



CALM News

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Ranger course looks at law

HAMERSLEY FIRE LEAVES ITS MARK

By PHIL RAMSAY

A fire that started on about November 28 last year on Hamersley Station burnt a 25km wide path across the northern half of Hamersley Range National Park.

Sixteen days later Keith Cunningham — Ranger-in-charge at Hamersley — finally saw the fire burn itself out after having travelled more than 65km and burnt over 150,000 hectares of Park in the process.

The fire was fanned by unpredictable winds of up to 40kph which made control of the blaze impossible.

Bulldozers supplied by Hamersley Iron and Hancock & Wright, along with graders supplied by John Hollands Construction Co and Matt Herbert of Juna Downs Station, worked ceaselessly to cut fire breaks, only to watch flames jump over the breaks as though they did not exist.

Ranger HQ had a narrow escape as a wall of flame swept past the fire breaks that bulldozers were still in the process of completing.

That fire travelled at over 20kph with flames 30m in front of the main blaze.

Keith Cunningham coordinated the fire control effort, which saw CALM personnel from Karratha Regional HQ, Cape Range National Park, Millstream National Park including the Aboriginal Trainee Rangers Group with volunteers from Hamersley Iron P/L, Hancock & Wright P/L, John Hollands Constructions, Police and SES.

A relief crew was also flown from Perth to assist.

The wives of CALM and volunteer personnel did a

mighty job of producing meals for the exhausted fire crews.

It is a tribute to Keith's organisational skill and the discipline of the fire crews that there were no injuries as a result of this dangerous fire.

The fire has devastated large areas of Mulga Thickets that may never regenerate to their former size and beauty.

The damage to the Park is incalculable in terms of

loss of habitat and the various forms of fauna it contained.

• The writer was the Senior Constable in charge of the Wittenoom Police Station at the time of the fire. He was coordinator of the Wittenoom Volunteer Emergency Service and has always been a "very good friend" of the Hamersley Range National Park. Phil assisted with the fire fighting throughout the emergency.



NATIONAL PARK Rangers question two "yahoos" (Kevin Morrison and Peter Pennings) during a law enforcement training course for national park and forest rangers at Como. The mock apprehension exercise was part of a two-day course that included lectures from police officers from the Detective training School and a Crown Law solicitor, and addresses from Chris Haynes, Chief Wildlife Officer Dave Mell and Senior Wildlife Officer Kevin Morrison.

Trainees offered CALM cadetships

By FRANK PRIDHAM

SIX trainees who joined CALM last year under the Australian Training System programme have been offered positions in the Field Officer Cadet programme.

Executive Director Syd Shea said the outstanding performance of the trainees in the Department's cadet selection process showed that the Commonwealth trainee programme had been very beneficial.

The successful trainees are Andrew Horan, Jenny Price, Caroline Brocx, Simon Watkins, Ian Faed and Owen Donovan.

Only 12 applicants make it through the three stages of selection.

The first stage is a shortlisting of candidates for interview, which usually numbers about 100.

In the second stage that number is reduced by interview to 32.

The third stage is "selection by performance", a five-day period at the Dwellingup Cadet School which includes classroom and practical exercises.

Cadetships begin at the South West College at Bunbury in February.

The second year of the two-year cadetship will take the cadets to Dwellingup and other training centres throughout the State for practical work.

lingup and other training centres throughout the State for practical work.

With satisfactory performance and available vacancies, the cadets may then apply for appointment as field officers.

Whatever the eventual outcome, congratulations are due to these young people on their success to date.

Acknowledgement is due also to the many departmental personnel who have assisted them towards a rewarding career in conservation and land management.

'86 GRADUATES

In December 1986, 10 Field Staff Cadets completed their Second Year of training.

This is the first group of cadets to have completed the Certificate in Conservation and Land Management, which is designed to cover the range of Departmental Operations.

The graduating cadets and their destinations are: CARL BECK, Dwellingup District; MURRAY CARTER, Pemberton District; BRAD DAW, Wildlife Protection; BRAD FISHER, Manjimup District; DAVE GROSSE, Kirup District; SCOTT HOWSON, Harvey District; DAVE MEEHAN, Manjimup District; PATRICK PAGE, Recreation & Landscape, Murdoch House; MATT REYNOLDS, Dwellingup Research; MICHELLE WIDMER, Metro Region, Operations at Murdoch House.



