

CALM LIBRARY RESERVE  
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# RESEARCH NEWS

The newsletter of the Research Division of the Department of Conservation and Land Management

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No. 4/89

April 1989

## Alice Springs Bound

*The Australian Mammal Society is the premier professional society for scientists and managers who deal with mammal conservation in Australia. Late April saw a number of Research Division staff leave for Alice Springs to attend the Society's 1989 Conference. The subject of this year's conference was "Research for Conservation" - with special emphasis on the mammals of arid Australia.*

*The Division was particularly lucky with the timing of this Conference on mammal conservation as it fell at a time when many staff had to travel to nearby regions as part of their normal field duties (eg Gibson Desert and Central Ranges). The nine officers attending in most cases drove to Alice Springs, forewent normal travelling allowances and paid their own way on associated field trips.*

*Research papers presented at the conference included:*

*Dr Andrew Burbidge and Dr Ian Abbott\* - The value of islands to the conservation of Australian mammals.*

*Dr Gordon Friend and Dr J Anne Kerle\* - The habitat of the Black-footed Tree Rat *Mesembriomys gouldii* in the Kimberley and the Top End and the implications for the conservation of the species.*

*Dr Tony Friend - Translocation of Numbats to Karroun Hill Nature Reserve in Western Australia.*

*Dr Jack Kinnear - Foxes and wallaby populations : evidence of multiple population domains.*

*Mr Keith Morris - Conservation of Forrest's Mouse on Thevenard Island (note: \*Ian Abbott - did not attend the conference. Anne Kerle not from WA).*

*Other Research Division staff who attended the conference included Tony Start, David Pearson, , Phil Fuller and Mike Onus.*

*The relevance of the conference to CALM is immense. The majority of the land that CALM controls is in the arid parts of the State and at present we do not have the necessary knowledge to manage these areas. Fire and exotic predators, especially the fox, are the most important factors in the recent extinction of 33% of the mammals of the arid interior. Little work has been done on this problem elsewhere in Australia, but what has been done has been largely carried out by the Conservation Commission of the Northern Territory and the CSIRO at the Arid Zone Research Institute in Alice Springs.*

*Post conference tours were conducted to field study sites where relevant research is being conducted.*



## Information from the Research Division Policy Group Meeting

The twenty-first meeting of the Policy Group was held on the 18 April 1989 at the Como Research Centre. The formal meeting was preceded by a meeting with Como Research Centre staff.

### Information from the meeting:

#### Review of Executive and Administrative Support Program

The Executive and Administrative Support Program was reviewed by the RDPG recently. This review was assisted by answers to a questionnaire circulated to all Research Scientists in March 1989. The review identified many strengths of the existing structure and also some weaknesses. As a consequence of much discussion the roles of the SPRS and PRS have been modified. These changes have resulted in the SPRS and PRS being responsible for specific programs. There will be greater interaction with Research Scientists by Policy Group members. A letter detailing the changes has been circulated to all Research Division staff.

#### Vacancy - Research Scientist

The vacancy created as a result of Joanna Tippett's resignation will be advertised as a Research Scientist (Level 2/4 or 5) in the Plant Diseases Program. The position will be transferred to Manjimup.

#### Reporting of RDPG meetings

To enhance communication between Program Leaders and RDPG members it was agreed that RDPG minutes should be circulated to Program Leaders.

#### Authorization of Overtime/Commuted Overtime Agreement

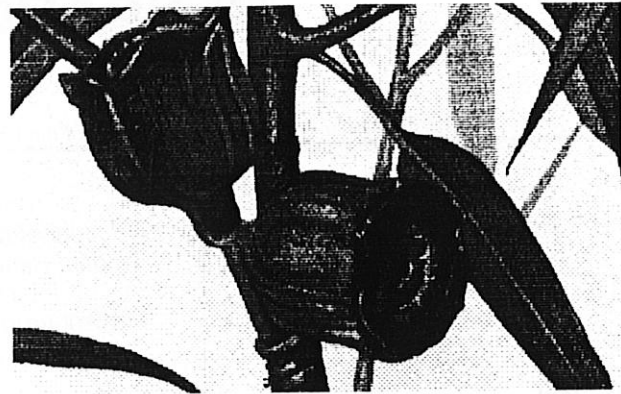
A recent meeting with Technical Officer representatives has raised the issue of - who authorizes overtime? The Divisional Manager advised that he was happy for individual Research Scientists to authorize Technical Officer overtime in connection with their work program.

