



FOREST NOTES

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Editor: I.G. Lennon

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The letter published below was received by the Conservator from Mr H.D. Evans, M.L.A., the previous Minister for Forests. The Conservator felt that the best way of complying with the wishes of Mr Evans, expressed in the last sentence of his letter, was to publish the entire letter in Forest Notes.

Editor.

24 Finch Street
MANJIMUP W.A. 6258

8th May, 1974.

Mr B.J. Beggs
Conservator of Forests
R. & I. Bank Building,
Barrack Street
PERTH W.A. 6000.

Dear Mr Beggs

Following the reorganisation of the Forests Department Administration with the recent State elections, I would like to express my appreciation of the efforts and support given me by the officers of the Department at all levels.

Many problems which arose during the past three years involved exertions on the part of many beyond the normal expectation of departmental duty.

I enjoyed my period of close association with the Forests Department, during which I increased my respect for the dedication shown by all officers in the proper management of a most important natural resource.

I would be most appreciative if you could in some way convey my sentiments to the members of the Department.

Yours sincerely,

SGD: H.D. EVANS, M.L.A.
(Member for Warren).

Forests Department
COMO.

May 6th, 1974.

The Editor
FOREST NOTES.

Dear Sir

The other day I came across the attached correspondence and thought you may be able to use same in Forest Notes.

The correspondence was handed to me some years ago by a Forester (since retired) who assured me that the incident in the letter did occur.

The verse apparently appeared from the pen of one of our staff in Head Office on its way out of Head Office.

Yours faithfully

A.J. ASHCROFT.

COPY.

17.6.48

CONSERVATOR OF FORESTS
PERTH.

P.P. FIRE ESCAPES - BERT

ATTENTION F.C.O.

Referring to mine of the 7th June, Mr Bert called today and admitted full liability and willingness to meet the cost.

He said he had been driven mad by ants invading his house, and finally set fire to the logs that sheltered them. The fire escaped with rise in hazard the next day.

He has been a good and willing neighbour on our telephone system. His fire did not enter or threaten State Forest, but entered an adjoining 160 acre block of Crown Land. He has now vacated his block (owing to weak heart) and is living near Manjimup and drawing the old age pension.

I am taking no action to recover the amount involved (£6. 1. 9) until I hear from you as regards general policy on this matter.

S.D.F.O.

Dear Bert

If you simply must
(To make a crust)
Burn the forest down,
For the love of Mike
You silly tyke,
Make sure the lands aren't Crown.

You're in debt,
For toil and sweat
Produced by blokes of mine,
You're not too dumb
To know the sum
Is Six Pounds One and Nine.

I know that ants
When in your pants
Produce much real confusion,
But to think that you
Could burn these few
Is merely an illusion.

But it's hard to hurt
A neighbour, Bert
(It savours more of killing);
And we have seen
That you have been
A friend both good and willing.

In view of this
You need not miss
Your future old age pension
(I'll do all I can
You silly man
To relieve your mental tension).

We'll say no more
About the score,
You're let off with a caution;
But do it again
No matter when
And gaol will be your portion.

C. of F.

FAUNA IN THE NORTHERN JARRAH
FOREST (THE MARDO'S SANCTUARY)

M.L. Mason

Fauna investigations at Dwellingup were initiated in response to the general public's questioning of the Forests Department prescribed burning policy. There was some concern that programmed burning would have a detrimental effect on the fauna of forest areas in Western Australia.

Initial investigations began in 1971. The aim was to determine firstly the distribution and types of animals frequenting the forest, and secondly the selection of species for long-term detailed study.

Exploratory trapping was subjective in the early stages, and mainly confined to swamps and areas of dense vegetation that were found to support forest fauna. Upland areas were trapped to a lesser extent because only a few, if any, animals were caught. As a result of these early studies it was thought that prescribed burning had a minimal effect on the existence and maintenance of smaller marsupial populations.

Subsequently, long-term studies were initiated in swamps to ascertain animal movement patterns and population stability. Antechinus flavipes, a small marsupial mouse (Mardo), was selected as the most suitable species for close study due to the relative ease of capture and recapture.

Recently, a study in upland forest was established in two areas. One of the areas was subjected to regular prescribed burning, whilst the second area had had fire excluded from it for 40 years. The regularly burnt area produced the same result as did previous upland exploratory trapping. The area from which fire had been excluded, however, had population levels which were as high as those found in swamps.

The reason for the substantial population in the unburnt country is not yet clear and further studies are under way in upland forest to determine the effects of canopy cover, quantity of logging debris, stand age and density.

It is possible that the regular 5 to 7 year burning of the forest has created conditions unsuitable for the Mardo in the uplands and thus it has sought sanctuary in the dense swamps.

The swamp areas are not burnt so frequently and hence vegetation and litter are allowed to build up to what appear to be suitable habitats for the Mardo.

Since it is not practical to extend the interval between prescribed burns in upland forest, we could make a special effort to see that swamp areas are not deliberately burnt out when the prescribed burning is done. Instead, a 15 to 20 year rotational burning of swamps could be implemented on a selective basis and, since the swamp involved only makes up a small percentage of the forest area, this would cause little inconvenience to the prescribed burning programmes that are at present in operation.

DISTRIBUTION OF MODERN MAMMALS
IN THE SOUTH-WEST OF WESTERN AUSTRALIA

F.E. Batini

Distribution maps for nineteen species of modern mammals have been prepared by inspecting the mammal collection held at the Western Australian Museum. Data for a further thirteen species were made available by Mr Alex Baynes. The combined data cover the following groups:

Monotremes 1 species

Marsupials

Native Cats 7 species
Bandicoots 2 species
Possums 4 species
Macropods 6 species

Eutherean Mammals

Bats 9 species
Rodents 2 species
Dingo 1 species

The distribution of species has been plotted on the 1:1 500 000 map of the forest areas of the south-west using a 10° latitude by 10° longitude grid. On these maps, the symbol ● indicates that the specimen is held in the W.A. Museum (skin, skull or spirit) and has therefore been checked for identification. For some species, the symbol ◐ indicates that the specimen was discarded after the initial identification and should therefore be regarded as a Museum sighting.

In addition to the distribution maps, a list of the Museum numbers for each species and for each grid co-ordinate is available. By reference to these, further details (sex, date of collection, locality etc.) can be obtained. Copies of the complete set of data will be held at the Western Australian Museum, Head Office library and the Research Centres at Como, Dwellingup and Manjimup.

The records are those of modern mammals (circa 1896 onwards) and do not include fossil specimens, specimens held in other museums or the records contained in the publications of Thomas and Shortridge. There may be some limitations in interpreting the data.

Museum specimens may not cover the full range of the species and the absence of a specimen from an area cannot be taken as the absence of the species from that area. In some cases these maps reflect the distribution of population as much as the distribution of the animals.

Some of the older records may be incorrect in their location since, on occasions, the location of despatch rather than that of collection was used (e.g. three of the boodie rat specimens came from Forrest Street, Beverley).

No idea can be obtained of the density of the species, or of the habitat preferences. In some instances (e.g. honey possum, native cat) a single collector provided a large proportion of the specimens.

Discarded specimens may have been incorrectly identified and cannot be checked.

Nevertheless, these data provide a basis for the preparation of distribution maps for the mammals of the forest areas of this State. The curator of Mammals (Dr. D. Kitchener) considers it desirable that specimens which are dead when collected be lodged in the Museum, especially if an animal is rediscovered in an area after a long absence (e.g. woylies near Karridale, last collected in 1930), or when the geographical range of a species would be greatly extended (e.g. records of the fat-tailed dunnart in the southern forests). These specimens should preferably be sent by way of the nearest Research Centre, as suggested in the article by P. Christensen, which follows.