SYD SHEA congratulates one of the recently graduated youth trainees.

Staff can win holiday prizes

WIN a week's working holiday in the Bungle Bungles or on Ningaloo Reef. All you have to do is sell the most Landscape Gold Star subscriptions.

Landscape Gold Star is a special offer from CALM: subscribers get four great issues of Landscape, plus a package which includes maps, guides, and the latest information on where to go in WA's national parks and forests.

They'll also have one year's unlimited free entry for one car into all of WA's national parks.

The competition is open to all CALM staff. One prize will be awarded to the winner in each of two categories: front counter staff and rangers; and all other staff.

You have until June 1 to sell as many subscriptions as you can, and a running tally will be kept so you'll know how you're doing.

To show them what a great magazine Landscape is, requisition a few back copies of Landscape from Stores at SOHQ and hand them around.

Use the coupon in the Landscape Gold Star brochure to sign people up.

See you up north!

WOODCRAFT PROJECT PLAN FOR MANJIMUP

THE Manjimup region would be developed as a centre for excellence in woodcraft under a proposed project on specialty timbers.

Karen Keely, Joblink coordinator for the area, and CALM Acting Regional Manager Alan Lush have together developed a proposal seeking funding from the Australian Special Rural Research Council for the project.

The Minister for Conservation and Land Management, Barry Hodge, has responded favourably to the proposal, which is still being considered by the Federal Government.

In its first of three phases, the project would employ one person for 20 weeks to identify local craftwoods and their potential to support an industry, such as a cottage industry and possibly small enterprises.

CALM would provide administration, accommodation, transport and field assistance.

The project's two other phases are not being considered for funding at present.

The second phase would involve the development of a training programme in fine woodcraft, and the third phase would see the exploration and development of appropriate marketing strategies for timber products from the region.

The first phase would include: interviewing local artisans to find which timbers have commercial potential; assessing the availability of specialty timbers; trial harvesting to test the accuracy of the field estimates and to indicate how best to harvest; developing ways for local artisans to extract specialty timbers; assessing the production and sale of the final products to determine the value added; and producing a discussion paper on the findings of the first phase.

— COLLEEN HENRY-HALL

FROM MY DESK

DURING February I made a series of visits to southwest districts to talk with staff about our goals for the year, to listen to their worries, try to find solutions to problems and inspect operations in the field.

Included in these visits were days at Wanneroo, Mundaring, Harvey, Collie and Walpole. Visits to other districts are scheduled.

Being the height of summer, naturally one of the main topics of concern in all districts was fire.

Three things really impressed me.

The first was the very professional performance in the prescribed burning programme. I don't think I have ever seen such high quality burning.

Secondly, the degree of dryness of the bush this year.

Because, (to date) the summer has been so cool it has disguised the extreme drought factor.

The third was the number of fires occurring, especially deliberately lit fires or escapes from campfires in our National Parks.

Rick Sneeuwjagt tells me that already to February 20 this year we have had 206 fires to suppress. This imposes great stresses on district staff and their resources.

We have a serious problem with camp-fires. All three serious fires in the Walpole and Broke Inlet areas this year appeared to start from camps.

Although some people have tried to play it down, the Walpole-Nornalup National Park fire has caused very serious damage to landscape and environmental values and could have been disastrous in human terms had not the town of Walpole been protected by recent prescribed burning, and our fire fighters done such a magnificent job.

A smarter approach to preventing these sort of fires is clearly needed, and is to receive some priority before next summer.

Finally, I have found that courage and physical toughness of our departmental fire fighters is often overlooked, or is underrated by those far-removed from the smoke and flames.

If any of you fire crews are reading this you are not forgotten.

Wherever possible I will be fighting to make your task easier, not the reverse.

R. J. UNDERWOOD
General Manager

FAMILY FOR JANIE

IN the last few months Janie Rowse has seen much of the "old guard" of the Forest Department leave, and after 10 years with the Department, she's leaving as well, to start a family.

