Department employees from earlier times, or whether by somebody associated with one of the timber logging operations from the days preceding any Forests Department involvement with the area. Definitely a mystery, the author includes it here for completeness without in any way knowing its provenance.

Yornup

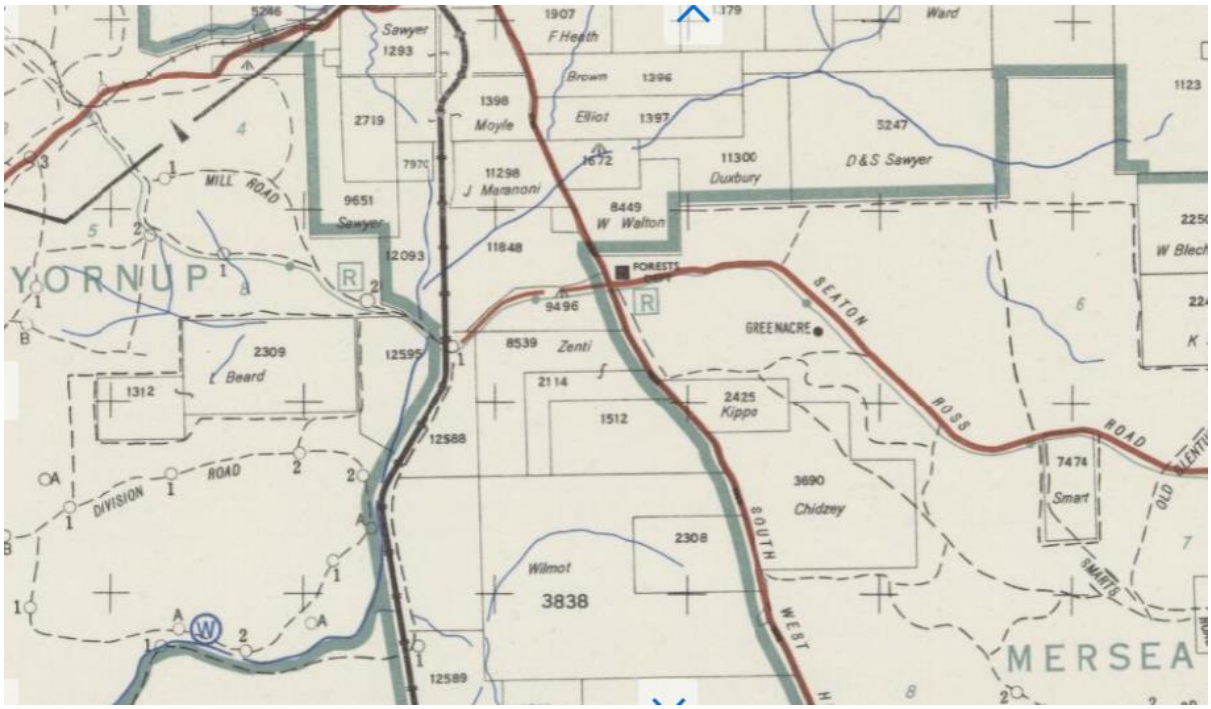
At the junction of today’s South Western Highway and Seaton Ross Road (north of Manjimup, and south of Yornup) this tree was recently ‘re-discovered’:

The reader should be able to see several steel climbing pegs on the upper parts of the tree. All other pegs have loosened and fallen out over time.

The following discussion of Alco Tree, taken from Don Stewart's administrative history (p.17), is most useful in introducing this decaying, long-forgotten relic:

Alco Tree with a cabin at 24m was situated some 16km north west of Manjimup and was the first of the regularly manned tree lookouts. It served well for 28 years before being replaced by a standard tower of 110 feet. It is noteworthy that when a tree lookout was first proposed for Yornup in 1934, higher authority rejected the idea as quite impractical. Meanwhile one officer (Assistant Forester J. Watson) on his own initiative constructed in 1935/36 a lookout in a large tuart tree at Ludlow by means of a ladder attached to the bole. It was used for occasional checks on reported smokes and proved the practicability of such a project. When late in 1936 the D.F.O. at Manjimup had a selected marri tree pegged on Alco Hill the forest coverage was so excellent that the services of Assistant Forester Watson were made available to construct a 'crow's nest', assisted by the employee who had pegged it (G. Reynolds). This, the first lookout south of the Blackwood Valley proved so effective that the 'crow's nest' was replaced by a small cabin the following year and equipped with suitable fire plan and direction finders.

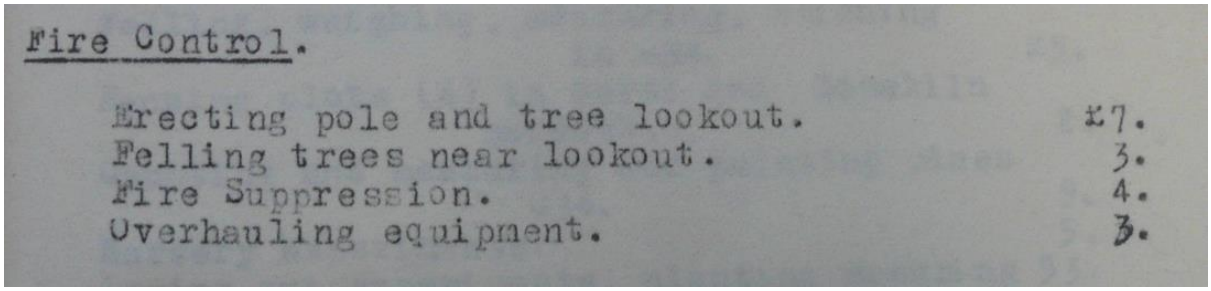
The question obviously is - taking all the above into consideration, just what exactly is the photo showing? As shown earlier in this book, Yornup was one of the original sites where an overseer's house was established. However, that original location was on today's Brooks McAlinden Road along the route from Yornup siding to the sawmill at Donnelly River. It was progressively upgraded to settlement status and then moved to the site where this tree is to be found (about roughly 3 miles SSE of the Brooks McAlinden Road location). The precise timeline for this activity is unknown, but definitely sometime in the 1930s - possibly towards the back half of the decade. This tree is roughly 8 miles north-east of the new Alco tree lookout mentioned by Don. So, in 1934 it is *not* clear <u>where</u> the pegged tree requested by Yornup (and knocked-back by Head Office) was suggested for - 'Yornup 1' or 'Yornup 2'. Don's cryptically-worded comments don't help in this regard. If originally suggested when 'Yornup' was situated at its original site, it is *possible* that this tree in the photo was constructed later at the new, translocated site after the Alco Tree was up-and-running and needed a viewing point for cross-bearings for any smokes spotted by it. This tree would be almost perfectly located for performing that function. In short, it remains a bit of a mystery (especially given the settlement movement and whenever that occurred) - but a pleasing mystery nonetheless. The site of 'Yornup 2' settlement is shown on the map below. The tree is to be found on the south side of Seaton Ross Road. It should also be mentioned that the later 140ft Grevillea Tower would be erected about 7½ miles almost due east of this Yornup tree in 1940/41. It therefore may have had other usefulness as a source of cross-bearings depending upon how long the Yornup outstation remained active beyond the 1930s.



Ludlow

This is a 2018 photo of the tuart tree at the Ludlow settlement just north-east of Busselton. It is considered to be the first of the tall tree lookouts, and is feted as being the forerunner of later, more famous structures like Gloucester Tree and Diamond Tree due to it being erected by Jack Watson.

The reader will note that the lower pegs have now all been bent at right angles - presumably to stop anyone attempting to climb it today (the tree is easily accessible by members of the public - providing they know where to look). How the ladderway was arranged can be discerned from the photo - a vertical set of pegs hammered into the tree, and a separate independent 'leg' of ladder (now absent) affixed to the outside of the pegs to provide the necessary rigidity and support. A second 'ladder' commenced after the point where the first offshoot bough can be seen. It reputedly had a crow's nest at the top, and it is unknown if that was ever upgraded to something more substantial. In the Detailed Annual Report for Ludlow Pine Plantation (15/9/35 - 15/9/36) there appears:



Fire Control.

Erecting pole and tree lookout.	£7.
Felling trees near lookout.	3.
Fire Suppression.	4.
Overhauling equipment.	3.

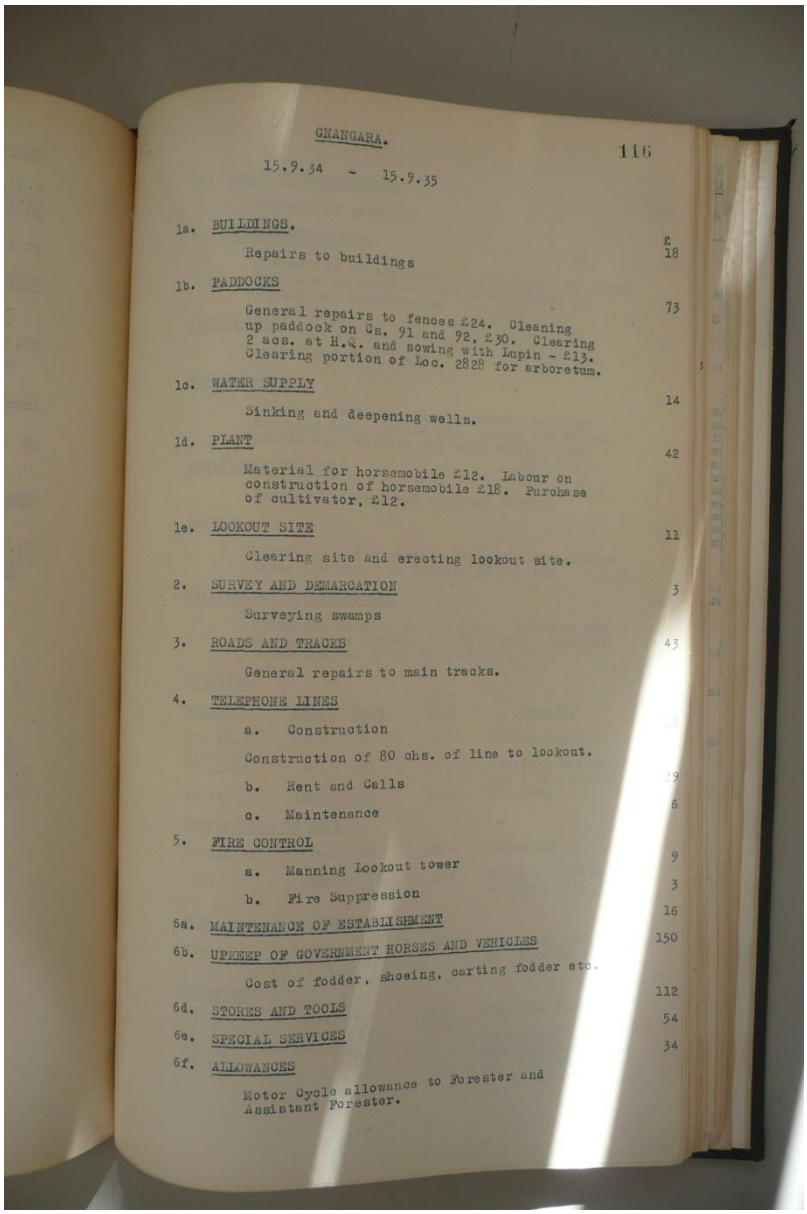
So, the novel form of construction method should therefore be called "pole and tree", in keeping with how it was described at the time.

