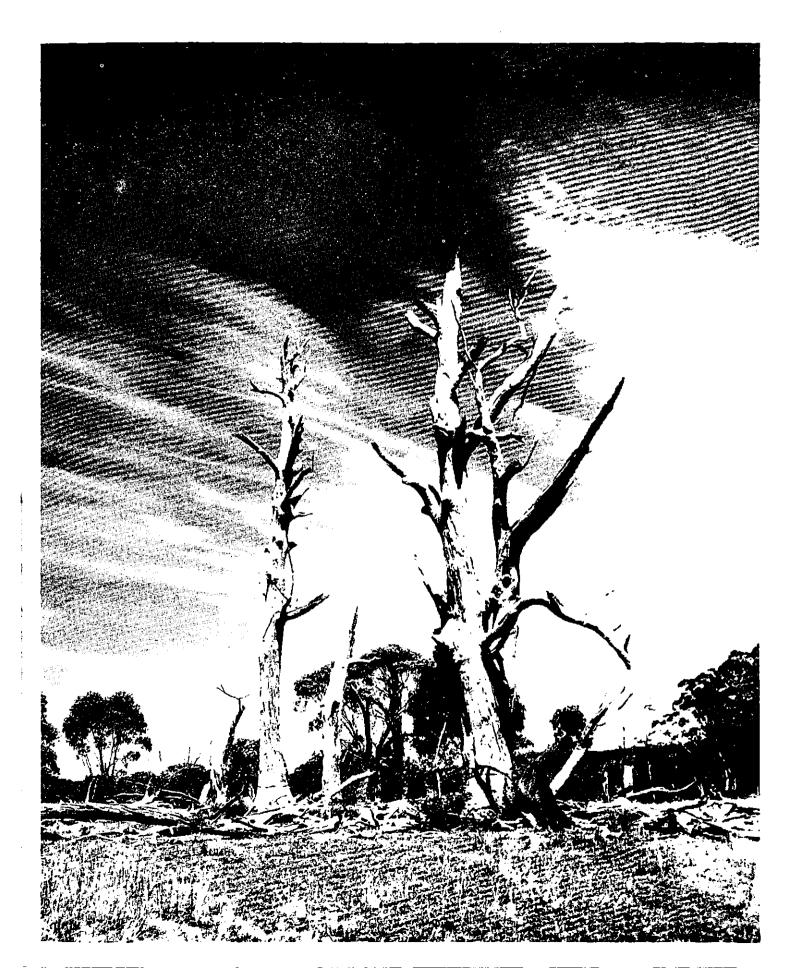
NPA Bulletin

National Parks Association of the A.C.T.

Vol 24 No 2

December 1986



NATIONAL PARKS ASSOCIATION OF THE AUSTRALIAN CAPITAL TERRITORY INC.

Inaugurated 1960

Aims and Objects of the Association

Promotion of national parks and of measures for the protection of fauna and flora, scenery and natural features in the Australian Capital Territory and elsewhere, and the reservation of specific areas.

Interest in the provision of appropriate outdoor recreation areas.

Stimulation of interest in, and appreciation and enjoyment of, such natural phenomena by organised field outings, meetings or any other means.

Co-operation with organisations and persons having similar interests and objectives.

Promotion of, and education for, nature conservation, and the planning of land-use to achieve conservation.

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Articles by contributors may not necessarily reflect Association opinion or objectives.

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COVER

Ringbuck of trees Nous Creek

Photo by Hedda Morrison

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Misplaced

Would the young couple who walked with their baby, having returned from Singapore recently, and who drive a yellow station wagon, please get in touch with Simon Blake (Tel: 82 4380).

I think Heft a bush hat in your car after the walk up Mt Coree in May. Many thanks.

PRESIDENT'S FOREWORD

The 1980's are proving to be increasingly difficult times for our National Parks as the self interest of individuals and groups threatens to overwhelm the nature conservation functions of the Parks. The recent Australian National Parks Council annual conference in Hobart was a valuable drawing together of a national perspective on the problems faced. In Western Australia and the Northern Territory the push for mining and mineral exploration in the Parks is strong. Kakadu National Park, the site of current controversy contains only a small minority of the mineral sites in the region, and may be seen more as a test case for the Australian Mining Industry Council's campaign to gain access to National Parks generally. In Western Australia the government has recently invited applications for petroleum exploration permits over Nambung National Park (containing the 'Pinnacles') just north of Perth. Under present WA legislation National Parks outside the south-west are open for mining without the approval of Parliament.

In both Western Australia and Victoria, National Park management is now subsumed into 'mega-department' structures and this has made an independent voice for National Parks more difficult. Tasmania has recently incorporated the National Parks and Wildlife Service into the Lands Department. The government has argued that this is an economy measure. Of particular concern to Tasmanian conservationists is the maintenance of the NPWS Act.

The National Park budget in Queensland has continued to rise but the impression gained is that this is due more to the highly promoted links between tourism and National Parks in that State, rather than concerns for nature conservation. The impressive new National Parks visitor centre at Cardwell in north Queensland devotes a major display to the 'tourist dollar' but the Service is unable to provide interpretive and information material for the northern parks, due to lack of funds.

National Parks are also coming under pressure from the timber industry as production from the 'old growth' hardwood forests declines. In New South Wales the leader of the National Party has stated that if elected, he would open up the parks for hardwood logging. Parks most affected would be those on the north coast containing rainforest-sclerophyll intermixtures which were withdrawn from logging in the historic 1982 decision of the Wran government.

Given these threats to our National Parks from both internal and external pressures, it becomes increasingly important that we are not swayed by arguments that economic salvation will come through logging and mining the parks or that off-road enthusiasts have a 'right' to take their vehicles into the remotest untouched areas. We should also be wary of using the slogan 'Parks are for People' in an unqualified way. Only by safeguarding the nature conservation values of the Parks today, can we guarantee their benefits to future generations.

In conclusion, I would like to extend to members the compliments of the season and hope your New Year's resolutions include items such as joining the NPA committee or a sub-committee, writing for the Bulletin (editing the Bulletin!), or offering to lead walks.

Namadgi Sub-committee Report

Philip Gatenby

A joint Working Group has been established between the Department of Territories and the National Parks Association to oversee the proposed work on Orroral Valley Homestead. The Association's representatives on the working group, which met for the first time in August 1986, are Kevin Frawley, Denise Robin and Ross Carlton.

At a recent meeting of the Namadgi Sub-committee Paul Davies and Peter Hann from the ACT Parks and Conservation Service answered questions from Sub-committee members on Namadgi National Park. A wide range of topics were covered, including a planned brochure from the Parks and Conservation Service on walks in Namadgi, the need for permits for overnight camping in the Cotter catchment upstream from Corin Dam, the future of Boboyan pine forest and programs for the control of feral animals.

All involved found this meeting most useful and more may be held in the future.

