



ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS

RAINFOREST STUDY GROUP

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Syzygium paniculatum
Duboisia
General

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'The wisest is he who knows what he doesn't know' (Socrates)

SOME EARLIER CONSERVATIVE ATTITUDES OF THE SOCIETY FOR GROWING AUSTRALIAN PLANTS ARE CHANGING

NSW Region has resolved to be publicly known as The AUSTRALIAN PLANTS SOCIETY. The reasons for this were outlined in 'Native Plants for NSW' Apr 97 and was one of the many recommendations a Committee of Review made to revitalise the Society. The accompanying Annual Report 1996 was appropriately captioned "MUCH, MUCH MORE THAN JUST A GARDEN CLUB" and included a 'mission statement' (as do all good corporate citizens) that included 'protecting native plants and their habitats'. The welcome mat is unashamedly out for conservationists, environmentalists and 'greenies!' ((Ed. I am overjoyed to be so vindicated!))

Accompanying notes include a breakdown on 1862 responses to a survey on member's interests showing that 21% have a prime concern with conservation and 19% with bush care. 30% are interested in growing, and 21% in propagation with just 9% as 'new gardeners'. So, almost half the membership is basically concerned with natural aspects and it could be surmised that many with other interests are also concerned in varying degrees with environmental dilemmas.

Also included was a summarised Conservation Policy which seems pretty comprehensive and will no doubt please a majority of the States membership. Of note - 'The Society will promote the preservation of all remaining rainforest, wetlands, old growth native forest and all other vegetation and plant communities not well represented in present reserves.' (There is a following item on the areas of two States currently reserved.)

WE WELCOME THESE NEW MEMBERS TO OUR GROUP

ANDREW & ROSEMARY WRIGHT, Shellharbour NSW. GARY & KATHERINE PEDERSEN, Castle Hill NSW.

LISTING OF SPECIES GROWN BY MEMBERS IS REQUIRED FOR A DATA BASE... WILL YOU ASSIST?

Patrick wants to set this up in conjunction with the propagation reference files that he is building up. Some lists were sent to Esther long ago, but they are either missing or out of date. It is quite important that such information be available in order to answer queries from various people, and it would be good to have some records to justify our 'study'.

MY THANKS TO THE MEMBER WHO SENT ME THAT GREAT BIG WOODEN SPOON

There was no message with it, merely an inscription on the handle reading "The Society's Greatest Stirrer". That was a great gesture that I will treasure for ever, and it is nice to know that, some at least, are weighing up the arguments. My wife says that it will be of good use when making the Xmas cake each year. Again thank you very much, pity the postmark was indecipherable otherwise I might have a fair idea from whence it came.

ANOTHER OF OUR GROUP GAINING AN AWARD IS NEIL MARRIOTT

His was a fair dinkum one though - an 'Australian Plant Award, 1995-1997' in the professional category. Neil has been a member of SGAP for 25 years and has been active in many aspects of administrative and practical applications regarding native plants. He is an expert in *Grevillea* and co-author of a 3 set volume on the genus, though perhaps RF species may edge out that priority? At present Neil is busy rehabilitating and revegetating 500 acres of granite hill country in central Victoria but still has time for other environmental pursuits within SGAP and outside it. Neil, you are a worthy ally and I congratulate you. Many others of the RFSG will, I am sure, join me in applauding your award.

SPECIES CURRENTLY AVAILABLE FROM THE SEED BANK

Alphitonia petrei *Araucaria cunninghamii* *Brachychiton acerifolius* *Cassine australe* *Cissus hypoglauca* *Cordyline stricta*
Erythrina vespertilio *Ficus coronata* *Ficus obliqua* *Pandorea jasminoides* (2 var. - white, normal) *Parsonia straminea*
Petalostigma trilobulare *Planchonella australis* *Stenocarpus sinuatus* *Tecomanthe* sp Roaring Meg Ck. (Recent donors - Oliver Carter, Lance Fitzgerald, David, Patrick.) All requests to P. Bennett 20 Belmore Court Pine Mountain Q. 4306 with a stamped self-addressed envelope please.

The bank is depleted and much remaining seed is aging (still need growers to check viability though), so it would be appreciated if members can scrounge whatever they can to restock.

IT IS MY INTENTION TO CHANGE THE TITLE OF OUR GROUP

I have decided to approach ASGAP to rename the RFSG to the 'Rainforest and Conservation Interest Group'. Among the reasons for such change are: (a) Rainforest and conservation have become synonymous in recent times. (b) Many members are in fact concerned with both aspects. (c) Prospective members will be aware of what to expect from the N/Ls prior to deciding to join. (d) There is currently no 'Conservation Group' as such within SGAP. (e) It will legitimise what is in effect the attitudes taken during my leadership.

Anyone with strong feelings either way should let me know in the next couple of weeks and include your reasons for support or opposition. All representations will be included in my submission to the Committee requesting the rename.

TROPICAL RF OF THE MONTH - QUEENSLANDS 'BLACK MOUNTAIN CORRIDOR'

This is a relatively narrow and rather tenuous stretch of forest on the edge of the MacAlister Range escarpment. The majority of the contiguous rf communities which make up the corridor are contained within the boundaries of the World Heritage Area, and include 41 species of rare plants, several of which are considered endangered. Six birds and 2 mammals found there are classified as rare, vulnerable or endangered.

This group of forests plays a significant role in the maintenance of the integrity of the Wet Tropical rfs as a whole, through its provision of a continuous belt, or land bridge, between the larger rfs of the north (Mt. Carbine Tableland) and the south (Lamb Range and associated rfs), along which migrating and dispersing fauna, and to some extent, flora, can safely pass.

Extensive research by Uni of Qld geneticist Dr Chris Schneider demonstrates that over 20,000 years ago when it was much drier and cooler, the tropical rfs contracted to isolated pockets in such places as Carbine Tableland & the Lamb Range. The research has shown that populations of species in these isolated pockets have developed distinctive genetic traits. With the expansion of the forest in more recent times, the Black Mountain Corridor allowed isolated populations to mix again, and it could be the convergence of genetically dissimilar populations that generates new species.

If you would like to see this RF, you are in luck, because a road has been pushed right through in recent times. You may have to join a developer's fan club to traverse it though, because he owns it. It is 31 kms long, from Wangetti on the coast to the future "Palm Springs of N.Q." a resort & residential development for about 150,000 people at 'Southedge' between Mareeba & Mt Molloy. That 42,000ha property (ex crown pastoral lease) will be improved by the addition of another 6 big, artificial lakes to complement the present massive dam. No EIS was ever prepared for the developments, or the driveway. It has been said that the road cost \$25 million to build but the land was free, much being State Forest. Wonder what sort of a permit was needed for that?

If you would like more details of the RF, or those developments, the Wilderness Society at Cairns will be only too pleased to help you. If you are concerned at possible expropriation of public property, perhaps you should contact Hon H Hobbs MLA PO Box 1588 Coorparoo Delivery Centre Q 4154. for his explanation, and ask that a full EIS be prepared.

(Ed. Thank you Joe Friend for sending me 'The Cairns Koala' with its interesting and eye-opening features.

PLANT OF THE MONTH - SYZIGIUM PANICULATUM MAGENTA BRUSH CHERRY family MYRTACEAE

(The Syzgium group of the Myrtaceae family comprise large shrubs or tall trees with opposite and sometimes fragrant leaves. Flowers have 4 petals and 4 sepals, with numerous fine stamens.)

The Magenta Brush Cherry, so described because of the bright reddish colour of the fruit, is a large shrub to small tree (5 - 8m) with a dense, bushy foliage crown. Although restricted in its natural distribution between Jervis Bay and Bulahdelah on the NSW coast, it has a long history of cultivation as an ornamental landscape tree.