Was it a 'subsidiary lookout'? Well, that really becomes a question for anyone who lists pedantry amongst their favourite hobbies. It appears a bit late in the timeline to be considered as a 'classic' subsidiary lookout. Also, at that stage Ludlow was way more substantive than just a single overseer's quarters. Against that, it never appeared in the listings of 'towers' that were described in the Annual Reports of the era (although it did seem to make the move across during the 1940s) so, I suppose by the sketchy standards of what indeed *was* a subsidiary lookout, you can make an equally strong case that it qualifies. Anyway, it's here in a book on subsidiary lookouts now - and possession is nine-tenths of the law apparently.

Wetherall (also referred to as Wetherell)

In 1996, the City of Wanneroo Oral History Project interviewed Phillip Clover, son of George Clover who was the first overseer of what would become the Gnangara pine plantation. Phillip was born in 1937, and the interview covered much of his early life at the plantation.

The lookout at Gnangara was constructed on Wetherall Hill - only a short distance (80 chains) south-west from the accommodation and, as the page reproduced from the archived Detailed Annual Report of the period shows below, it was established during 1934-35. The costs associated with the lookout suggest that whatever was built was not of any grandiose proportions - no photograph of the lookout site when it was operational is known to exist. The reader is asked to note the almost identical relative costs of Wetherall and the tuart tree lookout at Ludlow.



GHANGARA. 116

15.9.34 - 15.9.35

		£
1a.	BUILDINGS.	
	Repairs to buildings	18
1b.	PADDOCKS	
	General repairs to fences £24. Cleaning up paddock on Cs. 91 and 92, £30. Clearing 2 acs. at H.4. and sowing with Lupin - £13. Clearing portion of Loc. 2828 for arboretum.	73
1c.	WATER SUPPLY	
	Sinking and deepening wells.	14
1d.	PLANT	
	Material for horsemobile £12. Labour on construction of horsemobile £18. Purchase of cultivator, £12.	42
1e.	LOOKOUT SITE	
	Clearing site and erecting lookout site.	11
2.	SURVEY AND DEMARCATION	
	Surveying swamps	3
3.	ROADS AND TRACKS	
	General repairs to main tracks.	43
4.	TELEPHONE LINES	
	a. Construction	
	Construction of 80 chs. of line to lookout.	
	b. Rent and Calls	29
	c. Maintenance	6
5.	FIRE CONTROL	
	a. Manning Lookout tower	9
	b. Fire Suppression	3
6a.	MAINTENANCE OF ESTABLISHMENT	16
6b.	UPKEEP OF GOVERNMENT HORSES AND VEHICLES	150
	Cost of fodder, shoeing, carting fodder etc.	112
6d.	STORES AND TOOLS	54
6e.	SPECIAL SERVICES	34
6f.	ALLOWANCES	
	Motor Cycle allowance to Forester and Assistant Forester.	

Phillip Clover's recollections include this:

"We kids were involved in fire lookout duty - for which we were paid a small amount of money - on the tower hill, which was about a mile from the settlement. We would be rostered for duty up there and look out for fires. We had a telephone down to the Settlement and if we saw a fire, we would tell Dad or whoever might be on duty and that was it".

Being born in 1937, Phillip is probably referring to a time close to the end of the Second World War or possibly even post-war. As children would be expected to be in school on weekdays, these stints of lookout duty were likely to be at weekends. He doesn't mention during his interview what the arrangements for manning (childing?) at other times were. Therefore, it is difficult to positively pin down what lookout description should be given to Wetherall, but it definitely didn't make it onto any official lists of Forests Department towers - so 'subsidiary lookout' is probably an apt one to use.

The metropolitan pine plantations

A unique feature of the Applecross (Somerville) pine plantation was that it was established not on Crown land ceded to the Forests Department, but on land already owned by the University of Western Australia. This was discussed in this informative September 1935 newspaper article:

Progress at Applecross

Favourable growth has been made by the pines in the plantation established on the University endowment lands at Applecross, some of the trees having reached a height of 25 feet in eight years. The University of Western Australia has purchased an aerial photograph of the endowment lands showing the area occupied by the pine plantation, with the North and Bibra lakes in the background. The aerial photograph was bought from Mr. Stuart Gore, of Canning Bridge. Details of the establishment of the pine plantation and the progress of the pines are contained in an official report.

"In 1926", stated the report, "assent was given to by the Governor-in-Council to a working plan prepared by the Forests Department for the control of some 2,330 acres of coastal sandplain country about a mile south of Applecross wireless station. Afforestation operations were immediately commenced on the area, and today there are approximately 900 acres of flourishing young pines established. It was through the foresight of the University authorities, and with the co-operation of the Forests Department, that this project was made possible. The land in question was not Crown land, but University endowment land, and by entering into an agreement with the Forests Department to plant this 2,330 acres with pines, the University rendered to the community a signal service".

Pinus pinaster (cluster pine or maritime pine) is the only species planted on the area. This pine is well suited to deep sands near the coast and at Applecross is showing every promise. Stock for planting is raised in the nursery on the plantation. In the commencement of operations it was found necessary to infect the nursery soil with a mycorrhizal fungus before nursery stock could be grown satisfactorily. The infected soil for the nursery beds was transported from an old-established nursery at Hamel, and now the Applecross nursery provides for itself fine one-year stock. Clearing commences about 18 months before planting and after the area has been felled all timber suitable for firewood is removed by firewood cutters working under permit. After the felled timber has lain approximately 18 months it is burnt by as fierce a fire as possible. Ploughing and cross-ploughing is then carried out, after which planting may commence.

The officer-in-charge of the plantation resides on the area, and has under his control a number of relief workers. The existence of the plantation depends on its being completely protected from fire, and the value of having a resident officer on the area becomes apparent in summer, when there is need for constant watchfulness to prevent outbreaks of fire. A resident workman also is stationed in a departmental cottage on the highest point of the plantation, from which he commands a view of all compartments. The plantation is surrounded and subdivided by a firebreak system, external firebreaks being two chains wide and internal breaks - which subdivide the area into compartments of approximately 30 acres - being 15ft. wide.

Wherever and whenever possible controlled burning is carried out from the external boundaries of the area. The pines grown on these endowment lands, which would otherwise be waste and unproductive terrain, will prove a valuable asset in future years, the plantation being, as it is, so close to the metropolitan market. The growth to date has been very favourable, the maximum height being 25ft. at the age of eight years.

The original site for the overseer's accommodation (and the subsequently-established pine nursery) was at the north-eastern corner of the University land (where today's Piney Lakes Reserve is to be found - just south of today's Leach Highway). Possibly the lowest point in the area, and it explains why sometime soon after establishment the 'resident workman's cottage' was erected about 2 miles south-west of there just north of today's South Street (and west of today's North Lake Road) - the location of the area's high point. It is doubtful any extra platform structure would have been needed above ground level, as from this vantage point an observer would be able to scan the entire area - aided also by the scheme of pine planting which happened over the years and firstly started along the northern boundary, down the eastern side, along the southern boundary, and finally up the western edge. The 'workman's cottage' would see the most distant (earliest planted) pines growing highest with the younger, shorter ones being closer to the observer and not blocking out views of the entire plantation. It is unknown if this was a planned-for scenario or simply blind luck (Author's note: lived experience suggests to the author that the latter is the more likely choice), but it was a very serendipitous occurrence nonetheless. At a later unknown time all plantation activity was concentrated at this point from which a small settlement developed. In 1954 a tuart tree at this location was converted into a tree lookout when the continually-growing pines all around the high point got so tall that observation from ground level for smokes was no longer possible.

1954 Somerville tree lookout

View looking ESE from tree lookout (showing part of the settlement in foreground)

Collier Plantation was, unlike Applecross (Somerville), a wholly Forests Department project. It will be seen (p.15) that 'South Perth' (together with Gnangara) was advertised as a tender for overseer's accommodation in 1925. In later years the plantation headquarters was located on high ground just to the west of the plantings (and bordered today by Todd Avenue, Blamey Place, and Ryrie Avenue in Como), and it is assumed this was the original - and only - site ever used. Like the Applecross observation site, it was probably high enough ground to adequately survey the young, growing pines before they had reached full height. A fire tower was only erected at this location in the 1950s.

The third metropolitan plantation - Scaddan, was only proposed in 1931 and clearing commenced in May 1932. Being located in Mt Lawley about 2½ miles almost due north of the Perth GPO, it could easily be observed for any smokes from adjoining residences in the area. The caretaker at the adjacent Mt Lawley Golf Club (a Mr Tinlin) was the nominated 'observer' who communicated with the Forests Department when required. Scaddan Plantation was listed as being "lost to fire" on p.21 of the 1958/59 Annual Report, without giving dates or any further detail. The following comes from the 1952/53 Annual Fire Report for the metropolitan plantations:

3. Organisation for the Fire Season.

(a) Fire Hazard.