On the 14 October the House of Representatives Standing Committee on Environment and Conservation released their report on the administrative arrangements for the management of Namadgi National Park. The standing committee has recognised the inadequate legislative arrangements covering Namadgi and recommends declaration of the Park under the National Parks and Wildlife Conservation Act 1975. However, any such declaration appears to be a long way off as it depends on acceptance of the report by the Government and agreement between the Department of Territories and the ANPWS on the delegation of all the Service's responsibility and powers under the Act, as they apply to Namadgi. to the Department of Territories.

Other recommendations in the report deal with the appointment of a representative from ANPWS to the Namadgi National Park Consultative Committee, amendments to the ACT Nature Conservation Ordinance 1980, the role of the NCDC and Aboriginal interest in the Park.

Amendments to the ACT Nature Conservation Ordinance were laid before Parliament on 23 October 1986, and will remain there for 15 sitting days. Under these amendments the Minister of Territories is required to adopt the Plan of Management for Namadgi, management plans are required for all other areas declared under the Ordinance, public consultation is required before a plan of management can be adopted and these plans are binding on the Department of Territories. Also, revocation of part of Namadgi or any other reserved area will now have to be sanctioned by both Houses of Parliament.

Committee News

A new Committee took office at the Annual General Meeting in August. Office bearers are listed inside the front cover of the Bulletin. Responsibility for Sub-Committees has been allocated as follows: Namadgi (Philip Gatenby), Environment (Craig Allen), Finance and Marketing (Neville Esau). Publicity and Education (Glyn Lewis) and Outings (Ian Haynes). The Tree Planting and Field Guide Sub-Committee will continue to be represented by Kevin Totterdell. To date the Committee has not found an editor for the Bulletin.

In October, a delegation of Committee members attended a meeting aranged by Phil Ford with personnel responsible for planning the proposed naval installation at Jervis Bay. The purpose of the meeting was to obtain information on proposals and on the current state of planning.

Also in October, the Association co-sponsored a Public Meeting on Recreation Management in the Alpine National Parks. The meeting was attended by a large contingent from the four wheel drive clubs in the region, who were drawn to the meeting by the recently released Report of the Wilderness Working Group to the NSW Minister for Environment and Planning, This is a controversial document containing recommendations for identifying and managing wilderness areas throughout the state, both within and outside national parks. The Report may be consulted in the Association's library at the Office.

The Committee has endorsed a "Statement on Employment in Forest Industries" which was drawn up by the Victorian National Parks Association. This statement is intended to articulate a unified and coherent policy of the major conservation organisations on the sensitive issue of employment in the forestry industry. This statement is also available through the Office.

The Australian National Parks Council met in Hobart in October, and our Association was represented by Kevin Frawley, Neville Esau, and Reg Alder.







Letters

Cotter Hut

Dear Sir.

The caption to the photo of the Cotter Hut in your September issue asks readers' opinions as to whether the hut is an intrusion or part of the history. Our opinion is no, it is not an intrusion. We should like it to stay. And yes, it does reflect the history, but we regard that as a fact, and not a matter of opinion.

Robert and Sybil Story

Today – Tomorrow's History

Dear Sir,

Fiona Brand, a long term environmentalist with a sense of history and now past convenor of the Namadgi sub-committee, in the September issue of the Bulletin asked an important question as to what members think should be the tate of the Cotter Hut.

It must be pointed out that the present but is not a relic of the pioneers of the valley but a still livable residence built in the early sixties for the ranger of the Upper Cotter catchment above the Corin Dam. It is sited on the western bank of the Cotter in a bank of eucalypts at the southern end of the grazing area of the original settlers who established themselves almost opposite above the eastern bank of the river. All that remains of the original Cotter homestead or hut is a heap of stones at the base of the fireplace, a number of holes where the building stumps have rotted away and the iron framework of a bedstead.

The resident ranger has been withdrawn from the hut and in the past the last permanent occupier had gained a reputation for a dedication to his duties in the preservation of the wilderness values of the area. The area is now patrolled by non-resident rangers based in the Orroral Valley Space Facility. The Cotter Hut Road leads into the

Upper Cotter Valley from the Orroral Valley and a branch road goes to the Lower Creamy Flats where a weather station is maintained. The hut is only accessible to walkers.

The Draft Management Plan for Namadgi proposed that a walk-in camping area with facilities be provided in the vicinity of the Cotter Hut. This Association and many others objected to the provision of a permanent camping area and in the final plan this proposal was withdrawn in favour of dispersed camping 1km away from stored water under a permit system.

The Ministerial Namadgi Consultative Committee because of the diversity of opinion as to whether the Cotter Hut should be demolished, made a visit to the hut under light snow. Responding to the harmonious blend of structure and surroundings, they sympathetically recommended a five year reprieve against demolition.

Your committee in May reversed a recommendation of the Namadgi sub-committee and decided as a matter of policy that the hut should be demolished. It is perhaps a matter of shame at this act of vandalism that this important decision has not been reported to members in the Committee News published

in the Bulletin.

When does the immediate past become history? The hut, for whatever purpose it was built, is a record of man's use of the area and the materials then currently available. Josephine Flood in her paper on Cultural Resources presented at the Association's Jubilee Alpine Conference says, 'Cultural sites in the south-eastern highlands are usually small and visually unobtrusive and do not detract from the natural character of the landscape Whatever their architectural merit, one should think carefully before demolishing or removing any of these structures, for what a site lacks in antiquity or other heritage significance may well be more than compensated by its educational value ... Cultural sites and wilderness need not be incompatible. The Scottish glens are rich for their crofts, the Himalayas for their yak-herders' huts, the Cape York wilderness for its rock art galleries and gold rush relics and the Australian Alps for their Aboriginal and historic sites.

The sighting of any man-made structure or other evidence of

mans' intrusion is anathema to the wilderness buff even to the extent of destroying small directional cairns. Their high minded ideals and vociferousness quickly vanish when even a sheet of iron provides some shelter from a lashing storm to light a fire. The early pioneers had an aptitude for the location of huts, for besides being in the most pleasing location for looking out to the most distant mountains, they always blended in and became subjugated by their surroundings. This hut is no exception.

In past issues of the Bulletin Babette Scougall and I as editors and in personal articles have drawn attention in text and photographs to the remaining structures in Namadgi National Park. Decisions on their use, conservation or destruction have yet to be made – all have a purpose. Already four residences have been demolished without any prior public consultation – what will be next?

Structures should not be destroyed just for destruction's sake, who knows what use could be made of the Cotter Hut in the future – an extension of a field study unit, with increasing visitors to the area the restoration of a resident ranger, or base in emergencies, or in the distant future a time capsule of a style of living and architecture for the Museum of Australia.

And finally, there are many more productive ways in which scarce funds can be spent to benefit the park than to squander them on a demolition which is not warranted.

Reg Alder

President's Response

- 1. The decision by the Parks and Conservation Service not to immediately demolish the cottage at Cotter Flat, and to review its status in five years was based on its use for management purposes not its cultural value.
- 2. There is **no** 'recommendation' from the Namadgi Sub-committee recorded in the Committee minutes that the building should be preserved. It was agreed at the May Committee meeting (attended by all Committee members except Kevin Totterdell) that 'the Association should lobby for the disposal of the



The original Cotter Hut in 1942. Only sunken earth and a pile of chimney stones remain to show its location.

