

RAINFOREST STUDY GROUP

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" We are not masters of the environment - we are dependant on it "

WELCOME TO OUR NEW MEMBERS

We trust that the following people who have joined the Group over the past few months have a long and happy association, learn a lot and perhaps contribute some of their experiences to their fellows.

Grahame Duibidge	13 Dixon St Seaham 2324	Steve Sinclair	3 Biscayne Dr Mt Waverley Vic 3149
Leon Radunz	46 Caber Cl Dural 2158	David Thomas	9 Miriam Rd Denistone 2114
Lyndsay Simpson	80 Dawson st Keppera Q. 4054	Mark Williams	20 Henson St Summer Hill 2130
	Trish Williams	32 Lambert St West Ryde 2114	

APOLOGIES FOR THE GREMLIN IN OUR LAST NEWSLETTER

I managed to get 2 activities wrong, so Geoff, I trust you didn't lose any starters on your trip to LORD HOWE ISLAND'S Rainforests and that nobody ended up on Norfolk ! Jeremy's weekend at Gap Creek was in DEC-EMBER, so those turning up in November would have been in for a long wait. Sorry fellows.

A SURVEY OF OUR SYDNEY - NEWCASTLE - WOLLONGONG MEMBERS ONLY

As you will be aware, Jeremy Trahair has arranged some local activities, but some were not well attended. In order to find out whether city members are interested in outings and activities and their requirements, it will assist in planning these if you would complete the attached summary. Preferably return them direct to Jeremy rather than to me. His address is 56 Forestway Frenchs Forest 2086.

As well he would like to organise day trips and walks to ROYAL NATIONAL PARK (BOLA CREEK) - ROBERTSON - ILLAWARRA ESCARPMENT - GOSFORD AREA. Would anyone familiar with these areas please phone him on (02) 451 5086 to assist ?

THIS ISSUE WOULD HAVE BEEN MUCH LATER WITHOUT ANNA WENK'S ASSISTANCE

Due to competition from competing needs, a string of visitors, Xmas etc. I'd been continually putting off its preparation. However Anna offered to type up the Newsletter, so that forced me to get it under way, just a little late. Thank you very much Anna for your help and encouragement.

OUR SEED BANK - NEWS AND PROCEDURES

Esther mentions that much of the seed held is getting old, and no doubt some will be totally unviable; some of course should be OK (the drier varieties). Maybe those of you who are keen propagators could contact Esther and ask that she send you a selection and that you conduct viability trials ?

Other points that came up during our discussion were (1) Members should order / offer seed in advance via the Newsletter, particularly species with fleshy fruits or of known short viability - donors and seekers could then come to an independant mutual arrangement for supply and receipt. (2) Those seeking seed of particular species not listed as being in stock should also do it through the Newsletter to have a better chance of obtaining it. (Not all of us think to send seed to Esther automatically)

(3) For the benefit of new members - seed is free of charge but a stamped SAE should be included with your request, and of course donations of any rainforest species is always welcome. Seed Bank is c/- Mrs Esther Taylor 74 Francis St Raymonds Hill Ipswich 4305.

SEED GENERALLY STILL AVAILABLE *Abrophyllum ornans* *Alpinia caerulea* *Araucaria cunninghamii* *Archtophoenix alexandrae* *Barklya syringifolia* *Braehychiton bidwillii* *B. ruestrus* *Buckinghamia celsissima* *Canthium coprosmoides* *Celastrus subspicata* *Cissus antarctica* *Commersonia bartramia* *Cordyline ptiliaris* *C. stricta* *Decaspermum humile* *Elaeocarpus grandis* *Ehretia acuminata* *Euodia elleryana* *Eupomatia laurina* *Ficus hillii* *F. racemosa* *F. virens* *Flindersia australis* *F. xanthoxylon* *Gmelina fasciculiflora* *Hernandia bivalvis* *Hibiscus heterophyllus* *Jagera pseudorhus* *Mallotus phillipensis* *Melia azederach* *Morinda jasminoides* *Mackinlaya macrosciadia* *Nauclea orientalis* *Notelaea microcarpa* *Pandorea jasminoides* *P. jasminoides* (white form) *P. jasminoides* (pink form) *Peltophorum pterocarpum* *Pittosporum revolutum* *P. rhombifolium* *Psychotria toniceroides* *Sarcopteryx stipata* *Scolopea braunii* *Stenocarpus sinuatus* *Synoum glandulosum* *Tasmania lanceolata* *T. stipitata* *Toona australis* *Tristania laurina*.

Some seeds are limited so maybe you should request an alternative or two when ordering.

THE NSW ANNUAL WILDFLOWER SHOW IS BACK IN BUSINESS. WILL BE HELD 23RD & 24TH JULY

Venue will be the Nursery Industry Association Site at Annangrove Rd Rouse Hill. The organisers have written "The plan is to encourage the growing and care of native plants and to show their relationship to the environment. Your display would help to promote the public interest and the Society would appreciate your support" Further information will be available shortly, but if any of you would help to arrange a display and/or to assist at that time please contact Betty Rymer 48 Annangrove Rd Kenthurst 2156 Tel. (02) 654 1831 or Marie Spicer 12 Everett Pl Annangrove 2156 Tel. (02) 679 1439

NEWS FROM OUR MEMBERS

It was the big move by LEON RADUNZ, from Ipswich to Sydney and we trust that he will have as good an impact on his new area as he did in Qld. He mentions that he established several Rainforests in schools around Ipswich. Been busy down south too, planting out the 400 trees that they brought down with them. A little bit of S E Q in N S W ?

* * *

Another member that has also been overseas is GARY DALY who has written a short note on his trip to Sumatra - Indonesia. There are some great rainforests, especially the montane forms. They saw great fauna - horn bills, siyang monkeys, white headed gibbons, trugans and many species of Ranid frog. The most accessible places to see good primary rainforests are Bukit Iawang & Kerinchi National Park - Mt. Tuju. These dipterocarp forests are quite diverse - but still pale compared to some in Peru. Gary mentioned a string of notable plants and added that we could still get a grip on things on the other side of Wallaces Line where regrowth is often dominated by Macaranga (trifolia?), Omalanthus, and apparently a Commersonia. Generally the families Sapindaceae and Moraceae are common and He even found a Tristania & Agathis species.