This is phoned through to the plantation Headquarters every morning during the fire season.

(b) Detection.

From Headquarters at Collier and Somerville and caretaker Mt. Lawley Golf Club at Scaddan.

(c) P.M.G. phone between plantations, and by Departmental phones between settlers at Somerville.

(d) Suppression.

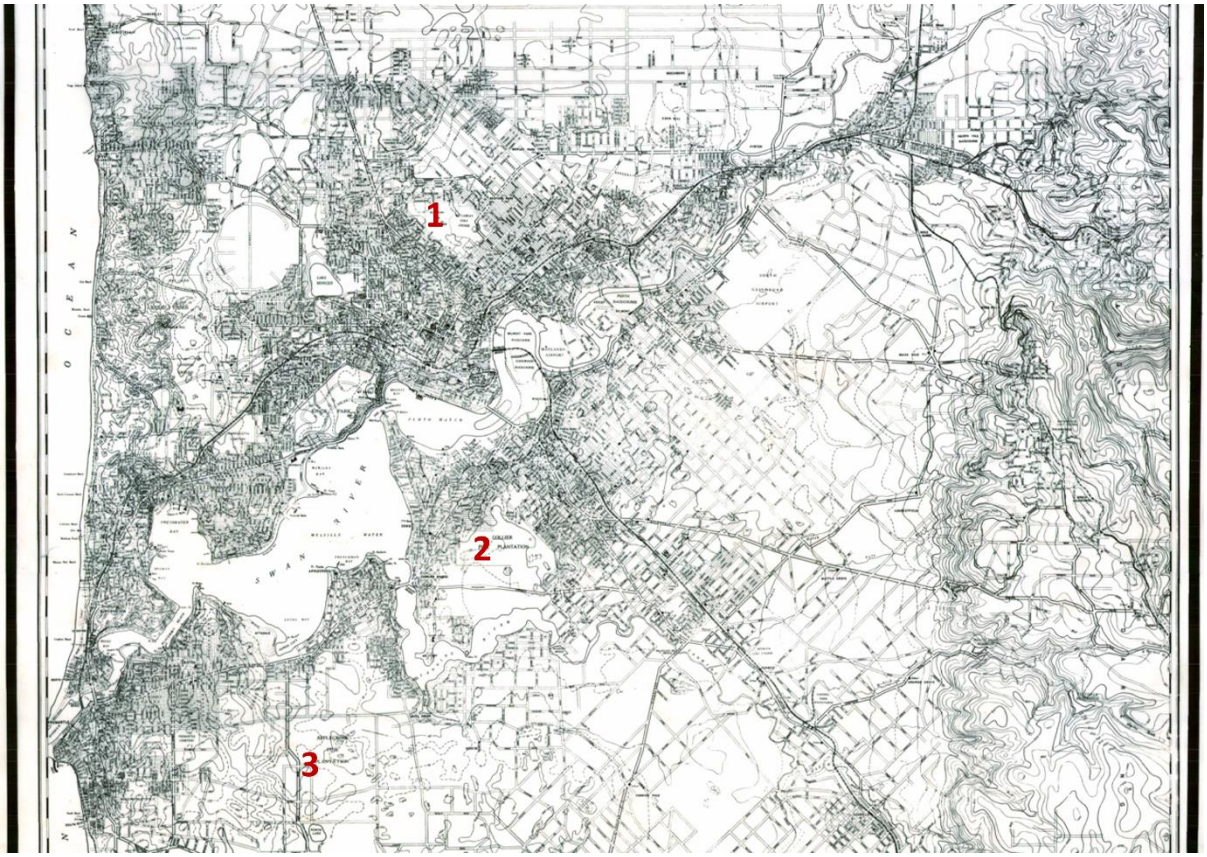
Gangs, practically all pieceworkers, were trained in various plantations. Efficiency of men at Scaddan and Collier was strictly limited owing to the rapid turnover in pieceworks. The position was stable at Somerville where the men are living in Departmental houses.

(e) Water Supply.

Scaddan) Unlimited from Metropolitan water
Collier) supplies.

The relative positions of Scaddan (Mt Lawley) (1), Collier (Como) (2), and Somerville (Applecross) (3) are shown on the following 1940s map of Perth. The reader can note the closeness (or lack thereof) of the plantations to the areas being inhabited at the time. Today's Perth looks *very* different.

Although nothing to do with fire lookouts, it is interesting in conclusion to state that all would go on to house new universities on parts of the areas after the pines had been harvested and the lands no longer were under Forests Department control. Scaddan is the home of today's Edith Cowan University, Collier to Curtin University, and Somerville to Murdoch University. All three campuses are scattered with old pine trees which give testament to their previous lives.


1
2
3
OCEAN
SWAN RIVER
COLLIER PLANTATION

Chapter Six

Secondary Lookouts

Chapter five marks the end of what the author has to date uncovered from old files, maps, and documents about subsidiary lookouts. As said right back at the start, I wish I had more to tell. However, the story of 'other lookouts' is not yet quite finished.

As has been shown, the name "subsidiary lookout" is one coined in the 1930s when 'proper' fire towers were proliferating southwards along the Darling Scarp, and those lookouts from an earlier time of isolated overseers scattered throughout the forested areas were still in existence (but slowly disappearing). It is a description brought about by retrospectivity (because when they were first erected, they actually weren't 'subsidiary' to anything), and attempts to give a sense of understanding of the then current (and evolving) situation, not one that would have been used back in their heyday years of the late 20s/very early 30s. By the start of the Second World War (as told in my earlier book on fire towers) the 'network' of towers that would oversee the forested areas then under Forests Department control had been largely completed under then Conservator Kim Kessell, as a more durable and 'modern' form of forest administration had emerged.

After the Second World War (again, as told in my earlier book) a few towers in previously 'missed' locations were erected, and then the situation subtly changes. The idea of a fixed, overarching grid of observation posts was a good one, but nature always has a way of moulding the landscape in such a way as to make certain areas harder to see than others. With having had the time to evaluate this 'network' of fixed locations, and now having more money in the bank to spend on issues that usually started with "Gee, I wish we had better coverage of *<insert here whatever particular part of the terrain has always been considered a 'bit of a problem' from the perspective of smoke detection by fire towers in that Division/District>*…", a period of 'gap-filling' occurred.

Another fact for the reader to keep in mind is that, although pine planting begins in earnest back in the 1920s, 'getting good' at pine growing was something that took many years of experience-gathering to get right and was hard-won Forests Department expertise which included a lot of failure along the way. So, pines only really started coming into their own in the post-war years. Pines were often referred to as 'high value' parts of the forest estate - as much time, money and manpower was expended in their establishment and care compared with the indigenous forested areas. As they started to deliver on their promise as the years rolled by, they became evermore important in fire tower planning. As well as the plantations close to metropolitan Perth, just about every other Division/District had smaller, isolated pine plantations within their areas too. How well a wide-ranging 'network' of fire towers overseeing the indigenous forests of the Darling Scarp would now be able to cope with this evolving situation was about to be tested.

To close this book, I'm taking the reader into a collection of poorly known-about lookout sites which (probably) were post-war, not meant to be considered as an integral part of the overall 'network' as an enthusiast would consider it, and (probably) had a raison d'être with a specific time period in mind. Whether the term to use is 'secondary lookouts', 'miscellaneous', or any other descriptor is really a matter for the reader to decide upon.

The Collie-Mornington-Mt Keats 'Bermuda triangle'

Here is a 1950 news article:

Daily News (Perth, WA : 1882 - 1955), Tuesday 31 January 1950, page 4

MEN BATTLE WITH FOREST FIRES

Forestry Department firefighting units yesterday fought and put out three fires in the Dwellingup forest district. The most serious fire started in forest and swamp country a few miles east of Mornington.

A tree lookout man spotted it soon after it began and telephoned the Dwellingup headquarters.

A Dwellingup officer sent a message by radio to a firefighting unit of six men who had a truck with water tanks and portable extinguishers.

The fire destroyed about 20 acres of forest before it was put out. The second fire started near Holyoake and destroyed about two acres.

The third fire was in private property near Mornington. It burnt about three acres of grass.

A fire in thick forest country in the Channybearup district late yesterday afternoon destroyed two acres of forest before it was put out.

The reader will note the presence of a "tree lookout man" with vision of an area east of the then existing Mornington Tower.