Copy photograph by Reg Alder from original by Bill Holesgrove.

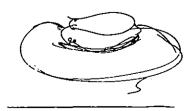
building during this time' (i.e. 5 years until review of the Plan of Management). No such lobbying has yet been carried out. With regard to notifying members of the decision, it should be noted that a whole range of decisions are made by the Committee—only a limited number of which are reported in 'Committee News' in the *Bulletin*.

- With reference to Cotter House. mere association with past activities does not, by itself, confer historic value and an imperative to preserve. If it did, the Service would have been bound to preserve the Cotter Flat arboretum, Evaluation of historic value must include other factors. For example, does the building show a particular architectural style now rarely seen, traditional craftsmanship or the skillful use of local materials? The answer is 'no'-Cotter House is a fibro walled cottage similar to thousands of others that may be found throughout Australia.
- 4. Nevertheless, it can be argued that the site does have historical significance and should be documented.
- 5. The building should be placed in the context of the zoning of Namadgi National Park. It is located in the declared wilderness zone and arguments for its preservation should take into account the concepts of wilderness.

Fiona Brand

Sybil and Robert Story

This is to convey our appreciation to Fiona as she steps down from the committee she has served on for twenty-five years. It has been a selfless duty broken only by her visits overseas and supplemented by additional duties on sub-committees, as editor, and as hostess at the committee meetings, where for many years she supplied the shelter and sustenance that were always welcome and sometimes badly needed. We look forward to her continuing support from the sidelines - lending a hand on outings. making new members welcome, pointing out how right something is (or how wrong!), standing in for people, and being available whenever a bit of cheerful willing help is needed. We count on that as confidently as we count on the NPA to back us in what we have said. Thank you, Fiona.



National Estate Proposals in the Canberra Region

Several places in the district familiar to NPA bushwalkers have been proposed for listing in the Register of the National Estate.

They are the Micalong Swamp area, the London Bridge natural arch and the Upper Murrumbidgee River.

The Australian Heritage Commission considers the Micalong Swamp important because it is an unusual montane peatland and one of the largest remaining ones on the south-western slopes. It is a valuable wildlife and flora habitat and is surrounded by a large number of Aboriginal sites.

The London Bridge natural arch is one of the outstanding geological monuments in the Canberra region. The Upper Murrumbidgee River – extending from Tantangara Dam to the mouth of Oakey Creek about 20 kilometres north of the northern border of the ACT – is considered to have the only remaining, naturally occurring population of trout cod (Maccullochella macquariensis), a

species at the top of the list of endangered fish in Australia.

Approximately three hectares of land set aside for the Queanbeyan Council rubbish dump is also proposed as it is a site containing the endangered daisy species, the Button Wrinklewort (Rutidosis leptorrhynchoides). Another colony of the daisy exists on Stirling Ridge in the ACT.

The places in the ACT proposed for the Register include:

- . The former Patents Office in Barton (now part of the Robert Garran Offices) one of the few late 1930's public buildings in the Federal Capital. Its design shows influences of art deco and the British Empire style of monumental public buildings.
- . The bush shelter near the intersection of Schlich and Novar Streets, Yarralumla – an unusually imposing example of a utilitarian building which reflects the architecture of early Canberra.

- The Cotter Pumping Station and Electricity Sub-station two of the first buildings for engineering purposes established in the district. The various pumps provide a record of the development of technology over 50 years in the supply of Canberra's water.
- The Forrest Fire Station and residence group the architecture of the residences, set against the more conservative fire station, provide an example of early modern architecture in Australia. The planning of such a grouping also reflects the former practice of fire officers having to live on the job.
- The Lanyon Bowl Extension a boundary amendment to the visual catchment area already listed on the Register.

The Register of the National Estate is the inventory being developed by the Commission of places that have 'aesthetic, historic, scientific or social' significance for present and future generations.

National Estate Proposals for Eden Forests

Recent action by the Australian Heritage Commission may help save three regions of native forests within the Eden woodchip concession area.

The commission has proposed that these three places should be entered in the Register of the National Estate. Such registration would bring into effect Section 30 of the Australian Heritage Commission Act which means that, before issuing export licences, the Federal Government would have to refer any proposal to the Commission for comment. The Tantawangalo and Coolangubra State Forests have been proposed as National Parks for some time, but are included in the areas proposed to be utilized post 1989 by Harris-Daishowa for woodchip production. The Eden Woodchip EIS did not satisfactorily consider alternatives to logging these areas.

As we saw last year in Tasmania, listing does not necessarily mean that woodchipping will be stopped, but it does draw attention to the value of the native forests.

In announcing its intention to propose the three places for listing on 20 October, the Commission issued the following descriptions of the regions:

Tantawangalo Creek Catchment

Approximately 10,000 hectares. 25 kilometres west-south-west of Bega, Tantawangalo Creek qualifies as a wilderness river protection area under the terms of the Wild and Scenic Rivers Committee Report. The area has wilderness qualities and includes moist forest elements, particularly ferns, unusual associations of eucalypts, and the habitats of the uncommon Tiger Quoll, the rare Powerful Owl, Gang Gang Cockatoos and a diverse and dense bat population. The area also has considerable aesthetic and landscape value.

Coolangubra Forest Area

Approximately 48,000 hectares. 15 kilometres south-east of Bombala. The area is especially important as a representative sample of once extensive forest, with types of forest association not found elsewhere. Its rare fauna includes potaroos, the Pygmy Possum, the Yellow Bellied Glider, the Tiger Quoll, the White-Footed Dunnart, the Feather-tailed Glider, the Peregrine Falcon, the Powerful Owl, Sooty Owl and the Gang Gang Cockatoo.

Nethercote Waterfall and Associated Outcrops

Approximately 180 hectares, seven kilometres south-east of Pambula, to be listed in four separate areas. The rhyolite outcrops are of geological interest and the unusual weathering of the rhyolite has formed the waterfalls. Four rare plant species are found on the rhyolite soil and its vegetation communities are most unusual containing many species which are at the southern limit of their distribution and otherwise unknown from the far south coast.

These three native forest regions come within the Eden woodchip area and consultation regarding the Australian Heritage Commission's intention to list them has been continuing over the last ten months with the NSW Forestry Commission. the company Harris-Daishowa and the Department of Primary Industry. The parties with an interest in the issue of renewal of the woodchip export licence are aware of proposals for listing. Under the provisions of the Australian Heritage Commission Act the parties involved are at liberty to object to the listing.