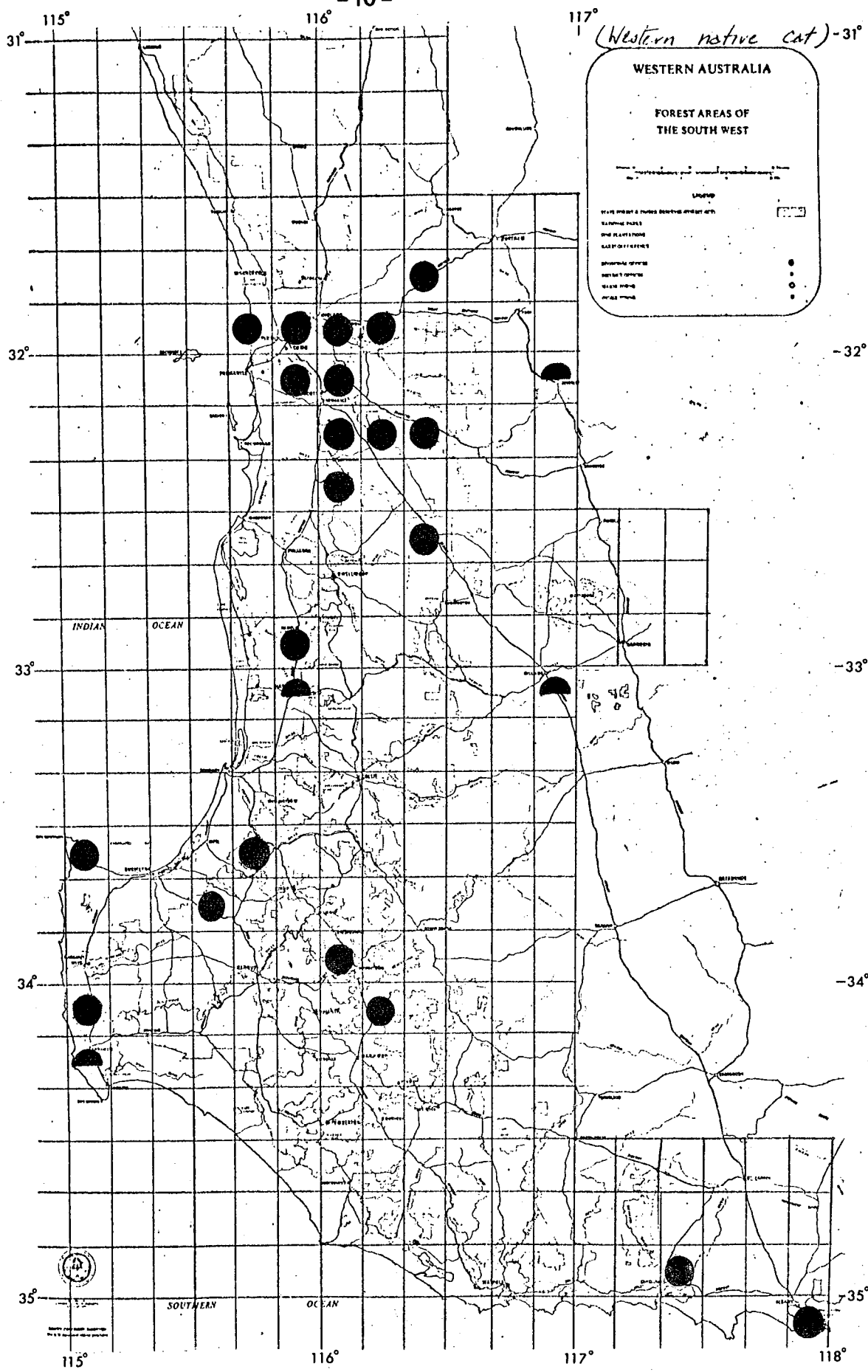
When the data on animal distributions currently available at the Dwellingup and Manjimup research centres are compiled in a similar form, it will greatly enhance our knowledge of the spatial distribution of these species. Blank maps will be made available to any officer who wishes to contribute on this subject if he contacts myself at Como Research.

The distribution map and list of Museum numbers for the western native cat are included with this article as an example of the information currently available.

Dasyurus geoffroii
Western native cat

LAT.	LONG.	MUSEUM NO.
31° 40'	116° 20'	M 4464
31° 50'	115° 40'	M 550, (M 1395)
31° 50'	115° 50'	M 311, (M 865) (M 1106) M 1318, M 1337, (M 1603) (M 1850) (M 2866), M 4702
31° 50'	116°	(M 323) (M 1035) (M 1282) (M 1829) (M 1831) (M 1838) M 1842, M 1863, M 1865, M 1866, M 1867, M 2062, M 2158, 2444, (M 2841)
31° 50'	116° 10'	M 5265, M 6797, M 6967, M 7160, M 7488,
32°	116°	M 1046, M 1294, M 6946
32°	116°	M 235, (M 1580) M 1581 (M 1583) M 2063, (M 2876) (M 2909) M 3075, M 6765, M 6766.
32°	116° 50'	(M 1128)
32° 10'	116°	M 6735, M 6928, M 7574
32° 10'	116° 10'	M 7575
32° 10'	116° 20'	M 4969
32° 20'	116°	M 1291, M 1326, M 1736, M 3359, M 3491, M 4098
32° 30'	116° 20'	M 4599, M 6582
32° 50'	115° 50'	M 1385
33°	115° 50'	(M 776)
33°	116° 50'	(M 3210)
33° 30'	115°	M 497
33° 30'	115° 40'	M 5123
33° 40'	115° 30'	M 6520
33° 50'	116°	M 548
34°	115°	(M 1824) (M 1825) M 1839, M 1852, M 1861
34°	116° 10'	M 1783, M 1784
34° 10'	115°	(M 1717)
34° 50'	117° 20'	M 6769
35°	117° 50'	M 6941

Specimens not retained by the Museum are bracketed



FAUNA RECORDS

P. Christensen

Few people fully realize just how meagre our information on fauna really is. Many interested persons living on farms, or in forestry or mill settlements, possess or acquire potentially valuable knowledge about the fauna in their area. Very few, however, report observations, or even worse they fail to send in valuable specimens when they get hold of them. The tendency is to think that they had known that species was there and to imagine that somehow it was general knowledge, and therefore unimportant. However, very rarely is it general knowledge, and it is always important.

A number of facts should be realized with regard to reporting 'animal sightings' and sending in specimens. Firstly, the only real, lasting record of an animal is a museum record. If an animal's occurrence in an area is not recorded in the museum records, that information will be lost for ever. For example, however common brush-tailed possums may be in a particular area, if no specimen skin or skull is lodged at the museum and the species disappears from the area, that information is irretrievably lost. There are countless stories concerning the abundance of various species in the south-west earlier this century; few, however, can be substantiated with specimens.

This situation makes any work on animal species very difficult. The information that can be gained from good museum specimens with reliable collectors' notes would surprise most people. For example, if many specimens of a particular animal are available, information as to its distribution will be reliable. The type of habitat it lives in can also be deduced from notes on where it was found. Measurements of size and weight are more accurate if many specimens are available. Other important information, such as the breeding season and the number of young they have, can also be gained from cutting up specimens. Food data can be obtained from examination of the gut contents. These are just a few of the more obvious things; much more information on the internal organs, diseases, parasites etc is obtainable from a good museum collection. Much of the published data have been obtained from examination of museum specimens.

As an example of just how little information is available about animals in forest areas, I have chosen the western native cat or chuditch (Dasyurus geoffroii). It is an animal which has at least been heard of by most people and also one which

is undoubtedly present throughout most of the forest area. Furthermore, it is an animal which is sufficiently interesting to prompt people to take an interest in it. Despite these facts, the number of museum specimens received since 1896 is extremely limited (see map and list following previous article by F. Batini). Most of the specimens have been sent in from near settled areas, for example the Perth vicinity and farms close to forest areas. This indicates the distribution of people rather than the distribution of the animal and is a pattern with museum specimens.

How many people have had in their possession, seen or had access to specimens of this animal during the last 80 years and not sent them in? And to how many other species does this situation apply?

Since the Department started work on the forest fauna we have had many specimens sent in which we have forwarded to the museum. But I strongly suspect that many more are still being discarded and lost. It takes a little effort but if anyone should come across, get hold of, or otherwise acquire or hear of any specimens, please forward these to the Manjimup Research office. Alternatively, give us a ring and we then have the opportunity to decide whether or not a particular specimen is valuable. Most specimens are worthwhile and for rare species we are willing to travel hundreds of miles! All specimens will be forwarded to the Western Australian Museum with due acknowledgements, after we have recorded the find in our own Departmental records. The museum catalogues each specimen and it is preserved in their collection for all time.

Small specimens can be preserved in alcohol, methylated spirits or 4% formalin. The stomach wall should be cut open to allow the preservative to get to the stomach contents. With larger specimens, the head or skull is generally the most important and can be similarly preserved. If in doubt, ring us for advice. Information regarding collector, area of collection, forest type, date etc. should accompany any specimen.

The forests cover a vast area, which is surprisingly little known, even to-day. The Department's, and indeed the State's records depend on the co-operation of everyone in forwarding material. We can cover selected areas but it will take years before we are able to search everywhere thoroughly.

[P. Christensen. Forests Department (Research), Manjimup.
Tel: Manjimup 711338
711988]

"COMEANAVAJARRAH!"

(Alcohol is now extracted from jarrah trees)

Hail, O hail the new poteen,
Hail the grog of Gropers,
In our forests grand and green
Grows the joy of topers.
Let us toast the ladies fair
In a jarrah bumper,
Mother's milk for millionaire,
Larrikin or lumper.
Where the "sp'rance surges swing,
On to Tuckanarra,
Hear the invitation ring-
"Comeanavajarra!"

In the past the juice of hops
Pleased its thirsty clients,
Now we'll swig the crystal drops
Coaxed from jarrah giants;
On the barley's yeasty brew
Climate rings the changes,
Therefore let us mop the dew
From the Darling ranges.
Oft we've raised a beery drought
With a ling or barra',
But in future we shall shout
"Comeanavajarra!"

In the future we can see,
As in spook recitals,
Changes when the eau de vie
Lubricates the vitals.
Barmen no more wallop squirt
Into tankards tubby,
Fusel barmaids no more flirt
With a rival's hubby.
No more Scotch, and no poteen
From the hills of Tara,
But we'll hear where men convene
"Comeanavajarra!"

Men who mill and men who mine,
Men who loaf or hustle,
Will in future, when they dine
With a jarrah tussle.
Mental pictures we produce,
Showing boss and bummer,
Soothing with this jarrah juice
Thirstiness in summer.
He who dines on caviare,
Or on boiled bungarra,
Murmurs, as he breasts the bar,
"Comeanavajarrah!"

West Australia once produced
Sand and skinny horses,
And, when came its golden boost,
Just a few divorces.
Then it found the trees it grew
Unsurpassed for paving,
Which now also yield a dew
Fit for larynx laving.
So in London's foggy street,
Or beside the Yarra,
This salute, in time we'll meet-
"Comeanavajarrah!"