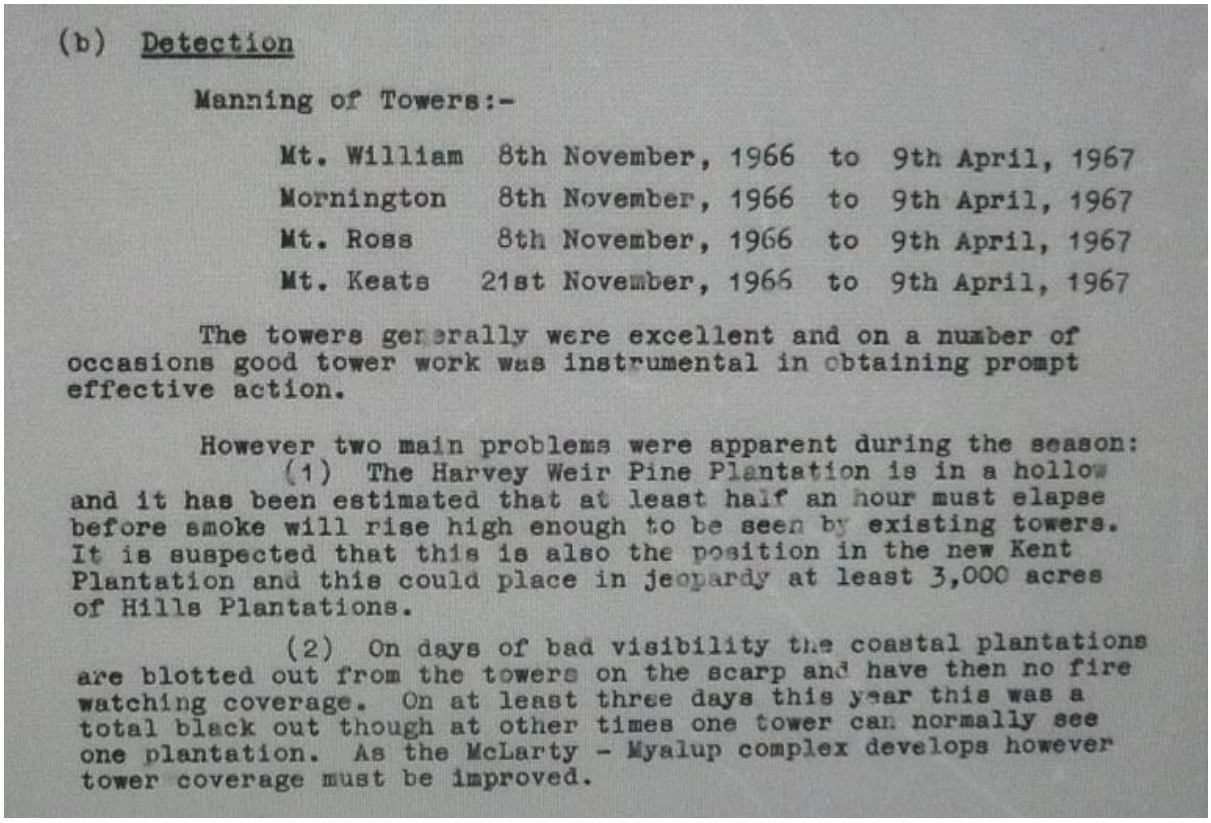
Next, in the previously mentioned book by Kevin Coate, he speaks of his time as a young trainee. For the 1952 fire season he and the other trainees were seconded to different district or divisional offices. Kevin went to Harvey, but he does also list where all the others went that year. In this listing is the following; "*Gordon Styles: Collie, with relieving duty on (unnamed) tree"*. The town of Collie is only about 15 miles south-east of Mornington Tower, and Collie District was of sufficient size that parts of it could easily be within viewing distance to contain the tree mentioned in the newspaper article.

Finally, in June 2021 the author had the great pleasure to meet and interview a lovely old gentleman called Jim Owens (now sadly deceased). Jim came to my attention through his family who were interested in commemorating his early years with a picture board for his room at the nursing home where he resided.

Cutting a long story short, Jim had mentioned to his family he had once done a spell of relief work on "Mt Keats Tower" in the early 50s. However, when interviewed it rapidly became apparent to the author that Jim was never at Mt Keats, as photos and descriptions of the site elicited nothing that matched his recollections. Jim wasn't a regular Forests Department employee and responded to an advertisement for someone to do short-term cover for a fire lookout "somewhere near Harvey". He caught the train down from Perth to take up the job. Trying to coax morsels from memories of times long ago is never an easy task, but the author left Jim thinking he was *definitely* up a tree at some point, somewhere inland from the coastal plain that Harvey sits upon, and possibly even further north and nearer to Nanga. Jim lived at a hut close by the tree for the time he filled-in as lookout man, and his description of where he spent his days scouring the surrounding countryside confirm it was certainly a tree and not a tower. Mt Keats would have been one of the nearby lookouts he would have communicated with via telephone.

So, taken collectively these few random snippets of disparate information suggest at least one lookout tree used to be located somewhere in this 'Bermuda triangle' - possibly more than one. Nothing has ever been found in the archives mentioning it/them.

However, and without knowing if this has anything to do with the story, the following is to be found in the Annual Fire Report for Harvey in 1966/67. Written much later than the time being discussed, it does allude to some of the problems with smoke detection in/near pine plantations. Whether at an earlier time a short-term solution of a tree lookout was ever used remains an open question.



(b) Detection

Manning of Towers:-

Mt. William	8th November, 1966	to	9th April, 1967
Mornington	8th November, 1966	to	9th April, 1967
Mt. Ross	8th November, 1966	to	9th April, 1967
Mt. Keats	21st November, 1966	to	9th April, 1967

The towers generally were excellent and on a number of occasions good tower work was instrumental in obtaining prompt effective action.

However two main problems were apparent during the season:

(1) The Harvey Weir Pine Plantation is in a hollow and it has been estimated that at least half an hour must elapse before smoke will rise high enough to be seen by existing towers. It is suspected that this is also the position in the new Kent Plantation and this could place in jeopardy at least 3,000 acres of Hills Plantations.

(2) On days of bad visibility the coastal plantations are blotted out from the towers on the scarp and have then no fire watching coverage. On at least three days this year this was a total black out though at other times one tower can normally see one plantation. As the McLarty - Myalup complex develops however tower coverage must be improved.

Blacktrackers and 'criminal lunatics'

The following is a newspaper story from 1948:

FIRES IN SOUTH-WEST

INCENDIARISM SUSPECTED

VALUABLE TIMBER ENDANGERED

Perth, Jan. 12.—Fire hazards in the forest areas of the South-West of the State had been increased by a suspected incendiarist who had deliberately set fire to leaf litter and endangered valuable timber assets, said both the Conservator of Forests, Mr. T. N. Stoate, and the Forestry Fire Control Officer, Mr. A. J. Milesi, yesterday.

Messrs Stoate and Milesi conferred at Dwellingup during the week-end, while Mr. Stoate was inspecting forest outposts of the South-West. The incendiarist was described by Mr. Stoate as a "criminal lunatic."

He revealed that the incendiarist deliberately lit a fire in forest country about four chains off the Nannup-Pemberton road, eight miles from Nannup, on Christmas Day. Apparently, said Mr. Stoate, he had thought that fire precautions might have been relaxed—an assumption in which he had erred. The fire had been detected by the Forests Department fire-watchers and had been extinguished after 200 acres had been burned. Rain had fallen before a black tracker could track the man down.

It was strongly suspected that the same man had lit fires at three places, close to the scene of the original fire, on New Year's Day, again thinking that vigilance might have been relaxed. The smoke had been picked up by the department's watcher at the Carlotta tower and the fires had been put out before appreciable damage had been done. When it was realised that a big karri tree, with 50 loads of timber in it, was worth about £150, the gravity of fires which destroyed whole acres of timber would be appreciated.

The Forests Department has installed four powerful R.A.A.F.-type radio transmitter-receiver sets, one each in Perth, Manjimup, Collie and Dwellingup. They will be in operation shortly and will enable two-way radio telephone conversations between forestry men at those places. Wireless communication has already been used successfully by the department for some years in fire detection, fire-fighting and forestry work. These new transmitters will strengthen the view often expressed by visiting forestry officers from other countries and States that this State has one of the most highly-developed forestry fire-fighting services in the world.

The Forests Department is arranging for a black-tracker to be stationed in the Nannup district to bring the incediarist to heel. The co-operation of the Police Department has been available from the outset.

Members of the air force on duty at the R.A.A.F. station, Pearce, yesterday received many calls from anxious persons, who inquired whether a bushfire was extinguished in the district last week had flared up again and was sweeping towards the station. As there was no sign of any outbreak, R.A.A.F. officers on duty were mystified about the source of the information, but came to the conclusion that the rumour must have been started as a practical joke.

At Corrigin the efficiency of the local fire-fighting unit, consisting of a truck and two sprays, was demonstrated on Saturday when a fire a mile from the town, near a dairy where Mr. R. E. Keays was harvesting, was quickly subdued. The damage was light.

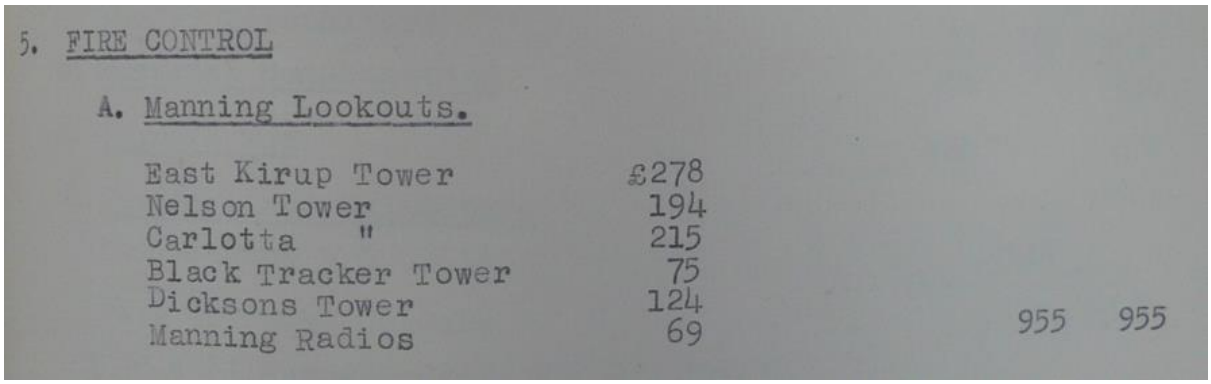
For over three hours on Saturday the Midland Junction fire brigade fought a fire which broke out about 6 p.m in rubbish and sawdust in the yards adjoining the Government railway workshops. It was put out before any damage was done to buildings.

In the 1947/48 Forests Department Annual Report several months later, the following appears:

This year, for the first time, the Department employed a black tracker full time during the fire season. He was stationed at Nannup and the convenience of having our own tracker always available at short notice was generally appreciated.

Presumably because of the seeming outbreak of criminal lunatic behaviour in the general Nannup area this strategy was undertaken. The author has never found any other references to Indigenous trackers employed and/or used by the Forests Department in the years since.

That being so, in the early 1950s the following cryptic entry is made in the Kirup section of the Detailed Annual Report (Note: at that stage Nannup fell under Kirup Division's control):



5. FIRE CONTROL

A. Manning Lookouts.

East Kirup Tower	£278		
Nelson Tower	194		
Carlotta "	215		
Black Tracker Tower	75		
Dicksons Tower	124		
Manning Radios	69	955	955

"Nelson" is Kelson mistyped, but the intriguing entry is "Black Tracker Tower", and the fact that considerably less was spent on it than other towers reported upon. Interestingly, if you hypothesise that the list was compiled by the writer in a more-or-less a north-to-south direction, then this puts "Black Tracker Tower" somewhere nearby Nannup.