But all is not rosy - every area is under threat from trans-migration, illegal logging and sancional concessions. (Ed. Is that bribery?) Near Mt. Tuju the extensive government tea plantations show a sad reminder of the forest habitat that has been cleared to provide us with tea. The rows of tea plants have huge rotting logs of the rainforest giants that stood a few years previously. Population growth in Indonesia is obviously the greatest threat to their rainforests - there are 180,000,000 people and is fast growing. Gary finished on a positive note suggesting that we see it now before it is all gone!

STOP PRESS -- SYDNEYS ONCE MAGNIFICENT ROYAL N P RAINFOREST TOTALLY DESTROYED IN THE FIRES!

The Bola Creek area contained the best R F in the Park, and indeed in the Sydney area, as it survived due to its protection within the world's second declared National Park (Yellowstone was the first). Alas, according to news reports it is totally lost, gone maybe for ever. The fire in this park was almost totally devastating, with a reported 98% burnt out. An initial comment on the Rf's loss by a NP&WS expert, was "that it will take probably 250 years for it to have some semblance of its former condition; and maybe it will never return to its pre-1994 condition

One of our nearby members reports that much of Royal was deliberately burnt out to protect some properties that may have been threatened by the fire, which was probably started either deliberately, or by a thoughtless act by a useless member of our community.

FURTHER RESULTS ON PROPAGATING THE WHITE BEECH - GMELINA LEICHHARDTII

Soon after reading Fran Guard's success at growing the species from seed (see N/L 20) I was fortunate in being able to collect fruits from a nearby property, and tried out 2 methods of treatment prior to sowing. Using 300 fruits in each trial and planted in a foam box, using straight compost, the first were treated by soaking in water for 5 days and the flesh removed prior to sowing (on 20 th March) ** The first seedling appeared on Nov 6th. By now (mid Jan) more than 100 plants have germinated.

The second batch was soaked for 3 months, and the water was never changed (a mistake?) and sown 30th June. The first seedling was up on 27th Nov, although only 14 have appeared so far. Not a good result as yet.

** From the first few seedlings I potted on 8 plants, using a fairly rich mix that I make up for growing food, and which includes lime, wood ash, Dynamic Lifter with blood and bone, rock dust and some cow manure. After about 10 days 5 of them had died, though the other 3 are doing very well. I tried another 20 using mix with little enrichment; as yet, after about 4 weeks, all have survived.

ANGIOPTERIS ERECTA - THE KING OR GIANT FERN

This is a huge fern with fronds sometimes reaching 7 metres long, and perhaps 4m wide. It is a magnificent fern, growing naturally in moist soils near streams and ponds. For the gardener, they require shade, good drainage, deep mulch and plenty of water.

Our first sight of these ferns was at Carnarvon Gorge N.P. in 1988, growing in a sheltered narrow gorge on the banks of a small stream, and were duly impressed by their size and beauty, as well as their great age. So it was somewhat distressing to see on ABC TV on the 14th Dec. that there are only 2 colonies left in the wild - the 15 plants at Carnarvon (that are not reproducing) and a number on Fraser Island. It is thought that all the other previously known plants in Rainforest situations have been wiped out, mainly through the ever-increasing clearing of land to grow even more sugar cane, a product that is oversupplied on the world markets and is therefore a very low value export.

THE N S W JANUARY FIRES - A DISASTER AND A TRAGEDY

What a dreadful experience these have been - A tragedy in the loss of human life, though it was amazing that so few were killed or injured. We sympathise with those who are suffering the trauma of the loss of their homes, and property of high personal importance and value, but again such losses were mercifully low. Due credit and deep thanks must go to the many professional and volunteer firefighters and to those who so willingly supported them in the field. Many RFSG members live in areas where the danger was severe; some were even forced to evacuate their properties. Our special thoughts go to those members.

The disaster is of course that so much of our wonderful bushland has been destroyed, or perhaps permanently modified. The toll of animals was horrendous, virtually none of the land animals or reptiles would have been able to survive the infernos. Many birds and bats were unable to escape - one estimate was that one million birds were killed. A huge loss of biological diversity has occurred, as well as the vertebrates communities. Wiped out.

There is much more that could be said and it will be of interest to see the results of the enquiries that will be set up. In the meantime I trust that the vitriolic attacks by the extreme members of society who hate any undeveloped areas and are so vindictive to their perceived scapegoats - "Greenies" and the National Parks Service cease, at least until proper investigations are carried out and the true facts are obtained and published. Only then can a balanced judgement and sensible decisions be made.

Those rednecks who have been so critical are merely proving what so many know - they have big mouths, brains of an inverse size (tiny), little knowledge and no common sense. Many politicians in country electorates stand condemned by their recent actions, for despite their wild tirades against environmentalists and even their own land management organisations, they were deathly silent on any mention of those who started 70% of those fires, many by arson deliberately, some by stupid acts of carelessness by idiots.

Finally, as most fires are started by people, let us have an end to such stupid media pronouncements that "fire has broken out", "erupted", "exploded" etc. Make them use correct terms, e.g. "the fire was started (etc)" "it was caused by arson", "The fire was deliberately lit", "it was caused by a land clearing fire which got out of control", and similar, truthful statements.

ON THE ROAD WITH JEREMY & SUE

-- NSW Northern Coastal Ranges

An enjoyable week of camping and bushwalking was had by the Newling and Trahair families; 4 adults and 5 children under 10 years old!

First stop was Blackhead near Taree where a half hour walk through littoral rainforest (python trees a feature) led to the beach and an enjoyable paddle for the children.

After two days enjoying David and Beryl's company and hospitality at "Booyong", we made our way to Werrikimbe NP, which lies north of the Oxley Highway between Walcha and Wauchope. It contains many vegetation types; cool, warm and subtropical rainforests, spectacular heath communities and New England Blackbutt forest. We enjoyed many walks in Werrikimbe, but the two enjoyed most were in Flora Reserves adjoining the park.

Fenwicks Scrub is on the western side of the park and has been preserved for its magnificent relatively unlogged coachwood forest. Floyd states that the canopy is 98% coachwood. A 30 minute trail has been marked which is, well worth walking. Turn off Fenwicks and travel 900 meters down Careys Trail. Stop at the red tags and enter the forest on the north side of Careys Trail. The tags return to Careys Trail 200 meters down hill.

The Toorumbie Trail is in Banda Banda Flora Reserve near the eastern edge of Werrikimbe. The trail is an old 4WD road (now closed) that passes through a majestic forest dominated by nothofagus with coachwood, sassafras, red and yellow carrabeen also present. A feature of the walks through the beech forest was *Dendrobium falcorostrum* in full flower.