Janie, secretary and stenographer for the divisional managers, went on maternity leave in September 1985.

She returned in May 1986, but in the following six months decided to have another baby.

Janie started with the Department as a typist, when "manual machines were all the go".

She also gained experience in the "machine room" in Accounts, when such things as pay and vehicle registration were not on computer.

She was soon serving as secretary for the Deputy Conservator of Forests and two Assistant Conservators, a position that evolved into her present one with the amalgamation.



JACK LEWIS



JANIE ROWSE (left) with Wendy Bott and Esther Segal at a recent social function at Como.

EXPERIENCE WILL BE MISSED

WITH 47 years in the Public Service, Ken Hide has a lot of experience in government departments, and he considers CALM and the former Forests Department the best.

Ken retired recently as senior administrative officer.

"The work here was refreshing, because you had professional people doing a task that was wider than the strict limits of their professional expertise.

"I enjoyed the people I worked with, who had their feet on the ground but were doing something very worthwhile," Ken said.

His Public Service career began as a temporary messenger boy with the Tourist Bureau in 1947.

"That was the way they started you out in those days," Ken said.

"They gave me a bicycle and told me

to pick up things here and take them there, and when they saw I survived, they made me a junior clerk."

Ken had two breaks from the Public Service: four years' war service and four years' study to earn a BA in economics.

Some high points of Ken's career included serving as secretary of the Metropolitan Regional Planning Authority, and with the Department of Conservation and Environment when it was formed.

Ken joined the Forests Department in 1977 as Secretary, the senior administrative position, which also included serving as secretary of the Sandalwood Export Committee.

Ken and his wife just celebrated their 40th anniversary, with surprise visits from much of their family.

Travel is in the plans, when Ken is no longer knee-deep in grandchildren.

Jack bows out after 29 years

JACK LEWIS, a leading overseer at Jarrahdale for 19 years, has retired.

Jack was with the Department for 29 years.

He started as a forest worker at Glen Eagle in 1958, took over supervision of the trainee gangs there and eventually became an overseer.

The 17 forest workers at Jarrahdale he worked with were praised highly.

"An unorganised crew is a mess, but all my guys were good guys," Jack said.

"A forest worker is really complex and he doesn't get the credit he deserves.

"When I first started, there were gangs of 10 to 12 people and now there are gangs of three doing the same jobs over the same area."

As overseer, Jack supervised such

work as road and bridge building, machinery operation and thinning.

"It's not an easy job being an overseer, because you've got to know how to do all these things and get other people to do them right.

Jack plans on doing a bit of fishing, prospecting in the Goldfields and travelling.

"It's no good staying still and getting stagnant, is it?" Jack said.

CALM retirements . . .

CADET SCHOOL TIE BROKEN

By COLLEEN HENRY-HALL

ONE hundred and ninety CALM field staff have passed through the Dwellingup Cadet Training School, all under the watchful gaze of Regional Forester Frank Pridham.

Frank recently retired from the Department after 22 years service.

As Departmental Training Officer from 1972 to 1986, he is the man most responsible for the way CALM trains its new field officers.

CALM's training programme was an ongoing scheme from the Forests Department, and one of Frank's most important duties recently has been to rework the syllabus of the two-year cadetship to reflect the change in field officers' duties.

"I'm particularly pleased that from this year's cadets, one has been posted as a wildlife officer," Frank said.

"It is a tangible demonstration that the product of the training was acceptable to another branch of CALM."

Frank began his forestry career in Britain in 1948 following his release from the British Army.

He earned a Forester's Certificate from the UK Forestry Commission and in 1952 went to Tanzania as a forester.

In 1961, the Tanzanian Forests Department sent Frank to Edinburgh for a year's Teacher Training after which he was involved full-time in the training of African foresters.

In 1961 also, he was awarded an MBE for his services to forestry in Tanzania.

When he first came to Western Australia in 1964 and began operational duties at Dwellingup, he was most impressed with the difference in fire control.

"Here the whole department was so organised that everyone immediately put on their fire control hats when there was a fire."