[From: 'Jarrahland Jingles'. A Volume of Westralian
Verse. By "Dryblower". Printed and
published in 1908, for the Sunday Times
Publishing Company, Perth.]

BIG TREES! TALL TALES?

L. Talbot

During the last century, explorers of the South-West often recorded their impressions of dense stands of large trees and described individual trees of giant proportions.

In 1831 Capt. J. Bannister recorded a large karri tree near the Frankland River. He claimed this "bluegum of prodigious height diameter" had a breast height girth of 13 m and was 43 to 46 m to the first limb.

A.C. Gregory claimed several of the karri he saw along the Donnelly in 1852 were 43 m to the first limb.

Western Australia's first Conservator of Forests, J. Ednie Brown, recorded the following measurements of a karri felled for M.C. Davies' mill at Karridale in about 1896.

"34 feet [10 m] circumference 3 feet [1 m] from the ground.
160 feet [49 m] to first limb.
14 feet [4 m] circumference at first limb.
Extreme height over 200 feet [61 m]."

He wrote, "From these figures it will be seen that the bole of this tree from the bottom to the first limb contains nearly 6 000 cubic feet [170m³] of timber. This means that it has a weight of over 40 tons [41 t] in all [170m³ of green karri would weigh 196 t!]; that it would take one of our ordinary mills at least four days to convert it into sawn stuff, and that it would form about a quarter of the loading capacity of one of the ships which form the fleet of our present export timber trade".

Governor Stirling, describing the jarrah forest he passed through between the McAlinden River and Bunbury (1837), claimed that the huge jarrah trees with clean boles to 15 m were only 1 to 2 m apart.

In the 1870's Baron Ferdinand von Mueller was brought to W.A. by the Colonial Government to examine and report on the Colony's forest resources. In his report he said that the Muir brothers had told him of a karri tree 91 m to the first limb and he said that he had himself seen trees which he considered must have been 122 m high.

In 1876, in a lecture he gave in Victoria, von Mueller gave accounts of some of the largest trees measured or known of up to that time. He said, "- the highest tree previously known was a karri (Eucalyptus colosseae), measured by Mr Pemberton Walcott, in one of the delightful glens of the Warren River of Western Australia, where it rises to approximately four hundred feet [122 m] high. Into the hollow trunk of this karri three riders, with an additional pack horse, could enter and turn in it without dismounting". (It was von Mueller who named karri E. diversicolor).

However, the Baron went on to tell of some Victorian trees which dwarfed this W.A. giant. At his request a Mr D. Boyle had measured a fallen tree (probably E. regnans F. Muell.) in the Dandenongs. It measured 128m, and near Healseville a Mr Klein measured a eucalypt which it was claimed measured 146 m. This in turn was dwarfed by another which a Mr George Robinson found in the ranges near Bewick. Robinson claimed for his tree a girth of 25 m, 1 m from the ground, and he supposed that this species (E. regnans) reached a height of "half a thousand feet [152 m] towards the sources of the Yarra and Latrobe Rivers".

So it would seem that Victoria grew bigger trees, or story tellers, than Western Australia, but perhaps that isn't really the case; Jesse Hammond has given us a tale about a big tree to match the best of Victoria's.

In "Winjans People" Hammond told how in the 1890's he was with a party kangarooing about 161 km east of Northam. They had with them an old aboriginal man who was born in the Kellerberrin district. One night as they sat talking around their fire the old native told them of a big tree that once grew in that region. In this tree the eagles built their nests and sometimes they took picaninnies to feed the young eagles. The natives could not throw their spears or koilees as high as the nest and neither could they climb the tree, so they decided to burn it down. All the natives from near and far gathered to do this and they carted all the wood within one kilometre of the tree, but still it took several months to burn down. The next day the old native took the white men to where the tree had stood, about 16 km from the previous night's camp.

According to Hammond there was an outline on the ground that seemed to suggest that a huge tree had been burnt there and, judging by this outline, the tree would have been over 152 m

long and 5 m in diameter, while the width across its limbs would have been 21 m. No vegetation at all grew on the outline and the old black fellow told them that no grass or scrub would ever grow on that spot again and that the black people would not stand on the cleared spot for fear that the "Jingee" (devil) might come. He said that no one could say when it was done, only that it was done.

The information for this article was obtained from original material held in the Battye Library, as was that used in my previous article "Wild Men of the Wild Country". (Forest Notes, Volume 11 Number 3).

A TREE OF DISTINCTION

B.J. White

The photograph on page 19 shows a jarrah tree of good form and vigour which I consider warrants recording and retaining from further logging or clearing for pine establishment.

What distinguishes this particular tree is not so much its good form and predominance over the surrounding forest as its apparent capacity to retain its vigour, despite the obvious presence of Phytophthora cinnamomi. I have been observing this tree for the past 5 years, during which time it has shown none of the usual dieback symptoms. Phytophthora cinnamomi has been present for considerably longer than this, as evidenced by the typical degraded nature of the forest in the vicinity. Adjacent jarrah trees are showing typical dieback symptoms, though others also remain healthy. Dead and dying native pear (Xylomelum occidentale) and blackboys occur within 20 metres of its butt.

This tree may have been spared the ravages of Phytophthora simply because it has not so far been attacked. Some peculiarity of the site that is not readily apparent may be inhibiting its spread. If such is the case, then it could promptly die if and when it is attacked. To prove that this tree has some genetic quality which endows it with resistance to Phytophthora would require expensive testing, possibly involving the difficult process of vegetative reproduction. Nevertheless, the evidence suggests that it could be resistant and therefore steps should be taken to ensure that it has the chance to demonstrate what may be a very valuable characteristic.

The tree is located in typical sunklands soil in Millbrook Block, map reference FT.37.54. It can be seen projecting above the general canopy level at the eastern end of a large pine plot, about 100 metres south of the Busselton-Nannup road.

Measurements taken are: -	G.B.H.	1.13 m
	Total Height	30.2 m
	Bole Height	18.9 m



"A Tree of Distinction"

A DIFFERENT APPROACH TO PICNIC
SITE MAINTENANCE

R.J. Underwood

Trials were installed at Pemberton during early May of the "Take Your Litter Home" system of picnic spot maintenance. This scheme has been used with great success in parts of the United Kingdom in recent years. In the Pemberton trial, small signs have been erected at selected forest picnic spots carrying the simple message, "Please take your litter home". The litter bins have been removed from the sites. The signs, routed lattice board construction, are small and set low down to minimize impact on the scenery and yet be clearly visible. The sites are being checked weekly and tallies are being kept of litter collections if any; tallies on litter removals are also being kept for comparison purposes on "paired" picnic sites elsewhere, comparable in accessibility and level of use with the trial sites.

The trials will probably run until about September and if desirable be repeated or enlarged over the summer period. If as successful in Western Australia as in the United Kingdom this system could greatly reduce the cost of picnic area maintenance as well as helping to educate tourists and forest visitors in the general concept of "taking your litter home".

It is hoped that a report on the success or failure of the scheme can be included in a future issue of Forest Notes.

OBSERVATIONS ON THE EFFECT OF
RE-FERTILIZATION OF PINUS PINASTER
PLANTED ON GREY PEATY SANDS

A.R. Annels

A small experimental area (approximately 1 hectare) of Pinus pinaster was planted on peaty sand country on the old Northcliffe Rifle Range area in the 1965 planting season.

The ground which was planted had been either virtually treeless or the scattered small timber had been removed in clearing for the range area or by Group Settlement Scheme farmers, many years ago. Vegetation consisted of scattered groups of paperbark (Melaleuca preissiana), Warren River cedar (Agonis juniperina), and the odd jarrah (Eucalyptus marginata), with a thick ground cover of sand bottlebrush (Beaufortia squarrosa), swamp kangaroo paw (Anigozanthos viridis) and rushes, Restionaceae and Cyperaceae spp.

Site preparation consisted of removal of scrub and debris by burning, followed by ploughing and mounding, which involved the use of a small bulldozer. Mounding was essential in order to be able to plant into comparatively dry ground during the winter months. Pinus pinaster was notch planted on the tops of the mounds in 1965 at approximately 3 m x 2 m spacing. Superphosphate and zinc were applied at the time of planting at the rate of 75 grams per tree.

The survival rate of trees was good and in 1966 a small area approximately 40 metres x 20 metres, on the south-east corner of the plot, was re-fertilized with superphosphate and zinc at the same rate as the original application. By 1968 this small plot was obviously far superior to the main plot, and a side-effect had become obvious with a marked height gradation extending over 2 or 3 trees around the perimeter of the area. Another marked difference was the effect the superior growth of the pines had exerted on the growth of the ground cover, which by this time had become well established over the plot again except where pine growth was sufficiently vigorous to have a limiting effect, that is on the re-fertilized section.

In the light of these observations it was decided to see what results would be evident by re-fertilizing with superphosphate and a range of trace elements (super; super and zinc; super, copper and zinc; super, copper zinc and molybdenum). The remainder of the plot was divided into five strips 75 metres x 25 metres, thus allowing a strip to each treatment and one control strip. As a further test these plots were subdivided and half was grubbed to remove weed competition before manurial treatments were applied (see plan).