We camped at Brushy Mountain Rest Area (near Banda Banda) which has good facilities. It has a large open area surrounded on one side by a shallow creek that is clear and refreshing. It was explored for many hours by the children as they looked for gold and treasure.

from Jeremy & Sue Trahair

AUSTRALIAN RAINFOREST PALMS

by Alec Blomberry

Although the majority of Australian rainforest palms occur in rainforests chiefly in the northern coastal areas of Queensland and with some in the Darwin area of the Northern Territory, all of the other species although growing in arid conditions only occur where there is a constant supply of water, for example seepage in crevices of rock faces and often in swampy areas. Species such as *Livistona australis* occurs in wet soils adjoining wet sclerophyll forest areas. In northern Australia there are patches of rainforest in gullies around Darwin, Kakadu and Arnhem Land.

The following is a list of rainforest plants many of which are endemic to Australia.

In NSW there are three species of palms:

Archontophoenix cunninghamiana - Bangalow Palm (Piccabean Palm in Queensland). A tall graceful single trunked feather palm 20-25M high and occurs in rainforests from Batemans Bay NSW to coastal areas of southeast Queensland on the edge of rainforests.

Calamus muelleri - Lawyer Cane, Wait-a-while Palm. A climbing palm with a number of slender stems with the leaf bases covered by spines and with a number of long flexible extensions from the leaf base armed with hooks which assist palms to climb. It also extends to southeast Queensland and grown in more elevated rainforest areas of northeast NSW.

Linospadix monostachya - Walking Stick Palm. A small single stemmed feather palm to about 2M

high and grows in elevated rainforest areas from Bulahdelah in northeast NSW to southeast Queensland.

The following palms occur in Queensland and the Northern Territory:

Archontophoenix alexandrae - Alexandra Palm. This tall graceful palm with a single trunk grows to 20-25M high. There are several forms of this palm one of which was formerly known as *A.beatriceae*. This species grows in rainforest areas chiefly on margins and gullies and occurs from southeast Queensland to the top of Cape York Peninsula from sea level to about 1200M.

Arenga australasica - A clump forming feather palm with a number of stems 10-15M high. It occurs in lowland rainforest from Innisfail in northeast Queensland to the tip of Cape York Peninsula.

Calamus aruensis - A feather climbing palm with spiny leaf bases and long flexible extensions from the leaf bases armed with hooked spines. It occurs on Cape York Peninsula north of the Jardine River to the top of Cape York.

C.australis - Lawyer Cane, Hairy Mary, Wait-a-while Palm. A climbing feather palm with numerous fine spines at the leaf bases with a long flexible extension with hooked spines and grows along water courses in lowland and elevated rainforest to about 1000M in northeast Queensland.

C.caryotoides - Fish Tail, Lawyer Cane. A climbing feather palm with slender stems with leaf bases armed with spines and slender flexible extensions from the leaf base armed with fine hooked spines. Leaflets are wedge-shaped with cut-off ends. It occurs in lowland and elevated rainforest in northeast Queensland.

C.muelleri - see under NSW palms.

C.radicallis - Vicious Hairy Mary. A climbing feather palm with numerous spines on the leaf bases, leaves are rather large. Occurs in lowland and elevated rainforest to about 100M in northeast Queensland.

C.moti - Yellow Lawyer Cane. A climbing feather palm with groups of yellowish spines neatly arranged on the leaf bases, leaves numerous and large. Occurs in elevated rainforest in northeast Queensland.

C.hollrungii - A climbing feather palm with stout stem and armed with spines on the leaf bases. Occurs in lowland rainforest from Tully in northeast Queensland to the McIlwraith Range Cape York Peninsula and also extends to New Guinea.

C.warburgii - A climbing feather palm with stout stems and large leaves with numerous leaflets, the leaf base armed with spines with a flexible extension from the apex of the leaves armed with large black hooked spines. Occurs in lowland and elevated rainforest to about 100M in northeast Queensland and also extends to New Guinea.

Carpentaria acuminata - A tall graceful single trunked feather palm which grows to about 20M tall. This beautiful palm occurs in small patches of rainforest along small water courses fed by permanent springs and is found in a number of small patches of rainforest around the Darwin area, Northern Territory.

Caryoto rumphiana - Fistail Palm. An interesting feather palm having bipinnate fronds and the leaflets are wedge-shaped with the ends presenting a cut-off appearance. This species occurs in lowland rainforest north of the McIlwraith Range Cape York Peninsula, it also extends to New Guinea.

Gulubia costata - A tall single stemmed feather palm 25-30M high and resembling a coconut palm

but has a crown shaft. This species occurs in lowland rainforest near the top of Cape York Peninsula, Queensland and also extends to New Guinea and the Aru Islands.

Hydriastel wendlandiana - A clump forming feather palm with three to four slender stems fringed with suckers. This species grows chiefly in lowland rainforest north of Tully northeast Queensland. It also occurs in association with *Carpentaria acuminata* in the Darwin area Northern Territory.

Laccospadix australasica - A single stem to multi-stemmed feather palm to about 3M tall. This species grows as an understory rainforest palm and in elevated rainforest of the northeastern tablelands of Queensland to an elevation of about 1000M.

Licuala ramsayi - A usually single stemmed fan palm with an unusual blade to the leaf, the narrow wedge-shaped leaflets radiating from a central point in a circular outline and grows from 5-12M high. This species grows in lowland rainforest from tully in northeast Queensland to the top of Cape York Peninsula.

Linospadix - This group of palms are small feather palms with a small crown of fronds with broad to narrow leaflets and grows from 1-2M high.

L.aequisegmentosa - This small species with slender stems is considered by A.K.Irvine of Atherton Queensland to be a form of *L.palmeriana* and occurs in mountain rainforest areas of northeastern Queensland.

L.microcarya - A small feather palm with slender stems and occurs in lowland and elevated rainforest areas about 1100M in northeastern Queensland.

L.minor - A very slender feather palm which is widely distributed in rainforest in North Queensland.

L.monostachya - see under NSW palms.

L.palmeriana - A small feather palm similar to *L.aequisegmentosa*, which appears to be confined to the rainforest of the high parts of the Bellenden Ker Range above 800M in northeastern Queensland.

