

RESEARCH NEWS

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

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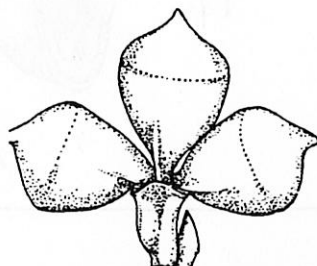
EDITORIAL - ON NEWSLETTERS!

I recently stumbled across a book in my local library titled "Keeping Employees Informed" by Russell Craig and Roger Hussey, which I thought may give me some ideas for our newsletter. A closer look at the publication saw that it presented a detailed picture of employee reporting in Australia, providing practical guidance to management in their employer-employee communication. Though not entirely what I was after I took time to read parts of the book and was interested in the results of a survey which was conducted to ascertain ways in which employees like to receive information. 231 interviews were conducted which displayed the most preferred source of information as being direct communication from Manager/Supervisor to employee. Interestingly enough the second most preferred source was newsletters and the third, special meetings. Results of this survey were later backed up by a similar survey conducted by the Australian Institute of Management. Newsletters were praised for their regularity and because they provided a retrievable record. They claimed to facilitate understanding because employees could read and digest the newsletter at leisure.

The results of the survey hastened to inspire me and hopefully other editors and contributors will feel the same.

Jeanette

	ISSUE	DEADLINE	DISTRIBUTION
DEADLINE FOR NEXT ISSUE	SEPTEMBER '89	26 SEPTEMBER	EARLY OCTOBER



Information from the Research Division Policy Group Meeting

The last meeting of the RDPG was held at the Wildlife Research Centre, Woodvale on the 25 August 1989. The meeting was followed by a meeting with Wildlife Research Centre staff. The following is a summary of discussion from the RDPG meeting.

Timetabling for Future Programs Reviews

The timetabling and frequency of future Program reviews was discussed. It was resolved that the Herbarium, as a whole, should be reviewed this financial year. For the remaining Programs the idea of a rolling review, i.e. one Program every three months was favoured as opposed to reviewing all Programs at once. The frequency of review was favoured at every two to three years. Discussion resulted in a variety of ideas - members are recording their ideas for debate at the next meeting.

Vehicle type Change for Narrogin Research

Enquiries are being made for support from Engineering Services for the change of vehicle type at Narrogin from 2WD to 4WD.

Setting of Priorities: Statement of Trends for 1989/90

A list of Departmental priorities which summarized the functions/services which are to be enhanced, as opposed to those which are to be maintained as is, or allowed to decline was noted by members. Departmental priorities will be taken into account when Research Division priorities and allocations are made.

Review of Performance appraisals.

A review of Performance Appraisals carried out over the past twelve months has been conducted and a report written. Recommendations from the report were discussed. The report and resolutions will be circulated to all centres for noting by all staff.

Budget

Unfunded Positions - Program budgets (except the Herbarium which has already experienced cuts) will be cut by 4% in order to raise money to support four unfunded positions.

Herbarium Budget - Various problems exist within the Herbarium budget. There are insufficient funds to support computer maintenance, publication and library costs. The issue will be discussed with the General Manager.

Acting Arrangements

The following arrangements will apply during the absence of the Director of Research

Acting Director	Dates
Steve Hopper	29 August - 1 September and 9 September - 15 September
Jim Armstrong	4 September - 8 September

Next Meeting - The next meeting of the RDPG will be held at the Manjimup Research Centre on 28 September 1989

THE 1989/90 BUDGET

At the time of writing the 1989/90 budget is almost finalised. Along with most of the rest of CALM, Research Division has suffered a real cut in its allocation. In general terms the Division has the same amount of dollars, with no allowance for inflation. This cut has been exacerbated because we have been allocated new people and positions over the past year that we expected to be funded from growth, and this has not eventuated. In order to provide operating funds for these groups it has been necessary to cut even further into funds previously allocated to other research areas.