Survey 1986 of Glendale Tree Planting

TREE GROWTH (Excluding Natural Regeneration)

Charles Hill

Species	Date	Under 30cm		30-90cm		Over 90cm		Totals	
-		No	%	No	%	No	%	No	5
	_		·						
E bridgesiana	22.3.84	21	11	158	82	14	7	193	100
(Apple box)	24.4.85	11	6	146	78	30	16	187	100
	28.5.86	59 ⁽¹⁾	34%	83(1)	47.5%	32	18.5%	174	100%
E. pauciflora	22.3.84	5	22	12	52	6	26	23	100
(Snow gum)	24.4.85	1	5	10	47.5	10	47.5	21	100
(2	28.5.86	1	5%	5	24%	15	71%	21	100%
E. rubida	22.3.84	20	16	91	73	14	11	125	100
(Candle bark)	24.4.85	9	7	81	66	33	27	123	100
, (Garrano Barrill)	28.5.86	17(1)	15%	61(1)	53%	37	32%	115	100%
E. stellulata	22.3.84	19	31	40	66	2	3	61	100
(Black sally)	24.4.85	3	6	27	58	17	36	47	100
(Diaok daily)	28.5.86	3	7%	6	14%	34	79%	43	100%
TOTALS	22.3.84	65	16	301	75	36	9	402	100
	24.4.85	24	6	264	70	90	24	378	100
	28.5.86	80	22.5%	155	44%	118	33.5%	353	100%

TREE TOTALS AND LOSSES (Excluding Natural Regeneration)

Species	Date	Totals	Annua	al Loss	Cumulative Loss	
			No	%	No	%
E. bridgesiana (Apple box)	4.6.83 22.3.84 24.4.85 28.5.86	213 193 187 174 ⁽²⁾	20 6 13	9 3 7.5%	26 39	12 18%
E. pauciflora (Snow gum)	4.6.83 22.3.84 24.4.85 28.5.86	25 23 21 21 ⁽²⁾	2 2 0	8 9 0%	4 4	16 16%
E rubida (Candle bark)	4.6.83 22.3.84 24.4.85 28.5.86	137 125 123 115 ⁽²⁾	12 2 8	9 2 6.5%	14 22	10 16%
E, stellulata (Black saily)	4.6.83 22.3.84 24.4.85 28.5.86	90 61 47 43 ⁽²⁾	29 14 4	32 23 9.5%	43 47	48 52%
Totals	4.6.83 22.3.84 24.4.85 28.5.86	465 402 378 353 ⁽²⁾	63 24 25 ⁽²⁾	14 6 6.5%	87 112	19 24%

Notes to the Tables

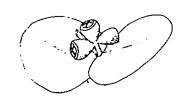
- 1. Some trees in these categories have died at the top with some new growth lower down. In effect their growth has regressed. See also Note 2.
- The totals include some trees which are not dead, but for which survival is doubtful as follows: E. bridgesiana 33, E. pauciflora 1, E. rubida 7, E. stellulata 3, Total 44. The loss figures should therefore be read with the possibility in mind of some early additional losses.

The annual survey was carried out on 28 May 1986 and the results are shown in the two tables below. Regeneration of *E. pauciflora* has continued near the small clump of adult trees at the southern end of the site. To avoid what is becoming a confusing statistical picture, all natural regeneration (i.e. not planted by NPA) has been omitted from the tables this time, including the 1985 figures reproduced for comparison.

Attention is drawn to the notes with the tables. The actual loss to 28 May 1986 is satisfactory, but a somewhat higher potential for additional loss exists because of the poor condition of some trees This is also illustrated in the growth table; E. bridgesiana shows larger numbers with growth under 30cm than in 1984 and E. rubida has a similar trend. The situation is that growing leaves and stems have died probably due to insect attack. long dry periods and very low temperatures; regrowth has occurred and this has in turn died and a further regrowth is struggling up from the base of the tree. The site is subject to a downward flow of very cold air and the losses and potential losses seem to be mainly in the lower areas where this cold air concentrates. We have noticed that young and semi-mature trees in the bush nearby are suffering in a similar way.

On the other hand there are some *E. bridgesiana* and *E. rubida* which have reached a good height. *E. pauciflora* and *E. stellulata* are doing well and some are close to 3m high; insect attack is much less so far for these species, although some scale has appeared.

The concepts of the planting plan are not really affected by the losses. *E. bridgesiana* when mature is a large spreading tree and if only 25% of our planting of this variety survive, it should be ample for the site.



How Many More Australians?

Ross Carlton

I recently attended a conference at the ANU dealing with population and entitled 'How Many More Australians?' There was some good debate and a number of very interesting papers but I came away a little disappointed. This was because of my perhaps unreasonable expectation that a conference should attempt to reach a consensus or at least produce a resolution that might possibly be of some use to somebody. I should know better. I have been to enough University conferences to know that academics seem to be content to present their papers without ever expecting that anybody might take any notice of them. Anyway, the lack of any resolution from the conference leaves me free to draw my own conclusions.

To set the scene we were given some demographic facts and forecasts. Although Australia's rate of natural increase is below the replacement rate, because of our present age structure our population will continue to increase until about the middle of next century. With zero migration we would have a population of about 19 million by 2021. With roughly the level of immigration we have had for the last few years (about net 75,000 per annum) this would rise to 22 million and with a net 100,000 per annum, to 24 million. The Government recently announced sharp increases in the level of the migrant intake and some people believe it is considering even higher rates. We can therefore expect that by 2021 there will be at least 6 to 8 million more Australians than at present. Put another way, we will have the equivalent of another Sydney and another Melbourne.

There were two schools of thought on the importance of the migration issue to the population debate. One school (supported by the Department of Immigration and Ethnic Affairs) thinks that zero immigration is not a practical option and so we are only really looking at a range of 22 to 24 million. This is a small range and the argument on the size of the migrant intake is therefore of little significance. The other school believes that something close to zero migration is possible and we are therefore looking at a range of 5 million (19 to 24)

which is significant. These people also contend that immigration is the easiest factor in the population equation to control (easier than birth rates and death rates) and is therefore of prime importance.

There were also two schools of thought on the moral issues related to migration. First the view that Australia, as a rich and free nation, has an obligation to aid those less rich or less free. The alternative view was that Australia cannot solve the world's problem. Whatever we do will only be a drop in the bucket on a world scale and we should therefore consider immigration in terms of our own needs rather than as altruism. This was countered by the argument that even if what we do is not significant on a world scale we should be seen to be doing what we can. It was stated that people short of resources have a right to take the unused resources of others and we therefore need a higher population both to ensure that all our resources are being used and to improve our defence capability. The various speakers were poles apart and there was little agreement.

Once again there were two views on the economic merits of immigration. This is not surprising as everyone knows that the number of views on any economic question is equal to the number of economists studying it. One argument was that migrants bring in capital and create jobs (a figure of 4 jobs per migrant was quoted) leading to economic growth and greater wealth. There was some disagreement however as to whether this would also mean increased per capita wealth. The

alternative view was that large sums must be spent on housing and servicing migrants (\$2.3 billion on Government services to accommodate an additional quarter million people in Sydney). A higher population increases the pressure on resources, including land. It was also pointed out that if increased immigration did not produce the predicted economic growth, the result would be increased unemployment.