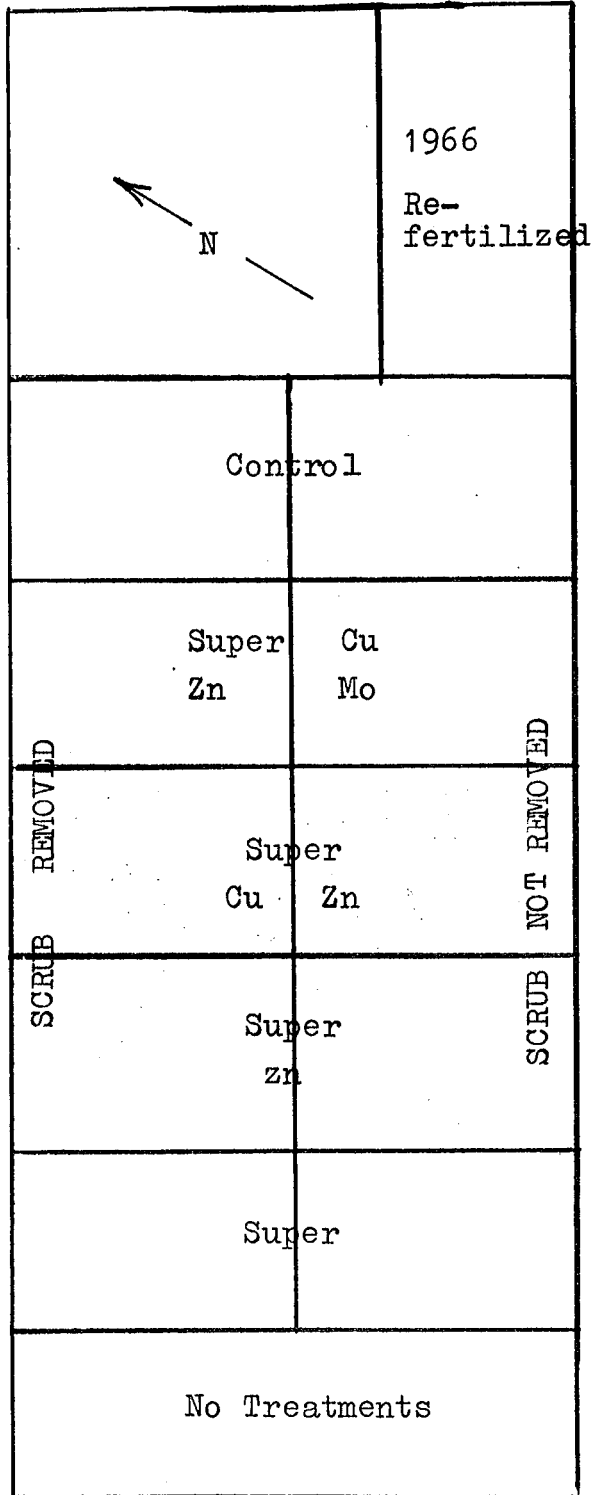
The central 30 trees of each plot were numbered and height measurements taken before any treatments were applied (see Graph 1). Measurements of height growth were made in December 1969, approximately 16 months after the date of inauguration of the trial and these showed definite improvement in the re-fertilized and grubbed sections but virtually no differences in the ungrubbed sections. In February 1974, height measurements were again carried out but in this measurement only 14 trees per plot were measured, equivalent to a spacing of 750 trees per hectare. Diameters at breast height were also measured and a similar pattern was shown (see Graph 2).

Although these figures are not conclusive evidence, owing to lack of replication as a result of the limited area available for trials, certain trends are suggested:

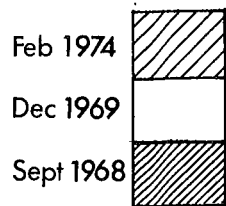
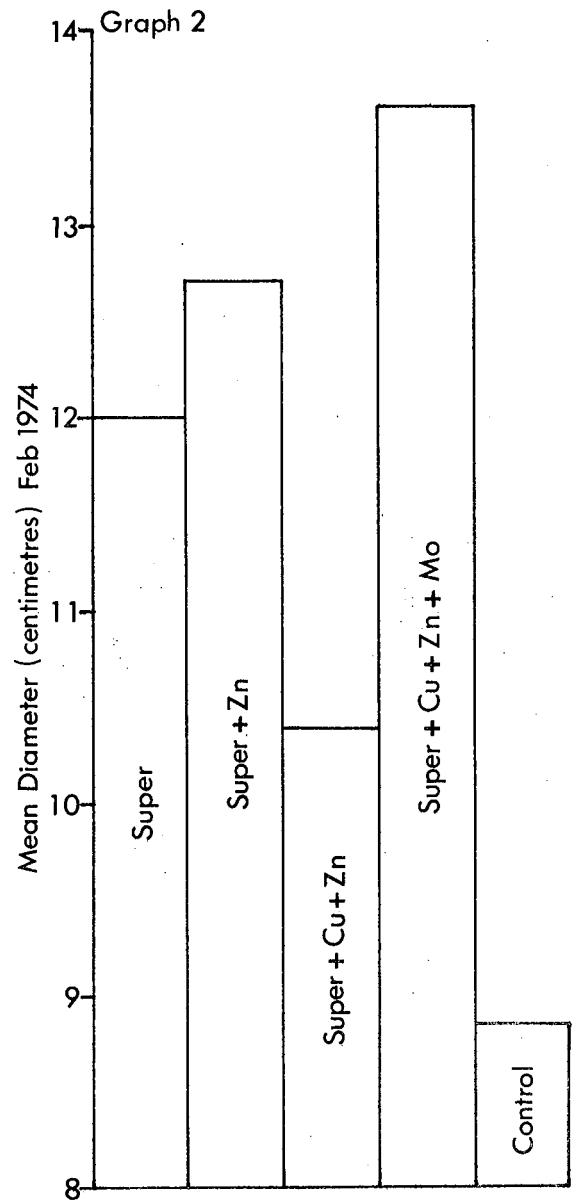
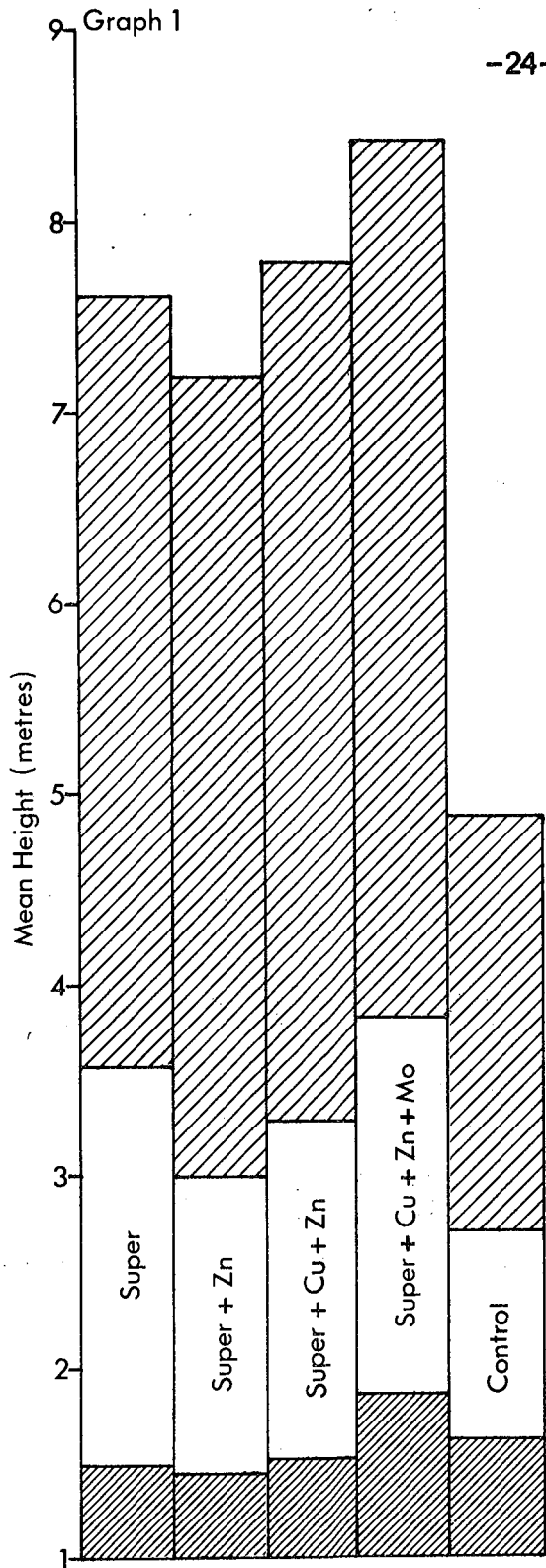
- (1) A second application of fertilizer is beneficial to height growth, providing
 - (a) scrub control is effective, or
 - (b) fertilizer is applied at year 1 or 2 after planting, before scrub competition becomes intense.
- (2) There is a possibility that other trace elements may be needed besides zinc, for example, copper and/or molybdenum.

The benefits gained can be seen by looking at the stand; the trees in the control plot now have a typical unthrifty appearance with tufts of needles on the ends of the branches extending back \pm 200 cm, compared with a comparatively normal needle growth on the treated trees, that is persistent green needles on limbs and upper bole.

Plan of Layout



Scale 1 cm = 8 m approx.



REGIONAL NOTES

(Compiled from material supplied by various personnel at the Division and District Offices).