Commuted Overtime Agreement - Negotiations are currently underway in order to obtain an extra weeks leave for technical staff working commuted overtime at centres other than Woodvale. This extra weeks leave is currently a condition of employment for Woodvale technical staff only.

#### Administrative Assistant - Woodvale

The position will be re-advertised with a "Centre" biased duty statement as opposed to a Divisional biased duty statement.

The next meeting of the RDPG will be held at Woodvale on Thursday 25 May 1989.



### Procedures For Filling Technical Staff Vacancies Research Division, CALM

1. The RDPG will keep and review from time to time a list of additional FTE requirements within the Division.
2. When a Technical Officer position becomes vacant (as with any other Research Division vacancy) the RDPG will decide whether to refill it or to use the FTE to fill a position on the priority list. The latter may or may not be a technical position.
3. If the FTE is to be reallocated a new PDF will be prepared and in any case a selection panel appointed.
4. If the vacancy to be filled is still a Technical Officer position consideration will be given to filling the vacancy by direct transfer, provided there is a suitably qualified Officer who wishes to transfer.
5. Where, in the opinion of the selection panel, there is no suitably qualified Technical Officer who wishes to transfer into a vacant position permission will be sought from the Department's vacancy Committee to advertise.
6. Subject to Departmental approval to fill the position, it will be advertised as a Public Service position at Level 2.

## Reflection

The recent deadline for contributions for articles for the newsletter was drawing near. I ventured to the filing cabinet, located the file titled "newsletter articles" and sat down to digest the material. I quickly read through the first article "Procedures for Technical staff vacancies" and then realized this was it! Yes, this was the sole contribution to the "Newsletter of the Research Division of the Department of Conservation and Land Management". One with not such an astute mind may conclude that Research Division staff had sunk into a state of nonchalance. Rather than flying into a state of immediate panic I chose to remain CALM and adopt the attitude - "we can only give them what we've got!" I then picked up my copy of the Research Division 5 Year Plan and browsed through the 150 page document of "what we're doing" and "where we're going" I could have picked on any

one of a hundred or more topics and pursued a scientist to reluctantly write me half a page which in turn would appear in print. After several minutes pause I chose not to do this - I see the newsletter as an avenue where staff can freely write on their research or other items of relevance. The newsletter is for the benefit of all Research Division staff.

Over the last fifteen issues twenty-five staff have contributed articles\* (some many more than once). In a Division of 140 (give or take a couple) this represents only eighteen per cent. Does this mean that only 18% of staff are interested?

Some more facts for the record. Many may not know that the newsletter is distributed not only to Research Division staff but also to all Divisional and Regional Managers, General Manager and Executive Director. Feedback over the past twelve months has been encouraging - Chris Haynes wrote after the July '88 issue "Just for feedback - this is very effective to help people like me know what Research Division is doing. I enjoyed this issue particularly". Syd Shea wrote after the August '88 issue - "Congratulations on an excellent newsletter. Can you make sure that it is widely distributed through the Department". These comments are directed to all contributors and I take this opportunity to share them with you.

I am determined the "Newsletter" should not sink into extinction. At the moment it has crept onto the Rare and Endangered List. It is up to the readers to help bring it back on the road.

Jeanette Gilmour.

\*Note: Does not include seminar notices or scientific publications.



### Mallee Conference

The National Mallee Conference convened by the Mallee Working Group under the auspices of CONCOM (Council of Nature Conservation Ministers) was recently convened in Adelaide from 18 to 21 April.