The final piece of the puzzle comes, yet again, courtesy of Charles Gilbert from Nannup:

"There was another temporary tower to the west of Nannup along the Great Western road, now the Mowen road connecting Nannup with Margaret River. This was very temporary although constructed with prime sawn timber and was attractive to others obviously equipped with heavy duty timber handling equipment and relocated to an unknown destination."

A diplomatic way of saying it was 'pinched' by some-or-other local villain? (Perhaps known to the writer? Country towns keep their secrets close to their chests, and never divulge them to curious, meddling outsiders).

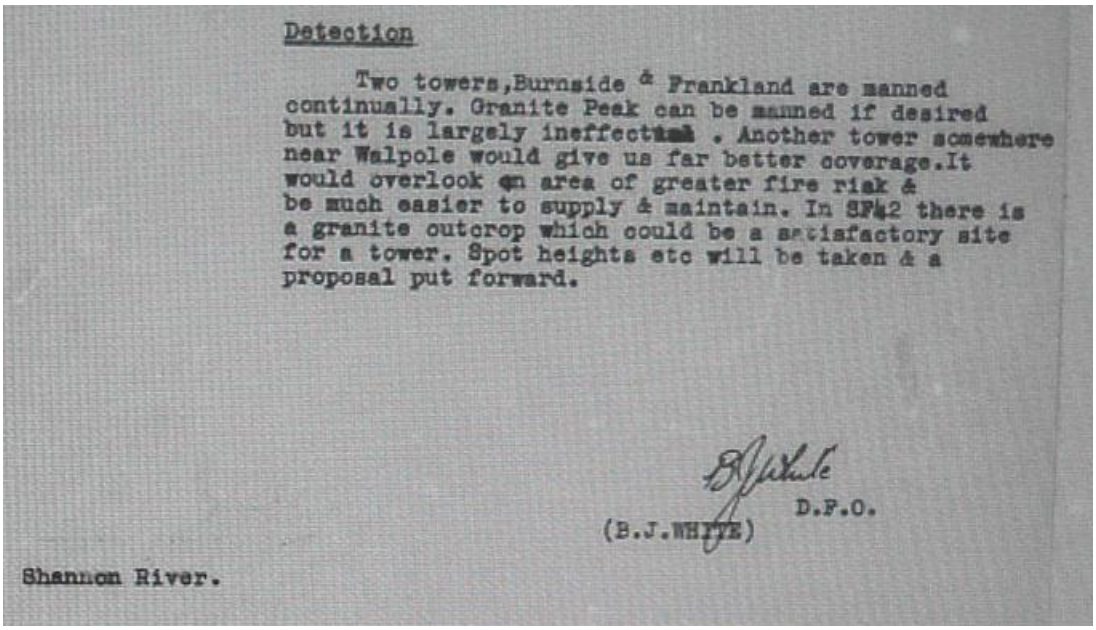
Was it "Black Tracker Tower"? Are any of these above snippets of information actually connected to any of the others? Who knows (the author certainly doesn't). However, it can be said with reasonable confidence that £75 did indeed get booked at some time in the early 50s to a structure which may or may not have been somewhere near Nannup. No references to it are to be found in any Forests Department documentation from subsequent years.

Mehniup

An enduring mystery, Mehniup was a name which has appeared only once on a 1991 Forests Department listing of lookouts without any explanation or relevant details as to its type, location, communications capability, etc. Only much later has the following map been discovered:

This at least established the location of 'Mehniup' (very close to the southern coastline, and east of Walpole) - but nothing more. This symbol appears on Forests Department 80-chain maps issued in both 1963 and 1971.

Subsequently, Annual Fire Reports were located for Shannon Division and in 1961/2 the following was included:



Detection

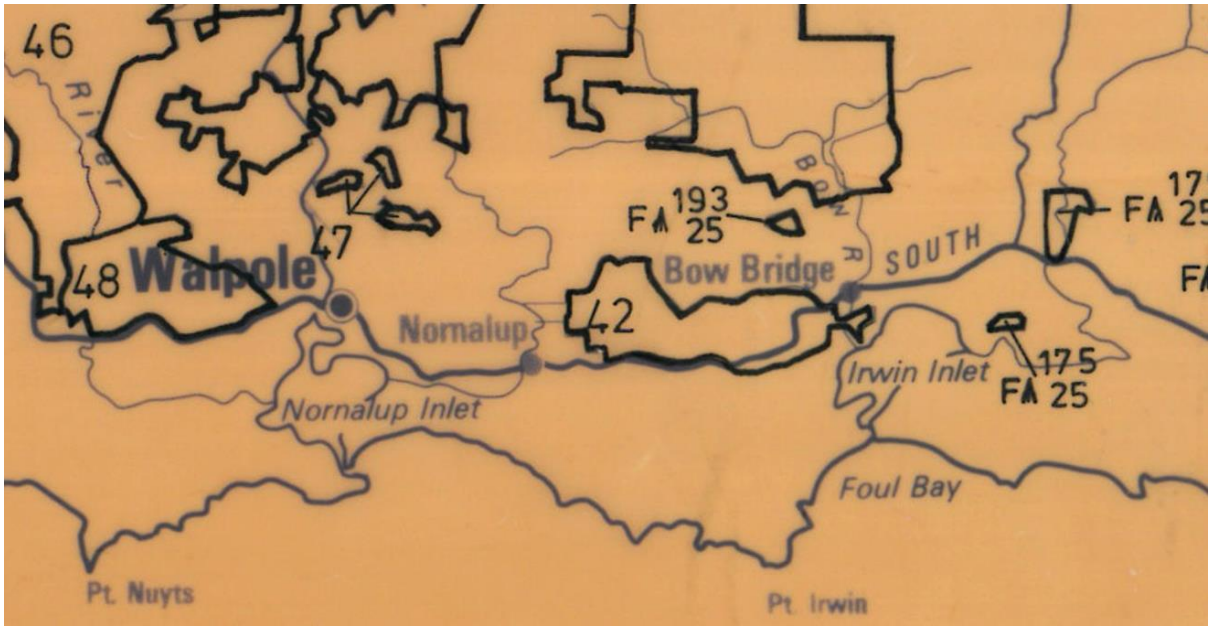
Two towers, Burnside & Frankland are manned continually. Granite Peak can be manned if desired but it is largely ineffectual. Another tower somewhere near Walpole would give us far better coverage. It would overlook an area of greater fire risk & be much easier to supply & maintain. In SF42 there is a granite outcrop which could be a satisfactory site for a tower. Spot heights etc will be taken & a proposal put forward.

D.F.O.

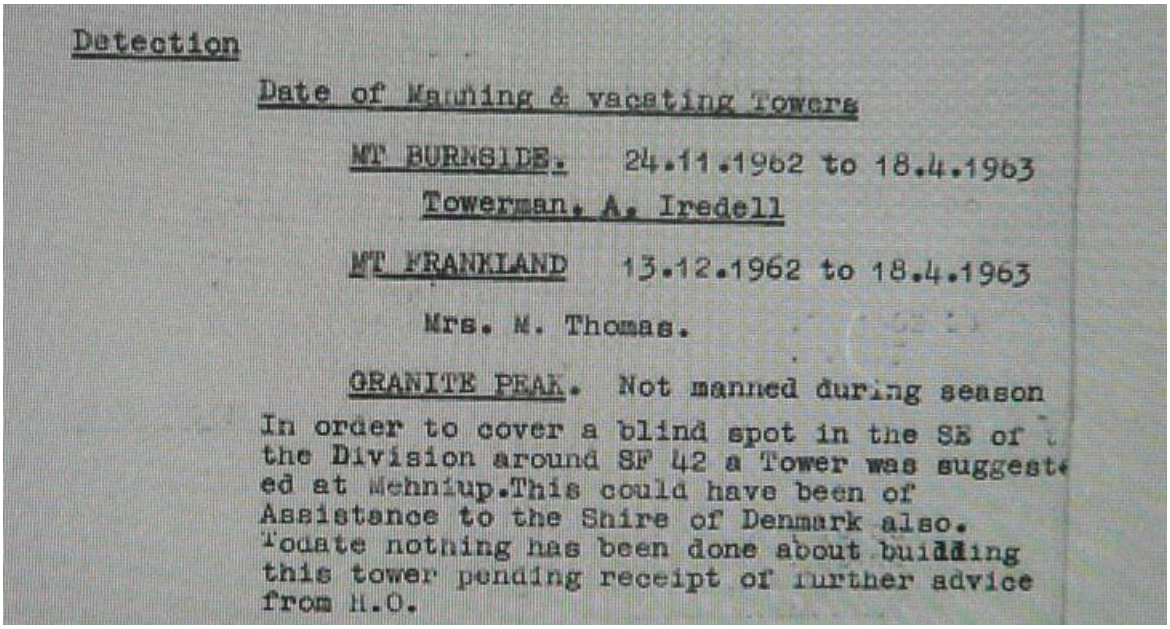
(B.J.WHITE)

Shannon River.

A problem with this is that Mehniup Hill isn't in SF 42 - as can be seen on a map previously brought to the reader's attention, it lies just outside it and further eastwards in Timber Reserve No.175, although this shouldn't have been in any way an impediment for it to be the site of a lookout:



From the next year's Annual Fire Report (1962/3):



Detection

Date of Manning & vacating Towers

MT BURNSIDE. 24.11.1962 to 18.4.1963

Towerman. A. Iredell

MT FRANKLAND 13.12.1962 to 18.4.1963

Mrs. M. Thomas.

GRANITE PEAK. Not manned during season

In order to cover a blind spot in the SE of the Division around SF 42 a Tower was suggested at Mehniup.This could have been of Assistance to the Shire of Denmark also. Todate nothing has been done about buidding this tower pending receipt of further advice from H.O.

Now, taking into consideration that a map dated "1963" does indeed show a lookout symbol at Mehniup Hill, this suggests it's *possible* some form of structure was placed there after the contents of this report had been received and digested at Head Office. Regrettably, despite extensive badgering of people in the Walpole area in search of more detail, the author has to date not found anyone who has any recollections of what *may* have been placed atop Mehniup Hill in the 1960s.