The sociologists warned of some of the dangers of increased immigration, particularly if, as seems likely. many of the newcomers move into the larger cities. They talked of social inequality, increased population densities, increased crime. increased social control and reduced freedom and choice. There was some spirited response from the representatives of migrant groups and it was made clear that the problems foreseen are largely the result of population numbers rather than cultural differences. That is, the problems would be much the same if the increased population was due to natural increase rather than immigration. The town planners also discussed the problems and social changes inherent in high population densities but nevertheless came down on the side of growth. It was stated that no growth would create more planning and financial problems than high growth. Stasis, it was claimed, is neither attainable nor desirable.

There was less dissention among the natural scientists and environmentalists. It was pointed out that Australia is not well endowed with certain resources including oil, phosphates, rainfall and high quality soils. Australia has about 70 million hectares of potentially arable land

AUSTRALIA'S ALPINE AREAS MANAGEMENT FOR CONSERVATION

Papers from a conference held at the Australian National University, November/December 1985.

Edited by Kevin Frawley.

Illustrated with maps and photographs, 178 pages.

Available from the NPA Office. Kingsley Street, Acton \$8 or \$12 posted. and the area of our cropland is about the same as that of the State of lowa. It was also claimed that 6 tonnes of topsoil is lost for every tonne of wheat harvested. Various warnings were given about the declining productivity of our soils and the danger of global warming which is expected to reduce still further the rainfall in the southern half of the continent. It is expected that the additional population forecast will lead to greatly increased settlement along the east coast where the consequent urbanisation will compete with agriculture for some of our best land. It was agreed that increased population means increased environmental damage. Judith Wright pointed to the damage we have already done and suggested that the answer to the question 'How many more Australians?' might be 'None, if they are all like us'. A number of speakers suggested Sweden as a model for Australia. Sweden is a modern industrialised country with a stable population of only 8.4 million. Two speakers suggested that we should be aiming at reducing rather than increasing our population.

There seemed to be no recognition by the pro-growth side that they were inevitably talking about a temporary, short-term situation. Although it was not spelled out, there seemed no awareness that there must be limits to growth. This attitude was described by Prof. Boyden as a cultural delusion i.e. a delusion shared by almost all the members of a society. He suggested that this delusion would seem as incomprehensible to future generations as does the cultural delusion of the Aztecs to us. (The Aztecs believed that prosperity could be achieved through the sacrifice to the gods of live human hearts.)

The conference was notable for the variety of views expressed and the way in which different people saw different aspects of the question as important. As there was no resolution, I feel free, as I said at the beginning, to draw my own conclusion, which goes something like this: People use resources and resources are limited. Therefore there must be limits to growth and, in the long term, we must be looking towards a stable population. A high priority for our society ought to be the identification of the optimum

population level for Australia and the development of policies aimed at achieving and maintaining that level. In view of the wide scale degradation of our soils and pollution of our fresh water, it may be that we have already exceeded the optimum level. An additional 6 to 8 million people will place enormous pressures on all our resources, including national parks.

Editor's Note

As a result of this report on the ANU conference, NPA has written to the Minister for Immigration and Ethnic Affairs asking the following questions:

- What does the Government see as the optimum population level for Australia?
- 2. When is it expected that this level will be achieved?
- 3. Where is it expected that the additional 6 to 8 million Australians forecast for 2021 will be housed and employed?
- 4. What, in broad terms, will be the environmental consequences of this?

How Wide Are Our Interests?

Den Robin

Some curious comments were made by the Federal Member for Mallee, Mr Peter Fisher, in Parliament on the tabling of the report on Namadgi National Park by the House of Representatives Standing Committee on Environment and Conservation.

Mr Fisher talked about the 'double standards' that had surfaced during the inquiry. He said, to quote:

'It is absolutely legitimate and important for concerned people, whether they be landholders, political parties or park users, to indicate their views in a robust manner. But I find it of great concern that individuals in the political life of the Australian Capital Territory, both at the parliamentary and political party level and within departments, who were noticeably silent when this Committee was involved in the important issues of national significance such as the development and creation of the Barrier Reef National Park, Uluru National Park, Kakadu National Park or the South West Tasmanian issue, should suddenly be both vocal and of conflicting opinion on the Namadqi question.'

Mr Fisher's comments are not directed at the NPA - obviously we should be more concerned about what happens in our own area than about things further afield. However, they do raise the question: should we be broadening our field of interest? Should we become more involved in 'national' or other issues outside the Canberra district? Or. on existing resources and the numbers of willing members, should we be concentrating more on matters in the national capital, the Jervis Bay territory and those nearby places we know and love from our bushwalking?

The Committee would be interested to hear members' views on this subject. Our two major 'activist' Sub-committees – the Namadgi Sub-committee and the Environment Sub-committee – are handling an ever-increasing number of local issues, but we know that the Assoc-

iation has members who are more familiar with the types of places Mr Fisher is talking about through their travels or through their professional endeavours.

If it is felt more involvement is necessary the Committee would welcome the input of these members, in the form of alerts about current and pending problems, articles for the Bulletin, first draft letters, guidance on when NPA should act and the supply of relevant background information.

We should be tapping all resources, so if you have knowledge and concern, please speak up. Your President is a phone call away!

News Flash

News Flash

On 3 October 1986 gazettal of the Budderoo National Park, on the escarpment near Kiama, was announced by the NSW Minister for Planning and Environment. The Park includes Minnamurra and Carrington Falls, contains stands of red cedar and the rare Grevillea rivularis, and is sanctuary for bristle bird and ground parrot.

Just Briefly-



It appears that the very first Life Be In It walks associated with the NPA. occurred earlier than at first reported in 'Just Briefly'. In 1982, Olive Buckman was approached by the Life Be In It organiser to put on a 'gentle' walk as part of the first Senior Citizens' Week, Olive asked that it be done under the name of the NPA, and got a number of members to help her. (Sheila Kruse, Gladys Joyce etc).

After three days reconnaissance, she managed to find (a) a fairly level track, (b) a short track out to the road (in case of emergency), and (c) a nice picnic area, halfway along the route.

Came the day, and Olive with her helpers went to the picnic spot to set up seating and refreshments. They arrived back just in time to see a CTC7 camera crew unofficially giving the go-ahead over the stile. However, with Olive established as leader and with the help of other members, the walk went off well, with the added bonus of everyone seeing themselves on the TV news that night.

Some months later came another request from Life Be In It to organise about six walks. Olive could not do this herself so she contacted some NPA friends, including Bob and Sybil Story. As they were unable to help, their daughter, Muriel took over and from there the story continues as 'Just Briefly' reported in the last issue of the Bulletin.

* * *

Seat allocation on interstate buses is a game of chance as to one's travelling companion for the many hours between capital cities. A lucky draw for this NPA member travelling from Canberra to Melbourne recently was the company of the past-president of a Perth walking club.

This friendly and very interesting lady said that NPA members visiting Perth would be welcome to join the Western Walking Club on any of their outings. Interested members could ring 88 1889 for further information.