Normanbya normanbyi - Queensland Black Palm. A solitary trunked feather palm which grows to about 20M high. In the early stages of growth the leaflets are long wedge-shaped which divide into a number of segments as the palms become mature. This species occurs in lowland to elevated rainforest north of Cairns in northeast Queensland.

Oraniopsis appendiculata (syn *Orania appendiculata*) A solitary trunked feather palm to about 12M high and occurs in dense rainforest along watercourses and the adjoining slopes, extending to the tablelands west of Innisfail and the Atherton Tablelands northeast Queensland to about 1200M.

Ptychosperma bleeseri - This rather rare feather palm has a number of slender stems to about 8M high and is confined to a few small rainforest areas in wet soils with permanent water from springs and occurs south of Darwin, Northern Territory.

P.elegans - Solitaire Palm. This solitary trunked feather palm grows from 5-8M high and grows in lowland to elevated rainforest areas to about 600M from Fraser Island to the top of Cape York Peninsula. This palm is widely grown in Miami, USA.

P.Macarthurii - A clump forming feather palm with a number of slender stems to about 5M and occurs in lowland rainforest from the McIlwraith Ranges to

the top of Cape York Peninsula and also extends to New Guinea. This palm is widely cultivated in northern parts of Queensland and the Darwin area and overseas tropical areas.

In addition to the palms on the Australian mainland there are species in the rainforests of Lord Howe Island and Norfolk Island. On Lord Howe Island there are two species of *Howea* (often called *Kentia* Palms, both species are widely cultivated).

Howea belmoreana - Curly Palm, Belmore Sentry Palm. A single trunk feather palm 10-15M high and occurs in rainforest from sea level to about 500M elevation.

Howea forsteriana - Thatch Palm. A single trunk feather palm to about 15M high and occurs in pure stands and rainforest from sea level to about 250M elevation.

Hydyscepe canterburyana - Umbrella Palm, Big Mountain Palm. A single trunk feather palm to about 6M high and occurs in rainforest from about 300M to the peaks of 875M and is commonly covered in mist.

Lepidorrhachis mooreana - Little Mountain Palm. A dwarf feather palm to about 1-5M high and occurs in the mountain mist rainforest from about 700M to the peaks at 875M.

There is one species on Norfolk Island:

Rhopalostylis baueri - A single trunk feather palm 6-12M high and grows in lowland rainforest to elevation of 318M.

(Alec is a well known member of SGAP, and author of many books on Australian Plants. This item was published in *Aust Plants* Vol 16 No 129 (1991). We appreciate this opportunity to reprint it).

Phil LANE of Balgowlah NSW adds further details on this subject: "My own limited experience with growing palms is that they like lots of organic material, must have moisture and shelter, and/or warm positions." From Phil, some contacts who might be able to give some growing tips:

- (1) Paul Anderson, Past President
Palm & Cycad Soc of Aust. (Sydney Branch)
PO Box 2, EMPIRE BAY NSW 2257
Phone: (043) 691 422
- (2) Don Morris, Member of SGAP
c/o Hunter Region Botanic Gardens.
(Don has written articles for AP and PACSOA)
- (3) Peter Hind, Fern Study Group Leader,
41 Miller Street
MT DRUITT NSW 2770

ANIMAL LIFE ON A RAINFOREST AT MEERSCHAUM VALE in 1993

This has been the year of Cuckoos. As Australians know, we have a lot of Cuckoos and none of them makes a sound like the English one. Most days since they arrived here from the north, we have had up to six different sorts calling round us. We have had very good and frequent sightings of five of them, but I still haven't seen a Brush Cuckoo, although one woke me up very early one morning with its distinctive loud call outside the bedroom window. By the time we got outside with our binoculars it was away in the distance. But we have seen the Fantail Cuckoo many times - it seems to call at night sometimes and the exceptionally noisy Channel-billed Cuckoo, which has woken us up just at dawn frequently. The Koel has one of my favourite calls, very evocative of Summer in this area, but is quite a difficult bird to see, in spite of being large, and the Pheasant Coucal never comes into our clearing, but we hear it calling in the fields nearby. Most interesting was seeing a young

Shining Bronze Cuckoo being fed by a Brown Thornbill in a Brush Box tree. The Thornbill was flying around looking for food, closely followed by the nearly full grown Cuckoo, constantly begging for food.

At O'Reilly's this year in Bird Week, the first talk was about Cuckoos, with some excellent slides from Glen Threlfo. During the talk we learned that there is a lot of survey work into the possibility that Cuckoos lay the egg somewhere outside the nest, carry it in their beak and deposit it in the host nest. After all, many of the host nests would have far too small an entrance for a Cuckoo to fly in to lay the egg there.

This year we have been feeding possums during the evening. They were stripping our passion fruit vines of everything, even the new leaves, so we guessed they must be hungry. We give them our fruit peelings and occasionally vegetable peelings. The latter are not always popular though. During January, we saw a mother with baby and now in December, we have another. We thought there might be one around as Mum had become much more secretive, visiting later at night than usual. This little one travels quite a bit on its Mum's back still. They're Short-eared Black Mountain Possums or "Bobucks" (as they are called locally). Very beautiful Brushtails. Bill has learned to protect his paw-paws from them by putting a cage round each tree, close against the trunk at the top and bellied out at the bottom. Seems to work.

We have had Koalas around all year. We can just about guarantee to show visitors our Koalas. Most of them appear to be healthy. While we were away one time the neighbours found a dead one on the ground. An autopsy indicated that it had possibly broken its neck falling out of a tree. It was a male and otherwise perfectly healthy. Goannas we also have around and although we fear for our Sugar Gliders, we are not as neurotic as we were when we had Tawny (a frogmouth unable to fly).

We finally decided that we really couldn't look after Tawny now we are away so much, so have lent the cage to a group of Animal Carers and taken Tawny to Fleay's Fauna Reserve on the Gold Coast. From the moment he arrived there he was spoiled, particularly by the Aboriginal Interpretational Officers, one of who used to carry him around on his shoulder, while he was working. He is the favourite there, as he doesn't mind people at all and appears to react with interest to situations. His photo has appeared in the press twice; he seems to be chosen to be presented to important visitors while they pose for the camera. He has the company of about four other Tawny Frogmouths too, which is good, we think.

We've only actually seen one Python close to home this year, and that was the day my brother John arrived. He found it somewhat unusual, but coped.