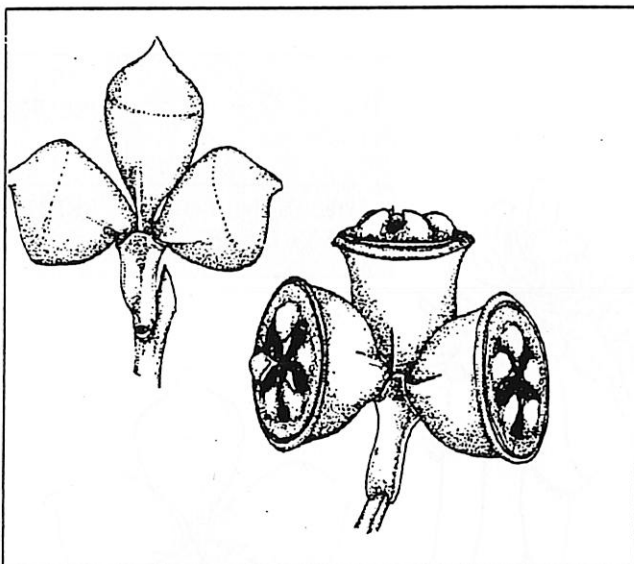
The solution worked out by RDPG is to cut all research programs except the Herbarium by about 4% and allocate a significant amount from the contingency fund. Research Computing will be cut by an even larger amount, the exact figure has still to be finalised. We have not cut the funds allocated to research centre running costs, because we know that these are already limited. Even then, everyone should be clear that there is no additional allocation to cover inflationary costs of electricity, telephones, etc.

The Herbarium is in a particularly parlous state because of a much smaller than expected allocation from the Treasury. I am working on solutions to this problem, but solutions can not be guaranteed.

I ask everyone to cooperate to keep overheads down to a minimum. The best way to achieve this is by cutting down on the use of electricity, telephones and paper. If research centres look like finishing the year in the red we will have to cut more money from research, meaning that there will be less travelling and field work.

I would be happy to receive any suggestions from staff about other cost-cutting measures that we could initiate.

- Andrew Burbidge



Scientific Etiquette

Recently there has been considerable discussion in "Current Contents" about the above. As might be expected, there is a spectrum of breaches from the serious (such as international fraud) to the negligent.

Below is a list of unethical behaviours culled from my somewhat limited reading on this topic.

- Concretion of false data and fudging of data to gain support for a hypothesis
- Plagiarism
- In priority disputes, falsely imputing plagiarism to others who have independently discovered the same matter
- Excessive secretiveness
- Eponymizing oneself (ie naming something after oneself)
- Under-acknowledgement of collaborators eg failure to offer co-authorship
- Ad hominem attacks (ie attacking the proponent and not the issue)
- Excessive self-publicity ("Grantsmanship")
- Issuing research results in least publishable units to increase one's publication rate.
- Adding gratuitous co-authors (usually one's hierarchical superiors) to a paper
- Failing to acknowledge intellectual predecessors
- Irresponsibility with research funds
- Gross imbalance between advancement of self and advancement of knowledge
- Attempting to skirt peer review
- Inadequate knowledge of the literature
- Publishing the same data more than once
- Not publishing at all

- Ian Abbott

CALM News Liaison Officers

Following the circulation of CALM Briefing Paper 2/89 explaining the new format of CALM News and calling for CALM News Liaison Officers, the following people have been nominated as Liaison Officers in our Research Centres.

Como Research	Glenda Godfrey
Dwellingup Research	Brian Morgan
Herbarium	Vicki Hamley
Manjimup Research	Penni Hewett
Woodvale	Jeanette Gilmour

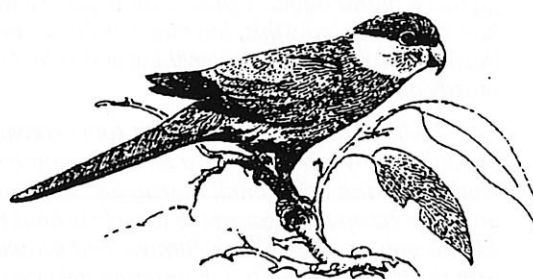
Perhaps these people would like to perform the same function for Research News and advise the editor of any scientific breakthroughs or just good old gossip that may have happened in your Research Centre.