S. paniculatum grows on sandy soils amongst littoral or STRF, often in gullies or along watercourses. It has a dense crown of opposite and extremely glossy, dark green leaves to about 6cm long. The young stems are often a reddish colour. Small panicles of white flowers, approx. 1.5cm across are borne at the end of branches and in the upper leaf axils from December to March. The deep magenta-red ovoid fruit to 2.5cm across are ripe from March to May.

Cultivation: It has been commonly grown as an ornamental shrub or small tree in eastern Aust for over 50 years. The development of a range of 'dwarf' cultivars has seen it being used extensively by the landscape industry in recent years. Apart from being a landscape feature plant, S. paniculatum has great potential as an ornamental cut flower. Summer flowers can be used for floral arrangements, and the glossy green leaves make it an attractive foliage filler throughout the year.

Pests: It can, unfortunately, suffer adversely from attack by leaf-pimping psyllids, and scale which can be followed by sooty mould, particularly in young plants. This may make it unsuitable for cultivation in hot sub-tropical areas.

Requirements: Grows easily in most soils and is frost and sun hardy from a young age. Propagation can be from cuttings, or fresh seed which germinates within 3 - 4 weeks.

Further references: Jones D.L. 'Rainforest Plants of Australia', Reed Books 1986. Nicholson, H & N 'Australian Rainforest Plants Vol 4', Terrania Rainforest 1994.

(From Rhys McGregor, Terrigal NSW)

Rhys added that S. paniculatum (though rare & endangered) grows naturally in a nearby RF gully.

INSECT OF THE MONTH - A WEEVIL - PROPTERUS CHEVOLATI

I came across this one merely by chance, in early April on a grassy track at the edge of our RF. I noticed a small almost black object less than an inch in length that appeared to be either a dead spider or a Casuarina 'nut' - either one being out of place there. Further investigation indicated that it was a beetle of sorts, probably dead. Reference to 'Beetles of Australia' T Hawkeswood 1987 showed it to be Propteris which he describes as the largest of our RF weevils, appearing after the summer wet season and usually seen on rf logs feeding on bracket fungi and moss. They are slow-moving and if handled outstretch their legs in a characteristic fashion and assume a lifeless appearance. They seem sensitive to light and generally avoid clearings, preferring locations deeper into the forest where ample shade is available. The book says that they are a Qld endemic, but obviously they come a good way further south. Their life history and behaviour is largely unknown, but they are certainly interesting and unusual creatures.

TALKING OF INSECTS - DO YOU KNOW THERE IS AN OFFICIAL AUSTRALIAN NATIONAL INSECT COLLECTION

There certainly is. It comprises about 11 million specimens and has been gathered by the CSIRO Division of Entomology held (I think) at Canberra. I am unsure of the actual number of species those 11 mill represent, but the bloke describing it stated that there could be a total of 250 million insects and other invertebrates represented in Oz. That's amazing, though not all are found above ground, as many are soil fauna of course.

They (the administrators) feel that the collection is presently "a wasted resource" because of the possibility that there may be some valuable drugs which could be obtained from insects. There has been little work done on this aspect in the past, but the industry is now showing interest. It has been decided that the collection be made available for 'pharmaceutical bio-prospecting'. What a delightful term for the exploitation of probably the continents last, untapped element of its biomass.

The forests contain a far higher ratio of insect fauna than any other ecosystem, and we may shudder to think of the damage caused to many RFs during the search and collection of likely, highly valuable species.

UPDATE ON A PREVIOUSLY FEATURED MEMBERS GARDEN - NSW ILLAWARRA

Dean Pryke writes " It is my intention to establish the RF plantings to dominate the background of my property at Burrawang in the Southern Highlands. I'm clearing Holly, Tradescantia, Honeysuckle and Ivy, and slowly grubbing out most of the ancient Kikuyu except in a small area to be kept as lawn, for outdoor recreation facilities. Recently, I showed local member Helen Tranter the proposed area as she is involved with the Robertson 'Yarrawa Brush' and I want to bring my area into line with that reserve. My plan is for essentially warm/cool temperate highland RF dominated by Coachwood, with already about 10 of these planted, including 2 super-advanced specimens. As well I've Callicoma, Tasmania insipida, Acmena smithii established and will add Doryphora sassafras, Polyosma cunninghamii and Pennantia cunninghamii. The few remnant species include Rapanea howittiana, Geitnoplesium and Eustrephus.

At home in Sydney, the Matson RF is now so overloaded with surplus mulch, I'll just have to shift some up to Burrawang. The good news here is that yet another new neighbour above our property is showing interest in planting his adjacent area similar to the Matson forest".

GARRY DALY DESCRIBES RECENT EFFORTS IN REGENERATING HIS NOWRA NSW PROPERTY

"Over the last decade I have been planting out certain areas of my 100 acre property at Nowra on the south coast. The area is frost free and people may be surprised to know that many areas on the Illawarra are generally frost-free, whereas even Nth Qld. (Atherton Tableland) frequently experiences frost.

Over the last year I have been planting out gum trees. You may ask - why is a RF enthusiast planting sclerophyllous species? The answer is simple. In temperate areas, rfs have a lower diversity of vertebrates than open forest. To promote an elevated biodiversity I have been establishing these high nutrient gums: Corymbia maculata, Eucalyptus tereticornis, E. punctata & E. robusta. I recommend these species as they can flower in winter and are used by a range of mammals including Koalas and Yellow-bellied gliders.

To promote the growth of the gums, I am currently eliminating Turpentine Syncarpia glomulifera regrowth. The idea is to manipulate the environment so that the area has a patchwork of high nutrient gums on the drier ridges and rf trees in the gullies. One gully has Acacia binervata regrowth approx 15 years old. The problem with Two-veined Hickory is that it grows to a large size and takes up to 40 years to die. I have seen several forests at a stage of regrowth where these wattles are senescent and falling over, damaging or destroying many regenerating RF species in the process.

To overcome this problem, I use small wattles (i.e. Cootamundra or Qld. Silver) as 'nurse trees' as these are relatively short lived and easy to manage. The gully which had the large A. binervata has been treated with a chain saw. Though the effect is reminiscent of a forestry operation, the advantages are worth the effort and aesthetic disruption. The fallen timber can be used as firewood, or left to decay and provide habitat.

After opening up the canopy I am planting out advanced trees. I have found that these (at approx 2m high) are more robust than tube stock, settle in faster and generally are not attacked by Swamp Wallabies. Even fenced tube plants are often browsed, and thus set back a tree for years. Wallabies appear to discriminate against certain plants, one N.Qld Cryptocaria was OK until a tree guard was placed around it. A few days after the guard was removed from the then 1.5m tall tree, it was reduced to a 300mm stump!

I regenerate with mostly northern NSW or far Nth Qld species. I hope to see the day when they flower and fruit. Currently more than 200

species have been planted and there are more to follow. I find large scale reclamation work much more rewarding than a small backyard full of crowded plants. My advice to members in urban areas is to buy degraded coastal land and be its guardian for a period. In NSW, the NP&WS conservation agreements should be considered so that your efforts are not undone by future subdivision."

(Ed. You may recall that Garry is an environmental consultant, and now operates under the name 'Gaia Research'. I find James Lovelock's Gaia theory fascinating, and if I last long enough as leader hope to do a synopsis of that concept for members information.

AS MOST OF YOU KNOW - OUR PROPERTY 'BOOYONG' WAS GAZETTED A WILDLIFE REFUGE BY NSW LEGISLATION

Certain conditions have been established (by agreement with ourselves and the NP&WS) and we have undertaken to - (1) Preserve the wet sclerophyll forest & RF pockets on Lot 1, DP 248857. (2) Continue to control unwanted weed growth - particularly Lantana camara infestations. (3) Encourage the natural regeneration of native plant communities through exclusion of stock and the control of fire. (4) Livestock to be restricted to existing pastures on the southern boundary - those pastures will be securely fenced. (5) Fire may be used to hazard reduce the roadside strip adjacent to Comboyne Rd, only. (6) Continue to encourage waterfowl to use the area through the provision and maintenance of dams.