Angas Hopkins and Steve Hopper represented CALM at this conference. Angas has been the

Departmental representative on the Mallee Working Group since December 1987. Involvement up until now has been by correspondence only.

Mallee and allied *Eucalyptus* dominated shrub communities occupy about 95,000 km<sup>2</sup> of Western Australia on just over 25% of the South West Botanical Province. There are about 150 conservation reserves containing mallee and mallee heath - the total area of this vegetation type in conservation reserves probably exceeds 14,000 km<sup>2</sup> (Stirling Range, Fitzgerald River, Frank Hann, Peak Charles, Cape Arid, Dundas, Truslove, Lake Magenta, Jilbadgi).

At present CALM input into research on mallee management and conservation issues is small. Attendance at the conference enabled us to keep in touch with relevant research in Victoria, South Australia and New South Wales.

### National Workshop on Commercially Managed Honeybees in the Australian Environment

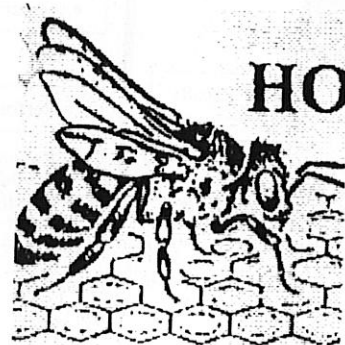
Following on from the recent Mallee Conference in Adelaide Steve Hopper flew on to Canberra in order to attend the National Workshop on Commercially Managed Honeybees in the Australian Environment. Attendance at this workshop was fully funded by the Honey Research Council.

The reason for the workshop was to establish what research needs to be done in order to establish the nature of the interaction between the Honeybee, *Apis mellifera* and the Australian environment.

The following matters were discussed at the workshop.

- what are the main geographic regions of common concern to both apiarists and public land managers
- what research would establish the place of honeybees in such environments
- how much research needs to be carried out and the resources that would be needed to do it.

By next issue we hope to have caught up with Steve and report in more detail on this.



## Third Agroforestry Conference

Richard Moore from Busselton Research recently returned from long service leave and flew to Victoria in order to attend the Third Agroforestry Conference.

The theme of the conference was "Farm Trees for Productivity and Profit". Richard was invited by the Organizing Committee to present a keynote paper. The title of this paper being "Agroforestry for Profit". The invitation to present a keynote paper at the conference is recognition of CALM's leadership in agroforestry research.

## The Dark Dim World of Performance Appraisal

I recently had the opportunity to attend a Technical Officers and Research Division Policy Group representative meeting. During this meeting the topic of "Performance Appraisals" were debated. The relevance of completing a performance appraisal even if you are on the maximum of your level was raised. As a member of the Australian Institute of Personnel Management I, from time to time receive some very interesting and informative information on performance appraisals, their values, how to conduct them etc. I thought it might be valuable to share some of this information with you.

Jeanette.

### Performance Appraisal - What is it?

In its broadest sense performance appraisal is the continual process of evaluating the performance of individual staff members. An appraisal scheme should not only focus on behaviour with a view to improvement over time; it should also be a means of aiding the broad professional/occupational development of the staff member in order to increase that person's intrinsic job satisfaction, value to the employing organisation and ultimately value to the community.

People want to know how they stand in the eyes of their management. The four key questions people ask about their jobs are:

- What am I supposed to be doing?*
- How well am I required to do it?*
- What do people think of my performance?*
- How will I be rewarded?*

### The Role of Performance Management

Managers need to ensure effective job supervision of all people for whom they are responsible. To completely discharge this responsibility a number of key tasks need to be performed.

Job objectives must be clearly specified and should directly relate to departmental objectives and overall corporate strategies.

The design of the job, provision of resources, facilities and the work conditions must all provide for optimum motivation towards task accomplishment.

Actual performance must be continually monitored and ongoing feedback provided to correct or reinforce job behaviour and standards of achievement.