* * *

After three Canberra winters I have become accustomed to, but still gaze in wonder at, the vibrant colours of king parrots promenading on the window sill. The brilliant pattern of crimson and eastern rosellas on the lawn still enriches an otherwise grey day. However, the parrot world had still more delights in store. Late in May came the unheralded arrival of two flamboyant free-loaders. Their breasts of orange and red rivalled the morning sunlight. With rapid bobbing of violet heads, they fed hungrily whilst the vivid green of their backs confused the kingparrots. These were the dazzling rainbow lorikeets. Mainly a bird of lowland forests, usually east of the Divide, they are recorded in Canberra as irregular or rare visitors and are known to the 'birdos' as 'vagrants'. That is, unless they are escapees from an aviary. Canberra Ornithologists Group, COG, invite NPA members to avail themselves of Bird Report Forms if they are willing to record unusual sightings (of birds, that is). (COG phone 48 5140)

* * *

Congratulations to Peter and Mary Ormay on the birth of their daughter. Lowana.

* * *

David Brumby would like to hear from anyone interested in joining him on 2 day walks mid-week, as he works weekends. David may be contacted on 47 2839.

* * *

Sophie Caton's report of dieback in German pine forests, has prompted Bernice Anderson to report that in a small park in the city of Basel. Switzerland, the trees are tied with ribbons which are colour coded to indicate the health of the tree: blue (healthy), white (ailing), yellow (sick), red (dying), black (dead or felled due to disease). These trees were

all large, established deciduous trees of various species. Nearly every one was tied with a white or yellow ribbon.

* * *

Seen any koalas lately? Katherine Crisp of the ACT Parks and Conservation Service would like you to report any koala sightings. Remember that the best way to locate koalas is to look for their droppings which are about the size and shape of a jelly bean, and smell strongly of eucalyptus. Katherine may be contacted on 46 2127 (work) or 86 6052 (home).

From the Story Book (2) 'From Lamington National Park' or 'A Rummy Rat'

Where every ounce seems like a pound by the time you make camp at the end of the day, you go easy on the luxuries you carry. So it was that on our walk round the Scenic Rim (between NSW and Queensland) we opted for OP rum for that welcome evening snifter. At 30% alc/vol a little goes a surprisingly long way towards relaxing tired muscles and heightening your appreciation of the rainforest giants and the beasties that live among them. The occasion of our first snifter was a Rackham drawing come to life. A bright-eyed forest rat came from the twisted mossy roots of an Antartic beech next to our tent and busily went about foraging for his supper — all rather beautiful, yet with that indefinable touch of menace that is so characteristic of Flackham's drawings. We would have done well to heed that touch. Of course we didn't, and it would have been round midnight that a hint of rum on the air and an intermittent scrabbling awakened us. The rat! He lifted his head from the plastic bottle our rum was in and cocked a bleary eye along the beam from the torch, then returned to the bottle without being in the least put out by our noisy indignation: lit up inside and out, he stood his ground until we were almost on top of him. It is beyond possibility that he could have drunk all that was missing (about half, because he had gnawed through the bottle a long way down) but we still hope he got enough for a stunning hangover. Perhaps we should have let him be,

ON THE TRACK

Be punctual at meeting places.

Listen to advice from the leader; don't leave the party without informing the leader.

EQUIPMENT

Wear proper walking boots or shoes with rubber soles and thick socks. Take windproof and waterproof clothing and a hat.

Take plenty of food and water.

Take a map and compass, a torch and matches.

Carry basic First Aid equipment. Walkers are responsible for their own injuries.

WALKING

Get through rather than over fences; but if climbing do so at a post.

Leave gates as you find them; make sure the last person knows whether to close the gate or leave it open.

In scrub, walk a few paces behind the person in front. It is the responsibility of the follower to avoid the springing twigs, not the one in front to hold them back.

CONSERVATION

Do not litter. Carry out what you carry in.

Do not pick wildflowers, or disturb animals or birds.

Remind your children about conservation of the bush.

Do not allow stones to be thrown, bushes broken, rocks dislodged, or wildlife habitats disturbed.

Replace aboriginal artifacts, and do not deface aboriginal art. Leave dogs and other pets at home.

The President and Committee wish all members

A Merry Christmas and Prosperous New Year

and incite everyone to the

Christmas Party

at Orvoral Valley Picnic Ground at 3 p.m. on Sunday, December 14



· Bring an evening meal »

- Wine, cheese, biscuits provided -

- maybe a cake

Aims and Objects of the Association

Promotion of national parks and of measures for the protection of fauna and flora, scenery and natural features in the Australian Capital Territory and elsewhere, and the reservation of specific areas.

Interest in the provision of appropriate outdoor recreation areas.

Stimulation of interest in, and appreciation and enjoyment of, such natural phenomena by organised field outings, meetings or any other means.

Co-operation with organisations and persons having similar interests and objectives.

Promotion of, and education for, nature conservation, and the planning of land-use to achieve conservation.

OUTINGS GUIDE

Day Walks - Carry lunch, drinks & protective clothing

Pack Walks - Two or more days, carry all food and camping requirements. CONTACT LEADER BEFORE

WEDNESDAY.

Car Camps - Often limited or no facilities. Vehicles taken to site can be used for camping. BOOK WITH

LEADER EARLY.
Other activities include Nature Rambles, Field Guide Studies.

Ski Tours, Snow Crafts, Tree Maintenance and other projects. DAY WALKS — GRADING

- A Up to 15 km, mainly on tracks or forest roads, relatively flat terrain or shorter distances through trackless open bushland.
- B Up to 20 km, mainly on tracks or shorter walks through trackless open bush.
- C As for 'B' may include rougher terrain, i.e. heavy scrub, rock hopping or scrambling or steep terrain.
- D Up to 30 km, relatively easy terrain or less over trackless or steep terrain.

PACK WALKS - GRADING

- 1 Up to 14 km a day over relatively easy terrain.
- Up to 20 km a day, may involve long ascents.
- 3 As for '2' may include rougher terrain, le,heavy scrub, rock hopping or scrambling.
- 4 Strenuous long distance or much steep climbing or very difficult terrain.
- 5 Exploratory in an area unfamiliar to the leader.

Additional information will be contained in the actual walks programme. If necessary contact leader.

OUTINGS PROGRAM

December 1986 - March 1987 (Just)



POINTS TO NOTE

New faces to lead, new places to go! Please help to keep our Outings Program alive by volunteering to lead a walk occasionally. Contact Walks Convenor lan Haynes on 51 4762 (h).

All persons joining an outing of the National Parks Association of the A.C.T. do so as volunteers in all respects and as such accept sole responsibility for any injury howsoever incurred and the National Parks Association of the A.C.T., its office bearers and appointed leaders are absolved from any liability in respect of any injury or damage suffered whilst engaged in any such outing.

The Committee suggests a donation of FIVE cents per kilometre (calculation to nearest dollar) be offered to the driver by each passenger accepting transport. Drive and walk distances quoted in the Program are for approximate return journeys.