Interestingly, this information seems to fly in the face of other information until now considered as 'gospel'. In Dave Evans' book *Lookouts of the Karri Country* he states (on p.64 when discussing the erection of a lookout on Mt Frankland):

"At the time of its construction Mt Frankland was seen as part of the network which would command the southern forest. For a while, consideration was given to the building of another lookout on Mt Pingrup, a rocky outcrop some 728 feet (220 metres) in height and located three kilometres north-east of Broke Inlet road. This would have given useful surveillance of the lower Shannon and Deep River country and provided useful cross-bearings with adjacent lookouts. However, it did not proceed beyond initial examination".

Mehniup was located even further east than Mt Pingrup, and although it is unclear if anything was ever erected there (we have a symbol drawn on a map, urgings for something to be placed there, but no actual hard evidence at this stage as to what occurred), this is unfortunately a somewhat open-ended story. No doubt, after the time that aerial surveillance became a "thing" in the early 70s it's likely that it would have been very quickly forgotten about.

Lindsay

In the 1966/67 Annual Fire Report for the Nannup division the following appears:

"A temporary Tower was erected in Lindsay Block to assist in Plantation protection on days of 'Blue' Fire Danger rating and above."

In the 1969/70 report was written:

"The temporary tower, adjacent to Lindsay Plantation was manned on days of Blue Fire Danger and above."

It is believed that this bookends Lindsay's existence - a period of four fire seasons.

In a memo to Head Office in September 1971, an appraisal is made of all Nannup lookouts and available towermen. About Lindsay it states:

"Temporary tower located on private property and provides a direct view of Folly Section D. and E. It has limited value otherwise.

Not manned unless the Fire Danger forecast (Jarrah) is above blue. Was not manned at all during 1970-71.

This tower will assume some importance when Plantation development in the Nannup Brook Valley (Folly Section E) is completed (by 1973).

Considering that this time period coincides with the beginnings of aerial surveillance, it is unlikely that Lindsay was ever manned again after 1970. No trace of any structure remains now at the location, and no photo of it has ever been found. At best, it is considered that possibly it was a ground-level cabin or platform.

Keenan, …and a Nannup mystery is solved at the same time

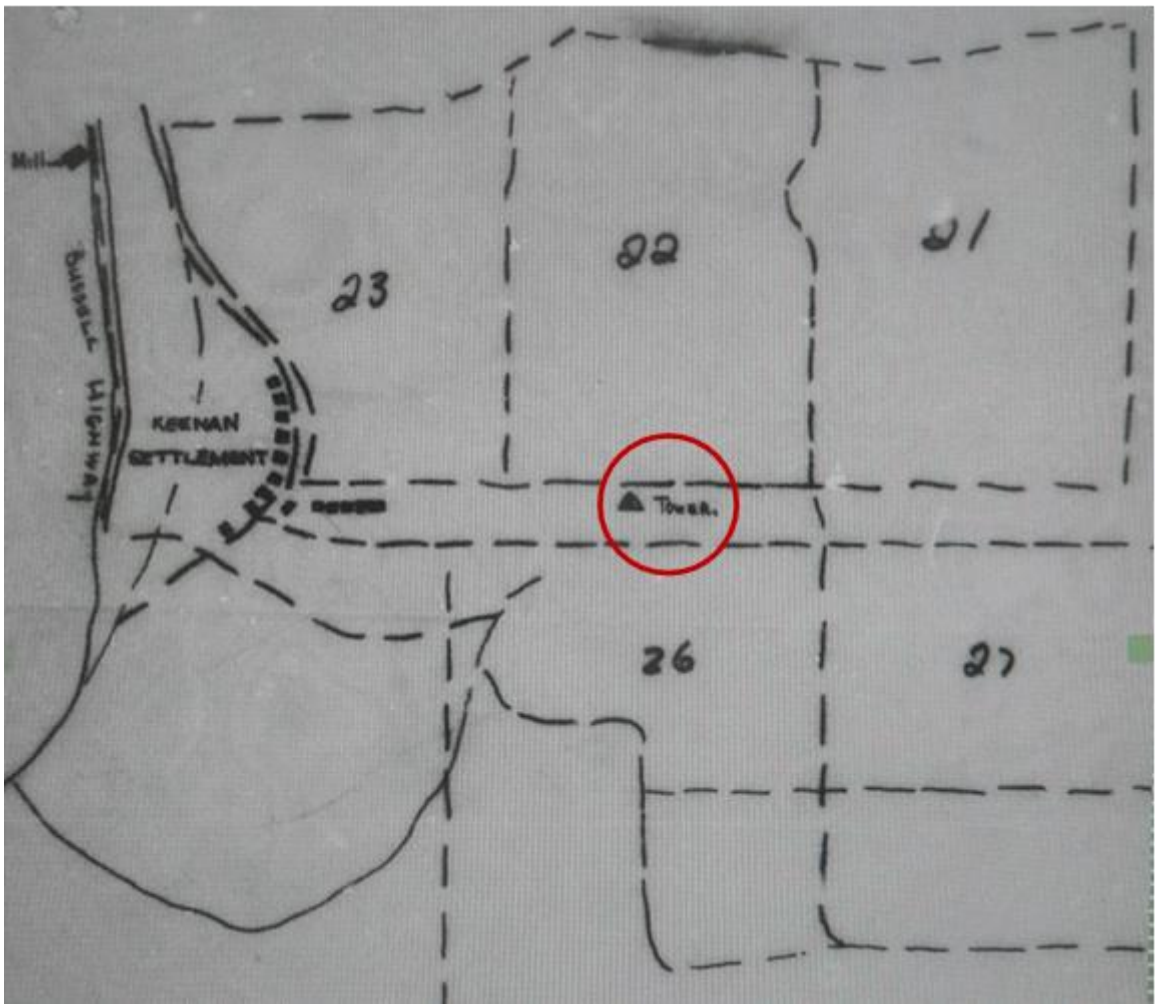
In my earlier tower book (p.85) I discuss the Mt Folly temporary tower, and elsewhere (p.96) a mysterious lookout sited north of Margaret River. The following June 1965 Nannup correspondence with Head Office has since been located:

With respect to your letter of 24th instant, you are advised.

1. *Mt Folly tower was last used in the 1960-61 season. It went out of use due to the fact that it was only twenty feet high and with the growth of the pines was of no further value. It was subsequently dismantled and forwarded to Margaret River for use there.*

2. *Garvin tower is located at FX5649, in Location 759 owned by S.A. Garvin. The tower is situated on a ridge which has a direct view of the majority of the Lewana planting area. It also gives coverage of the Balingup road. This tower began as a lookout point and was then upgraded with the construction of a 20 foot tower. It is connected to the main Nannup-Kirup telephone. The tower is located within the Kirup Division but is manned by Nannup Division.*

Accompanying this correspondence, the writer (D.F.O Hill) has helpfully included a sketch map of just where the Mt Folly tower was reassembled in the Keenan Plantation after translocation:

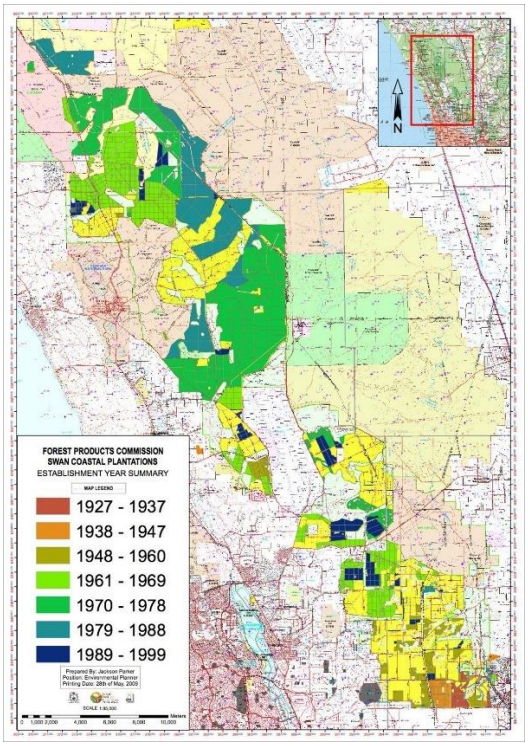


In December 1971 Andrews Engineers Pty. Ltd. of Welshpool was awarded the tender to build the 65-foot (20 metre) steel Collins Tower (for $3,060) less than 5 miles north-west of the plantation, and this probably led to the structure's second stint at temporary lookout duty also coming to an end. It is, to the best of the author's knowledge, the only temporary lookout to ever have visited other parts of the state 'looking for work'.

And finally, Kevin Coate fortuitously took a photo of the tower in 1958 when it was newly-installed at Nannup during his time working there as a Forests Department employee, included that photo in his book, and has thus solved a longstanding mystery for the author. Thank you, Kevin:

Gnangara and beyond…

If there is a place to flummox and frustrate a modern-day lookout researcher, then this is surely it. The author is convinced that those who worked there probably never saw it this way, but terms like 'haphazard', 'ad hoc' and 'lacking in an overarching vision' are those that the author would think of when considering the area. It will have been noted already that the other pine plantations closer to Perth of Scaddan, Collier and Somerville all started with defined initial boundaries and were filled-out with that initial spatial restriction in mind. Even plantations set in parts of the indigenous forest in the various districts and divisions were constrained by this same notion of a fixed area. Go north of Gnangara, and what transpired was a gradual sprawl as the years rolled by with no seeming end-point envisaged. Pines stretching all the way to Lancelin (and possibly beyond) was an idea thought about at one time when Forests Department minds of the era sat around dreaming of the future. A very interesting retrospective map of plantings north of Perth appears below. The author has deliberately made it small, because the colour gradation is the important thing to note, not any of the finer detail (and the author is a bit sceptical of the base data that has been used, anyway):



Gnangara settlement is in the very bottom right-hand corner (the brown shading). A further consideration is that all these coloured areas began life as barely above-ground seedlings, and in a few short decades would gain sufficient height to block any line-of-sight previously the case before they grew. We are in sandplain country here - not the Darling Scarp. 'Hills' and 'mountains' do not exist; this is re-purposed coastal scrub country.