These are not onerous conditions (particularly as they were determined by mutual agreement), and I commend to all who are concerned with the future to set up a similar, environmentally sympathetic haven to protect and preserve even a small area of nature from society's increasing demands on remnant resources.

(This was written before Garry Daly's letter arrived - wonderful to be in such good company). Actually Garry's place has so much in common with Booyong - same Wattle problems, though ours are A. irrorata; RF gullies, and drier slopes and ridges (some different Eucs too): identical acreage. Though we get some frosts, we don't need to replant vegetation, mere removal of Lantana allows natural regrowth to resume.

I invite others to pass on the situation with acreage they are protecting - those I know in this position are, Sue & Brian, Jan & Ross, Kim & Peter, Anske & Martin (Dean we've just heard from, also recently from a couple of Victorian carers), and members from northern NSW and Qld.

AT PERTH - CHRISTOPHER PIDD HAS COME ACROSS A DELIGHTFUL SMALL RF GARDEN

"I saw it last Nov while visiting local properties in the 'Open Gardens Scheme' It is at Dalkeith and is an amazing achievement in a climate directly opposite to that in which Rf normally thrives. As you probably know, summers here are in drought conditions with temps. consistently over 30° sometimes passing 40C. Believing that the owners would be interested in knowing of the existence of our Group, I gave them relevant details should they wish to join."

Chris sent details of the 'Nettleton Garden' which says - "A shady tranquil garden has been created by the owners over the past 17 years. Towering Eucs create a tall canopy which has another 2 layers of palms and foliage beneath, giving the overall effect of a tropical forest. A pool surrounded by narrow paths allows the visitor to wander through this paradise, hardly believing that it lies in the midst of a Perth suburb".

Perhaps the publicity given to this achievement may encourage others in WA to create similar havens.

BEV CROFT IS TRYING TO RE-ESTABLISH RF ON A WINDY COASTAL SPOT AT TYAGARAH - NSW NORTH COAST

That is between Brunswick Heads & Byron Bay. Bev says "we are having a rest from environmental confrontation for a while, are now concentrating on planting more of our 7 acres (steeply sloping so probably closer to 10). I wonder if other members are trying to replace RF on red soil, coastal windy sites? We are about a mile back from the sea, on a hill looking east/south east. We are having mixed success with our dense planting, often have to stake after strong wind episodes, and losing an occasional tree. It would be good to exchange ideas with others."

Bev added that she is very pleased that the group not be split as their interests cover the wide spectrum, and fully agrees with the approach taken in the N/Ls. She wishes more people would wake up to the fact that our political masters and the 'big business' they represent are destroying this country.

NEIL MARRIOTT REPORTS ON THE STATUS OF HIS VICTORIAN RF SITE

"It suffered a lot last summer - very hot and dry at the time the windmill constantly broke down. So frustrating having plenty of water down in the valley but not available where needed! As a result our young RF plants got just one watering for the whole summer. The weaker ones succumbed, but amazingly the majority survived - can't believe how drought tolerant most of them are!! Overstorey trees have grown sensationally - Euc viminalis to 10m in 4 years, E. globulus 6m & E. saligna 3m in 2 years.

I started out growing all types of RF plants, but now realise that species which need good summer water may be too difficult at present. Species such as Synoum glandulosum, many of the Ficus, Syzygiums, etc are thriving on low rainfall. It seems my choice of sites has proven to be a winner - a sheltered gully on a hillside. The max/min thermometer at our house dropped to 1°C last week (mid May); the thermometer in the 'rf' only dropped to 10° - quite a contrast! Congrats on the continuing high standard of the N/L."

NEW SYDNEY MEMBERS - GARY AND KATHERINE PEDERSEN - WANT TO START A RF FROM SCRATCH

They explained that a reason for joining the Group was, as they have a shady, bush block which includes a creek, it would be ideal to create a RF there. I have asked them if they would pass on results from their efforts to us on a progressive basis. Perhaps some of the above peoples experiences will help them in planning their approach to the project.

SOME HISTORY OF A BEECHMONT (GOLD COAST HINTERLAND) RAINFOREST

Jan Sked wrote "When I was staying with my father at Beechmont earlier in the year, I was invited to visit a neighbouring property to see some RF restoration work being done. This was a controversial project. The land is in the Back Creek Gorge below my father's farm and was acquired many years ago by the army as part of the Canungra Jungle Warfare Training Centre. However the owner, Mr Pat Fitzgerald, was very loathe to part with his land and wanted to preserve and restore one particular area known as Killarney Glen, for public recreation. So he refused to leave the place and set up residence in an old slab hut that may have been one of the original residences when the area was settled. Pat was born in Beechmont in 1909 and is believed to have been the first white child born there. Some years ago he & his family set about restoring the natural RF vegetation on the steep sides of the gorge cleared in the early days and now overgrown with lantana. These days, most of the work is being done by Pat's son, Patrick who stays there with him, and a few supportive friends.

I was most impressed with the progress that had been made, as it is a very difficult site. You would need to be a mountain goat to keep it up. It is a lovely place and very difficult to gain access except by four-wheel-drive. There is a lovely little waterfall there that plunges into a small heart-shaped ravine. Importantly, however, there are some rare and threatened species here which Patrick is growing from seed and planting back onto the site. These are Owenia cepiodora (endangered), Cryptocaria foetida (vulnerable), and Milletia australis (rare). Patrick has also found various other little known species and forms of species. I had a marvellous time exploring the area under his guidance.

The family has been trying for years to have Killarney Glen legally preserved in some way, but so far without success. Their final hope is that the Aust Heritage Commission may list it because of its botanical and cultural significance. Meanwhile the army is biding its time and waiting for old Pat to pass on. Not that they haven't been doing their bit to revegetate some of their land, they are very proud of their efforts at Canungra (which I have not seen). I just think it is a pity that the two warring parties could not pool their resources and achieve so much more by working together."

Most interesting, Jan. Wonder whether anyone has thought, that, perhaps our rulers who seem hell bent on selling everything that isn't nailed down (and defence establishments are included - Point Cook & Richmond airfields, Holsworthy army base spring to mind) that perhaps Canungra too may be disposed of? After all, we won't have many troops or support staff left after the current downsizing is completed; obviously certain training areas will be superfluous to our needs, and there must be many people who would like to develop a resort in such a unique location?

Another thing to bear in mind is the current enthusiasm by governments to 'outsource' or 'contract out' most agencies, and it is not beyond the realm of feasibility that defence will also eventually be privatised and all bases sold. You must be aware that in our region, Papua New Guinea has started this process.

STEVE SINCLAIR HOPES TO BE INVOLVED IN A FIELD BIOLOGY TRIP AROUND CAIRNS

He wrote that this will be associated with his Uni course and will include mammal surveys. If it comes off he will let us know some of the features of the expedition. He said that as he hasn't been to the wet places for ages, he is quite looking forward to getting into RF environments again. Enjoy it Steve - half your luck!

YOUR FEARLESS LEADER INTENDS TO TURN A KIWI FRUIT Paddock INTO A RF TIMBER PLANTATION

We have a cleared, well fenced and irrigated couple of acres planted out around 15 years ago with 200 Kiwi vines which then enabled the owners to earn an adequate living. Now, not even a bare existence due to past government and community decisions to import much of our foodstuff. You should be aware most Oz agriculture is now uneconomic, and in our case the need for input of much labour, fertiliser and fuel has encouraged us to give up this activity.

I mentioned this decision to Rhoda Jeavons and Ralph Woodford, as I know that both have been involved in growing RF species for cabinet timbers for some time. Ralph has given a few tips and findings from his involvement, and I pass these to others who may decide on a similar, future path.