Frank went from Dwellingup to Manjimup, to Nannup, and on to Fire Protection Branch in the Northern Region before taking up training duties in 1972.

That training included not just the field officer cadets, but of all training done in the Department.

Frank's catchword when it comes to training is "selection" because he considers it the most important step in the training process.

"If trainees are not well-selected, the best training programmes in the world cannot give the organisation the product it needs," Frank said.

Retirement for Frank doesn't seem to mean rest and relaxation; he hopes to pursue full time studies in literature and, with his wife Shirley, to resume his travels when the time is right.



FRANK and Mrs Pridham with Executive Director Syd Shea at Frank's farewell party.

Arthur's record is impressive

THANKS to Arthur Kesners, CALM's recently retired Safety Officer, many CALM staff have avoided debilitating accidents.

Arthur, in his almost 10 years as the head of the Department's Safety programme, has developed safety training programmes and organised 75 safety award presentations.

That has been the satisfying part of his job, he said.

But there was also an element of sorrow, as when he had to investigate fatal accidents of people he knew.

"Safety is a constant attention to detail, and it's work that no one else realises you're doing," Arthur said.

"I just hope I've contributed in some way to help increase safety in the Department."

Arthur joined the Department in 1954 at Grimwade where he was a Forest Assistant doing clerical work and looking after pine mill functions.

His work subsequently included three months as a mill examiner.

Arthur was transferred to Dwellingup in 1964, where he stayed for two years before going to Wanneroo, until 1973.

He moved to Dwellingup as District Forester then, and was there until 1977,



KEN HIDE

when he took up the duties of the Department's Safety Officer.

In 1986 he took up special duties at SOHQ sorting out workers' compensation procedures.

In 1983, Arthur prepared a paper for the Productivity Council of WA, titled "Safety Aids Productivity", which won the Premier's award.

Arthur is also proud of the year 1982, during which the lost-time accident frequency rate of 9.9 was especially low.

"No other Forests Departments have ever approached that figure," Arthur said.

Arthur plans to indulge in travelling, fishing, golf, attending the opera and ballet in his retirement.



Arthur Kesners

Jim Rose will be remembered

JIM ROSE, Resident Ranger for Kalamunda, Lesmurdie and Gooseberry Hill National Parks, has retired.

Jim started with the National Parks Board in 1966 when he was posted to Yanchep — the second Mobile Ranger appointed for National Parks.

After three months there, Jim was based at John Forrest.

During those earlier years he serviced Walyunga, Lesmurdie and Serpentine as well as an occasional stint at Cape Le Grande and Nambung.

He was involved in the back breaking work of building the monumental bridge over Lesmurdie Falls and clearing trees and debris from Walyunga Pool.

After some years as a Mobile Ranger, Jim became Resident Ranger at Walyunga, where he car-

ried out initial development.

He was later transferred to John Forrest, and in 1979 took up his most recent position.

Jim will probably be remembered most for his work in the Kalamunda area.

Despite serious accidents that affected him physically, Jim carried out extensive fire-fighting duties and his liaison with the local Shire and other instrumentalities earned him considerable respect.

He was also a prominent member of the St John Ambulance Brigade for many years.

Jim and his family have moved to Esperance where they will continue to carry out the welfare work for which they are noted.

Best wishes to them for the future.



CADETS IN BUSH

FIRST-year cadets at Bunbury spent a week around Pemberton during October gaining first-hand experience in the planning, navigation, equipment, food and safety required for a successful bushwalking expedition. This experience should be invaluable in the future when they may have to work with groups recreating on CALM land.

From left, Ian Freeman, Don Boyanton, Brian Ingels and Dennis McDonald discuss the finer details (and correct spelling) of national park management.

NEW PINE PROGRAMME

By RAY FREMLIN

CALM has begun an ambitious programme that may see pine cuttings replace seedlings to grow pines.

The advantages of cloning, or vegetative propagation, in forestry are immense:

- rapid realisation of genetic gain,
- greater genetic gain than is possible with seedlings,
- development of more uniform forests,
- ability to match clones with particular sites, and
- ability to select individuals with high resistance to disease.

Seed from seed orchards is a mix of different crosses, and the forest grown from these seeds is an average of these crosses.