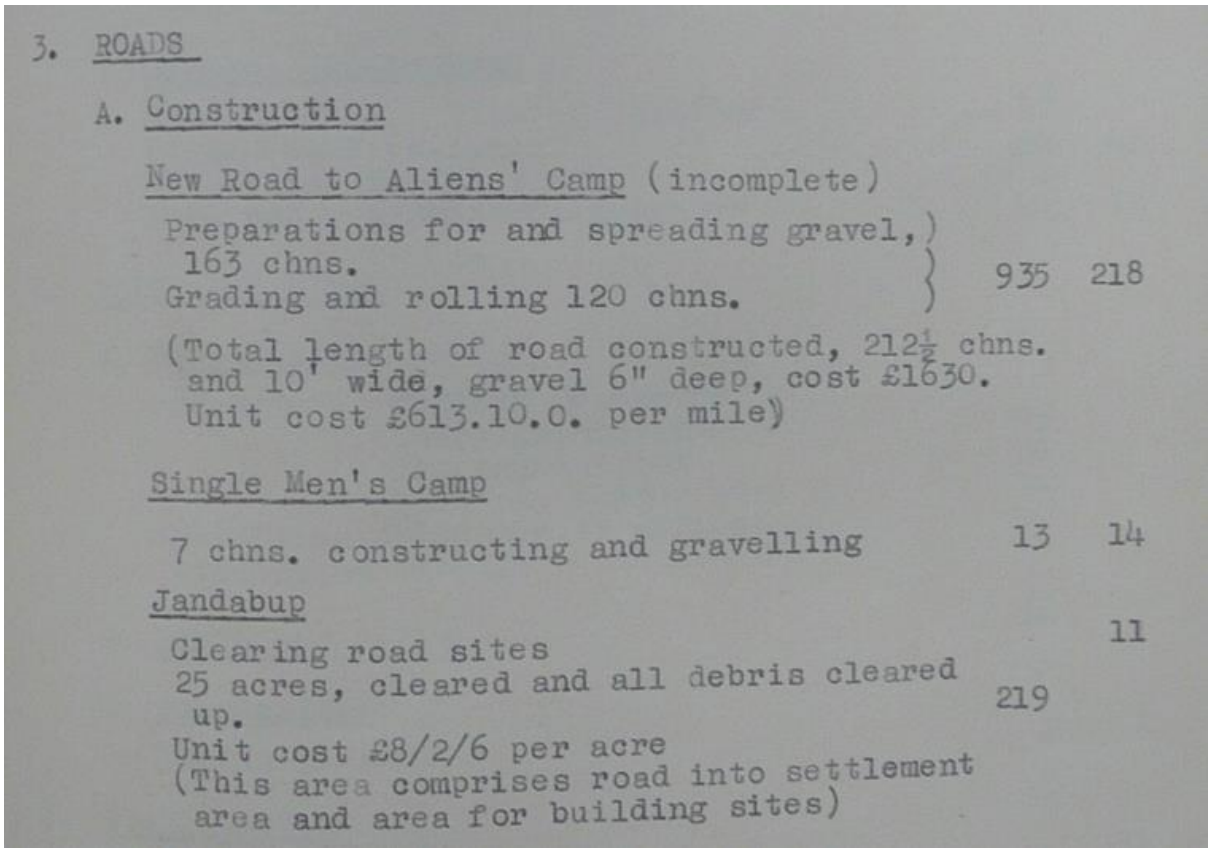
Ironically, this whole area to the north of Perth was never available for aerial surveillance when it began in the early 1970s, because it falls within the ambit of airspace needed by the Australian Airforce for training flights using the RAAF base at Gingin. If ever there was an area naturally suited to some form of non-terrestrial detection capability, then this was surely it.

What should not be forgotten by any reader is that we are discussing ancient history. The author would suggest a reader access any form of satellite software they have at their disposal and just look at what the area is like today - virtually completely cleared of any pine, and in many places going back to coastal scrub. It shouldn't escape the reader's attention that all of the lookout building activity - over decades, along the Darling Scarp and beyond could, conceivably, still be the template for any modern ground-based detection strategy should it ever be required again. Pines 'came and went' - despite the visions held all the way back in the 1920s, they were a passing parade in the inextricable march of time. The author has often wondered if people back in the day actually *did* invent a time machine, travel into the future, and work out that it was not going to be a good idea to create anything more than temporary structures, because the whole idea was never going to have a long-term future anyway.

Possibly a bit too philosophical in a book like this, but it is a good segway nonetheless for what comes next.

Jandabup

In the 1950/51 Detailed Annual Report there is much evidence of expansions underway at Gnangara which are centred on areas west of the original Gnangara settlement. The name 'Jandabup' was used (unsurprising, as it lay just south of Lake Jandabup), and according to the information below the site of the wartime alien's camp was somewhere within the larger scope of works:



3. ROADS

A. Construction

New Road to Aliens' Camp (incomplete)

Preparations for and spreading gravel, 163 chns. Grading and rolling 120 chns.	935	218

(Total length of road constructed, 212½ chns. and 10' wide, gravel 6" deep, cost £1630. Unit cost £613.10.0. per mile)

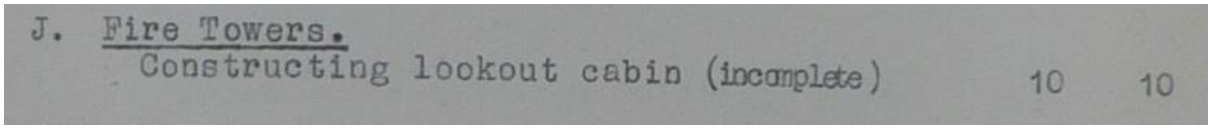
Single Men's Camp

7 chns. constructing and gravelling	13	14

Jandabup

		11
Clearing road sites 25 acres, cleared and all debris cleared up.	219	
Unit cost £8/2/6 per acre (This area comprises road into settlement area and area for building sites)		

A year later, and in that year's Detailed Annual Report, is the following also relating to 'Jandabup':



J. Fire Towers.

Constructing lookout cabin (incomplete)	10	10

All figures above are costs in pounds. It is then seemingly absent from any surviving archived data until it reappears in a handwritten Annual Fire Report from 1954/55 in the "fire detection" section. The records appear to show Annual Fire Reports weren't done for Gnangara before this year - which may explain why the existing Wetherall lookout seems to be being described in such detail that wouldn't need to be provided if it had been 'introduced' in any earlier reports:

— Organisation of Fire Season —

a Fire Hazard :-

Fire Weed for each morning during fire season and all concerned notified.

b Detection :-

A Look Tower has been erected on a hill abt 60 chains from Head quarters and from this a good view can be had of all planted country. It is manned on all except low - nil hazard days during the fire season

Communication is by telephone.

Jandabup settlement is prominently situated and connected by Phone.

c Communication

Locally by telephone - outside by telephone and radio.

d Suppression :-

Local employees form a Fire Gang and some are reading at all times to man the outfits.

Intriguingly, in recent years a private smallholding was advertised for sale at 54 Paini Way, Jandabup which listed a “lookout” as one of its selling points. It looks like this:

An obvious ‘earth mound’-type of raised area, it is unknown how much the site has been modified over the years, but it does seem to fit the criteria for the likely spot of the Forests Department ‘Jandabup lookout’. There is a further side to this story - Wanneroo Division also submitted Annual Fire Plans, and the earliest of those that still survives (1958/59) does not mention Jandabup in that year, nor in any subsequent year up to and until the arrival of the 3-legged Wanneroo Tower in the 1963/64 season. As the new 70ft Wanneroo tower was less than 3 miles almost due west of the guessed-at Jandabup site, it suggests the initial idea was good - but the structure and location were too low, seemingly abandoned for any useful fire detection work sometime in the mid-50s, and the ‘permanent’ 70ft tower eventually took over for this general location in the early-to-mid 60s.

Carabooda

An appendix to the 1969/70 Annual Fire Report for Wanneroo Division (headed ‘Points of Interest & Recommendations for next fire season”) the writer states:

The three main lookouts - Gnangara, Wanneroo and Wabling functioned effectively during the season. At times of poor visibility the subsidiary lookouts - Pinjar and Wetherell were manned. A new subsidiary lookout - Carabooda was established to cover high risk “blind” areas of Pinjar - both planted and cleared - and this was also manned on days of bad visibility and high danger ratings. Communications with Carabooda lookout on these occasions was maintained with mobile V.H.F sets. Consideration also has been given to the installation of radio-telephone on Wabling tower. The present means of communication with this tower is by V.H.F. radio, which tends to take up a lot of radio traffic with smoke reports and hourly reports as well as creating a communication problem on weekends. (Note. This installation has been approved)

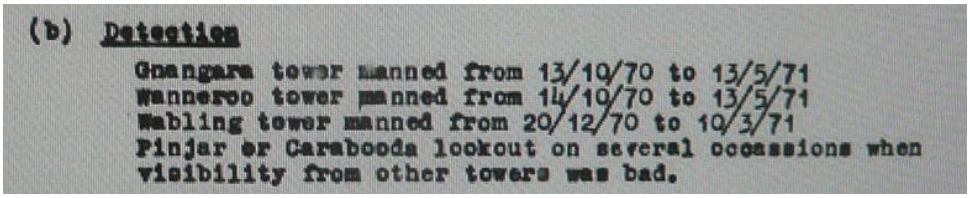
A new tower between Wanneroo and Wabling will be required in approximately 4 years, and to this end a preliminary rece of suitable sites was carried out. Further investigation is still required.

Carabooda is listed on a less-than-reliable 1991 Forests Department spreadsheet as being an “earth mound” of 2 metres height, but this is assumed to be accurate. The last Annual Fire Report where it is listed is for 1971/2 - so, suggesting a usage life of three seasons.

If the “new tower” yearned for above was in fact Shireview, then that would only be erected in the second half of the 1980s.

Pinjar

In my earlier book on fire towers, it was speculated that Pinjar was indeed a tower. Further research suggests this may not be the case.