"If there is potential for bushfire damage, I'd think hard about it... Do you have frost in that paddock? .. What would have grown on the site naturally?

If it wasn't a RF community I wouldn't try growing RF there. That doesn't mean it can't be done - the old saying that the

more you put in the more you get out, but people up here have tried to grow woodlots on sites that would have been originally only marginal RF and is now land suffering from exposure and degradation. Such sites where there has been minimal maintenance have failed. A better idea would have been to plant an initial block of Acacia melanoxylon and a Euc sp. in alternating rows (or else use a cabinet timber species instead of Euc). At Rocky Ck dam, A. mel has a natural cycle of around 35 to 40 years, and under management should come back to between 20 - 30 years. From observation, i.e. the litter layer under mel, it seems to be a good soil builder. I've put in provenances at the dam this year from Tassie, Dorrigo, and locally. I should have selections from these trees in 6 to 7 years time.

Producing trees with better form and growth through selection has had low priority in government funding for forestry projects, and yet it is at the core of all forestry and silviculture crops. For sure, it is easier to purchase seed from someone who has already done the work, but that isn't the case for most cabinet timber species. Getting back to A. mel, after all the above positives it is a pioneer and thus suffers from a host of insect predators. It will only grow to millable log size on sheltered sites, ie protected gullies and slopes and has been the fastest grower in the mixed woodlot at Rocky. Because of this fast growth, pruning is vital if a quality sawlog is to be obtained. The rule of thumb is no laterals or double leaders should be allowed to grow bigger than 25mm diameter. This means pruning, or at least getting around your trees on a monthly basis in the growing season for the first few years. The larger the wound, the greater the healing time and there are borers who enter through wounds in mel, so the smaller the better for this one. After 3 years, your tree should be 5 or 6 metres high and though pruning needn't be regular, it will still be required.

Of the 40 A. mel planted in the first cabinet timber block, there are about 9 trees left; the others had poor form and were closing the canopy, retarding growth of the mature phase trees below. Of these 9 remaining trees, one has needed no apical pruning, and minimal lateral removal. Root cuttings should be taken from this specimen, to be grown on for seed production.

Moving back to the good points A. mel generally forms a dense canopy and particularly where you grow it with Eucs, the Eucs become the emergent and the wattles then produce a dense understorey canopy which is great for retarding weeds. Grown with cabinet timbers that are emergents like Flindersia schottiana, Elaeocarpus grandis, Araucaria cunninghamii the same results will be achieved. It is not known whether A. mel actually releases nitrogen through nodulation to the benefit of other plants, one of A Specht's students is doing work on this at the moment."

Ralph subsequently elaborated on the technique with these recommendations. (a) Well-grown plants to a 6" pot stage are ideal. (b) Space plants at a 4 x 3m grid. (c) Add one of those slow release plant pills at time of planting. (d) Apply a handful of 'DAP' fertiliser each year to promote good growth. (e) Don't go overboard with species variety - depending on area available, around 6 is sufficient. (f) Plant out rows of just the one species - an erratic or planned variation will make it much more difficult when harvesting, and result in unnecessary damage to adjacent trees. (g) For coastal sites he advocates Silky Oak & Hoop Pine in drier spots, White Beech & Elaeocarpus grandis near creeks and wetter areas, and select from Flindersia schottiana, F. australis, F. brayleana, Agathis robusta, and Red Bean. Unfortunately the chances of Red Cedar getting Tip-Moth make this species too risky.

(Ed. Thank you Ralph, as always a most interesting and useful contribution and in return I'd better make regular progress reports on my eventual efforts.)

REGENERATION IN PINE RIVERS SHIRE IS GETTING SERIOUS

Jan mentioned that she has been spending weekends instructing a group of TAFE students in the collection of seed of local RF species. The Council is assisting with the establishment of a community nursery to propagate local lowland RF plants, which will be used to restore the districts remnant riverine RF. Grovely TAFE College and its students are involved in setting up the nursery, and with propagation. Jan identifies the seed being collected and gives advice on methods of propagation. We join her in the hope of the project being a great success.

In between this activity, she has got a son's RF garden underway by planting 50 trees that were jumping out of their pots. Another 40 to go in should make it a veritable forest, and a vast improvement on the original and now removed Camphor Laurels and Jacarandas.

IT WAS GOOD TO HAVE ANOTHER DISCUSSION WITH OUR CANBERRA CORRESPONDENT CON MANN

Con apologised for being unable to contribute to the last N/L due to so much of his time being taken up with Budget preparations, and wondered what the group thought of his involvement. (Ed. I sheepishly had to say that there was virtually no recognition of our 'behind the scenes' reporting of the matters we discuss; but then there is little response to many items in these N/Ls. He reckoned that perhaps I don't raise any controversial subjects, perhaps he is correct in that assumption.)

Anyway we both had a bit of a chuckle at news of a 'well qualified' bloke who tried to talk the electorate into letting him run the country a few years ago, but was so rejected at the polls that he 'spat the dummy' and went back to commerce. Unfavourably, one of his public companies shares recently went from \$2 to just 30 cents within a mere 4 months, upsetting a few investors to various degrees, so he wisely resigned from the chairmanship. Just imagine what he could have done to Australia in an extended 3 years!

Obviously we discussed the budget at great length, especially the decisions that will effect the environment, social welfare, and cultural activities (e.g. the ABC). Though I tried not to embarrass Con with my criticism of particular matters, I must have implied that I didn't believe that they upheld any pre-election promises at all. Con denied this but had to admit that, on the spot, he couldn't think of any that were kept in their entirety, but generously accepted my challenge to think about it and give me a list of perhaps six policies that had been honoured. If forthcoming, I will pass them on to readers.

ONLY BEEN ONE RESPONSE TO THE QUESTION OF 'STUDY' OR 'INTEREST' GROUP

A succinct statement from Sue - "Interest Group is a far more realistic title. Not sure that in the history of our planet, volunteer research groups have ever conducted any sustained research. Mostly the leaders or organisers have ended up saddened".

ALARM RAISED THAT MUCH OF THE SPENDING ON ENVIRONMENTAL PROGRAMMES IS UNACCOUNTED

The National Audit Office report of 5.6.97 expressed concern that much of the money outlaid on Landcare, Save the Bush, Billion Trees, River Murray, Corridors of Green, Grasslands & Waterwatch may not have been spent as intended. It particularly questioned \$151 million of Landcare grants and added "incentives and sanctions to encourage compliance with conditions in the contracts are rarely applied by the relevant Departments." "Nearly 8 years into the Decade of Landcare, the Commonwealth is still unable to indicate in any detail the outcomes that have been achieved from any of the programmes examined." This report raised fears that, perhaps, the National Heritage Trust could be misused as a political slush fund or for de facto regional developmental schemes.

Despite all this money being spent (or misspent) on repairing past mistakes, and all the sanctimonious statements about the awareness of past blunders and inappropriate activities on our fragile land, we are currently one of the top 10 countries in land clearance.

Seed germination - an easier and more successful way? NORM McCARTHY passes on a great suggestion and recent results from his method saying "50 seeds of Diploglottis campbellii were germinated within 3 weeks in a plastic bag. First, I washed off the soft flesh and placed the hard seeds in the bag with a little water and hung it up. Every seed germinated between 2 and 3 weeks, and had produced 2" radicles. .. I feel many of our Rf species grow more readily and successfully if initially allowed to putrefy somewhat in a sealed bag with a little water, (usually placing the whole fruits, skin and all in the bag.) Change the water every few days, and after say 3 weeks all fleshy material would have been dissipated. At that stage, rinse well and put cleaned and wet seed into a fresh bag. Watch carefully as germination of many species can be rapid. This is one of the many methods to 'stratify' seeds.