Job incumbents must be appropriately rewarded and remunerated at levels consistent with the magnitude and quality of their job achievements.

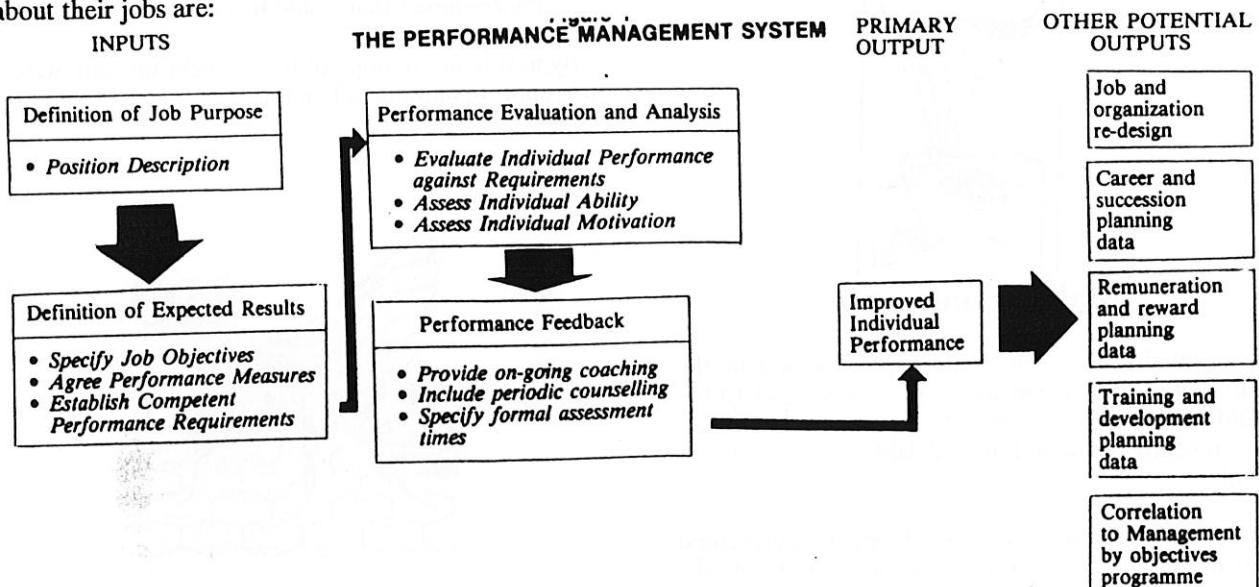
#### Elements of Performance Management

The Management of performance is best viewed as a total system with a number of closely inter-related elements which follow a logical process of Inputs, Process Activities and Outputs. This approach is demonstrated in the figure below.

#### Who is accountable for it?

The following should come to mind when "performance appraisal" is mentioned:

- enthusiasm*
- commitment*
- success*
- achievements*



If appraisals are introduced at the top (Chief Executive) then the whole organization has a greater chance of feeling accountable for its contribution to organizational success.

### Conclusion

Supervisors and staff alike should remember the primary purpose of performance appraisal must always be to "appraise and improve an individual's performance in his or her job". The time involved in performance appraisal should be viewed as an investment for the future and not a cost which disrupts daily routines. It is part of management, not additional to it.

## Library Report

Ever been frustrated when trying to locate a report or details of work that was done years ago? You know, that thinning trial that was put in at Jolly Block by Joe Blow in 1950, or was it put in by Fred Bloggs at Rosa in 1960? Perhaps you should have asked Mike Smith before he retired, certainly Tom Brown would have known, pity he died. Well, your troubles may be at an end because Frank McKinnell and Hugh Cliff are undertaking a major review of the storage and retrieval of information within the Department and the role of the library in these services. This review is not intended to consider just reference books, journals, photographs and slides, but also archival data which are required for the management of CALM lands. Should the library be involved in all these functions, should it restrict its role to journals and books? **Does the library provide an excellent service for you the user? If not, how could it be improved? Come to that, what sort of service should the library provide? Now is your chance to voice your opinion.**

Let Frank or Hugh know your views before the end of May.