* * * * * *

6 December - Saturday Tree Maintenance

Ref: ACT 1:100 000 Glendale

Leader: Charles Hill 95 8924

Arrive anytime after 0930 with gloves and heavy gardening tools for tree and quard maintenance

6/7 December - Pack Walk (2)

Kiandra Ref: Tantangara 1:100 000

Leader: Denise Robin 81 4837

Contact leader by Wednesday for details of this walk from Kiandra to Witz's Hut, Hains Hut and Gooandra Ruins. Walk mostly on tracks, over undulating terrain. 380 km drive.

7 December - Sunday Walk (A)

Big Hole/Marble Arch Ref: Kain 1:25 000

Leader: Arno Wynd 47 8542

Meet at Canberra Railway Station 0730. A pleasant 10 km walk on tracks crossing the Shoalhaven River to the intriquing Big Hole and then to the fascinating Marble Arch, 190 km drive.

13 December - Nature Walk

Tidbinbilla Ref: ACT 1:100 000

Leader: Sue Armstrong

Meet at Tidbinbilla Information Centre 1630 sharp. Interpretative water bird walk 1700, koala walk 1800. BBO evening mea! (bring own food), 2030 spotlighting for night birds and animals. Information leaflets provided Bring binoculars and torches. Contact outings convenor for details (51 4762).

14 December - Canoe Sunday

Casuarina Sands/Urlarra Crossing Ref: ACT 1:100 000

Leader: Peter Marshall 47 4899

Meet at Casuarina Sands car park 0800. A canoeing Sunday down the Murrumbidgee from Casuarina Sands to Uriarra Crossing. All equipment, instructions and bus shuttle provided. All inclusive cost \$60.00 for this all day event. Contact leader early for details.

14 December - Sunday Xmas Party

Ref: ACT 1:100 000 Orroral

Leader: President

Meet at Orroral picnic grounds 3 pm for NPA Xmas Party.

10/11 January - Pack Walk (4)

Ref: Belowra 1:25 000 **Tuross Gorge** Leader: Philip Gatenby 84 4970 (w) 41 6284 (h)

Contact leader by Wednesday for details of walk in Wadbilliga National Park. Plenty of rock scrambling and swimming with packs to get through gorge. 320km drive

17/18 January - Pack Walk (2)

Wombat Gulley Ref: Thredbo 1:50 000

Leader: Craig Allen 52 6058 (w) 54 9735 (h)

Contact leader by Wednesday for details of walk in the Mt Terrible area south of Thredbo, the highest point visited by John Lhotsky. Discover the gold fields of the 1860s. 380km drive

24/25/26 January - Pack Walk (1)

Kowmung River Ref: Shooters Hill 1:25 000

Leader: Reg Alder 54 2240

A 4 km walk to a base camp on the Kowmung River in the Kanangra-Boyd National Park A 60m clamber down a ridge alongside the Tuglow Falls. Walks along the Hollanders, Tuglow and Kowmung Rivers in spectacular country. A \$2.00 parking fee is required for leaving each car on private property, 500 km drive.

31 January, 1/2 February - Pack Walk (2/3) Rocky Flat Area

Ref: Rendezvous Creek 1:25 000

Leader: Robert Story 81 2174

Contact leader by Wednesday for details of walk in the Namadgi National Park. Camp in one place and have trips each day - terrain is rough and steep in parts. 100 km drive.

1 February - Sunday Walk (A/B)

Shoalhaven River Ref: Braidwood 1:100 000

Leader: Neville Esau 86 4176

Meet at south end of Warri Bridge on way to Braidwood at 1000. A walk of 3 km downstream to excellent swimming/li-loing areas. Plenty of opportunities for cooling off. on the way also - great for the kids. 140 km drive.

7/8 February - Pack Walk

Ref: Araluen 1:100 000 Deua Leader: Garth Abercrombie 81 4907

Contact leader by Wednesday for details of walk in the Deua National Park.

7 February - Saturday Walk (A)

Majors Creek Ref: Araluen 1:100 000

Leader: Charles Hill 95 8924

Meet at Canberra Railway Station 0830 5 km walk across open scenic country from village to waterfall, 200 km drive

12 February - Thursday Walk (A)

National Botanic Gardens Ref: Canberra UBD Leader: Gladys Joyce 95 6959

Meet at Information Centre 1000. Walks through tropical rainforest and other interesting walks in the gardens Lunch in the amphitheatre area 4 to 5 km walk.

15 February - Sunday Walk (A)

Swamp Creek Ref: ACT 1:100 000

Leader: Di Thompson 88 6084

Meet at Eucumbene Drive/Cotter Road 0930 for easy 4 km stroll along Swamp Creek to swimming hole, 40 km drive

14/15 February - Lodge Flower Weekend Kosciusko Ref: Kosciusko 1:100 000

Leader: lan Haynes 51 4762

Come and enjoy some of the magnificent Kosciusko alpine flora. Stay at a Charlotte Pass Lodge. Contact. leader early for details. Numbers limited, NPA members only, 420 km drive 212 to 3 hrs one way.

21/22 February - Pack Walk (1)

Goodradigbee River Ref: ACT 1:100 000

Leader: Fiona Brand 47 9538

Easy 2km pack walk for beginners and children, Contact leader by Wednesday for details 160 km drive.

21 February - Saturday Walk

Mt Budawang Ref: Braidwood 1:25 000

Leader: Kevin Totterdell 81 4410

Meet at Canberra Railway Station 0830 for drive to the Mongarlowe side of Mt Budawang for walk to the top with extensive 360" views, 180km drive

28 February/1 March - Pack Walk (3/5) Island Mtn/Camping Rock Creek

Ref: CMW Budawangs

Leader: Eric Pickering 86 2128

Contact leader by Wednesday for details of this walk in the north Budawangs Most of first day spent in Crevasse Canyon, where if conditions permit swimming will be possible Returning via Island Mtn. 340 km drive.



to make certain, but it's difficult to weigh things up dispassionately when you are in crisis.

So much for the fond belief that a taste for grog must be acquired, and that animals especially turn from their first drink with loathing. At least one rat is not like that!

* * *

Many thanks to the contributors of material to this column since it began appearing under its current mellifluous signature. Seasons greetings to all NPA members and please remember to make a note of those 'holiday happenings' which readers can laugh at, or learn from. Phone 88 1889.

Best wishes for 1987.

Melliodora



Creeping up on Point C.

Photo by Margus Karilaid



Map and Compass Instruction

Jennifer Jeffress

Twelve people took part in this most enjoyable and informative day. At 9 o'clock promptly on 27 September Margus Karilaid started drilling us all on how to find and give grid references, find features on maps and read the contours. At last

I think I can tell the difference between a spur and a valley. We also did a few exercises planning the best routes between points on a map. We stopped for a quick cup of coffee, then returned to be briefed on the skill of using a compass in conjunction with a map. We learnt how to take back bearings, grid bearings and magnetic bearings and how to convert grid bearings into magnetic bearings and vice versa. One of the most important things I learnt was the mnemonic for remembering these conversions - namely, to convert a grid bearing to a magnetic bearing you subtract the magnetic variation (in this part of the world at any rate) - the mnemonic for this was GrandMa Sucks - G for grid bearing, M for magnetic bearing and S for subtract - crude but at least it has stuck in my mind. To convert a magnetic (compass) bearing into a grid (map) bearing you add the magnetic variation - the mnemonic for this was CMA (Central Mapping Authority).