I have just 'bagged' Acronychia littoralis, Davidsonia pruriens var jersyana, Premna lignum-vitae, Phaleria clerodendron, and Aleurites moluccana and will report on the results later.

Another method I used years ago with Syzigium wilsonii was to place ripe fruits in a plastic bag with moist peat, and had good results. Some species can be slow, but generally this method is satisfactory overall."

*

If you use roundup near your rf food plants - remember a legal residue limit on produce is in force. The National Registration Authority sets legally allowable limits on all chemicals used in agriculture; there are a known 442 different agricultural and veterinary products we can eat in our food every day (Biological Farmers of Australia). Roundup is one of the most commonly used herbicides and it was determined that a residue limit of 0.1mg per kilogram be applied. However an exception was made to imported, 'genetically altered' soybeans where approval for a vastly greater contamination of 20mg per kilo, according to a Consumers Federation spokesman.

But note that this dispensation does not apply to any RF fruits, foliage or tubers that you grow and sell, nor does it apply to any soybeans that you, or anybody else produces in Oz. So none of us has anywhere near as much influence as perhaps does the US chemical/genetic manufacturer which claims Roundup residue is benign. Lets hope they are right.

*

The Duboisia plantations near Proston mentioned by Esther. Greg Sked thinks they were established during the 2nd World War. There is a Duboisia processing factory there and the product is exported for use in pharmaceuticals. Jan has a feeling that the species grown may be a hybrid developed to increase the particular chemicals available for extraction from the leaves. (Ed. I was told years ago, that early CSIRO research centred on a chemical replacement for the imported component for seasick pills - Germany was the source, but seeing we were fighting them they stopped the supply so our diggers would have been so crook, they wouldn't be able to shoot straight when they got to Europe).

Ralph Woodford added that Duboisia was harvested commercially around Lismore NSW with factories at Casino and Wollingabar up till 20 years ago. The Queensland plantations are trees bred for high concentrations of the active chemical so that material collected from the bush can no longer compete. "Much of the area I'm restoring beyond the spillway (of Rocky Creek dam) is dominated by Duboisia regrowth, and in the past it was cut out from all pioneer regeneration here."

*

Lemon Myrtle has been in the news lately, and several people have asked me about it. It is Backhousia citriodora and is being touted as a food plant with increasing demand and suggesting it be grown in coastal areas, together with "Dorrigo Pepper" as Bush Foods. B. citriodora is a Qld species of coastal RF from Brisbane to Cairns. There is an interesting description of its essential oil properties in Wanatca's "Quandong Vol 23 No 1" as a reprint from "Rural Research /1996 Spring", though I think also that leaves themselves, both dried and fresh are used for flavouring. Two or 3 leaves added to a pot of tea certainly add a refreshing 'zing' to that beverage.

*

The apple disease 'fire blight' which is in the news can affect all the Rosaceae family. The main concern with fire blight is of economic cost and the probability of loss of export markets for our apple growers. Pears too, can be affected as would ornamentals/weeds - Cotoneaster, Pyracantha, Briar and Boxthorn; Blackberry and Roses too. If the disease is actually established here could all these widespread species be springboards for infecting RF plants? All Rubus (native raspberries) are in the Rosaceae, and could be assumed at risk. Would such decimation of the genus in the wild have a knock-on effect to local ecology and any RF where they make up a substantial biomass? I was unable to ascertain whether other species of the family are endemic, but I suspect that some could be found in the monsoon forests of our north.

One has to be impressed at the efficiency of modern science. Fire blight could have been established, but dormant in Oz for an indeterminate time and never noticed by anybody. Yet a visiting New Zealand scientist was so observant during a quick few day visit, who just happened to walk through the Melbourne Bot Gardens, just happened to have secateurs with him, extraordinarily spotted 2 diseased Cotoneasters among the thousands of plant specimens in those gardens, cut off a couple of branchlets and returned to NZ where they were tested and found to have the dreaded blight. Coincidentally at the very time NZ was endeavouring to export apples to Oz but which was being resisted, due to blight being widespread in that country but unknown here. Really amazing, terribly coincidental.

*

Also it has been disclosed that we have managed to convey a nasty chicken disease to the Antarctic. That must have been extremely difficult to manage in such a harsh environment, but there is of course no quarantine regulation in such a desolate region where it is impossible to make a dollar. Pity about the Adele and Emperor penguins though - there are a known 4 colonies where this debilitating malady affects chicks, and lowers their chances of survival. Coincidentally, fewer Penguins will eat less fish, more for us to catch.

*

Research on Macadamia nuts has found that they contain an antibiotic protein. Especially anti-fungal and anti-bacterial properties that could be useful for tropical crops. Genetic 'modification' of those crops will of course have to occur, and will it affect consumers allergic to nuts, I wonder?

*

Some interesting recent work on commercial crops with minimum input. Or - 'The Bird's Message'. This was the title of an item by David Noel in the 'W.A. Nut & Tree Crops Assn' (WANATCA) Yearbook 1996 of results of studies on the use of minor (foliar) use of trace elements, combined with very heavy organic mulching and complete withholding of fertiliser applications to the soil. Its a lengthy description and I would recommend anyone interested in this method to obtain a copy (library?) or through membership of the Assn. Davids trials included RF species such as Bunya, Macadamia and Candlenut as well as conventional temperate, tropical and sub-tropical fruits and nuts, all growing on typical infertile Perth soils. He made up a trace elements mix (recipe was included) of 7 ingredients and applied tiny quantities each month or so. So tiny that each of his myriad plants received a total of about 3 grams in a year! He considers that all the other nutrients required are obtained from the breaking down of mulch with its associated benefits from the interactions of so many and varied insects and soil fauna (briefly described in a previous RFSG N/L).

Another make-you-think item from WANATCA, thank you David.

SGAP South Aust's Feb 97 Journal mentions that, (just like Cassowaries) Emus are great propagators of native plants. The journal quotes 2 reports that seed from Emus germinates well, unlike that voided by rabbits and domestic animals. This seems an odd situation, for if those animals were reliant on endemic vegetation for their survival, it would not be long before they annihilated their food source - their basic resource. Fancy anything being as dumb as that.

*

If you desire to collect plant material in Qld, you must obtain an additional license. Jan Sked elaborates on previous comments on permits saying "We have always required a Forestry "Permit to Traverse" areas not designated for general recreation. They are easy to obtain and are free of charge. I've always had a good relationship with the Forestry Dept and also have had permits to collect specimens and limited amounts of seed and cutting material in Forests. This latter type of permit is now complicated by the new Nature Conservation Regulations, in that first I have to obtain a permit from the Dept of Environment to collect botanical specimens of 'restricted' or 'protected' plants (now obtained) which lasts for 5 years, and so should be able to gain the necessary Forestry permits when required each year as they are issued on an annual basis."

(Ed.) At the risk of bringing down further wrath from some in SGAP, I say again - What sort of standards apply when individuals need permits to collect, travel, cut down a tree or whatever; (every State has differing rules) and yet owners, or even mere lessees of our crown (publicly owned) land, have virtually a free hand to totally clear tens of thousands of hectares and create vast expanses of unsustainable monoculture? It is an Australia wide problem, other than in SA perhaps, which has had strong land clearance regulations for some years. The rest have learned nothing from past mistakes and the resultant salinisation, desertification, desiccation, erosion, loss of species and biodiversity; that the promised Pork Barrel containing a billion dollar, so called Natural Resources Fund won't even start to make an impression on. In W.A. alone, "we require some 3 million ha of revegetation to bring land degradation under control" (statement by the executive director of CALM Dept. in 1996).

Certainly, we should comply with such requirements, after all they were made for very good reasons at the time, but surely we should not be going along with those destroying our biosphere on a massive scale.