(b) Detection

Gnangara tower manned from 13/10/70 to 13/5/71
Wanneroo tower manned from 14/10/70 to 13/5/71
Wabling tower manned from 20/12/70 to 10/3/71
Pinjar or Carabooda lookout on several occassions when visibility from other towers was bad.

Entries like this where Pinjar was spoken about in the same way that Carabooda was (and separate from mentions of 'proper' towers) appear several times in the late 60s, suggesting secondary status. And in this regard a brief entry in a late-50s Fire Report may offer a clue:

A platform be fixed to the top of the main supply tank to serve as a lookout tower for the next few fire seasons, and to be manned on bad days and during the weekends.

The author believes that "…the next few fire seasons…" stretched out of the 50s, through the 60s, and probably only came to an end in the early 70s.

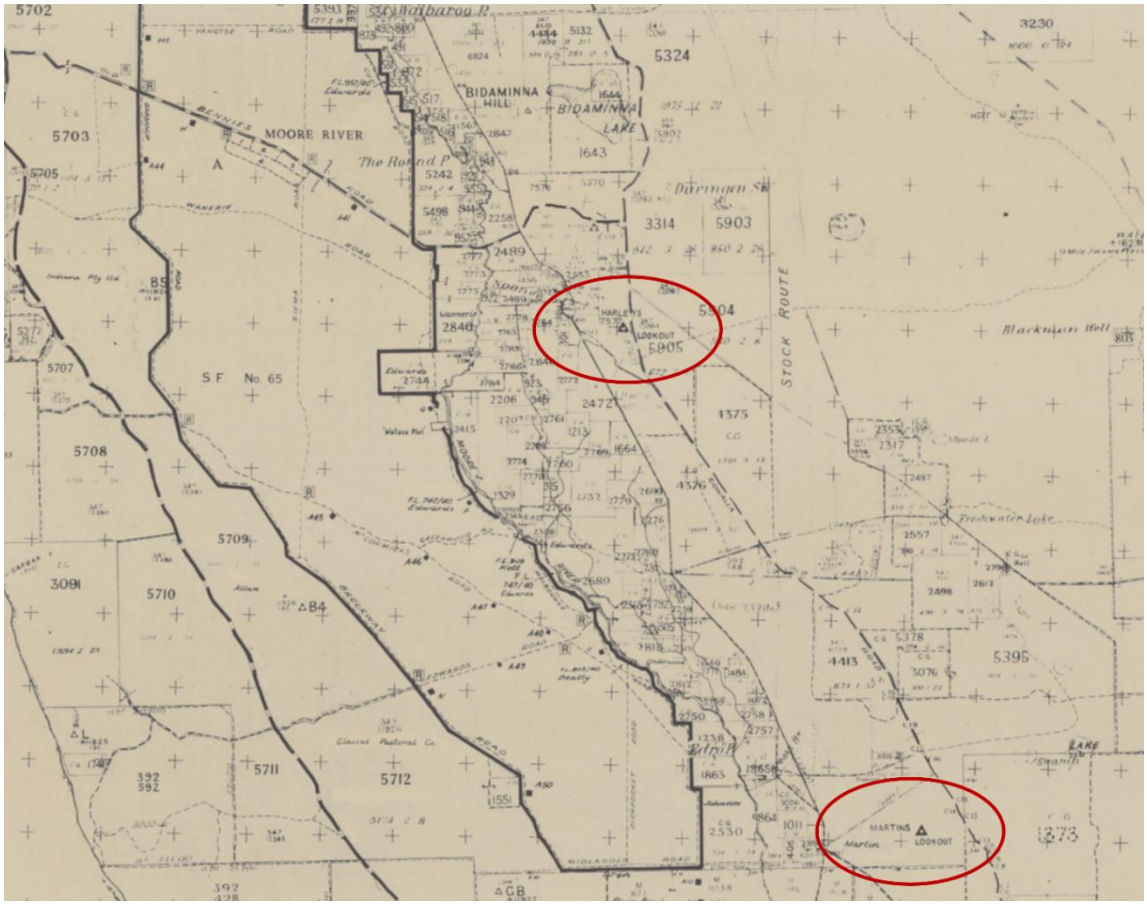
Although unsure of how relevant this is, here is a 1990s photo of the water tank at Yanchep showing a platform around the tank. This *may* give some indication as to what might have been used at Pinjar, although this is steel and Pinjar was listed as a 9 metre-high wooden structure. There is a photo of an earlier wooden water tank stand which was at Somerville shown in a photo on page 44 of this book. Note that the Somerville one has no platform around the tank.

Gingin Airport

In the pantheon of 'lookouts' northwards of Gnangara it is probably worth briefly mentioning the RAAF base at Gingin. Known only from a single map showing a lookout symbol at the control tower, it is possible that it was a site which could be phoned anytime a potential cross-bearing might be needed if, on the off chance, the source of the smoke was visible from there. The concept is not unheard of elsewhere - the author has previously seen mention made of Jandakot Airport's (Perth's main light aircraft airport located in the southern suburbs) control tower being referred to by name in a fire report from Somerville in the 1960s. Undoubtedly not a type of 'first choice' lookout, and any 'fire-spotting' would have been by request and not courtesy of a dedicated watcher.

Harley and Martin

Sounding more like a comedy duo than anything else, Harley and Martin are two sites right at the upper end of the north-of-Perth pine planting experiment. This map (the Moore River 80-chain map) was issued in 1973:



State Forest 65 was proclaimed in March 1959, as shown earlier in this book. The northernmost (and largest) section of SF 65 lay north of the road connecting Gingin to Guilderton. SF 65 is demarcated on the map by the solid line. It will be seen that both 'lookouts' are on private farm land, west of Cowalla Road (the dashed line).

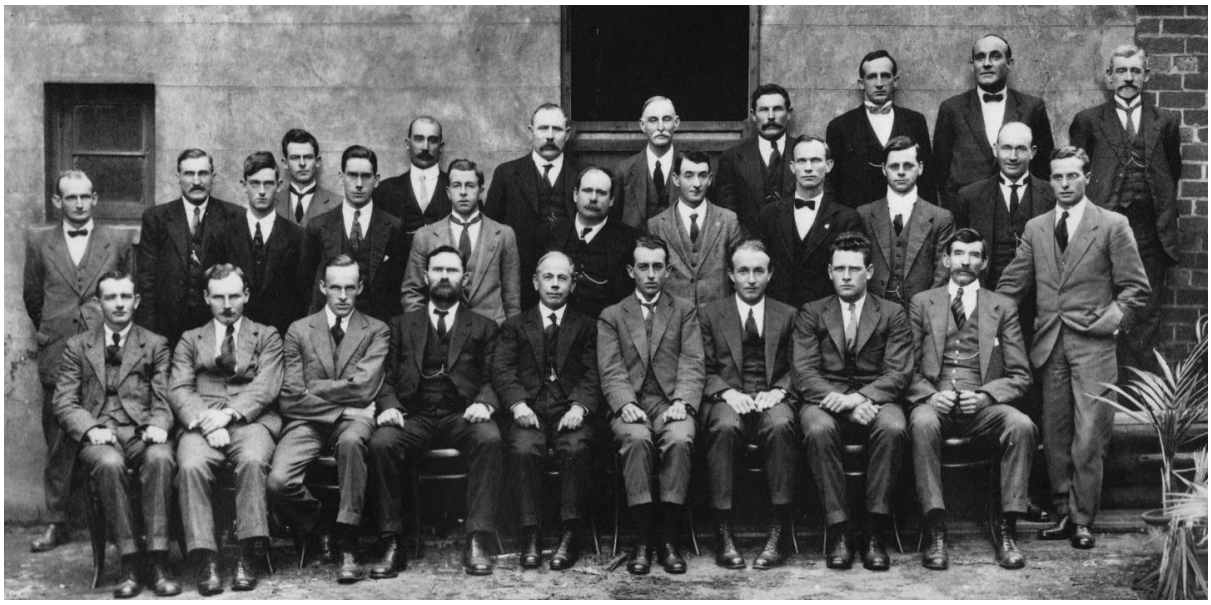
Interestingly, the <u>only</u> part of this area ever planted with pine was a narrow strip just south of Bennies Road (shown with dotted lines just below where "Moore River" appears on the map). The remaining land is all coastal banksia scrub - and still is in that pristine yet weatherbeaten condition today. The only clue is that "Harley" (here marked as "Harley's Lookout") is located such that it would look WNW along Bennies Road to the planted area although it is a *long* way away if that was the motivation, and the rationale for Martin further south is a mystery - it is absolutely nowhere near any plantings, although it may have been of some use scanning southwards towards the northern end of the Pinjar plantation blocks on the other side of the Gingin-Guilderton road.

The author's long years of examining Forests Department archives and badgering anyone who may have known of activities in the area have <u>never</u> uncovered any information to explain these lookout symbols.

Chapter Six

In Conclusion…

That brings the reader's journey to an end. I doubt any reader can have failed to notice that the longer the story has gone on, the less seems to be known - despite the times being closer to modern times. The author has previously had a 'mini-rant' (rantlet?) in his earlier book on towers about this very unsatisfactory situation and will spare the reader a repeat here. Suffice to say that the diligent, professional standards of the early years when it came to keeping records seemed to wane the longer things went on.



As a way of romantically bringing this story around and back to the start - and hopefully to also leave the reader with some swinging jazz music jangling-around in their head as a souvenir, this is a group photograph of senior Forests Department officers attending a 1923 in-house meeting discussing forestry issues. It is probably just as well they (mostly) naturally died of old age, as I suspect they would have died of shame if they ever had found out how record-keeping and maintaining internal 'corporate memory' was going to be done in the future. They, at least, can justifiably hold their heads high with honour. Thank you, gentlemen.

(Some of the faces: Kim Kessell is seated in the front row, sixth from the left: Bill Stoate is next to him and seventh from the left: a young Dick Perry is in the back row, third from the left; and a man whose name is known by many people interested in Western Australian botany even today, Charles Gardner, is front row and third from the left.)

Thank you for taking the time to read this book.

Max Le Clercq

13 January 2024