SEMINAR CHANGES

Cancellation - Neil Burrows' Seminar (Fire in a timeless land) scheduled for 6 October has been postponed. As a consequence of this there is now a vacancy in the series for a speaker on this date. Would anybody willing to give a seminar in the afternoon of 6 October 1989 please advise Jeanette on 4055105.

Amendment - The Seminar scheduled for 19 October will be given by John Bartle. John's chosen topic is the "Development of pulp wood cropping systems for the south-west"

Red-capped Parrot *Purpureicephalus spurius*



CORRESPONDENCE RECEIVED

From time to time correspondence of a more interesting nature is received by Research staff. This month two letters have been passed on to me for inclusion in our newsletter, the first given to Keith Morris as a result of the Chuditch publicity program and the latter received by Angus Hopkins. Unfortunately it is not practical to reproduce the letter to Angus in full. An extract only is printed. I'm sure both Keith and Angus would be interested in your feedback/help on the letters

- Ed.

6565 Great Eastn. Hwy
Mundaring

The President Ratepayers Assoc

Dear Sir

Thank you for your invitation - I will not be able to attend.

Mr Morris from CALM might be interested in my observations of the Native Cat (Chuditch).

I first trapped a Native Cat more than 60 years ago, even then they were not as plentiful as the Feral Cat.

Actually they only have an apology for a pouch compared with other marsupials. As a boy I remember catching one with a number of young attached firmly to its teats. I have never forgotten this unusual occurrence.

I was employed 60 years ago trapping Quokkas for the Forests Dept (they were ringbarking young trees around a

swampy area). I caught many Quokkas, Brush, Tammar, Opossum, Feral Cat and Native Cat in this area using about 100 traps and this was at a place called Greystones about 5 kils from Mundaring Weir.

Small marsupials were plentiful in those days (I forgot to mention the Kangaroo Rat and Bandicoot). However from the day the fox was first sighted in the Mundaring area so these small animals depopulated (A Cecil Hilton first sighted a fox in 1929) - with the exception of the Opossum and the Bandicoot. The Bandicoot because he is like coiled barbed wire to handle - the Opossum is mostly a tree dweller.

I am sure the fox would be responsible for the decline in Native Cat numbers, as he is a relatively slow mover, but is probably not very palatable. I came to this conclusion after skinning them and pegging out the skins. From memory they have a layer of fat adhering to the skin (rather like an Emu but not like any other Marsupial). Anyway this fat has a putrid odour. I guess a lot of people would be horrified on hearing this, but that was the normal thing in those days. You skinned everything and sold the skins for mostly only a few pence.

I will conclude by saying with some conviction, that the only way we will ever see a revival in numbers of the Native Cat and other small Marsupials, is to have an intensive campaign against the fox. He is hard to trap, but easy to poison. Most elderly farmers and people associated with the bush, know this, but unfortunately we never see a determined effort by people in Authority to do anything about this killer.

Sincerely M R Gray

Rome, 17 July 1989

Dear Angus

While in Rome we have been seeing our friends the Pigiottis - Sandro Pigiotti who is professor of botany there and his wife Erika who is ditto in Trieste. They have been to WA twice but say they have not met you. They are coming again for two months from mid September, this time bringing their son Giuseppe who is a forestry student. The object of this is that he had to do a special project in addition to his thesis, and would like to spend the two months in the forest working on this. We wonder therefore if CALM could help to lay on something.

He thinks mainly that he might be able to study the structure of eucalypt forests. It is my suggestion (if practicable) that he might go down to Manjimup and stay in the town, be briefed on all work done by CALM in the research branch and given access to the Library to read up all published work. Then he might go into the forest to take his measurements. Perhaps the initial stage could and will be covered in Perth at Forestry HQ. Do you think that this is practicable and that the Department would help him?