DWELLINGUP

Staff

Les Robson was transferred from Walpole to Dwellingup and commenced his duties at Dwellingup as Forester at the end of April.

Mrs Kay Marsden is another newcomer to Dwellingup. She commenced work as office assistant after Easter.

After a short stay at Dwellingup F/O Kevin Vear was transferred to Harvey Division.

A.D.F.O. Peter Ritson has commenced work at the Dwellingup Research Station.

Tim Birmingham has been appointed as a Technical Assistant to the Research Station.

Miss Heather Warren has taken up an appointment as Laboratory Assistant at the Dwellingup Research Station.

General

The departmental hardwood mill at Dwellingup is close to achieving 100% utilisation from its operations. The bulk of its output is sold under contract to a major timber company. Low grade scantling is disposed of to a timber yard in Perth whilst all reject boards down to 0.3 m in length are sold to a salvage yard at Mandurah. Offcuts are absorbed by a metropolitan brick yard in the form of 1.8 m firewood, and what is left (sawdust) is sold for use at a major poultry producer's establishment at Wanneroo.

The mill intake is made up of dieback salvage, salvage from road clearing operations, residue from jarrah peeler log cutting and material from minor plot clearing and mine sites.

EXTENSION SERVICES

Staff

Barney White has transferred to Como where he is dividing his time between Research Branch and Extension Services.

Ross Gobby resigned during April to take up an operational appointment with South Australia's National Parks and Wildlife Service.

Visits

Professor Giordano of Rome visited W.A. to inspect the natural range of tuart (Euc. gomphocephala) and flat topped yate (Euc. occidentalis), both of which are being grown as a 15 year rotation pulp forest on denuded farmlands of Southern Italy. One problem which has occurred with tuart is that by the third rotation the tree becomes prone to attack by Phoracantha and other insects.

In the field of forest recreation it appears that Italy has a few problems which are not so apparent here, as the following examples might show. Italy has only two National Parks; both are quite small and one of them has a relic colony of wolves (about 30 in number). The wolves are totally protected and when they raid a nearby farm to kill a sheep the farmer is given a new sheep by the Government if the killing can be proven.

There is an open season for bird shooting and it is estimated that there are about 3 shooters for every bird in the country. Not surprisingly shooting fatalities are nearly as common as disputes over ownership of birds with multiple shotgun wounds.

There has been an outbreak of consultants employed by the Australian Government and the branch was called upon to provide information to recreation consultants on three occasions in as many weeks. Two were employed by the Department of Tourism and Recreation and the other by the Department of Conservation and Environment.

Barney White has been nominated as the W.A. member of a Recreation Working Group appointed by the Standing Committee of the Australian Forestry Council. He attended the inaugural meeting under Chairman Dr. F. Moulds in Melbourne on May 7th.

Extension Services cont.

Peter Hewett attended a seminar arranged by the Department of Tourism and Recreation and titled "Leisure - A New Perspective" in Canberra from April 22-24th. It was a good opportunity to find new ways of occupying leisure time.

Bibbulmun Track

Due to a number of unforeseen circumstances involving catchment areas, dieback hygiene etc, finalization of the route for the track has been delayed and the Guide Book will probably not be available before Christmas 1974. Parts of the track have already been tried by bushwalkers, scouts and the press with good reports at this stage. Unfortunately the young walker who tried to be the first to complete the whole distance in January 1974 did not make it. He had a leg injury after 40 kilometres and was forced to retire.

University Extension Course

"Forests and the Natural Environment" was the title of a course arranged in conjunction with the University Extension Service in March-April, 1974. Forty-five people enrolled and the course took the form of five lecture periods of two hours plus three full-day excursions to Mundaring, Wanneroo and Dwellingup divisions. The "students" represented a wide range of ages and educational background and indications from a questionnaire were that the course was well received.

Leaving Applied Technology

The Education Department introduced for trials in 1974 a new course at 5th year high school level entitled "Leaving Applied Technology". On December 5th, 1973 the branch conducted a four hour course for a group of 26 manual arts teachers covering Departmental Organisation, Use and Properties of Timber, Fire Protection and the Role of Research.

HARVEY

Staff

Harvey Division is awakening for its "annual" staff transfers. The recent changes include:-

Inspector Hill transferred to Perth on special duties.

S.D.F.O. Spriggins becomes Acting Inspector.

D.F.O. Scambler's arrival is imminent.

Greg Heberle has been promoted to D.F.O.

Jack Doeble joins the staff as F/A utilisation.

General

Harvey Division enjoyed a very good fire season this year, the final score being one red action and 12 minor scirmishes. Grey hair and ulcers were still all too frequent bi-products of the summer surveillance, and nerves were worn thin as the first rains approached. The reigning philosophy until the bitter end was "She could still go"!

The Divisional safety record also remains excellent and is now teetering on 200,000 accident-free hours.

Working Plans

With Manjimup Working Plans Office heavily committed to chip-wood assessment, the Harvey Office is doing some work in the southern regions. The sunklands of Kirup, Nannup and Busselton have been mapped for dieback using aerial photograph interpretation and road checks. Mapping of dieback in Manjimup, Pemberton and Walpole Divisions has reached an advanced stage.

HEAD OFFICE

Staff

S.D.F.O. P.N. Shedley has commenced duty in this office and will take over from Mr P.H. Barrett, who retires at the beginning of August.

Additional Books to the Accession List

WOOD Alcohol by A. Lush
VISIBILITY in dense forest by B. White
The BIBBULMUN track by A. Walker
FAUNA of the forest floor by Underwood
CONTOUR mapping of steep land by A. Hill
OPENINGS in the Forest Service by A. Hatch
ALWAYS wear your safety helmet by Deadman
SOIL moisture holding agents by Peet

Books not included in Forestry Classification

THAT certain smile by A. Leah
A REPORT on Stonehenge by A. Mason
MOTOR boats versus sail by Nelson
O life, O hope - O'Neill
To HELL and back by Evans

KELMSCOTT

Staff

S.D.F.O. Bradshaw has moved to the greener pastures of Manjimup W.P.O. and has been succeeded by A.D.F.O. Lush from Wanneroo.

Was the above change responsible for our office girl joining the Army? We don't know and Robina isn't letting on but the fact remains that the C.M.F. have gained a new recruit and Dolly Gallagher (full and part time F.D. office girl for eleven years) has been called in to part-time harrass, while Robina attends camp.

Kelmscott cont.

Forest Guard Russel Walter is now blooded to tree marking and has a three inch scar to prove it after cutting into his leg with his treemarking axe. Fortunately F/G Beer from Dwellingup was on hand and Russel is now fully recovered. Kelmscott Division goes to extraordinary lengths to help its neighbours.

General

Bauxite mining rehabilitation has stepped up from fifty to eighty hectares for this season and appears likely to remain at this level for the next few years.

On the P.R. scene, more and more of the Public are educating themselves in the forestry field through the medium of Forest Focus. Barely a day goes by without several editions being handed over the counter - good business! Head Office haven't yet sent any letters asking us to stop the "Please add to the Head Office mailing list" requests.

MANJIMUP

Staff

On the Research scene, P. Kimber took over the reins of Officer-in-charge and Per Christensen began 3 years study leave during which he will be doing a Ph.D. Miss Kathy Pentony was appointed A.D.F.O., ecology section, taking over from Per. Andrew Goode resigned from Fire Research in March. Two new T.A.'s, Phil Hadley and Chris Vellios, joined the Research section in April. Chris was formerly Divisional Storeman in Manjimup. All candidates for the promotional exams in August were successful.

General

Not much social activity is expected in the Manjimup area over the next twelve months. If the proposed accommodation programme is completed all staff will have to become totally involved. The programme includes twelve new houses, new single officer's quarters, new store, extension to the regional office, extension to working plans office and extension to research, not to mention a new room on house No. 2057.

Manjimup cont.

The Nannup Golf Day trophy is as good as back in the Manjimup Office. We have a crack squad under intensive training. H. Deadman and L. Court assure us they are world class golfers and we hope they are. The only cause to doubt their statement is their shocking defeat by M. Sanderson and J. Peos on the dart board after claiming their challengers would be no competition.

Our cricket team was unlucky this year and we hope for improvement in the coming season. We have had an 'additional' staff member in the shape of spotter pilot Jim McMahon. A tremendous job was done by Jim, both on the ground and in the air.

Three fauna surveys have been conducted by the Research ecology section this season at Jarrahwood Sunklunds, Nannup Pine plantations and the Collie area. The Sunklunds produced the best results; Collie was comparatively poor in fauna and even the personal attendance of P. Kimber failed to increase the number of sightings.

NARROGIN

It all started with our Aboriginal Affairs Planning Authority gang trying to work out how to use a chain saw (we have just recruited two new members to the gang). They took it out to the mallet plantation and jumped up and down with it - and it's been raining at Narrogin (and incidentally it seems, everywhere else in the State) ever since. As a direct result of this (the rain, that is, not the chain saw) the nursery here is now in full operation. Already two thirds of the stock have been sold and one third of the species sold out. The nursery season officially did not open until May 1st.

At present John Humphreys is on Annual Leave - and has left for the bright lights and big smoke. He is to be followed shortly by Forest Ranger Bob McAlinden. It would seem that the time of the year when the estimates and annual report have to be done, the busiest time for the nursery, is the most popular time for taking leave.