*

Coffee is becoming a very valuable commodity but is threatening our RF habitats. Increasing demand and vagaries of weather in the traditional producing areas is encouraging Oz producers to grow the bean. Farmers are competing with expanding Macadamia growers for the high quality land required for both crops. Ideal soil is that well drained red volcanic stuff which presently carries much of our remnant, richest forests. The pressure from unchecked and increasing population is surely bad news for nature.

Ralph Woodford makes a few comments on our last N/L. "Hoop Pine: it is important to get seeds as fresh as possible, for a couple of hot windy days can destroy a lot of viability.

Euroschinus falcata: has only fruited twice in the 10 years I've been here at Whian Whian.

Rhodosphe seed has a tough outer case. Eventually the seeds fall and the longer they have been on the ground the greater opportunity for this hard case to break down. One way to get fresh seed to germinate is to nick the case until the seed inside is visible. (Also you will notice lots of seedlings coming up under and around mature trees that have been seeding for some years).

Erratic seed bearing: I've read an explanation for biennial fruiting as being a method the tree uses to break up insect pest cycles." Thanks Ralph.

*

A question on success from cuttings of particular species. Ralph asks if any member(s) have had good results from, and successfully grown Gmelina, Flindersia, Dysoxylon or Agathis from cuttings? If so, could you pass on the methodology through the N/L (or directly to him). If a successful cabinet timber industry is to be established, then we need to start selecting for form and vegetative propagation to make this possible.

*

It seems that the approaching 'Greenhouse Effect' will have mixed blessings for the forests. Recent rural comment on predicted changes to a specific catchment in NSW of an increase in temperature by 3^o and a reduction in rainfall. Plant growth should increase with both the warmer temperatures and increased CO₂ but the reduction of moisture will be detrimental. Differences in wind directions or velocity were not addressed, but such changes would also have an effect, one way or another. Just shows that the outcomes of changes we make to the environment cannot be calculated. I saw some astonishing figures on the amount of fuel the worlds 520 million vehicles use - tens of millions of barrels a day. Every year in Oz alone, we consume over 18 billion litres. That is 18 million tonnes of mineral; also there is distillate, gas, heavy oil etc, as well as coal. I'm getting worried that if all of this matter is being removed from the Earth unevenly, whether it may change the planets balance and throw it off its orbit?

*

If you need advice on propagation of particular species, new member Kim Gollan has generously offered to help. Just phone at Dingo Creek RF Nursery at Bobin NSW in the 065 directory. Already some observations have been sent to Patrick, who very much appreciates such details.

*

The recent court case in Sydney on evolution v creation theory has thrown up a puzzle. No decision has yet been made as to the winner of the trial (late May); however an acquaintance asked if I knew whether Noahs Ark contained every plant species as well as its cargo of animals. I wasn't able to answer that question, not being able to recall it from my Sunday School days so long ago. I surmised that if plants were taken on board that they would have been surely eaten as fodder. But if plant species weren't protected from inundation in some way, most would surely have become extinct in nature. (From my experience anyway, for even a few days submergence has killed some touchy plants I've grown, and a long lasting boggy condition on top of 80 days continual immersion would surely exterminate vast numbers of species).

Does anyone with theological knowledge have an answer to this interesting question?

"NORTH BROTHER" IS A NEW NATIONAL PARK ON NSW'S NORTH COAST

This 717ha Park is located between Port Macquarie & Taree, previously the Camden Haven State Forest. It represents an exceptionally diverse example of coastal forest, including 3 poorly conserved swamp forest types. 30% of the new park is old-growth forest and includes some of the best examples of mature blackbutts left in NSW. Unusually well developed STRF can also be found there, as well as a range of threatned flora and fauna and others of regional priority.

It is easily accessible to visitors and has picnic facilities and magnificent coastal views. For the adventurous, there is a walking track to the coastal village of Laurieton, some miles to the east. Well worth a visit.

AUSTRALIA DOES NOT HAVE ANYWHERE NEAR ENOUGH NATIONAL PARKS OR OTHER NATURAL AREAS RESERVED

An assertion was contained in the last N/L that "RF areas in Queensland are now well reserved in N.P.'s and that ecosystems most in need of conservation now are Mitchell & Flinders grasses, and brigalow", (though no figures justifying this statement were quoted). To me this implied that all other habitats are satisfactorily protected. This so much surprised me that I sought further information on the amount of our continent set aside to maintain all endemic species of plants, animals and their habitats.

Having regard to the global consensus that a minimum of 10% of the planet should be reserved for natural habitats and values, it was pleasing to note that the past and present Oz governments determined that 15% of pre-European ecosystems be maintained in an original condition. However, I must say that I was more than disappointed after obtaining the following facts.

NSW figures are - A mere 5.34% of the State was protected in various reserve classifications at June 1996 - 4,273,545 ha. Fortunately this proportion is being regularly increased; last year for example 26 new national parks & nature reserves totalling 236,000ha were added. Further additions have been made since then and as Regional Forestry Agreements are completed, more will be included. I don't have State Forest area as yet.

Queensland's situation is even worse. As at 21st Feb '97, only 3.95% of the State was protected for conservation. The total of 6,824,462 hectares is made up of - 210 dedicated National Parks (6,419,101 ha); 157 Conservation Parks (28,713 ha); 36 Resource Reserves (322,102 ha); 7 Scientific Areas (52,166 ha); 4 Nature Refuges (1210 ha) and 1 Coordinated Conservation Area (of 1170 ha). As well, there are around 4 million ha of State Forests and Timber Reserves (2.3% of Qld), though much of this is either plantation or has been so intensely logged, little is practical for conservation significance.

I did not seek a breakdown of those reserves by vegetative classification and the % of particular habitat protected, as any figures available could only be a very rough estimate anyway.

Of the rest of the state, a massive 78% is under 'pastoral lease' (though not all of this huge area is actually occupied), so you'll have to excuse any scepticism about a fair and reasonable area of Qld being set aside for environmental protection. When (if) it gets well over 10% I will then be most happy to agree, that yes, a magnificent and necessary improvement has been made!

ADDITIONAL DETAILS OF SOUTH STRADBROKE ISLANDS FIRST DEVELOPMENT HAVE BEEN ANNOUNCED

A recent press 'advertorial' elaborated on the Interpacific Resorts' promotion of this real estate venture as 'the South Pacific's premier ecological-sporting resort'. Among the vital information - "Ron Clarke has spent \$15,000 saving a gum tree at his fast-selling Couran Cove resort" (Ed. For heavens sake, it has cost me nothing, other than the land cost, to 'save' around 500 gums and 20ha of RF. What have I done wrong and why is this not news?)

Mr Clarke has paid \$120,000 a year rent for the past 5 years for a lease, to ensure the area remains in pristine condition. Despite this?... The stage one, 5 star hotel is due to open in December, but with only a lake and bare sand to show (pristine bare sand?), buyers are snapping up houses and units off the plan. The resort has already sold 25 of its 26 3 & 4 bedroom villas fronting the Broadwater at around \$300,000 each. Sales have also been made of some of the 50 beachfront lodges (around \$275,000 each), 192 marine resort apartments (between \$200 - 217,000) and 200 inland eco-cabins (about \$150,000 a pop). There will be an outdoor, transparent-roofed chapel set beneath a canopy of mango trees, designed for weddings; a conference centre; and facilities for 17 individual sports plus catering for the arts, birdwatching, nature walks. So we have all this - a quick mental arithmetic calculation shows a total cash return of around 92 million dollars, and, say 10 -20 million worth of supplementary structures - and an ecologically sympathetic setting at the same time. Perhaps its all a Mirage, just like Port Douglas and Sanctuary Cove.

You'd have to be convinced too, that 'Greenhouse' and rising sea levels are a figment of the imagination, if purchasing property on a sand island, one would think.

