

WILDFIRE

by Colleen Henry-Hall



Alan Hordacre

It was Tuesday, 21 January 1986, the fifth consecutive day with temperatures around 40°C and no relief in sight.

Keith Latham had been on duty since 7 am at the Wabbling Fire Lookout Tower, 30 km north of Wanneroo. At 10.30 he spotted a faint puff of smoke about 4 km east of the Yanchep pine plantation. Within a few minutes seven more columns of smoke rose in a straight line about 100 m apart. An arsonist was at work.

The Wanneroo fire would turn out to be a big one. The number of fire fighters and other people involved would eventually exceed 300. The fire would threaten communities at Yanchep Beach, Two Rocks and Guilderton, and would close Wanneroo Road to traffic north and south.

From this fire many lessons would be learned and refinements made to fire-fighting procedures used by the Department of Conservation and Land Management. One of the major changes would be the development of a campaign fire organisation — a procedure that would enable efficient cooperation between CALM and other organisations such as the Bush Fires Board, the Police and the State Emergency Service.

But at 10.30 am on 21 January, this was the start of just another fire.



Alan Hordacre



Colin Henry, staff

Fire-fighting strategy is devised by CALM officers at the Wanneroo District Office

After the Walpole fire (left).



Marilyn Ramsey, CALM's Wanneroo District Clerical Officer, took the radio call from Towerman Keith Latham.

'When Keith gets excited, his voice gets very high, and when you're listening for the radio, you pick up on it right away. You know something's wrong,' Marilyn said.

She would be at the radio for almost 24 hours, and in that time she was the critical contact between the fire fighters and CALM officers devising strategy.

CALM's Wanneroo District Manager Alan Briggs treated the fire alert as he had many

others: he activated 'Red Action' — automatic dispatch of all Wanneroo fire crews, as well as two units from his neighbouring CALM District at Mundaring.

'The first half hour is very hectic, with people heading off in every direction,' Alan Briggs said.

Because nine out of ten fires can normally be handled quickly by the District, the procedure is to send all available District crews to the fire as quickly as possible to fight it when it is still small and put it out before it grows, Alan explained.

First to arrive at the fire was Barry Morris's crew from Yanchee.

'We found at least six fires burning in heavy banksia woodland and only one or two were small enough for us to tackle,' he later reported.

By the time five other crews had arrived 20 minutes later, the fires had joined to form a fast-moving front 500 m wide with flames up to 20 m high.

From the first radio report to the final mop-up, the radio channels were jammed with incoming information from the fire and outgoing directions from headquarters. By far the most frustrating part of fighting a bush fire is the lack of ready information coming in from the field. This is due to a number of factors, and the sheer bulk of information that must be transmitted is one. Staff at headquarters must be told where the fire is heading, how fast it's going, how many crews are fighting it and where. Staff in the field need to know where to concentrate their efforts, the wind direction, the temperature, what the fire is predicted to do next, and details of incoming men and equipment.

By noon winds were gusting from the east at 45 km an hour. A southerly wind change sent the fire north at a furious

rate of 3000 to 4000 m an hour. It was obvious now that the fire was a major one.

The 'large fire organisation' was put into gear — a central command group headed by CALM's Fire Branch Manager Jock Smart and set up at State Operations Headquarters in Como would be the nerve centre of the fire. (It was the large fire organisation, inherited from the Forests Department, which played such an important part in last year's whale rescue at Augusta.) The Chief Executive from CALM, the Bush Fires Board, the State Emergency Service and the Police worked side by side to deal with the emergency.

Both the large fire and campaign fire organisations developed by CALM have five different functions.

'Control' involves the total management of all fire activities. The controller makes decisions about how to fight the fire, where to place men and machines, what the priorities are.

'Intelligence' provides the controller with information and predictions on what the fire is going to do, weather forecasts, maps, staff and equipment requirements and relative costs.

'Suppression' is the organisation of the work on the fire line, a job handled by the fire boss who follows the plan of action laid down by the controller.

'Supply' involves the dispatch of all fire-fighting resources: men, machines, stores and fuel, food, accommodation and communications.