PEMBERTON

The .22 Incendiary Launcher

"The dusty little vehicle swerved to a halt beneath the huge white trees and a lean, helmetted figure sprang from the cab carrying a heavy-barrelled rifle and a box of cartridges. In a flash he had disappeared into the dense scrub and moments later a fusilage of heavy shots rang out"

The scenario from an American World War II movie? A TV documentary on elephant shooting in East Africa? No!, merely a familiar scene in the karri forest last summer following the acquisition of a .22 Incendiary Launcher. A Winchester action rifle with a bored-out barrel, the launcher is a special device for shooting incendiary "bombs" over a range of about 75-100 metres. The incendiary itself is a sausage-sized chunk of jellied dieseline, armed with match compound and lit and propelled by a "blank" ratshot cartridge that is magazine loaded into the rifle.

Accuracy with the launcher is quite good and the incendiary, which burns fiercely for 10 seconds, is about twice as effective as the permanganate capsule used in aircraft burning. The launcher costs about \$80 and the bombs about 8 cents each.

The rifle proved most effective in karri hand burning where shots can be fired to left and right from prepared ignition lanes through dense scrub. It was also quite handy during edging, enabling the rapid lighting of strips on the down-wind edge, and for quick ignition of regeneration burns. Although not tried for this purpose, it is believed the gun would also be extremely useful for "thickening up an edge" in a wildfire situation.

Sawmill Production

Pemberton's pine mill is working to capacity and in recent months the crew has repeatedly established new daily records. Their best effort to date was a sawn production of 18.9 cubic metres in an 8 hour day. This represents a production of 3.8 metres per man under the mill roof, nearly double the theoretical expectancy for this mill.

Pemberton cont.

Rooms at the top

Major renovations were carried out on the famous Gloucester Tree during April. This was initially proposed due to (i) the extreme nuisance value of something like 50 - 100 tourists per day climbing into the cabin during the summer period and (ii) the decision by radio branch to resite the VHF repeater in the cabin rather than in the vandal-proof hut at the bottom. However, the work was later found to be urgent and essential when a large rot pocket was discovered in the tree bole about 3 m down from the cabin.

The work was carried out by contractors and involved removal of the old cabin and construction of a new one, installation of a "visitors gallery" about 4 metres below the new cabin and extensive bracing and strutting of the upper bole with steel members bolted through the tree.

A most interesting find was that of a 1943 Penny which came out of the tree on the end of one of the original wooden pegs just beneath the old cabin. It was probably inserted by George Reynolds or Len Nicol at the completion of the original pegging of the tree in 1947. The penny, along with the inside window ledge of the old cabin into which was carved the names of many early towermen, has been retained for posterity.

A very good year

The 1973/74 fire season was the first since 1966/67 that a major fire did not occur in the Pemberton Division. This probably explains why local hoteliers, cafe-owners and motel proprietors failed to make their expected profits over the summer months, and why Steve Quain applied to have his long service leave during that period nullified. Main reasons for the achievement were (i) the completion of the first rotation of aircraft burning in 1972/73, meaning that the bulk of State Forest in the Division now carries fuel less than 5 years old (this only occurred once before, when practically the whole of the region was burnt by wildfire in 1950/51); (ii) the fantastic improvement in detection due to the advent of the Spotter aircraft and (iii) relatively mild weather.

WALPOLE

Staff

Ron Hunter has been transferred to Manjimup and is replaced by Tom Backhouse. Phil Tomlinson has gone to Nannup, being replaced by Bill Muir.

General

Contrary to belief, Walpole still exists, and in fact is beginning to show itself as a force in the finer arts of forestry. Firstly, the division has just received its third consecutive safety award, now exceeding 150 000 hours. For a small workforce this has taken 31 months. Currently 35 months have been reached, but not without some close shaves. Another award (grudgingly extracted from Jack Smart) was enjoyed by all when the division survived the last fire season without an escape. Having burnt around 30 000 ha that's not bad, considering the previous year's record. Naturally we will consolidate this position next year, and rightfully claim ourselves as No. 1 fire control.

WANNEROO

Staff

F/G Lex Mathews has transferred from Mundaring to Wanneroo.

The place of A.D.F.O. Lush has been taken by A.D.F.O. Meehan.

On May 17th Andy Robertson resigns from the Forests Department to return to Scotland for the second time in three years. Even though he says "this time it is for good", we expect to see him back by Christmas (he was back in Scotland only seven months when he left previously). The quality of his work and his friendly approach to staff and men alike made Andy a very popular figure throughout the Wanneroo Division. A bon voyage dinner has been arranged at the Balga Inn where over 30 people from the Wanneroo Division will attend. Should Andy's return to Scotland be permanent we take this opportunity to wish him success in his new job (forestry) and happy memories of Australia.

Wanneroo-Kelmscott Cricket Match (held at Wanneroo on Sunday, 31 March).

The "Champions of a bygone era" were there, the stars of the future were there, there was no room for the average player. Included in the "champions of a bygone era" were Mick Golding (batsman), Alan Lush (bowler), Tony Lloyd (batsman) and Dave Lejeune (everything). Stars of the future included T. Wood (a most promising batsman), Alf Lorkiewicz (promising bowler) and George Cragg, recipient of the man of the match award.

The match was underway by 11.10 am. Wanneroo, sent in to bat, were soon one for none. Betting odds were now 2 to 1 for a Kelmscott victory. Alan Lush (Kelmscott) refused to accept a \$5.00 bet on Wanneroo from a rather overzealous Wanneroo player.

With the motherly spectators chasing children and talking about the weather to encourage them, Wanneroo raced to a score of 117 for 13 off 19 overs.

A lunch break was agreed to by both Captains.

Two o'clock saw Kelmscott take to the batting crease and things looked dim for Wanneroo as they were soon none for 30. However, the Wanneroo bowling was tight and when the 33 overs were up Kelmscott were 7 for 108, meaning Wanneroo had won by 9 runs.

The cricket match was followed by a barbeque/keg at the rear of the single officers quarters.

George Cragg received the man of the match award (a quarter of a yard), which was put to immediate use.

Tom Wood, the Captain of the side that "won by a little bit", welcomed the Kelmscott crowd and the opposing Captain, Mick Golding, expressed his thanks and his invitation for Wanneroo to come to Jarrahdale next year was accepted with pleasure.

People began to leave by 7.30 pm, united by the fact that everyone had thoroughly enjoyed the Wanneroo-Kelmscott social day.

COMO (Research)

Staff

Anne Farren and Nancy Stewart left the Department's laboratory to start at Teacher's Training College. Their places were taken by Valda Garkaklis and Beth Smith. Valda left after only a short time and Jenny Goodlet has now been made welcome.

General

Hydrology is becoming an increasingly important part of the research scene and Mr Havel recently gave a talk to the Hydrological Branch of the Institute of Engineers. The laboratory has been reorganised to cater for large numbers of water analyses, primarily for total dissolved salts (especially sodium chloride). Samples are being collected from the Woodchip Licence area, subcatchments of the Murray and South Dandalup rivers, the Nannup sunklands and the Helena catchment. In conjunction with the Public Works Department, a paired catchment study has been initiated within the Helena catchment. Its aim is to assess the effects of pine planting on hydrological and salt parameters.

Also of interest on the research scene is the survey being carried out to determine the influence of drought, of over-use and of the pulling quota on the sandalwood resource. The short and long term aims of the survey are:

1. To examine the influence of the sandalwood pulling quota on the vegetation.
2. To define the place for sandalwood in the restoration of site capacity in relation to these agencies
 - i) following drought and
 - ii) in the grazing system.

Some interim results of this survey will be the subject of a report in a future edition of Forest Focus.

SAFETY NEWSLETTER

Once again it is pleasing to report that success in reducing the incidence of injury accidents has continued during the third quarter of the current financial year.

During this three month period, 8 Disabling Injury Accidents and 30 Serious Injury Accidents were sustained, as compared with 10 D.I.A. and 33 S.I.A. during the same period last year.

Not only has there been a reduction in the number of accidents sustained but there has also been a significant decrease in the number of days lost, which proves beyond doubt that an organised approach to the accident problem pays off, not only in reducing accidents but also in reducing the severity of those that unfortunately do occur.

The departmental and divisional statistics which appear on pages 39 to 44 amply illustrate the success that has been achieved during the past five years, and I am sure that the entire workforce shares with me a feeling of satisfaction in the knowledge that our individual efforts have resulted in the achievement of a safety record which is second to none in the field of Forestry operations.

What a far cry it is from the days prior to 1967 when the attitude of the majority of us was that accidents in forestry operations were inevitable.

We remember the oft used comment of "Carelessness", "Occupational Hazard" and "Unavoidable" when accidents happened, such as when an employee wearing sand shoes on top disposal lopped off his big toe with an axe, or when a fellow wearing a felt hat whilst tree felling suffered severe head injuries as the result of being struck by a falling limb.

In tracing the history of Safety in this department, we find that it closely parallels that of industry in general - from the days when a man's freedom from accident depended on his attitude, his skill with his tools of trade and lots of luck, to the present day where an organised approach to the accident problem has produced spectacular results not thought possible in our particular industry.

However, although our approach to the safety problem has been conducted within the framework recommended by Safety organisations throughout the world our success could not have been achieved without the co-operation of the workforce.

The acceptance by all that accidents just do not happen - they are caused, and by an adherence to the basic principles of accident prevention they can be prevented.