MANY LITTORAL AREAS ARE INCREASINGLY STRESSED - BRAMBLE BAY IS A SHALLOW ESTUARY IN DEEP TROUBLE

Sue Quinnet detailed an alarming situation on a recent AC TV '7.30 Report' where she was interviewed on the above crisis. These are her findings of the situation.

"Bramble Bay lies just north of the mouth of Brisbane River. Although close to the city, Bramble Bay contains large areas of freshwater and estuarine wetlands. These form a Ramsar listed site of great importance for migratory waders and were a focus of attention and admiration during the 1996 Ramsar conference in Brisbane.

However, quite suddenly, all is not well here. Since late 1995 the small animals that live buried in estuarine sediments have undergone a dramatic decline. A survey in late 96 showed subtidal sediments to have a density of invertebrates about 0.01% of that in the same area 25 years ago. Intertidal areas also have suffered a severe loss of both species, and numbers of organisms. Since early 1995 the intertidal mudflats of Nudgee Beach area of the Bay have lost about 75% of larger invertebrate species. A routine survey is demonstrating that recruitment of young organisms from plankton is happening, but that most individuals do not survive. The migratory wader bird numbers are substantially reduced.

The cause of the loss of macrobenthic organisms from the Bramble Bay area has not been established. However, the decline of the fauna began soon after a synthetic pyrethroid (bifenthrin) was released for unrestricted use in Oz. Bifenthrin is widely used for termite prevention and treatment on house sites around Brisbane; and is also available through retail outlets as an insecticide. It is repeatedly reported in scientific studies as being extremely toxic to aquatic life with invertebrates being poisoned by as little as 0.0000000001 grams per litre of water. Despite this bifenthrin may be purchased readily for horticultural use in concentrations of 3 grams per litre.

Its chemical structure allows bifenthrin to bind tightly to organic matter and fine sediment particles, which makes it especially threatening to estuarine animals as well as extremely dangerous for virtually every freshwater ecosystem. Testing by Qld Dept. of Environment has identified bifenthrin in Brisbane creeks and at least one recent fish kill has been attributed to this chemical. Chloropyrifos, another chemical recently introduced for termite control also has caused fish kills in Brisbane. Control of very dangerous agricultural chemicals in Oz is extremely lax and needs urgently to be addressed.

(There are reports from Britain of mass aquatic invertebrate and fish deaths caused by another pyrethroid, cypermethrin, which is used to dip sheep. It is thought that drips off dipped sheep grazing on pastures near streams provide sufficient pyrethroid to decimate aquatic life.)

It is not known if only the estuarine fauna of Bramble Bay has suffered extensive die-off, or whether a similar scenario is occurring stealthily in other Australian estuaries. This needs urgent investigation. It is a worry that, with the spread of insect resistance to older insecticides, the temptation to use the extremely toxic pyrethroids will be very great. They are already being widely used in rice paddies of SE Asia ---- We should be very concerned".

(Ed. Thank you for that report Sue. No doubt it will be claimed that the products are harmless, even benign, just as we were

told were cigarettes, DDT, mercury, Dieldrin, Chlordane, etc.

CAPE YORK TOO, IS STILL 'BENEFITING FROM EXCITING NEW DEVELOPMENT'

Mays financial news included "Australian Kaolin NL is to spend \$60 million to establish a mine and processing plant at Skardon River (the 3rd large western river below the tip of the Cape). Production will be 175,000 tonnes pa, with a proven 15 years resource available." Kaolin is a fine, white clay used to give paper that lovely glossy finish.

Skardon is due west of Shelburne Bay where large quantities of high grade silica sand is being removed for use by Japan, and not far from Weipa's bauxite operation. Perhaps there won't be enough of the Cape left for that oft-proposed space project after all?

THE FEDERAL BUDGET DIDN'T DO MUCH FOR RAINFORESTS OR THE ENVIRONMENT GENERALLY

Sydney's Herald had a special 15 page coverage of the budget, and environment expenditure seems especially unexciting. A mere 1.5 million has been allocated to the Daintree RF rescue package from a total of 255 million; most of this will be spent on rivers, land and vegetation 'repairs' (read - fix mostly agricultural degradation). And yet Sydney's olympic games is to have 560 million of federal funds spent on it over 3 years. (The games themselves are expected to cost at least \$5.2 billion to stage).

A billion dollar 'Federation Fund' to be spent some time in the future on undefined projects is an odd promise, as its cost will come out of normal taxes. Yet an Environment programme was judged to be of such urgent and vital nature, that Telstra had to be sold to pay for it. Maybe a bit too disingenuous, but it indicates that whiteboards are in big demand these days.

Something that may just benefit the forests though, could be 'the work for the dole' scheme. Up to 10,000 young people will be forced to participate in 70 pilot projects for a couple of days each week, though again details are sketchy (unknown). It has been said that all projects will be non-metropolitan, and was set up so that the unemployed return something to the community that is supporting them. There is an alternative way of looking at that. Perhaps society has a moral obligation to ensure that work is available to all who want it, and if we are unable or unwilling to provide that, are we not duty bound to support those, who, through no fault of their own, cannot get a job?

Perhaps the environment is not worth defending anyway. One of the more petty results from the budget was the cut to the Environmental Defenders Office. Not a lot of money involved, but it will have a big effect, as the Office will be unable to assist many community groups trying to prevent possibly illegal development approvals. The EDO has had a high success rate in its legal challenges and the high quality advice it has given to aggrieved people obviously made some powerful enemies who now seem to have got even.

One of the promises of the Heritage programme is that 250,000ha of degraded land will be revegetated over 5 years. Some justifiable environmental criticism on that decision, seeing that around 660,000ha are cleared each year and there is no intention to regulate this contrary activity.

IF AN IMPORTANT VICTORIAN FOREST IS LOGGED - BAW BAW FROGS WILL BE VIRTUALLY WIPED OUT

A report in the "Australian" 17/5/97, declares that the proposed roading and logging of forest near the Baw Baw NP in the Southern Highlands poses a major threat to the frog which is said to "now number only in the hundreds", and to the rare Leadbeater's possum. It states that the Baw Baw frog is already almost extinct, with numbers dropping 98% in the past 12 years. The Wilderness Society wants that area added to the Park to protect a significant RF stand as well as the two animals.

It appears some Regional Forest Agreements and boasts of 'outstanding environmental policies' may be lacking in effectiveness.

AN AREA OF FOREST NEAR THE ONE-TIME NSW 'BIG SCRUB' IS TO BE RESTORED

This is 'Compartment 78 of Whian Whian SF' near the population of the rare Elaeocarpus sp Minyon and is 148ha. Steep gullies of RF survive, though logging of accessible areas has occurred. 9 local environmental groups with membership of about 150 will be involved in the regeneration in cooperation with State Forests. Unfortunately Forestry cannot guarantee that some time in the future, logging will not occur, though at this stage there are no harvesting plans. Whian Whian is of 5,000ha, and has some fine RF patches surviving. There is an attractive camping area (free) with good facilities, and a hut is available for rental. Well worth investigating and a great place to spend a few days. We should have a RFSG campout there sometime, soon.

BAD NEWS FOR OZ FORESTS - CONTROLS ON EXPORT WOODCHIPS AND LOGS ABANDONED

The ceiling on exports of woodchips that federal governments have historically maintained was abandoned on the 29th May; the industry is now able to export whatever it wishes, and there will be no requirement that sensible prices be obtained. In addition, for the first time in donkeys years, raw logs can be exported so that existing jobs in sawmills will be lost, and smaller mills closed. The constant rhetoric of "value adding" seems to not apply to our natural resources. The legislation was passed only by one vote - that of DLP senator Harradine. He has done all sorts of contortions in the past to ensure more jobs for Tasmania, so this seems an odd decision. Must ask Con Mann about the deal that was struck, because I keep being told that there is insufficient hardwood timber available for domestic use and here we are about to export shiploads.