But with cloning, it is possible to take the best cross and grow "super trees".

Tree improvement with seed orchards takes from eight to ten years, but by using vegetative propagation, selected material can

be multiplied and put into the field almost immediately.

Many individual trees express combined attributes that do not usually occur together, like vigour and high density wood, or small branches and long interwhorls.

These outstanding hybrids are difficult and sometimes impossible to grow from seed; cloning is the only way to mass produce these trees.

Apart from genetic gains, there are other advantages to growing pine from cuttings.

Cuttings taken off physiologically-aged parents develop into trees with straighter stems and smaller branches than cuttings taken from genetically identical seedlings, which results in lower pruning costs and better timber recovery.

Each tree in a clonal forest is genetically identical, so plantations are much more uniform, substantially improving the efficiency of silvicultural, harvesting and processing operations.

Cuttings are harvested between May and September from specially managed mother trees.

They remain in nursery

beds until late spring when roots begin to appear and the plants are ready for the field in the following winter.

CALM began the programme in 1985-86 with 50,000 cuttings at West Manjimup Nursery.

This season, Forest Ranger Ray Flanagan supervised a programme at Gngangara Nursery with 130,000 cuttings.

This number should increase to 500,000 in 1987-88 and ultimately the programme will see CALM raising between 1.5 million and 2 million cuttings a year.



FOREST Ranger Ray Flanagan (left) and Nurseryman Sam Greer inspect the cuttings at Gngangara Nursery.

Walk through Shannon Forest

THE Shannon Forest — a place of peace and past controversy; a place of a thousand landscapes; a place of great beauty.

There is no better way of experiencing this place of contrasts than by hiking along the Rocks Walk Trail.

Beginning at the barbecue area, the trail consists of an 8km loop equipped with boardwalks, covered resting places, bridges and even a sealed section to make the going easier for prams and wheelchairs.

Well placed interpretative signs provide scintillating snippets of information which will whet anyone's appetite for knowledge about the forests and landscapes explored.

The thick scrub of the swampy areas at the start of the walk echoes to a symphony of birds, frogs and crickets.

It is in sharp contrast to the harsh, relatively silent world of the exposed granite rock faces which shimmer in the heat of a summer's day.

The restricting tunnel vision forced upon the walker by the dense scrub in the karri

forest is suddenly replaced by breathtaking views from unexpected granite outcrops where one may also be eye-to-eye with the birds nesting in the forest canopy.

The welcome breeze cools you down ready for the next forest section.

In spring the flowers titillate the nostrils.

Fragrances range from the sweet scent of the wild brown boronia to the spicy aroma of the white crowea.

Walkers will experience a whole range of forest types — thick bush with an overstorey of awe-inspiring karri trees; more open jarrah and marri forest; groves of sheoak providing a wel-

come cool relief from the summer sun and the eerie shapes in the dense swamps.

After tackling the moderately steep track, visitors will be glad of the chance to paddle their toes and quench their thirsts with the waters of the Shannon dam — they may even capture their dinner in the form of delicious marron.

By RAE BURROWS

DISAGREEMENT RESOLVED

A disagreement over hours of duty for CALM Forest Act Field Staff has been resolved.

The issue was first discussed during a recent lunchtime meeting of CALM field staff.

A meeting was then arranged with Executive Director Syd Shea, and agreement has since been reached with the Civil Service Association and the Forst Act Field Staff Sub-Association for a fourteen-day, three-week work cycle in the Northern, Southern and Central forest regions.

The agreement was reached following a compulsory conference before the Western Australian In-

dustrial Relations Commission and a review of working arrangements in these regions.

The decision was due in part to the fact that field staff have worked a fourteen day, three week cycle

in these regions for a number of years, and that managers are able to operate the arrangements efficiently.

For more information on the new hours of duty, refer to Circular No. 2/87.

Whale sighted

MARMION Marine Park Manager Greg Pobar has sighted a Pygmy Right Whale off the metropolitan coast. He first saw the 5m whale at Trigg Island swimming with the surfers, and it has spent the last four weeks off Rockingham.

"It's not a rare whale, but it's certainly unusual to see one," Greg said.