A snag is that the young man is bilingual in Italian and German but is not too hot at English. Obviously he will have to read research reports in English, but while in the field it would help if a forester speaking Italian or German were available to guide him.

Could you let me have a reply giving your views on this, to reach me in a month's time

South East Asian Botanical Program

In 1988 Neville Marchant from the Herbarium was invited by the Network for the Chemistry of Biologically Important Natural Products (NCBNP) to examine Herbaria and botanical institutions in South East Asia. As a result of a report prepared by Neville and submitted to NCBNP he was then invited to organise and chair a meeting of Asian plant taxonomists in Bandung, Indonesia in January 1989. Departmental and Ministerial permission was obtained so that Dr Marchant could visit Indonesia for five days at no cost to the Department.

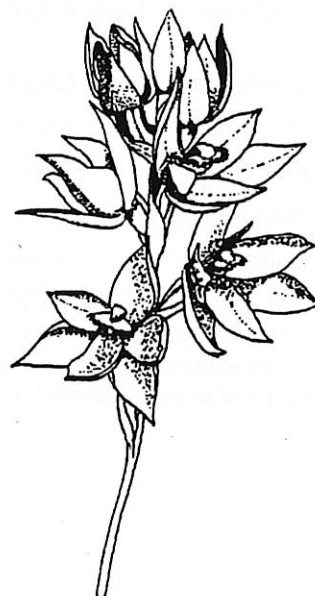
The Bandung meeting resulted in the formation of the South East Asian Botanical Program (SEABOP), an organisation which will foster taxonomic botany in the South East Asian-Australian region. At this meeting Neville was elected as Secretary to the South East Asian Botanical Program.

The second meeting of SEABOP is currently being held in Leiden, Holland, in conjunction with an International Symposium on the Flora Malesiana project. Following the Symposium there is to be a two-day workshop on the Flora Malesiana project.

The Symposium will deal with conservation and taxonomy of the flora of the Indonesian-Philippines region. There will be progress reports on the Flora of Philippines project, Flora of Papuaia and Flora Malesiana project. As well as topics on Taxonomy, Vegetation and Flora writing there are to be papers on medicinal plants, conservation and gene banks.

The workshops will deal with organisation and preparation of large-scale floras, relationships between flora treatments and monographic studies as well as the role of field knowledge in herbarium taxonomy. All of these topics and many papers in the symposium itself are especially relevant to current departmental research.

All costs for the trip have been provided by NCBNP.



7th Australasian Plant Pathology Society Conference

The 7th Australasian Plant Pathology Society recently held their Biennial Conference at the University of Queensland. Representing CALM's Research Division were Bryan Shearer from Dwellingup Research and Tom Hill from Como Research. The following is an abstract from the poster presentation prepared by Bryan.

POPULATION DYNAMICS OF *PHYTOPHTHORA CINNAMOMI* IN *BANKSIA* WOODLANDS AND THE JARRAH FOREST OF SOUTHWESTERN AUSTRALIA

Shearer, B.L., Dillon, M.J. and Buehrig, R.M.,
Research Centre, Department of Conservation and
Land Management, Dwellingup, Western Australia,
6213.

The seasonal recovery of *P. cinnamomi* from four infected coastal *Banksia* woodland sites was compared with the recovery from an infected area in the jarrah forest where jarrah as well as *Banksia* were dying. From mid 1987, soil was sampled each month near the collar of recently dead *Banksia* and at random in plots from the top 5 cm of soil and at depth to a metre in the soil profile. Presence of *P. cinnamomi* was determined by baiting with *Eucalyptus sieberi* cotyledons.

In all plots, *P. cinnamomi* was recovered more frequently from soil sampled at a metre below the soil surface than from the top 5 cm of soil. In two *Banksia* woodland plots the fungus was recovered from groundwater at 3 and 5 metres below the soil surface. The spatial distribution of recoveries of *P. cinnamomi* from surface soil was poorly correlated with recoveries from depth.