This year, we haven't had the same good views of Sugar Gliders as we are used to. They seem much shyer than they used to be. Maybe too many of them have been eaten by Pythons, Goannas and Kookaburras. We did see them emerging from three boxes in June and saw them round about September quite a bit, when my grandchildren were staying here. At the same time, we saw Fireflies nightly, particularly down by the creek.

In April we were visited by tiny insectivorous Bats. We couldn't identify which sort they were. We were having lunch one day, out on the verandah and heard a movement in the tiny little house, which my son sent me from Hong Kong. It's made of bamboo, so we put it under cover as protection. We could see a little bat nose inside the hole. That night we saw three bats leave at dusk. Four days later, the number had increased to eight, ten the next day, and after

that it held at eleven. We didn't see them in the box after the end of June, but still see some flying around the clearing at dusk sometimes.

Apart from those interesting sightings, we have had the usual ones. Whipbirds close to, in and out of the bird-bath, Noisy Pittas and Rose Robins visiting us in May, the latter collecting insects off the windows and perching alongside us on the rail during breakfast time, Regent and Satin Bowerbirds visiting, the former mainly for the bird-bath and the latter for Persoonia seeds. A "first" was a pair of White-throated Treecreepers, who built a nest in one of our 'A' line birdboxes. The parents collected what looked like bark and "teased" it against the tree trunk and side of the box until it was right and then they put it in the nest. When we arrived back from Bird Week at O'Reilly's, a baby was looking out of the hole and being fed constantly. There could have been two there, we weren't sure. On the following day we went shopping and when we returned they had all disappeared, hopefully the baby or babies fledged, not eaten. On very hot, dry days we are visited by a flock of Grey-crowned Babblers. They had a baby with them this month. At nights we still hear the White-throated Nightjar in the distance. Also the Owlet Nightjar. While walking up the hill with a friend, we heard an Albert's Lyrebird recently. A pair of Spotted Pardalotes has nested in the mound again and the usual Variegated Wrens have brought a family up along by the track.

from Alison Siliakus & Bill Tubbenhauer

SOME COMMENTS ON SEED GERMINATION

Jeremy and Sue TRAHAIR have had success with the following:

Dysoxylon fraserianum - 3 months
Cryptocarya glaucescens - 3 months
Acmenia smithii - 3 months (~ 100 seedlings)
Mellitea megasperma - 6 months
Brachychiton discolor - 6 weeks (ex Seed Bank)
Citrobatus paniciflora - 6 weeks
Hymenosporum Flavum - 3 months
Rhodospaera rhodanthema - 3 months
(casing cut to reveal kernel)

Nan Nicholson recommended cutting away the casing to help germinate schizomeria ovata. I have some seeds in but no success yet. I use a heat board with an igloo above to aid germination through the cooler months. Its good, but two words of warning. (1) I had to replace one heat board after it burnt out and then gave me a slight shock (caused by water entry and poor sealing of the board). (2) An unexpected hot day can cause the precious seedlings to be dried to a crisp. I've lost a few plants this way.

A GARDEN WITH A DIFFERENCE--Karalee near Brisbane

Judith BRASS sends details of the situation on her property: "Sorry about the long delay in writing but I took on a fairly heavy study load this year (I anticipate a similar load in the coming year). With exams out of the way I am beginning to catch up on other tasks including gardening and correspondence.

I have done little planting this year due to spending all my available time watering. It is still very dry here, but relief is in sight a storm has just broken and it is raining at last! The soil here is sandy and dries very quickly in this heat. The rainforest area is well mulched (~30cm deep), which helps to keep the moisture, but it does mean that a lot more water is required to reach the soil beneath.

Since my exams finished I have started to install a couple more ponds. I have a small steep sided pond which was good for frogs and plunge bathing

honeyeaters, but did not allow easy access for small birds to drink. I installed one pond using the mid-year break and it is very popular with a variety of birds. It is made from thick black plastic used double. The bottom has been covered with sand to protect it from UV light. It is only 30cm deep at the "deep end" tapering off to nothing at the shallow end. It has been built up on a steep slope above the original pond so that it looks as if it would flow into the lower pond. It actually flows out into a bog garden at the side. It is planted with cunjevoi (*Alocasia macrorrhiza*), a walking stick palm (*Linospadix monostachya*) and ferns. The two new ponds will extend the rainforest stream. One only has a surface area of 1M² and is about 15 cm deep. It is already proving popular with Figbirds as it is under a sandpaper fig tree. The other one is about 3M long, 1M wide and 30-0cm deep. I only filled it last month. Both need rocks around the edges, some soil fill and plants around them.

So much for the rain, it has almost stopped but there does appear to be another storm on the horizon. I can always hope."

Butterfly of the Month - ORANGE PALM DART

(Judith Brass wondered if other members may have submitted items for this series. As no information had come in, Judith has again taken the trouble to prepare a few more descriptions. Species she describes occur in her garden and therefore emphasise butterflies common in SE Qld, though most are much more widespread).

ORANGE PALM DART *Cephrenes auggeodes*, Fml. *Hesperiidae*. This is a small brown and orange butterfly which flies in a rapid, jerking manner. It tends to hold its wings at an angle when at rest. Most gardeners do not welcome it, as the larva can occur in large numbers. They roll the segments of the fronds from the underside. The cylindrical shelter is held together with silk. They stick their heads out to graze on the end of the leaf, extending the shelter downwards as they eat it from the top. Large numbers may be present giving the palm a ragged appearance. They are particularly fond of *Archontophoenix cunninghamiana* and *Livistonia australis*.
Ref: Common & Waterhouse 1972. Butterflies of Australia. Angus & Robertson, Sydney.

(Judith also included a couple of short notes on beetles in the hope of raising further interest in these often beautiful insects.)

Anoplognathus aeneus - Fml. *Scarabaeidae*. This beautiful metallic green "Christmas beetle" is about 3cm long and is found mainly in rainforest. Nothing is known of its life history, but the large (for beetles) eggs are probably deposited on the ground. The larvae are probably typical 'C' shaped scarab larvae. Like most members of this family they probably eat rotting wood or plant roots. The adults eat leaves. Hawkeswood (1987) lists them as being rare. I have only found one in my garden. It fell into a small pond which is overhung by a pink bloodwood, a *Buckinghamia* and a sandpaper fig. I do not know which of the three it was feeding on.
Ref: Hawkeswood, T. 1987. Beetles of Australia. Angus & Robertson, North Ryde.