'Liaison' is essential at all fires where the media and other outside organisations attend. The liaison function enables briefing of media for press reports, and constant contact with other organisations to make a



Neil Burrows

cooperative effort in fighting the fire.

Wanneroo CALM Forester Bill Muir served as fire boss at a critical stage during the fire. At the start of the fire, he went up in the spotter aircraft to get a view of the fire.

'You know what it's like in the curl of a wave while you're surfing? Well, the smoke was rolling over and around the plane just like that. And once, when the wind changed suddenly, we could see the flame at the outer edge of the fire just stand right up, leaping from about 1 m to 8 m high,' Bill said.

It was also while in the plane that Bill and the pilot had to guide a grader operator out of the smoke and flames after he was cut off from ground crews by the fire.

The fire almost claimed other victims too. A group of three heavy duty pumps

became bogged in deep soft sand while trying to cut off the headfire on a track near Coppino Lake parallel to Wanneroo Road. The crews couldn't get the trucks out and it became apparent that the fire would soon engulf them.

Marilyn Ramsey, on the radio at the time, said 'It was so hard to be somewhere safe and to know that these people were in danger. All we could do was give them suggestions on how to keep the fire away.'

First they cleared the area of flammable material and used their remaining water to wet the ground around the trucks. They climbed inside the vehicles, closed the windows and waited for the fire to pass over them.

Fire Controller Jock Smart said later: 'That's one of the good things that came out of this fire. You can train people in survival techniques but

you'll never know if that training will be okay in a real life situation. In this case, the survival training and crew discipline saved these people.'

During the night, the fire continued its fast pace westward.

By early Wednesday morning, it was obvious that the next line of defence would have to be Wanneroo Road, the main link between Perth and Lancelin. Police roadblocks were set up on Wanneroo Road to keep the public out of the fire's path.

A new control point was established on Wanneroo Road just north of the Yanchep pine plantation. District Manager Alan Briggs, after having served one shift as controller at Wanneroo Office, had had a rest and returned to the fire as field controller.

'When I got to the control point, it was almost a tent city', Alan said.



This fire-fighter shields his face from the heat as he carries out a backburn — one of the techniques used to bring wildfires under control.



Rae Burrows

A well-earned break.



Rae Burrows

Scattered around the area were an army platoon sent to help out with the fire, the CALM communications vehicle, Bush Fires Board personnel, trucks being serviced, vehicles parked everywhere.

'It was just amazing, this total confusion, and here were our men at tables way at the end trying to make decisions about how to fight this fire,' Alan said.

One of the first things he did as field controller was to order portable toilets, a necessity that had been overlooked. When they did arrive, they were deposited right in the middle of the control point.

He ordered whiteboards, tables, chairs, message runners. His efforts enabled the smooth operation of the control point, which in turn ensured more effective fire-fighting and better communication with Fire Controller Jock Smart at Headquarters in Como.

By 5 am the fire was fast approaching Wanneroo Road. For six hours CALM forces and brigade members battled to hold a series of separate headfires spearing toward them from Barragoon Lake.

Exhausted crews had been replaced that morning by fresh forces, with CALM crews arriving from Busselton, Collie, Harvey and Dwellingup districts. Voluntary brigades from the Gingin Shire, Wanneroo City and Swan Shire had been fighting the fire since Tuesday.

After a meeting at 8.30 am Wednesday, Syd Shea, Executive Director of CALM, asked the Minister for Lands to declare a fire emergency throughout the southern part of the State, which allowed the State Government to provide resources from its various departments to help fight the

fire. The Main Roads Department sent two teams of heavy machinery, including a dozer, a bucket loader and a grader and operators. The State Emergency Services provided teams of fire fighters, and through their contact with the armed forces arranged for some 45 army personnel and trucks to help on the fire front. Other support came from the Police with traffic control and possible evacuation. St. John's Ambulance provided medical assistance; the Salvation Army provided a field kitchen to feed the hundreds of men now at the fire.

Wednesday's forecast was for hot conditions with north-east winds possibly changing to north-west later in the day. The worst scenario for fire strategists back at Como was for the north-west wind to drive the fire into vulnerable pine plantations and Yanchep National Park. The fire could then turn to the densely populated areas north of Wanneroo city and could drive south nearly to Midland.