COASTAL DEVELOPERS IN NSW CONFIRM THAT THEY CANNOT BE TRUSTED

The courts have judged that developers on the north coast, at Iron Gates near Evans Head and at Scotts Head, both littoral areas of high environmental value, disregarded both state laws and council requirements. Iron Gates particularly is utterly devastated; that developer has been ordered to remedy its damage. The question has been raised, will the company go into liquidation to avoid its responsibilities, or could it eventually buy its way out of trouble.

A FEW COMMENTS FROM A SYDNEY MEMBER ON PREVIOUS N/L ITEMS

Paul Brady sent a comprehensive report on his now established urban RF which I will include in October, but he also mentioned that among the interesting & invaluable reading in our N/L, the environmental issues raised are good. He especially feels the attempt to transform pastoral leases is suspect, representing little else than theft, if not from aboriginal people then certainly from the country as a whole.

Preservation through cultivation is but a complementary approach. The trouble is that only the minority of gardens will have extensive 'collections' of plants, most using world plants such as Bouganvillea and the dependables. He also included interesting observations of Nepal during his recent sojourn, for a later N/L. That nation seems to have realised the value of maintaining certain areas in their natural state to obtain revenue from tourism, and is prepared to take some intelligent decisions to protect that resource.

FRUIT BATS (FLYING FOXES) SEEM NEVER TO BE OUT OF THE NEWS LATELY

Sadly most of the publicity is bad, because of the slant that our present society has placed on their importance (value) - economic and not for their basic environmental function as pollinators and part of the 'web of life'. Despite our full knowledge and awareness of their crucial values to the survival of the ecosystem as we know it and RF in particular, they are often reviled, and wantonly destroyed because they consume some of our own food products. (Remember, many communities consider the bat as a prime delicacy loaded with protein).

But instead of shooting or poisoning these animals, would deterrence not be the way to go? Member Joe Friend who has been long involved with the Asian RF tree known as Neem (*Azadirachta indica*), sends this information that may be worth considering as an effective and benign method of protection of fruit trees.

"Neem extracts have become widely accepted as efficient pest-repellers for a wide range of insects, and certain mammal species. The scent of Neem is well known to some animal lovers whose pets have fleas; dogs especially do not like the scent which is a pungent mixture of 'bitters' & triterpenoids. Ongoing scientific research has led to the complete determination of a complex molecular chemistry. In India, research has indicated Neem's capacity to deter or repel most bird species and fruit bats. A NSW witness observed that commercial Mango crops were efficiently and cheaply protected by Neem sprays without need for netting, or scare-guns.

Since most fruit growers are at some time in the season involved with a spray programme, Neem extracts (which are totally compatible with other sprays) can be added as the cheapest method. Otherwise, Neem can be applied as a single spray close to harvest.

In recent small-scale trials conducted at Koonorigon-The Channon including periods of rain, on crops of mulberries, peaches, grapes and tropical apples, between 95 & 100% protection was obtained against bird attack, with 100% bat protection noted at the same time. As well, improved protection from insects resulted since neem components are powerful insect repellents. Unsprayed ('control') peach and mulberry trees were entirely demolished by successive nightly strikes; yet bats never appeared to descend closer than 20m above sprayed peach trees.

As a result Neem Extract seems highly recommended for use against birds and bats, with no known or observed side-effects".

If this method is effective, there is one less excuse to annihilate these useful animals so vital to the ecosystem. For more information contact Joe on 066 886150.

ANOTHER MAMMAL THAT USED TO BE WIDESPREAD IS THE LONG NOSED BANDICOOT PERAMELES NASUTA

Its habitat was right along the east coast, from Cape York to Victoria. As a child in the Sydney suburb of Gladesville which was then almost fully ribbon developed, there were Bandicoots 'in the bush'. After our marriage we settled at Eastwood in 1958, about 6 miles further out - an area where the last of the rural acreage was being subdivided but we had nightly visits from those animals that did terrible things to lawns. They lasted a few years, but dogs and cats triumphed and they went locally extinct. As settlement expanded throughout the Sydney basin Perameles numbers decreased within its range. However I was most surprised to learn that there is now only one colony left in the Sydney basin, and that is at North Head in the grounds of a Roman Catholic, one-time seminary. The church has found a better use of its land - real estate development - so the days of Sydneys few remnant animals are numbered. Sad. Have you any left in your district?

We often see signs of their activity on 'Booyong', their little excavations generally along tracks and forest clearings but sometimes in the mown grass near the house and just twice in the vegie garden though we rarely sight one. As we do have Powerful Owls at times, maybe they have evolved to be cautious of such native predators, though are obviously unable to cope with our domestic animals, especially in built-up areas. Our neighbour has only one cat left, and I believe it has more sense than to stray on to Booyong, so I expect our population will be safe for some time.

THE NUMBERS OF SPECIES BECOMING RARE & ENDANGERED IS CONSTANTLY INCREASING

An Information Sheet ancillary to the NSW Threatened Species Conservation Act 1995 lists the numbers extinct or threatened in NSW alone as being - Fauna 40 presumed extinct, 38 Endangered and 163 considered vulnerable; Flora 41 presumed extinct, 213 endangered & 196 vulnerable. That is a total of 450 plant species that we are aware of, there must be others that remained undiscovered prior to their loss. However, those documented show that each year since colonisation, 2 plant species and one animal have been lost or greatly diminished in numbers. There must be heaps of invertebrates in that situation too.

Newcastle Group's N/L Jan 97 included - "ENDANGERED PLANTS. A recent report from CSIRO states that almost a quarter of the plants classified as endangered or threatened on the whole planet are Australian! WA fares worst with 45% of Oz-endangered plants, while Qld has 27% and NSW 15%."... "from 1988 to 1995 there has been an increase from 17% to 23% in the number of Oz species. The failure to achieve anything is attributed to funding cuts and there appears to be little likelihood of any improvement in the near future. There are now 5031 rare or threatened Australian species. It makes very sobering reading.

How many of these plant and animal species are of the RF; does anyone have details of such records ?

CONTROL OF TWO HUGE QLD. COOPER CREEK PROPERTIES CHANGED RECENTLY

The 581,242ha lease known as 'Keeroongooloo' near Windorah was sold by Holmes a Court, and 'Nappa Merrie' of 727,500ha by an AMP subsidiary. Both are located in what is known as the Cooper Creek channel country, high quality outback habitat due to its seasonal flooding. When these leases are upgraded to freehold (after us taxpayers pay the compensation for extinguishment of native title) there will certainly be cropping on some of the fertile, but fragile land, leading to degradation and erosion. I wonder how much Brigalow and inland 'dry' RF species are on those places that I suppose overseas buyers now control.

One thing that these sales prove though, is that the cries of fear and doom that we have been hearing from farmer organisations and certain representatives that land leases are worthless, were untrue.

ON THE SUBJECT OF THE CONTROVERSY OVER NATIVE TITLE - THIS BLOKE SAYS IT ALL

David Turner of South Aust writes "In the dark of night we stole their children. And in the light of day we will steal their land". But will we? Maybe we electors will decide otherwise.

Others who will obtain huge benefits if extinguishment, freeholding and taxpayer funded compensation does happen include - Kidmans with 11.7 million ha, AMP (10 million), AA Pastoral (Elders) 6 million. The US Bankers Trust, BHP, and a number of extremely wealthy Australians & foreigners are said to have large holdings. The biggest individual lessee is a close relative of a federal minister with 4.7 million ha, though some of this is freehold. The family of a top National Party figure is reported to have 3.1 million ha. Over 20 politicians calling for extinguishment have interests in pastoral leases, you may be surprised to know. But those few people, though rich, powerful and influential are easily outvoted by compassionate and intelligent people.