The Pygmy Right Whale feeds on plankton, and this one looks healthy, Greg said.

Greg and CALM wildlife officers have made trips to the areas where it has been sighted, but apart from the first time Greg saw him, the whale has proven elusive.

Expedition skills — is it for you?

By DREW GRIFFITHS

SO what is this "Expedition Skills" course?

First, a little history. The pilot course was run by the former Forests Department and the Department of Sport and Recreation in 1980.

Since then the course has evolved to provide a basic understanding of bush walking and camping skills. When the course is over, participants will be able to travel in safety and in relative comfort in a semi-wilderness environment.

Some topics covered are: navigation — using maps and compass, planning a route; food selection and cooking; tents and equipment — selecting the right equipment, which ranges in size, function and price; campsite selection — camping in the bush without destroying natural habitats; living in the bush — hygiene, comfort, emergency procedure; evaluation — to overcome problems in future journeys; education — a little bit of nature study; leadership — learning to look after a group.

The one-week course begins with two days of formal lessons on these topics, and after two days you're itching to get into the karri forest to put it all to use.

Under the direction of a leader and assistant leader, you select your equipment, pack your food and go bush for three days.

(This is usually the point where most people get concerned.)

No, you don't march kilometre after kilometre up hill and down dale! You don't carry 30kg packs! You don't bash through

jungle! All these rumours are false!

The pace is leisurely, with emphasis on practising the lessons taught in the first two days, and your pack will weigh about 20 to 30 per cent of your body weight.

On your return from the bush, you systematically go through all your equipment and belongings to see how useful each item was and decide what you should take on the next trip.

What do you get out of the course?

The person on the front counter at Como may now have a better appreciation of the many aspects involved in camping and recreation and can be of greater assistance to the public.

The Park Ranger may be better able to show the camper how to pitch that tent or give advice on using that compass.

After the course some researchers have decided to camp in the bush on field trips, saving money and more importantly, hours of travel when in remote locations.

The Wildlife Officer and the Forest Officer will have met members of the public and will have passed on to them valuable information on flora and fauna.

In return, people have a greater appreciation of the bush, the need to take care with fire, to pick up rubbish, not to pick wildflowers or take fauna.

We help produce a team of honorary part-time wardens.

To take part in the course, talk with your manager to discuss the merits of attending.

Perhaps you are office-bound and would like to associate with people "in the field".

If your manager agrees, all you need is to be reasonably fit and able, because almost all equipment is provided.

Apply via your manager to: Recreation Projects Officer, Recreation and Landscape Branch, Murdoch House.

HERITAGE TRAILS OFFICER APPOINTED

A research officer has been appointed to the South Coast Region to establish a Heritage Trails network throughout the region's parks.

The position, which is for 12 months, has been filled by Libby Sandiford of Albany.

Libby holds a First Class Honours Degree in Botany/Ecology from Melbourne University.

She has extensive bushwalking and field research experience.

She has also worked as a volunteer in the Fitzgerald River National Park biological survey and, in conjunction with the Victorian Environment Centre, has conducted outdoor activities including nature walks and children's activities.

Libby is establishing an overview of the regional heritage trails and is undertaking the initial planning at several specific sites within the proposed network.

She has started archival work on the routes of the early explorers and has established contact with several key personnel in Perth and Albany.

Many aspects of cultural and natural heritage are to be investigated with the two-fold aim of highlighting the unique heritage of the South Coast and illustrating the role the land played in shaping the lives of those who lived or passed through the area.

If you have any ideas, whether they be on particular themes, areas or on presentation, Libby would be delighted to hear from you.



WAYNE and JENNY BURTON

Award winner

WALPOLE District Forest Worker Wayne Burton was on his honeymoon in Queensland when he heard he'd won CALM's inaugural Executive Director's Scholarship.

The scholarship, worth \$5,000, will enable Wayne to attend the second year programme of the two-year field officer cadetship at Dwellingup.

Wayne was one of eight applicants for the scholarship, and he'll qualify as a field officer when he finishes the cadetship.

He had applied for a cadetship four years ago but missed out.