Now although we can derive considerable satisfaction in the knowledge that our efforts have contributed to the success achieved in reducing accident incidence from the extremely high figure of 189 in 1967 to 45 in 1973, we cannot afford to relax as we still have a long way to go before we can boast of having achieved the low level of injury experience of which I am sure we are capable.

Remember it is up to each one of us to decide whether we shall appear in accident statistics or continue to work safely.

The decision is not hard to make - Safety is good for business.

No one wants to become a casualty, for besides the pain and suffering associated with an injury we must also consider the responsibilities we have to ourselves, our families and employer.

Let us therefore make certain that we do our job without injury to ourselves or to our workmates.

Let us also be safe at home and while travelling, for accidents whether sustained at work or not bring the same result - personal suffering, loss of earnings and production loss.

DIVISIONAL SUMMARY
DISABLING INJURY ACCIDENTS

DIVISION	1973-1974										1972-1973									
	JLY	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	TOT	JLY	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	TOT
COLLIE	-	-	-	-	-	-	-	-	-	NIL	-	-	-	-	-	-	-	-	-	NIL
WALPOLE	-	-	-	-	-	-	-	-	-	NIL	-	-	-	-	-	-	-	-	-	NIL
RESEARCH	-	-	-	-	-	-	-	-	-	NIL	-	-	-	-	-	-	-	-	-	NIL
W/PLANS	-	-	-	-	-	-	-	-	-	NIL	-	-	-	-	-	-	-	-	-	NIL
DWELLINGUP	-	-	-	-	-	-	-	-	-	NIL	-	-	1	-	1	-	1	-	-	3
KELMSCOTT	-	-	-	-	-	-	-	-	-	NIL	-	-	-	-	2	-	-	1	-	3
MANJIMUP	-	-	-	-	-	-	-	-	-	NIL	1	-	-	1	1	-	-	-	1	4
HARVEY	-	-	-	-	-	-	-	-	-	NIL	-	-	-	1	1	2	-	-	1	5
PEMBERTON	-	-	-	-	-	-	-	-	-	NIL	-	1	1	-	-	-	-	-	-	2
COLLIER- SOMERVILLE	-	-	-	-	-	-	-	1	-	1	-	-	1	-	1	-	-	-	-	2
NARROGIN	1	-	-	-	-	-	-	-	-	1	-	-	-	-	2	-	-	-	-	2
KALGOORLIE	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	NIL
KIRUP	-	-	1	-	1	-	-	-	1	3	-	-	-	-	1	-	-	-	-	1
NANNUP	-	-	-	-	2	-	-	-	-	2	1	-	-	-	-	1	-	-	-	2
MUNDARING	1	-	1	-	-	-	-	1	1	4	-	-	-	-	-	1	-	-	-	1
BUSSELTON	1	-	1	1	1	1	1	-	-	6	-	1	1	1	3	-	2	-	-	8
WANNEROO	3	-	2	-	-	-	1	1	-	7	-	-	-	-	-	-	-	2	2	4
TRAINEES	-	-	-	-	-	-	-	-	-	NIL	-	-	-	-	-	-	-	-	-	NIL
HEAD OFFICE	-	-	-	-	-	-	-	-	-	NIL	-	-	-	-	-	-	-	-	-	NIL
	6	NIL	5	1	4	1	2	4	2	25	2	2	4	3	12	4	3	3	4	37

MANHOURS WORKED = 1,234,411
 F.R. = 20
 MANDAYS LOST = 126
 DURATION RATE = 5

MANHOURS WORKED = 1,301,379
 F.R. = 28
 MANDAYS LOST = 355
 DURATION RATE = 9

DIVISIONAL SUMMARY
SERIOUS INJURY ACCIDENTS (MEDICAL EXPENSES ONLY)

DIVISION	1973 - 1974									1972 - 1973										
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	TOT	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	TOT
COLLIE	-	1	1	1	-	-	-	-	1	4	1	2	1	1	3	3	-	1	-	12
WALPOLE	-	-	-	-	-	-	1	-	-	1	-	-	-	-	1	-	2	1	-	4
RESEARCH	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	2	-	-	2
W/PLANS	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	1
DWELLINGUP	2	1	-	2	-	1	-	-	1	7	-	1	-	-	1	1	-	1	-	4
KELMSCOTT	-	-	2	-	-	-	2	-	-	4	-	-	-	-	-	-	1	-	-	1
MANJIMUP	1	2	-	-	1	-	-	1	1	6	1	1	-	-	-	-	2	2	-	6
HARVEY	2	1	-	4	1	3	-	-	4	15	1	1	1	2	3	-	1	3	2	14
PEMBERTON	-	-	-	-	-	-	-	-	1	1	1	-	-	1	3	1	2	-	-	8
COLLIER-SOMERVILLE	-	-	-	-	-	1	-	-	1	2	-	-	-	-	1	-	-	-	-	1
NARRGIN	-	-	-	-	-	-	-	-	-	NIL	-	-	2	-	2	-	-	-	-	4
KALGOORLIE	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	NIL
KIRUP	2	1	-	1	-	-	2	-	-	6	-	-	2	1	-	-	1	3	4	11
NANNUP	2	-	-	-	-	-	-	1	1	4	-	2	-	-	-	-	1	-	-	3
BUSSELTON	2	-	2	-	-	1	4	2	2	13	-	-	-	-	-	-	-	2	-	2
WANNEROO	2	-	1	-	-	-	3	-	2	8	-	1	1	1	2	1	-	-	-	6
MUNDARING	-	1	-	1	-	-	-	-	-	2	-	-	-	-	-	-	1	-	-	1
TRAINEES	-	-	-	-	-	-	-	-	-	NIL	-	-	-	-	-	-	-	-	-	NIL
HEAD OFFICE	-	-	-	-	1	-	-	-	-	1	-	1	-	-	-	-	-	-	-	1

MANHOURS WORKED = 1,234,411
 S.I.A. = 77
 F.R. = 62

MANHOURS WORKED = 1,301,379
 S.I.A. = 81
 F.R. = 62

DEPARTMENTAL STATISTICS 1966/67 - MARCH 1974

	1966-67	1967-68	1968/69	1969-70	1970-71	1971-72	1972-73	JULY 73- MAR 74
MANHOURS WORKED	1,844,653	1,895,600	2,019,568	1,901,020	1,808,406	1,759,888	1,728,577	1,234,411
D.I.A.	185	124	96	70	48	41	45	25
F.R.	100	65	48	37	27	23	26	20
MANDAYS LOST	3,244	1,701	1,738	721	458	275	414	126
DURATION RATE	18	14	18	10	9	6	9	5
SEVERITY RATE	1,758	900	860	379	253	156	239	102

DIVISIONAL STATISTICS 1962/63 JULY 1973 - MARCH 1974

DIVISION	62/63	63/64	64/65	65/66	66/67	67/68	68/69	69/70	70/71	71/72	72/73	73/74
BUSSELTON	18	20	19	21	24	13	8	6	5	2	10	6
MUNDARING	16	15	12	12	10	12	4	3	4	6	1	4
DWELLINGUP	15	12	17	21	10	5	6	1	1	3	3	NIL
COLLIE	24	7	17	9	17	2	7	4	2	NIL	NIL	NIL
KIRUP	17	19	17	19	13	21	9	14	4	NIL	3	3
MANJIMUP	16	12	10	12	20	8	13	4	4	2	4	NIL
NARROGIN	2	NIL	1	3	NIL	1	NIL	1	NIL	1	2	1
KELMSCOTT	7	9	11	7	2	2	5	6	1	1	3	NIL
COLLIER- SOMERVILLE	4	5	8	5	7	4	5	3	1	3	3	1
WALNEROO	14	17	17	9	19	10	12	7	7	8	6	7
HARVEY	31	21	25	26	29	20	12	3	3	3	6	NIL
PEMBERTON	17	13	14	13	14	5	1	3	4	4	2	NIL
NANNUP	10	18	7	15	7	15	5	7	2	4	2	2
WALPOLE	9	4	6	7	8	4	1	4	5	NIL	NIL	NIL
TRAINEES	NIL	NIL	NIL	NIL	5	2	NIL	NIL	NIL	2	NIL	NIL
KALGOORLIE	NIL	NIL	NIL	NIL	NIL	NIL	1	NIL	NIL	NIL	NIL	1
RESEARCH	NIL	NIL	NIL	NIL	NIL	NIL	3	3	1	NIL	NIL	NIL
W. PLANS	NIL	NIL	NIL	NIL	NIL	NIL	3	1	4	2	NIL	NIL
HEAD OFFICE	NIL	NIL	NIL	NIL	NIL	NIL	1	NIL	NIL	NIL	NIL	NIL
	200	172	181	179	185	124	96	70	48	41	45	25

DISABLING INJURY ACCIDENTS MONTHLY

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	TOTAL
1966/67	17	20	18	13	14	20	17	13	18	10	15	10	185
1067/68	14	18	10	13	9	9	10	13	4	7	9	8	124
1968/69	11	7	11	9	7	11	7	12	1	6	10	4	96
1969/70	7	8	5	5	5	11	1	5	8	5	6	4	70
1970/71	3	2	5	4	12	4	2	2	4	4	3	3	48
1971/72	6	4	3	3	5	3	1	4	5	3	3	1	41
1972/73	2	2	4	3	12	4	3	3	4	2	2	4	45
JUL 73-MAR 74	6	-	5	1	4	1	2	4	2	-	-	-	25