But the winds continued to be east to north-east all day, and the fire eventually ran into the Indian Ocean without directly threatening any of the residential centres.



The work doesn't finish when the fire is out. After the Wanneroo fire, researchers investigate the fire's behaviour.

Andrew Cribb

The fire had been kept out of the valuable Yanchep pine plantations thanks to a narrow strip of land around them that had been purposely burnt by CALM three years before.

The fire reached the coast at about 5 pm Wednesday, 22 January. At that stage the fire stretched 30 km in length and covered some 11000 ha. The large fire-fighting force spent the next two days securing the fire's 80 km perimeter.

A year to the day later, CALM had another fire on its hands — a 2000 ha bushfire in the Walpole-Nornalup National Park on the south coast.

Jock Smart, who served as Fire Controller on both fires, said 'We've seen a remarkable transformation from one fire to the next. One of the most interesting things is that everyone at the Wanneroo Fire was unsure of the liaison role — who was responsible for keeping the Police, the SES and the Bush Fires Board updated on what was happening and what they should do.'

'At the Walpole fire I was very pleased with the liaison efforts. The fire highlighted the fact that the management structure can work in such a situation,' Jock said.

'A debriefing always follows any fire where CALM officers highlight good things and bad things, and try to plug the gaps before the next fire,' Jock said.

The Wanneroo fire resulted in the development of the campaign fire organisation and a series of practice sessions at different regions and districts where officers ran through a mock campaign fire and afterwards discussed their actions and decisions.

In Australia bush fires are a fact of life — and sometimes of death. Constant vigilance and continual updating of techniques ensure that W.A. maintains its excellent record in fighting bush fires.

Landscape

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Contents	Page
Home On The Range by Dr Barry Wilson	3
Garden For Wildlife by Robert Powell	9
Diplomats From Day One: W.A.'s Stromatolites	11
Urban Antics — A Haunting in Suburbia by Andrew Cribb	15
Exploits At Icy Creek	16
A Year In Lilliput by Grant Wardell-Johnson	17
The Writing on the Wall by Howard McNickle	22
The Nostalgic Naturalist by Old Timer	28
Wildfire by Colleen Henry-Hall	29
Gimlets and Gold — The Story of Kalgoortie's Woodlines by Cliff Winfield	34
A Swamp For All Seasons by Susan Moore	41
Letters	47



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Editorial

W.A. is a vast, sparsely populated State, and it is not uncommon to hear some parts of it described as 'the last frontier'. But there are few, if any, parts of W.A. that have not been affected by European settlement.

Evidence of western civilization in some of the most remote areas is far too often the empty can. But even where there are no obvious traces, the effects have been profound.

There is compelling evidence, for example, that the displacement of Aboriginal communities from much of inland W.A. — and the subsequent removal of Aboriginal firing practices — is directly responsible for major changes in vegetation, which in turn has resulted in the virtual extinction of many native animals.

It is not always easy to pick the effects of European civilization on the natural environment even when the history is well-documented. This *Landscape's* account of the woodlands around Kalgoortie talks about the often horrific environmental damage, but an observer of these woodlands today would have difficulty recognizing that vast areas were clearfelled less than 50 years ago.

While the concept that we should 'let nature do its thing' has superficial appeal, the reality is that the purity of nature has been, and will continue to be, distorted by human presence. We have no option if we want to sustain the unique ecosystems of W.A. but to apply management principles.

The history and management problems of Benger Swamp, which feature in this edition, illustrates two fundamental points. Firstly, even the most disturbed areas of W.A. can make a major contribution to conservation. Secondly, we must be careful not to change a system that works even though the way it works may not be 'natural'.

As complex and as difficult as the task of understanding ecosystems is, the social and political factors which influence the type of management that can be applied are often more difficult to deal with.

The key to good management is an understanding of the processes that drive the ecosystem. Once we understand what the natural processes are, we can then devise management systems which will mimic them.

The only way to ensure that rational decisions are made on environmental management is to provide the facts.

COVER PHOTO

Just when you thought you had seen every angle on our State symbol, photographer Jiri Lochman surprises you with a fresh perspective.