OLIVER CARTER of Toowoomba writes of his latest "Manna Nursery" News:

I spend all the time possible at the nursery and still can only get some of the jobs I want to do done. Enclosed is a recently produced plant list. There are other plants not on this list, but are already in the "pipe line". There are a few exotic and a lot of native food plants which I am still trying to get, such as the Yam Daisy *Dielscorea hastifolia* (from WA), *Ipomoea costata*, .sp. (discovered and named only this year I think) from Central Australia. This one grows to one foot across (the tuber) and never gets

woody, can be eaten raw or cooked. This I.sp. could easily prove to be a better food plant than the exotic *I.batatas* (sweet potato). Some of my time is also spent in a bit of plant breeding (*Syzygium* spp.). This includes chromosome doubling with some early interesting results.

Manna Nursery is at 8 Vanity Street, Toowoomba opening between 2.30pm and 5.30pm (6 days). Oliver is happy to have RFSG members call in if they are in the area. You may remember that Oliver specialises in *Syzygium* and allied genus, as well as edible OZ rainforest plants. "Chromosome Doubling" is a complete mystery to me. I wonder whether Oliver or somebody else could write a brief description of what is involved in this? Ed.

DAVID THOMAS describes a Bush Regeneration Project west of Sydney:

For the last four months I've been involved at work with revegetating four hectares of forest red gum - grey box woodland at Prospect Reservoir. With two others, I'm supervising 73 (originally 96) students, employed in a Govt/Water Board L.E.A.P. project (Landcare, Environment Action Program). They do two days/week reveg. work, two days/week study at University of Western Sydney (Environmental Technology Certificate - 6 months) and one day per fortnight at TAFT (Bushland Weed Control).

Although some of the participants lack interest and enthusiasm the field work is progressing steadily. The work includes weed control (mainly African Olive, Lantana and Privet) and planting tubestock (about 10,000). The plants are local species, mostly grown from local propagules. We've had to mulch most of the area to suppress new weed growth until the plants have established. About 200M² of Themeda (kangaroo grass) has been transplanted from a proposed construction area. So far it looks to be establishing well.

As you'd guess, there's not much rainforest on Prospect Hill - but the scattered mesomorphic species include dry rainforest/wet sclerophyll forest types such as *Clerodendrum tomentosum*, *Rapanea variabilis*, *Notelaea ovata*, *Eustrephus latifolius*, *Pittosporum undulatum* and *Cayratia Clematidea*. *Marsdenia rostrata* occurs nearby.

Newcomer **STEVE SINCLAIR** would now be back from a bush walking trip to N. Qld, and hopefully has collected fern spores to germinate in due course. I hope that Steve sends a summary of his experiences and tells of the highlights of his holiday.

MARK WILLIAMS of Summer Hill who also is a relative newcomer to our group has sent a species list at Gap Creek Reserve, Watagan Mountains (see N/L No 11 "Walking Track") and a bibliography of Rainforest Studies north of Royal National Park.

Although kept very busy leading her own Study Group (Wallum) **BARBARA HENDERSON** has a two year old rainforest, which despite all the dry weather at Samsonvale, Qld. has grown well. Barbara puts it down to the good soil on the site - ex banana plantation. She knows Oaklands Nursery (N/L No. 22) well, doing some weeding and learning each week and says that John is most enthusiastic and that we should all call in there if visiting the district.

ALEX & MANDY PALMER have been on an overseas trip and say that Portugal is as close as they'd come to familiar surroundings, gums everywhere and plenty of wattles as well. They are interested in finding out more on *Euc.portugali* or is it (*E.globulus*). They saw many other countries and by all accounts had a great time.

THAT TREE -ELAEOCARPUS SP MINYON

- or is it RALPHS TREE?

So you want a brief outline on the TREE - well here we go! It was first, and only, collected in 1930 in the Minyon area. That was the location the specimen gave. Since then John Hunter from NSW National Parks & Wildlife Service and Gordon Guymer from Queensland Herbarium have spent many fruitless days searching for the tree in the Minyon Falls area.

While clearing new areas in the regeneration process, beyond the spillway at the Rocky Creek Dam near Lismore, I found a tree that I couldn't identify. After passing it around local botanists without any clear results as to what it was, a specimen was sent to John Williams at Armidale University. He had no relevant specimen to identify it with but was sure it was in the Elaeocarpus family and sent it on to the authority on Elaeocarpus at Queensland Herbarium, Gordon Guymer. Having the original specimen on hand he was able to identify it. Elaeocarpus Sp. Minyon.

Wow, I've found the long lost tree! Feelings of elation - the last of the species originally collected in the Big Scrub, thought to be extinct, but now its found. Wacko, Wopee Doo!!!! But alas Rous County Council, who owns the land that the tree stands on, intends to raise the dam by two metres and this will flood the tree.

Well after much soul searching, and looking at it in the light that if I hadn't been employed by Rous County Council the tree would never have been found and probably would have been bulldozed in the dam raising, Rous needs credit. Being the longest running regeneration project funded by a local authority in relationship to the environmental enhancement.

So the situation is this, there is in place an embryo cloning operation at Gatton Horticulture College, using seed collected last year. From this we should have a thousand trees ready for planting in the 1995 summer/autumn period. These will be planted at several locations with a similar habitat to where the tree now stands. The proposed dam raising is scheduled for 1997 so hopefully these trees will be established and growing on before the fateful day comes.

Rous intends to try and move the tree to a place above the new high water mark. With care I think this can be done, but, and its a big but, as no one has any experience at moving such a tree, the risk will be great. The tree is but the spark for the greater issue of development on the North Coast and the loss of quality of life that development brings. This type of situation will occur more and more in the years to come. Is development the right direction to head?

This is great news from member RALPH WOODFORD, and a brilliant find. Shame this unique tree only has a short life expectancy - but then so many complete populations of species are being wiped out in the name of progress and our supposed "vital" demands on the planet. ED.

SOME LOCAL BACKGROUND FROM OUR TASSIE MEMBER PHIL PARSONS

My interest is in southern cool temperate rainforest as well as warm temperate and subtropical Australian species that will grow here. I have a -9°C in my area (although coastal Tasmania has a higher minima) and what I am growing may be of interest. Most of my plants are sourced from Terania Creek Nursery. Those marked * were not.