"I was going to apply again, but I was planning on getting married and I wouldn't have gotten by on the first-year cadet wage," Wayne said.

"I guess it was the right time for another try."

Wayne has been involved in fire protection work and has been tending regrowth forests since he started with the Department in 1981.

Because of his experience with the Department, Wayne moved right into the second year of the cadetship, during which he'll learn the more practical aspects of CALM's field operations.



LIBBY SANDIFORD

Computer programme for wildfire data

By NEIL BURROWS

THE often severe and destructive wildfires that followed heavy cutting operations in the northern jarrah forest early this century was one of the main reasons for the introduction of the Forests Act in 1918 and the formation of a Forests Department.

Today, the protection of CALM lands (and adjacent life and property) from wildfire is a key management objective.

An important component of this management is the description, documentation and archiving of all wildfires on CALM lands.

In the past this was done by marking wildfires onto maps or by written annual wildfire reports.

This information (which dates back to the 1920s in some districts) is stored on microfiche at State Headquarters and the amount of wildfire information

gathered over the years is causing the filing cabinets at Como to bulge.

In Manjimup District alone, there have been about 600 wildfires recorded and documented since 1950.

To facilitate storage and retrieval of wildfire data, Pete Walsh at Manjimup Research Station has written a computer programme to enable wildfire data to be easily stored, retrieved and analysed on computer.

He is also updating the programmes to include all CALM lands.

This mode of storage not only reduces storage space,

but allows rapid retrieval of data and production of any form of historical analysis one may need.

A single floppy disk can store information on about 2,500 wildfires.

As well as refining the programmes, researchers at Manjimup, assisted by Nick Bukelis from Protection Branch, are loading up the data base with historical records.

The systems should be up and running in February.

Loading the data base with the last 50 years or so of wildfire records will probably take up to 12 months.

JARRAH FOREST INSECT PROBLEM

AT a seminar in November, Dr Ian Abbott of the Research Branch reported on his studies of the insect problem in the southern jarrah forest.

Assisted by Thomas Burbidge and Paul Van Heurch, CALM's forest entomologist explained that jarrah ground coppice is most vulnerable to leaf damage by leafminer within the low rainfall zone and in recently burned starts.

In 1985, about 5 per cent of leaf area was damaged by this species.

Another 5 per cent was attributable to about 10 species of beetles and moths, but no significant stand correlates were found.

Some 13 per cent of leaf area was damaged by a fungus, and damage was greatest in stands with high canopy cover.

Insect damage to leaver in pole crown averaged 17 per cent, nearly twice that of leaves in ground coppice.

This was attributed to Skeletonizer caterpillars, which were 40 times more abundant in pole crowns than in ground coppice.

Ants were found to be 20 times more abundant in ground coppice than pole crowns.

It is suspected that ants are important predators of these caterpillars.

In January 1986, the ratio of numbers of individuals of leaf chewer: Sapsucker: predator: parasitoid invertebrates in pole crowns was about 200: 12: 5: 1.

Monitoring of tagged jarrah leaves has shown that significant premature abscission occurs if more than 75 per cent of leaf area is removed.

Surveillance of the expanding area of outbreak of Skeletonizer has continued since it began in summer 1982/83.

In spring 1986 significant incursions (but WA outbreaks) of leaf miner were found in the northern jarrah forest east of Harvey. — IAN ABBOTT



Neville Fry of Crendon Machinery tests Pine Squirrel IV.

Evolution of pine squirrel

By COLLEEN HENRY-HALL

THE evolution of a squirrel is interesting to examine.

Not the furry animal that hides nuts, but the mechanical beast used by CALM staff to prune pine.

The Pine Squirrel, a cherry picker modified to enable foresters to remove branches 10m from the ground, has undergone a number of changes in the search for the most efficient machine.

CALM Silviculturist Ray Fremlin, based in Busselton, began to explore the use of the cherry picker as a pine pruner in 1980 when he used a hired one to determine if the concept of the design was feasible.

With the first tryout, the requirements to operate such a machine in the forest

were worked out, and Ray, along with Neville Fry of Crendon Machinery in Donnybrook, set out to modify the standard cherry picker.