The fungus was recovered more frequently from the sandy soils in infected *Banksia* woodland communities than from the gravelly loam of the infected jarrah forest site. In addition to supporting plant communities susceptible to *P. cinnamomi*, the sandy soils of the Bassendean dune system of the coastal plain of southwestern Australia have horizons that impeded the vertical percolation of water and favour survival and reproduction of *P. cinnamomi* at depth in the soil profile.

Research Project Plans

The following Research Project Plans have been approved this month

No: 23/89
Title: Effect of varying stand density on growth rate of *Phytophthora cinnamomi* lesions in jarrah in the high, intermediate and low rainfall zones.
Officer-in-Charge: Dr Stuart Crombie
No: 16/89

Title: Fire studies in shrubland at Stirling Range National Park. Part 4. Effects of fire on invertebrate communities.
Officer-in-Charge: Gordon Friend
No: 19/89
Title: Comparison of two high density regimes for *P. radiata* on Sunkland.
Officer-in-Charge: Richard Moore
No: 22/89
Title: Impact of prescribed fire on infestation by Jarrah Leafminer
Officer-in-Charge: Ian Abbott
No: 18/89
Title: Estimating the leaf area index (LAI) of forest plots using hemispherical photography
Officer-in-Charge: Kim Whitford
No: 21/89
Title: Fusilade effect on declared rare flora *Hakea aculeata* and *Daviesia oxlobium*
Officer-in-Charge: Ken Atkins
No: 24/89
Title: Success of infilling karri (*Eucalyptus diversicolor* F. Muell.) seedlings in one year old coupes
Officer-in-Charge: Penni Hewett
No: 25/89
Title: Processing - stability of re-growth and mature karri panels constructed from boards of differing moisture content
Officer-in-Charge: Peter Newbey

Scientific and Technical Publications

The following scientific and technical publications have been approved for submission for publication this month.

Author(s): G P Hall and G R Friend
Title: Distribution, habitat and behavioural patterns of *Nickerlea sloanei* (Lea) (Coleoptera : Cicindelinae) in south-western Australia
For submission to: Journal of Royal Society of W.A.
Author(s): N L McKenzie, L Belbin, C R Margules and G J Keighery
Title: Selecting representative reserve systems in remote areas : a case

study in the Nullarbor region,
Australia

For submission to: Journal of Biological Conservation

Author(s): J D Roberts, G Wardell-Johnson,
W Barendse

Title: Two new species of *Geocrinia*
(Anunra : Myobatrachidae) from
southwestern Australia, with
comments on the status of *G. lutea*.

For submission to: Records of the Western Australian
Museum

Author(s): H Borg and G L Stoneman

Title: The long term implications for
streamflow of changes in vegetation
cover and stand height in
regenerating karri stands in
south-west Western Australia

For submission to: Journal of Forest Ecol. Mgt.

Author(s): K D Morris and R N Bromilow

Title: A record of the Euro (*Macropus*
robustus) in John Forest National
Park

For submission to: W.A. Naturalist

Author(s): R Rule

Title: The Wickepin fence post trial after
57 years of service

For submission to: Updating of WURC report

Author(s): A B Thomson

Title: Shrinkage, collapse and
dimensional recovery of re-growth
jarrah

For submission to: WURC report

The following have recently been published:

Burrows, N.D., Woods, Y.C., Ward B.G. and Robinson,
A.D. Prescribing low intensity fire to kill wildings in
Pinus radiata plantations in Western Australia.
Australian Forestry, Vol 52, No. 1 : 45-52.

Burbidge, A.A. and Fuller, P.J. Numbers of breeding
seabirds on Pelsaert Island, Houtman Abrolhos,
Western Australia. *Corella* 1989, 13(2) 57-61.

Friend, G.R., Smith, G.T., Mitchell, D.S. and Dickman,
C.R. Influence of pitfall and drift fence design on cap-
ture rates of small vertebrates in semi-arid habitats of
Western Australia. *Australian Wildlife Research*, 1989,
16, 1-10.