**Elaine Davison**  
(Your temporary library committee representative)

## PC: DISK DRIVES - BLOODY DISK DRIVES !

Now, the time has finally come when we all have our own computers, or at least have access to one. With all these computers come disk drives - big ones, little ones, black and grey. Trouble is, which disks do you use in what drive, be it high density, low density, 5.25" or 3.5" (small disks) ? We hope that the following information will solve some of the mysteries to these questions, and put your minds at rest !.

Firstly, there are, as mentioned, the large 5.25" disks, and the smaller 3.5" disks. The 5.25" disks, as with the 3.5" come as either **DOUBLE DENSITY** or **HIGH DENSITY**.

| DISK SIZE | TYPE           | CAPACITY |
|-----------|----------------|----------|
| 5.25"     | DOUBLE DENSITY | 360 K    |
| 5.25"     | HIGH DENSITY   | 1.2 MB   |
| 3.5"      | DOUBLE DENSITY | 720 K    |
| 3.5"      | HIGH DENSITY   | 1.44 MB  |

A **DOUBLE** density disk drive can **READ** and **WRITE** to double density disks but **CANNOT** read/write to a high density disk. A double density drive may have difficulty reading diskettes written to by another double density drive.

A **HIGH** density disk drive can **READ/WRITE** to double density disks, as well as high density disks. It has more tolerance and can read double density disks written to by double density drives and other high density drives. It can write to a double density disk, and the disk can still be used in a double density drive (the disk should be formatted by a double density drive). The only known exception to this rule are **NEC POWERMATES** manufactured before 1989 (ie. a double density drive will not be able to read a diskette written to by one of these NECs).

**NOTE: THESE RULES APPLY TO BOTH 5.25" AND 3.5" DISKS.**

### Formatting

To format a **LOW** density disk in a double density drive, type **FORMAT A: <RT>** (or format b: if you are using the b drive).

To format a **HIGH** density disk in a **HIGH** density drive, type **FORMAT A: <RT>** (or **FORMAT B:** if using the B drive).

To format a **LOW** density 5.25" disk in a **HIGH** density drive, type **FORMAT A:/4 <RT>**

To format a **LOW** density 3.5" disk in a **HIGH** density drive, type **FORMAT A:/N:9/T:80**

**NOTE - never, never, NEVER FORMAT THE HARD DISK (C) !!!! THIS WILL DELETE ALL THE INFORMATION ON THE DISK**

*GLENN WHITE, COMPUTER TRAINEE,  
WOODVALE*



## SEMINAR

Thursday 18 May 1989

### The importance of *Phytophthora* in indigenous forests in Australia

Presented by Elaine Davison and Bryan Shearer

*In 1965 Podger, Doepel and Zentmyer showed that jarrah dieback in Western Australia was associated with forests sites infested with the soil-borne, pathogenic fungus *Phytophthora cinnamomi*. Since that time, particularly during the 1970s investigations of *Phytophthora* have dominated forest pathology in Australia.*

*Indigenous forests are managed primarily for timber production, water production and conservation. Soil infestation by *Phytophthora* has the potential to affect each of these. Effects on timber and water production can be quantified in monetary terms, effects on conservation, of course, cannot. We will present a review of published and unpublished data from State Government departments on the effects of *Phytophthora* on both commercial production and conservation values.*

Venue: Training Centre  
CALM SOHQ  
50 Hayman Road  
Como

Time: 3.00pm



## SEMINAR

Friday 2 June 1989

### THE USE OF TRIANGLES FOR ASSESSING THE DENSITY OF PLANTS, ANIMALS AND LITTLE WRIGGLY THINGS

Presented by David Ward

*Foresters were among the first biologists to grapple with the task of estimating the density of organisms, in their case trees. The initial approach was to count stems within fixed area plots or quadrats (Lowdermilk 1927). Ecologists adopted this method, but found some problems with it (Greig-Smith 1964). What size quadrat, how to place them? To avoid these problems plotless methods were developed (Cottam and Curtis 1949, Morisita 1954), but these have problems of statistical bias (Pielou 1959). Simple geometry leads us to a method based on triangles which seems to avoid these difficulties, whilst clearly relating distance, area and density. The method can be extended to three-dimensional densities, such as shoals of fish, or swarms of insects.*