Now, four versions down the line, the latest Pine Squirrel has been let loose in the pine plantations of Gnaragara.

Part of Ray's development effort has included visiting districts to demonstrate the benefits of the pine pruner.

The Pine Squirrel, although relatively expensive at \$15,400, doubles the ef-

iciency of forest workers and enables higher pruning, Ray said.

"They enjoy working the machine, so they work longer on it, which improves efficiency," Ray said.

The Pine Squirrel is controlled by two pedals in the base of the basket.

The latest model is equipped with a lightweight pneumatic saw.

The pruner is driven by a water-cooled diesel motor, with two powered wheels at back and two free wheels at front.

The front wheels can be lifted to a height of half a metre to manoeuvre the Squirrel over debris.

Because the electrical system is very complicated, the old Pine Squirrels tend to spend a lot of time in the shop.

Ray is now trying to convince Engineering Branch to take over the project and iron out the finer bugs.

"Once these have been worked out and we've decided the blueprint for it, we can go from there and produce the best possible machine," Ray said.



Work done at historic well

CALM staff from Katanning fenced, covered and signposted an historic well near the picnic site on the Lake Pallarup Nature Reserve recently.

The new cover is a far cry from the rough sheets of corrugated iron with a sign warning visitors to "beware of tiger snakes".

The well, which is about 15m deep, was dug in 1932 and then deepened by a group of farmers led by Hugh Roberts in 1945.

This well is now superseded by the nearby tank and rock catchment maintained by the WA Water Authority.

Our recent work on the well is part of a programme to upgrade the picnic site at Lake Pallarup.

The programme, which will include revegetating some unwanted tracks, will not only improve the site but should help to protect the plants, animals and natural setting which make the area attractive to picnickers.

It is unfortunate that some vegetated areas have been damaged, and that illegal removal of loam has occurred at two sites, but we will certainly be increasing our activity in the area during the coming 12 months. — KEN WALLACE

CHILDREN'S XMAS TREE

THE Children's Christmas Tree at SOHQ grounds was another raging success — certainly from the children's point of view.

The inevitable cricket match got the ball rolling, as tired old dads relived past glories or present fantasies in the hope that some of that old magic might rub off on their zealous offspring.

A flurry of activity around the horsefloat caused a mass exodus from the oval, and just as dad was starting to perfect his bouncer too.

The children gathered round as the master horseman plied his trade, grooming and harnessing Dollar,

to the Brownes milk cart.

The first cart load of excited little passengers was soon on its way around the complex.

Time to give Dollar a rest and watch the antics of the three little pigs.

No sooner had the players departed than the milk cart returned, bearing a very welcome fat jolly passenger.

There were gifts and bags of lollies for all the children, who assured Santa that they had been so good all year. — DREW GRIFFITHS



TARYN SERMON and Santa.

Safety Awards to Districts

THREE districts came up for the Executive Director's Safety Award in the last few months.

At Collie, 53 staff and employees were given their awards at a presentation attended by Syd Shea, MLC Sandy Lewis, Peter Hewett and Safety Officer Tom Wood.

The district had achieved one year without a lost time accident, and they now have rechargeable torches to show for their efforts.

Harvey District's 69 staff and employees also reached one year without a lost time accident.

Dr Shea, MLA Mr J.L. Bradshaw, Mr Hewett and Mr Wood attended the safety presentation during which the staff were given overnight bags.

Pemberton District, with its 55 staff and employees, was the third to have reached the one-year mark recently.

The presentation was attended by Dr Shea, MLC Mr W. Stretch, Mr Hewett and Mr Wood.

However, the money used to buy gifts for the presentation was donated by the staff to the WA Cancer Foundation in memory of former Pemberton Storeman Pat Evans, who died recently of cancer.

Mr Hewett presented the three districts with awards from the Industrial Foundation for the Prevention of Accidents for one-year without a lost time accident.

● NOVEMBER 1986 was the first lost-time accident free month in CALM's history.



PEMBERTON District overseer Wally Dunnet (left) hands over the workers' donation to the Cancer Foundation to Lower Central Province MLC Bill Stretch, with Dr Syd Shea looking on. PHOTO: Warren-Blackwood Times.