SEMINAR

Thursday 21 September 1989

What Truly Counts Can't be Counted

Presented by Nicholas Lander

The introduction of performance indicators into scientific research is essentially pragmatic. It can be traced to a decline in the availability of financial resources together with ever-increasing demands for assessment of "performance" from within and outside institutions, and the development of more "qualitative" or "formal" tools for improving the quality of decision making in the management of science.

In order to meet these demands Government and the research community itself will increasingly require quite specific information on the research activities of institutions, and also on those of individuals. In the current climate of accountability the need for explicit and systematic evaluation of research performance by one means or another is inevitable.

How should the research performance of biologists like ourselves be assessed? What can we learn from the experiences of other scientists and academics and from the extensive and growing literature addressing this controversial issue?

This seminar will consider the most commonly applied indicators of research performance against the background of the Research Classification Scheme, Research Project and the Performance Indicators currently under development by the Commonwealth Department of Employment, Education and Training (DEET) for use in tertiary institutions.

Venue:

Como SOHQ Training Centre
50 Hayman Road

Time: 3.00pm

Como Library Videos

I'm going to Ningaloo in September and so I have been trying to find out what information the Department has about the reef. I was delighted therefore to find that the library has a video on the Ningaloo Marine Park, it is just one of the 60 videos held by the Library. They include videos on plantations and native forests, conservation, land degradation, fire management etc. Some are clips from television programs, others have been made specifically for teaching purposes or to explain departmental policies. The oldest dated video is from 1982.

Robyn Weir at Como is in charge of the video collection, so next time you have to give a talk or, like me, are going on holiday, why not check out the departmental videos. Robyn can be contacted in the morning at the Como switchboard or in the afternoon on extension 460.

- Elaine Davison
Senior Research Scientist

PHILOSOPHY CORNER...

ADVANCEMENT

If you wish in this world to advance
Your merits you're bound to enhance;
You must stir it and stump it,
And blow your own trumpet,
Or, trust me, you haven't a chance

(W.S. Gilbert : Ruddigore I)

PROGRESS

All progress is based upon a universal innate desire on the part of every organism to live beyond its income [Samuel Butler (1835-1902) : Notebooks]

RESEARCH

He had been eight years upon a project for extracting sunbeams out of cucumbers, which were to be put in phials hermetically sealed and let out to warm the air in raw, inclement summers (Jonathan Swift : Gulliver's Travels III.V.)

On the lighter side!

Recently several CALM Research and Regional personnel were observed savouring an enjoyable chinese meal in a unsavoury downtown Karratha restaurant. During several indepth conversations and after mumerous glasses of beer, red wine and soft drink an anonymous Principal Research Scientist was overheard elucidating the finer points of several forestry related operational matters to a recently appointed Senior Principal Research Scientist. The most quotable and printable of these declarations were;

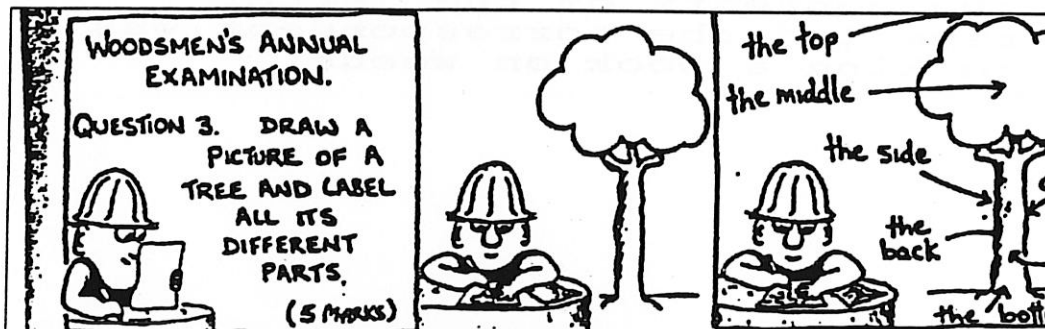
- PRS to SPRS "Do you know what a karri tree is?"
- SPRS to PRS "Yes I know what a karri is"
- PRS "You know, one of those tall trees and
- PRS to SPRS "you know those things that cut down trees? those things that go bruumm bruumm"