Venue: Wildlife Research Centre  
Ocean Reef Road  
Woodvale

Time: 3.00pm



## SCIENTIFIC AND TECHNICAL PUBLICATIONS

The following have been approved for submission for publication this month.

Author(s): G.K. Brennan and B.R. Glossop  
 Title: Seasoning 25 mm mature jarrah boards using a progressive tunnel kiln  
 For Submission to: WURC internal report

Author(s): A.J.M. Hopkins and E.A. Griffin  
 Title: Fire in the *Banksia* Woodlands of the Swan Coastal Plain  
 For Submission to: J. Royal Society in Australia (Proceedings of *Banksia* Woodlands symposium).

Author(s): K.D. Morris  
 Title: Conservation of the Shark Bay Mouse *Pseudomys praeconomis*  
 For submission to: WA Museum Special Publication - Research at Shark Bay: current status and future prospects.

Author(s): K D Morris  
 Title: Management proposals for the Monte Bello islands and surrounding waters.  
 For Submission to: CALM Technical Report

Stoneman, G.L., Bradshaw, F.J., Christensen, P., Silviculture. B. Dill *et al.* (eds). The Jarrah Forest pp 335-355.

McCaw, W.L., Burrows, N.D. Fire Management. B. Dell *et al* (eds). the Jarrah Forest, pp 317-334.

Abbott, I., Dell, B. Loneragan, The jarrah plant. B. Dell *et al* (eds). The Jarrah Forest pp 41-51.

Strelein, G.J. Gumleaf Skeletonizer moth, *Uraba lugens*, in the forests of Western Australia. Australian Forestry, Vol. 51, No. 3 pp 197-204.

McCaw, W.L. Regeneration of *Acacia* and *Kennedia* from soil stored seed following an autumn fire in jarrah (*Eucalyptus marginata*) forest. J. of the Royal Society of Western Australia 71(1), 1-6, 1988.

Abbott, I. and Van Heurck, P. Widespread regeneration failure of *Persoonia elliptica* (Proteaceae) in the northern Jarrah forest of Western Australia.

Maslin, B.R. and Court, A.B. *Acacia caeruleascens*, a new species of *Acacia* section *Phyllodineae* from Victoria. Muelleria 7(1) : 131-134 (1989).

Lander, N.S. and Walsh, N.G. *Olearia astroloba* (Asteraceae : Astereae), a new species endemic to Victoria. Muelleria 7(1) : 123-125 (1989).

Lander, N.S. *Olearia archeri* (Asteraceae : Astereae), a new name for a familiar species from Tasmania. Muelleria 7(1) : 117-121 (1989).

The following have recently been published:

Kinnear, J E, Bromilow, R N., Onus, M.L., Sokolowski, R.E.S. The Bromilow trap : a new risk-free soft trap suitable for small to medium-sized macropodids. Australian Wildlife Research Vol 15 (3) 1988, 235-237.

Schofield, N.J., Stoneman, G.L., Loh, I.C. Hydrology of the jarrah forest. B. Dell *et al* (eds.), The Jarrah Forest, pp 179-201.

## RESEARCH PROJECT PLANS

The following Research Project Plans have been approved this month.

No: 4/89  
 Title: Sawn graded recoveries from a sawmilling trial of regrowth jarrah and karri  
 Officer-in-Charge K. White, S. Raper

|                         | ISSUE    | DEADLINE   | DISTRIBUTION |
|-------------------------|----------|------------|--------------|
| DEADLINE FOR NEXT ISSUE | MAY 1988 | 25 MAY '89 | EARLY JUNE   |