Wally Wecollects...

Two bespectacled members of the staff attending the National Fire Workshop in Busselton recently, experienced considerable trouble in coming to terms with modern technology.

Fellowship after the first day's business had been a long, but agreeable affair. The two un-named participants set off for their motel room and a good nights rest. Not having previously set eyes on the room some difficulty was encountered in reaching agreement on its location and number. Eventually the footweary travellers found it. However, further difficulty was encountered as it slowly became apparent that the key would not fit the lock! The vehicle key was subsequently dispenced with and the room key substituted. Hey presto! And they were in! Of all the ridiculous situations - none of the lights would turn on. A small red light glowing behind a plastic holder on the wall gave our unlikely pair no clues. It was pressed and pushed to no avail. As the hour was late a daring decision was taken to sleep without lights - after a thorough pummelling of the telephone failed to raise anyone on the switchboard to register a complaint.

The next problem was to move the bags inside. In classic Laurel and Hardy style one bag was deposited just inside the door which the carrier of the second promptly fell over! Every single switch was grasped for and tried again. Still no light on the subject. The pair retired, leaving their key in the door.

During the night one awoke with an urgent need to relieve pressure. Completely disorientated he headed along the wall, rolling his companion's bed out of the way and knocking over the telephone in a successful if circuitous effort to reach his destination. Slumber continued, undisturbed except for a distant, annoying and continuous "beep, beep, beep...."

As the cold, grey light of day dawned the wonders of modern technology were revealed to our intrepid travellers. Had the key which had been left overnight in the door been inserted in the plastic holder infront of the small red light on the wall <u>all</u> the lights and appliances would have worked!!!

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FIRE MANAGEMENT ON NATURE CONSERVATION LANI

A NATIONAL WORKSHOP

Fire management on nature conservation lands was the foc workshop convened by Burrows and McCaw during October.

The workshop attracted participants from all states and territories representing conservation and land management agencies, rural fire authorities, the voluntary conservation movement, C.S.I.R.O. and tertiary institutions.

During the first 2 days of the workshop invited speakers addressed a number of important fire management themes. These included:

- *setting fire management objectives*
- *deciding critical data requirements*
- *selecting appropriate management strategies*
- *operational considerations and constraints*
- *requirements for monitoring*
- *social factors and public involvement.*

A field trip in the Leeuwin-Naturaliste National Park provided a focus for discussion of a number of issues including protection requirements for coastal settlements, rabbit grazing in coastal vegetation following fire, and the specific problems posed by the large number of caves in the area.

For the final 2 days the workshop participants were grouped into syndicates of 6 - 8 people in order to examine the procedures involved in preparing fire management plans for nature conservation lands. As part of this exercise each syndicate was given a case study based on a conservation reserve in Western Australia. The reserves chosen were Walpole-Nornalup National Park, Dryandra Forest, Fitzgerald River National Park and Hamersley Range National Park. The syndicate exercise highlighted a number of important steps in the fire management planning process. These should form a useful checklist for planners in the future.

The proceedings of the workshop will be published by C.A.L.M. following editing of the papers and collation of results from the syndicate exercise.

FIRE RESEARCH

Neil Burrows
Bruce Ward, Alex Robinson

Lachla.. McCaw
John Neal, Bob Smith

Fire research staff from Manjimup have become involved with investigations of fire behaviour in spinifex hummock grasslands in conjunction with research staff based at Kalgoorlie. The overall purpose of the project is to test the hypothesis that the disappearance of small and medium sized mammals from the arid zone has occurred because of the decline in aboriginal burning. The role of the staff from Manjimup is to develop prescriptions for aircraft burning trials which are to be conducted next May. Following an introductory trip to the Queen Victoria Springs Nature Reserve (300km East of Kalgoorlie) the team spent 3 weeks in the Gibson Desert Nature Reserve (500km East of Wiluna) assessing fuels and conducting experimental burns.

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A programme to determine the feasibility of using fire to eradicate wildings in pine plantations has been completed, the results are presented in a draft paper. Low intensity fires successfully killed small wildings without damage to crop trees, and may be a useful technique for stand management following thinning.

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Fire Studies in Heathland and Mallee Areas in the South Coast Region:
Further work has been directed in these areas including:

- monitoring of the impact of chaining treatment on mallee vegetation at Ravensthorpe,
- presentation of fire research proposals to staff at the regional seminar at Esperance,
- analysis of results of fuel drying study initiated by Paul Jones at the Stirling Ranges in 1974.

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Heathland Plots:
Plots to monitor the response of heathland vegetation to chaining at Kalbarri National Park were inspected following the completion of chaining. A comprehensive herbarium has been established to facilitate identification of species regrowing in the treated area.

The fire histories of the Fitzgerald River and Kalbarri Parks during the last 40 years are being compared from air photographs.

Data from the Ravensthorpe chaining experiments is now on the computer and ready for analysis.

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A workshop was held to review current findings from the Karri Wood Borer study; further work is necessary to analyse results according to climatic zones and site productivity.

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A progress report on burning in young stands has been circulated to Region and District Offices.

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A tour was conducted with Melbourne University students to examine karri regrowth management at Gray Block.

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ECOLOGY

Grant Wardel. Johnson, Graham Liddelow, John Rooney
Chris Vellios, Karan Maisey, Colin Ward, Ian Wheeler

Nest Boxes:
Annual checking of nest boxes has been completed. For the first time pygmy possums have been using the boxes in some areas. Other species encountered were mardos, phascogales, long-eared bats, owlet nightjars and tree martins.

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Walpole - Nornalup National Park Survey:
The final bird counts were conducted during July/August (when weather permitted). This now completes all field data collection, when analysis of the data has been carried out the results will be included in the Management Plan for the area.

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COMPUTING

Peter Walsh
Yvonne Woods

Digitizer:
A program has been developed for use with the digitizer enabling the rapid calculation of perimeter and area of any shape (to scale). The current use is for measuring fires from project Aquarius.

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Herbarium:
A system has been developed to catalogue all the specimens in the herbarium. This will provide a fast, easy method for locating specimens and will also provide a "keying out" procedure for plant identification.

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Automatic Data Capture:
The Husky Hunters were utilized for data collection during the recent Gibson Desert Survey. They were used for recording line transect data (vegetation) and proved to be invaluable time savers.

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Jarrah Leaf Skeletoniser:
Colin Ward has commenced work on this project with Ian Abbott. Stomach contents of selected bird species will be analysed for the sketetoniser caterpillar.

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Most of this section is currently involved in the November bird counts and mist netting at Gray Block.

A field project for December will be monitoring the response to the wildfire in the Walpole-Nornalup National Park.

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KARRI SILVICULTURE

Gary Inions
Peter Skinner
Tony Annels

Karri Site Classification:
Site classification of karri regeneration is now complete. The classification was based on 76 bioclimatic variables. Site types vary in fertility and climate (eg. site type 1 has high fertility and high rainfall, site type 2 has high fertility but poor rainfall etc.). The relationship between site type and site index (age-standardised top height) has been examined and a model to predict site quality from bioclimatic attributes is under construction.

Results to hand indicate that the productivity of karri regeneration is a result of the interaction of climatic and edaphic factors, and that the understorey floristics echo the influence of these factors on a site to a much greater extent than the age of the stand or period since burning. A model to predict productivity from vegetation has been completed - validation is in progress.

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