(and our future is influenced by these personnel, both of whom are members of the RDPG)

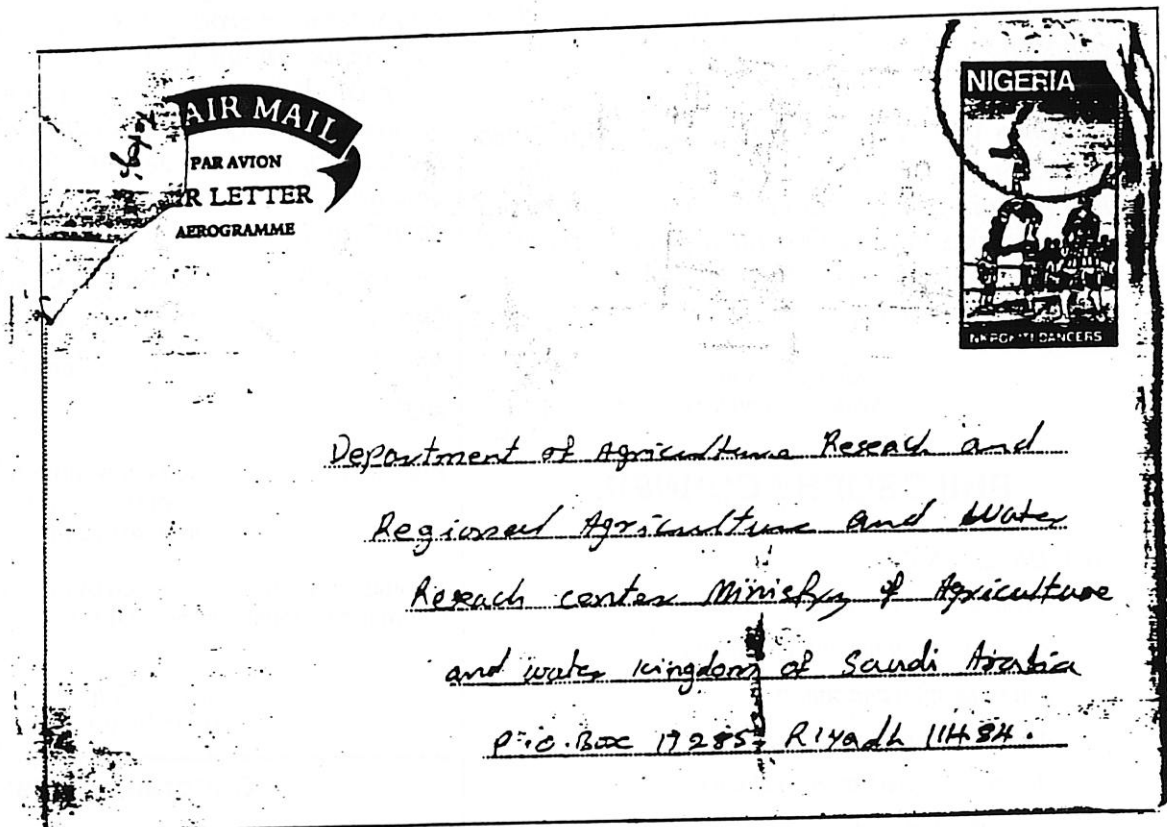
- by R.U. Full
(prop Universal Chinese Restaurant)

Congratulations:

Congratulations are extended to David Algar on the birth of his daughter Shannon and to Jim Lane and Paul Gioia who are expectant fathers.



The wonders of the postal system.....?
 (is this our new title?)



Library staff at Woodvale were somewhat perplexed lately with the arrival of this letter in the daily mail. Surprisingly enough the contents of the letter revealed the correspondent was seeking a book on weeds!