- *Acmena smithii minor
- *Backhousia myrtifolia
- Agathis robusta
- Ceratopetalum apetatum
- A.brachyandra
- *Macadamia tetraphylla
- Callicoma serratifolia
- *C.guimiferum

- Davidsonia pruriens
- *Elaeocarpus reticulatus
- Ficus coronata
- *Grevillia robusta
- Livistonia australia
- Planchonella australia
- Podocar elatus
- Syzygium australe
- S.wilsonii Waterhousea
- *Lomatia arborescens
- Araucaria (all 3)
- Toona australia
- Cordyline stricta
- Diploghottis cunninghamii
- *Eucryphia mooreii
- Geissos benthamii
- *Hymenosporum flavum
- Lophostemon confertus
- Oreocallis wickhamii
- Prumnopitys lalei
- S.paniculatum
- ssp cryptophlebium
- *Tasmania insipida
- Millettia meagasperma
- *Cissus antarctica
- Rubus rosafolius

I am interested in trying more species from cool and high altitude areas, shrubs and ground covers and species from associated genera especially.

Edible fruits are also an interest and I am seeking Syzygium oleosum at the moment.

Our southern cool temperate rainforest contains a relatively limited number of species compared to the warm temperate and tropical areas and so can seem repetative. The understory is often ferns and fungi where the canopy is tall and climate has restricted the site to deep gullies, but particular sites can surprise.

Some plants from associated genera are: Tasmania lanceolata; Aristotelia peduncularis; Northofagus cunninghamii; Eucryphia lucida; E.milliganii; Lomatia polymorpha; Trochocarpa cunninghamii and from families Phyllocladus; aspleniifolius; Cenarrhenes nitida; Richea pandanifolia; Microstrobos niphophilus.

Are any other members interested in the cool temperate rainforest?

SOME QUESTIONS TO THE GROUP, and COMMENTS from RHODA & HARRY JEAVONS

What is the single surviving specimen on the Rocky Creek Dam Wall? This is the Elaeocarpus sp Minyon. See Ralph's report this page.

What about a segment in the Newsletter on the specific needs of some species for successful seed raising? I have found out the hard way about light sensitivity and we have a batch of hoop pine, now tubed up, of which I lost a lot through not knowing of their peculiar way of discarding their woody seed cases.

No White Beech seed up yet. The Python Tree and others from "Booyong" are doing well, but not exactly huge yet - Streblus has done best-its about double in size.

Our cabinet timber patch continues to thrive. The Flindersia brayleyana just a year old are mostly over my head. Is there anyone from whom we can get information about tree growth, diseases, etc? I have written to U.N.E, C.S.I.R.O. and we went to Lismore, but couldn't find anyone to answer our questions. Perhaps we have a member who could run a Question and Answer Section in the Newsletter? Our questions their Answers. As an example, a few of the Flindersia have had a sort of stem rot, which I have treated by cutting them back hard, but . . what is the disease? How do we prevent it?

1994 SGAP QLD REGIONAL CONFERENCE "Flora of the Scenic Rim"

This is to be held at Lake Maroon, in the Boorah region from 31st March to 4th April, hosted by QLD Region and Ipswich Branch. The Scenic Rim is of course an area including magnificent rainforest on the ranges around the NSW/QLD border and the topics that will no doubt be covered at the conference would be of great interest to many RFSG members. Total full term accommodation is \$120, plus a registration fee of \$45 for a 4 night/3 1/2 day period. For further enquiries and bookings contact:

BILL PILGRIM, PO BOX 403, IPSWICH, QLD.

NORTH QLD. HAS BEEN IN THE NEWS LATELY. The big story was the continuing saga of STARCKE of Cape York fame where our old friend Quaid has been trying to make a few more bob out of the area by trying to flog off a quarter million hectares of prime environment overseas. What does he do with all his money anyway? All sorts of threats and promises were made by Goss and Kelly, but I've not seen any announcement of actual protection being made as yet. Has anything been done to ensure that it is rightfully kept in either public or Aboriginal ownership?

Further south, around Tully-Mission Beach, war has been declared on the numerous feral pigs that are affecting the Cassowary population particularly, but are also damaging the environment generally and causing economic loss to local agricultural interests. A special transportable trap has been developed to capture pigs that will then be exported as game meat to Europe. They will join the 1/2 million Tasmanian Possums that will be killed, processed and sent overseas to gourmets and others who take pleasure in eating wild animals.

THE (NSW) NORTH EAST FOREST ALLIANCE

NEFA is a network of individuals and community forest protection groups working to protect the old-growth forests, rainforest, endangered species, wilderness and high water quality of N.E. NSW. They are an unincorporated association of like minded people, working together as a volunteer, decentralised alliance drawing on economic, ecological, legal and other expertise to pursue their aims.

They recently sent us a full explanation of NEFA and their campaign, and which is in the Group files. Many people think that NEFA has done a great job in drawing attention to so many destructive activities in our forests, and in taking out legal challenges that have been astonishingly successful in preventing some acts of official vandalism and in ensuring that some of our Govt. instrumentalities actually obey the law! Naturally they haven't gathered too many congratulations from the exploiters and second rate decision makers around the place. They have had a number of successes in protecting areas of old-growth and associated rainforest of high conservation and scientific value, and in stopping the logging of the North Washpool rainforest. (That area represents the largest warm temperate Coachwood rainforest wilderness remaining on the planet). It is pretty bad when a group of private citizens has to take the Forestry Commission to court to stop them breaking the laws of their own government!

STILL IN NSW --- IS OUR FORESTRY COMMISSION UP FOR SALE?

It was recently corporatised, given a new name and had an estimated value of \$100 million placed on it. At the time it was said that there were no plans to sell it off, but you can well imagine that there would be a long queue of interested buyers of so much prime Australian real estate. After all, this government has sold much of what was not nailed down - its Insurance office, cleaning services, hospital grounds and many other smaller assets, and soon its Bank as well as that 2 million hectares of land previously commented on.

There will be huge costs associated with the 2000 Olympic Games, so every penny available will be wanted so it will be most unlikely that any reasonable offer for anything at all would be refused, however short-sighted the deal would be. And I don't know if anyone could trust the people in government, recently there has been almost a continuously revolving door of inept and/or criminal members resigning from this State. Pity political party preselection committees are unable to find candidates who are generally reasonably honest. No wonder the environment and economy are in such a mess; and you must believe me, it affects everyone so don't criticise me for drawing attention to such disgusting behaviour.