AGENCY OF DISABLING INJURY ACCIDENTS

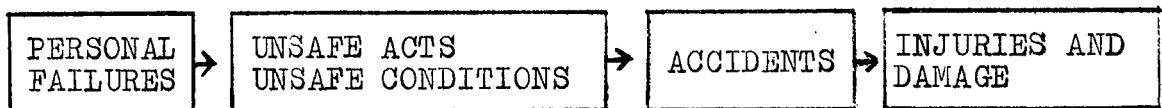
	Machinery in Operation	Vehicles and Moving Plant	Tools Hand	Tools Manual	Manual Handling	Persons Falling or Striking Against	Objects Falling or Flying	Harmful Contacts	Other or Miscell	Total
1959/60	1	1	26	Nil	30	51	55	3	8	175
1960/61	8	5	29	2	38	43	45	13	5	188
1961/62	2	11	14	10	46	39	45	13	8	188
1962/63	3	8	25	5	42	48	51	15	3	200
1963/64	3	4	18	6	29	49	38	17	8	172
1964/65	1	12	18	7	38	50	38	11	6	181
1965/66	5	7	28	7	25	62	34	6	5	179
1966/67	2	9	29	13	35	51	39	5	4	187
1967/68	3	4	14	7	30	19	31	14	2	124
1968/69	6	4	9	3	27	15	13	15	3	96
1969/70	3	10	7	6	17	10	10	4	3	70
1970/71	2	2	4	4	5	16	11	2	2	48
1971/72	1	2	6	3	7	13	8	-	1	41
1972/73	5	3	5	2	8	11	7	1	3	45
JULY 73- MAR 74	2	1	2	4	4	5	3	2	2	25

THE ACCIDENT CHAIN OF EVENTS.

Many people have the mistaken idea that accidents are bad luck, an Act of God or inevitable. I can assure you that this is not the case.

ACCIDENTS DO NOT JUST HAPPEN - THEY ARE CAUSED.

There is a definite pattern in all accidents and this is often referred to as the accident chain of events and runs as follows -



To illustrate this let us take a typical accident and follow the sequence of events and analyse the causes.

At 3 p.m. the District Forester received a message from an overseer working on road construction 20 miles away, that the grader was playing up and needed attention.

This particular machine was due for overhaul and as another grader was scheduled to complete its overhaul that day, the District Forester arranged for a driver to start early the following day in order to take the grader to the job and return the other machine for repairs.

The mechanic at the workshop completed his job at 4.45 p.m. and removed the sign from the steering wheel - DO NOT MOVE. UNDER REPAIR. - and drove the grader into the yard. In doing so he noticed that the brakes required adjustment but decided to do it next day.

Being unaware that the grader would be picked up early he did not replace the under repairs sign.

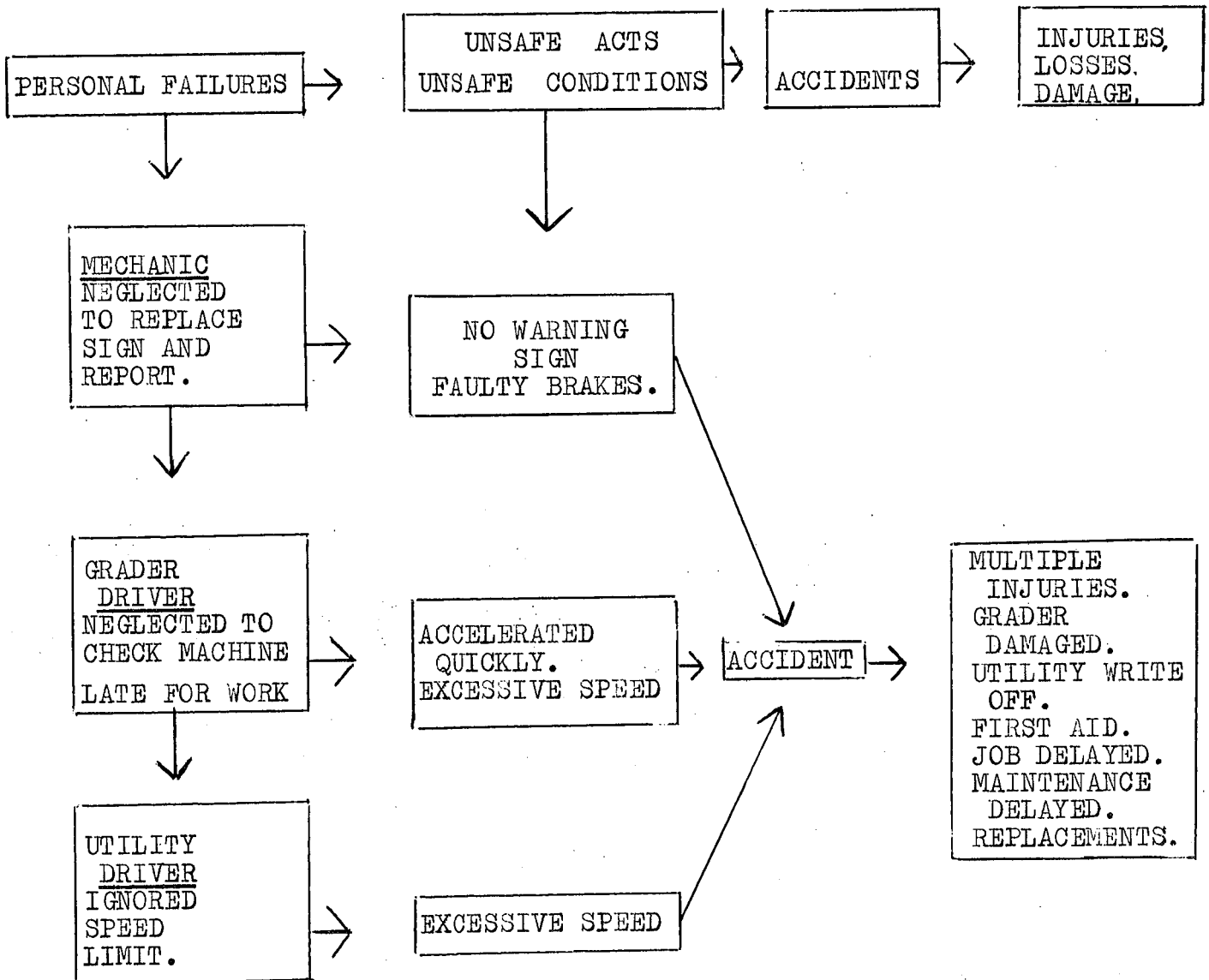
The following morning the grader driver arrived 15 minutes later than intended, started the machine and moved off without checking the brakes, reasoning that the grader had just received overhaul, and therefore must be in good condition.

To make up time he accelerated as he moved towards the yard gate. At the gate he noticed a speeding utility on his right and applied the brakes but was unable to stop and collided with the utility.

Both drivers received multiple injuries and shock, the grader was two weeks under repair and the car a write off.

ACCIDENTS DO NOT JUST HAPPEN - THEY ARE CAUSED

THE ACCIDENT CHAIN OF EVENTS.



REMOVE THE CAUSES-UNSAFE ACTS AND CONDITIONS

- STOP SIGN AT GATE.
- YARD SPEED LIMIT.
- SAFETY EDUCATION
- POLICE SAFETY RULES.

KANGAROO TICK

From time to time employees are called upon to work in areas infested with Kangaroo tick, with somewhat uncomfortable consequences.

During the past few years reports of tick bites indicate that not only does it appear that the tick population has increased but they are also becoming more widespread throughout plantations and forest areas.

The increasing number of people seeking medical attention also indicates that ticks are either becoming more virulent or else we are not taking adequate precautions, firstly to guard against attack and secondly care of bodily areas affected.

The matter has been taken up with the State and Commonwealth Public Health Departments and also the CSIRO, who can offer no other solution than preventative methods such as the use of various repellents on clothes and exposed skin, i.e. Dimp, Kerosene, Dibutyl Pthalate and Dimethyl Pthalate - and the treatment of affected areas by dabbing the skin with lighting kerosene or methylated spirits.

They also point out that general skin cleanliness, avoidance of scratching and adequate first aid to scratched and abraded skin to prevent infection or to treat it when it has arisen, is important.

Following confirmation from the Queensland Forest Service of the effectiveness of the emulsion repellent used by them - this was published in a previous newsletter - I personally tried it when collecting tick specimens for research by the Public Health Department and found it to be as effective as they claim.

As tick bites are classified as work caused injuries, it necessarily follows that they be defined as a work hazard, and appropriate action be taken.

To this end I am re-publishing the emulsion recipe with the hope that organised efforts at proving its effectiveness will be conducted at Divisional level.

RECIPE FOR EMULSION REPELLENT

Half pint of Dibutyl Pthalate
One gallon of water
5 oz soap.

METHOD

Cut soap into small pieces and boil in half gallon of water until soap is melted.

Add the other half gallon of water and the half pint of Dibutyle Pthalate.

Clothes which have been washed clean should be dipped in this emulsion, wrung out and dried.

The emulsion can be kept for further use.

One treatment of emulsion establishes repellent effects which survive four boilings, so that the clothes need to be treated in this way only once in five weeks.

Another method of using the repellent Dibutyle Pthalate is as follows:-

Rub Dibutyl Pthalate, with the hands, on to the outside surface of trousers and socks. Rub also on exposed skin surfaces.