NSW WILDERNESS DECLARATIONS

THE REDNECKS ARE IN A FRENZY!

They are even lashing out at fellow government members and are threatening to in effect, leave the Party and bring down the State Government. Don't hold your breath though because they would not allow the opposition to take over. Even so, they are particularly dangerous because of the 800,000 ha nominated, only 350,000 were initially promised - now you can guarantee that "in the interests of balance" some of this will be reneged on. The initial announcement trumpeted "a Xmas gift from the State govt. to the people of NSW and their descendants". Even that "gift" gave us very little, because 95% of the areas were already in National Parks and therefore well protected. It seems that the Messrs. Red of our world are infuriated that "vast tracts of the country will be locked up". Vast tracts indeed, if the 350,000 ha does go through, it will, together with the few wilderness areas currently gazetted, total 1.2% of NSW! So having only a bare 98.8% of this state available for access and exploitation means we'll "all be rooned". Says Hanrahan.

OUR INCREASING POPULATION - WHAT IS IT GOING TO DO TO OUR FORESTS AND OTHER BUSHLAND?

Australia's population is increasing faster than any other country in the OECD. There are forecast to be an increase of a million people in S.E. Qld in the next 20 odd years, nearly as many in the Sydney region, an 85% increase on the NSW north coast. The leading non-thinker in the Northern Territory recently called for a huge increase in the number of people in his State - he would like to see a total of 18 million there alone, equal to the present total population of Australia. Those 4 areas mentioned have already seen the loss of huge areas of Rainforest since white settlement commenced, and there is no doubt that so many extra people will require further large areas to be cleared, control burned etc. causing siltation and pollution of the few good watercourses remaining, as well as the degradation of the bulk of natural areas not developed for residential, agricultural, industrial and recreational uses.

Just think about it for a moment. An annual 2% increase in our population, a 4% increase in gross domestic product merely to prevent unemployment rising from its current high level will result in a doubling of our consumption within 17 years. So - in that time our use of forest products, amount of garbage dumped, number of dams needed, additional roads, pollution produced - everything will double. Just imagine, twice as many semi trailers (a sore point with us because of their continual accidents causing death, injury and chemical pollution) to put up with every time you venture on to the roads.

There is a group called Australians for an Ecologically Sustainable Population based in Canberra that speaks a lot of common sense and presents well researched information on the stupidity so often preached by people who should (and probably do) know better in their constant calls for continued development and growth. Perhaps they need reminding that in the human body, growth is often called cancer, and that malady frequently causes the death of the victim. Will continual, increasing growth cause the demise of planet Earth? Or even that great country Australia?

WOODCHIPS AND RAINFOREST.

The Commonwealth Government met a lot of criticism when it recently approved another year of woodchip exports and even allowed an increase in tonnage to 5.5 million tonnes. Little of the product comes from sawlog residue as it was initially meant to be, because that is a most uneconomic source at the current \$7 per tonne that the Japs design to pay us. That wouldn't cover the cost of labour, transport processing and fuel let alone give the forest owners (us) any return on the maintenance of the forests, access roads, administration etc. We even ship them from north of Coffs Harbour to Newcastle by road - around 500 km one way. And often they don't arrive, for they end up on the side of the road or in a gully somewhere after a crazed driver loses control and his truck "runs off the road". We lose Rainforest during the timber exploitation because much of the logs for chipping comes either from clear felling, or selective clearing of our old growth forests. Last December the industry stated that it would have to close down if prevented from logging old growth forests in NSW or Victoria - a sad state of affairs indeed.

PERHAPS THIS GROUP NEEDS A CHANGE OF DIRECTION

(N/L 23)

and therefore A NEW LEADER?

I have been advised that there is a degree of criticism and objection to a perceived over-emphasis on environmental/conservation issues in the Newsletter. This may be so, and probably arises from comments on the third-rate environmentally dense politicians we blindly elect to govern our country. However, all fair minded people would accept these criticisms and may choose to agree or disagree on them, but never object to their inclusion. After all, few would rarely agree to 100% of the information supplied to us, however highly regarded is its source.

I have attempted to do several things: increase members enthusiasm for rainforest generally; to cover as broad a range of topics as possible; to maintain interest and further encourage people to enhance their knowledge of specific interests from other sources and, to make you think! My job as leader is surely to pass on information, ideas and comment and all of you should interpret it as you wish. At present, I have to contribute an average of five hours a week of scarce and valuable time. Even so, I am unable to be all things to all people. Nor is it feasible to try to please everyone, because on this basis one ends up by pleasing no one at all.

Trying to decide how to handle this matter is the main reason that this Newsletter is later than usual. The short answer is that I do feel most uncomfortable in a conflict situation, and whilst I have never desired to alienate any member (we all pay money to belong to the Group) I am not prepared to invest my time in writing items that some of you are not interested in, or else automatically disagree with because of a particular partisan outlook.

An alternative is - we split the Group. I am well aware that many members are exclusively gardeners. There is also a large number of members, who like me, have a very much wider interest, and the growing of plants is of minor importance, (eg I have about five surviving RF plants in the garden, but then I have the luxury of about 40 acres of natural rainforest, and other members are in a similar situation). Should we therefore consider forming, say, the "Rainforest Plants in Horticulture Study Group" to be led by an enthusiast with a green thumb, and a "Rainforest - Botany & Ecology Study Group" led by someone with a wide spread of interests, some knowledge and useful reference source, or even by me? I'd be prepared to continue to be involved in something like that, because then I would not have to feel embarrassed, as I sometimes have been, in bringing in political and economic matters relevant to current environmental/quality of life issues and knowing that some people would be offended.

After all, we are the Society for Growing Aust Plants, and not an environmental or pressure group - aren't we? That is the reason why the Society has a decreasing membership, currently made up of mainly people of "advancing years", and why many younger people just don't continue to turn-up to meetings after their initial attendance, or fail to renew their membership. And why, I estimate, that 70% of the RFSG members below the age of 40 are not financial members of a SGAP Region! And, the reason that this Groups membership has been growing over the past four years is because of its emphasis on conservation and environmental matters.

WHAT DO YOU THINK?

I WOULD EXPECT MOST OF YOU WILL REPLY AFTER DUE CONSIDERATION OF THE POINTS MADE, BUT PLEASE KEEP IT FAIRLY BRIEF, AS ALL COMMENTS SHOULD BE PUBLISHED.