We had a late lunch and drove to Black Mountain where we tried out our skills. Margus was a bit disheartened to find that some of us were a bit slow in applying our new knowledge, however, we all enjoyed ourselves and with the help of Margus found our way back to the cars by 5 pm.

Thank you for foregoing the football Margus – your time and effort were greatly appreciated. My only disappointment was that I couldn't come the next day to try out my new skills.



Black Mountain Tower? ... Thataway.

Photo by Margus Karilaid

National Parks on the Level

Syd Comfort

Having panted up a steep hill on a hot day, and while there enjoying the well-earned view, a companion remarked that when he remade the world he would put the good views at the bottom of the hills. At the time, the notion while attractive, was dismissed as quite fanciful. But on reflection I realised that there was a way to enjoy views from the level, one which in some small measure I had indulged over the past year. A number of our national parks lend themselves to viewing from sea level and it is arguably the best way to see them combining the pleasures of boating with enjoyment of the environment.

The Myall Lakes National Park immediately springs to mind. The three camp sites along the shores of the lakes provide good opportunities for enjoying the uniqueness of each locality but a boat, as well as providing access to these areas. opens up many other areas not otherwise easily accessible. And what engaging names, Wallaby Joes Bay and Tickerabit Beach, for example. Some features of the Myalls are clearly etched on my memory from a week spent on the waters in October last: the abundance and variety of the bird life from colourful fig and mistletoe birds through hauntingly noisy pigeons to nesting sea eagles; the clarity of the water in the northern lake, the water being practically fresh but due to a lack of significant direct river inflow remaining crystal clear even after periods of heavy rain; the variety and intensity of sunsets perhaps the most characteristic being seen across the shoreline of beautiful melaleucas to the sculptured outline of the western ranges. And for those who still yearn for the hard-earned view there are hills to climb with extensive panoramas over lakes and coastline.

The Ku-ringai Chase National Park provides interesting bush walking with extensive views over Pittwatter and Broken Bay but also extends down to the water's edge along many miles of shoreline. Much of Pittwater is studded by development but further west in the area surrounding Cowan Waters the park has seen relatively little distur-



Myall Lakes.

Photo by Syd Comfort

bance. Visiting these shores by boat, it is fascinating to consider that much of this area is little changed from the time when it was first visited by Governor Phillip during his exploratory trips in the very early days of the colony at Sydney Cove. Today, this Hawkesbury sandstone country still carries many plants which were among the first to become familiar to the general public and contributed to a wider awareness of our rich floral store. In Feburary last, perhaps the most outstanding amongst the floral displays were the casuarinas in flower providing a reddish-brown spread through the dark green of the foliage.

Much of the Ku-ringai Park shoreline descends steeply to the water so sandy beaches are rare but those that occur are delightful. Narrow, almost non-existent at the highest tides, these beaches are backed by sheer sandstone cliffs and flanked by huge blocks of stone weathered into intricate sculptures. At some, a waterfall issues over the cliffs at the head of the beach so that one can enjoy a natural fresh water shower after swimming in the salt water of the inlet. The National Parks Service provides moorings for the public in a number of the coves and in some places rubbish drums close to the water's edge. Cleared by the park staff, these no doubt alleviate the ever-present rubbish problem but

at the cost of being somewhat unsightly.

The Park authorities in Croajingolong National Park have gone a good deal further in providing facilities for visitors exploring the park by water. Extending from Mallacoota, the park covers nearly all the foreshore land of the lakes which make up the Mallacoota Inlet. Apart from the township area around Mallacoota there are very few private properties bordering the lakes so that a large natural area of water and bounding bushland has been preserved. This contains considerable variety from sand-bars near the entrance to a steeply sloping passage between Bottom and Top Lakes and on to some miles bordering the scenic Wallagaraugh River. The park is best explored by water and to facilitate this the park authorities have provided picnicking and camping facilities at a number of places along the foreshores. Travelling from Canberra by the Mount Imlay Road, Mallacoota is within easy reach and provides an undeveloped land and water scene of great charm and with a feeling of real remoteness.

Sea level certainly provides some great angles on national parks. Take the puff out of park exploration and try it!



A Walk In Nadgee Nature Reserve

Judith Webster

On a Monday early in May, five NPA friends – Beverley, Fiona, Neville, Reg and myself, set off on a pack walk in the Nadgee Nature Reserve.

The weather was sunny and warm and we felt an uplifting of spirits as we set forth. Our first delight was to see all the Epacris impressa in flower – bright red clusters of bells. Each day we were thrilled to discover other heath plants in bloom; small dwarf-like banksias and grevillias, Correa rubra, tiny paper daisies, and sturdy little wattle bushes with thick furry golden blooms.

We were intrigued when we suddenly encountered hundreds of yellow faced honey-eaters flitting from tree to tree. They seemed to be in a migratory phase, possibly arriving from inland and were undecided on territories, or maybe they were still in transit. We also flushed out a pair of rare green ground parrots from the cover of the heath.

Fiona and I had our first swim of the trip in the Little River. It was very cold (a swim in the sea later that day was warmer). We had lunch sitting in the sun by the river, then crossed a beach and climbed on to Impressa Moor, the first of three moors. The others were Nadgee and Endeavour. When I wrote up my journal, I became increasingly confused as to which moor and which beach we had crossed or when! One might say then, that this account is more an endeavour to portray an impression of our walk than to give a minutely accurate description!

The first night we camped by Nadgee Lake, a delightful campsite amongst tall gums. It was a shallow, salty lake but with a good freshwater creek running into it. The lake was very tranquil and adorned by a small flotilla of black swans.

On the second morning, under a cloudy sky we skirted the lake, crossed over the sand bar at the top onto the ocean beach and thence up onto the moor following the track down to the Bunyip Hole. This is one of the few possible campsites on the walk because of the water supply. However, the 'hole' was now a shallow depression of sticky mud among forlorn looking dried reeds.

Soon we reached a long sandy beach where a part of wreckage from a fishing trawler sticks out through the waves. It looked rather sinister—like a periscope spying on us from some submerged submarine! This wreck is only two or three years old.

We then headed for the BIG dunes that surround Cape Howe, the border of NSW and Victoria and the most easterly part of SE Australia. Here is a most unusual landscape—like some Arabian desert scene but with a backdrop of dark, bush-covered hills and, on this particular day, blue-black menacing clouds. Some of these dunes were pristinely smooth whilst others bore rippled patterns from the wind. From some, the top of burnt bushes or a twisted, dead tree protruded.

Centuries ago this part of the dunes had been 'captured'; plants had gradually taken hold and the heath spread down practically to the Cape. Then with the arrival of white man in Australia, settlers came to the area and grazed cattle on the heath. To encourage new tender shoots for feed, they regularly burnt the heathland. The heath plants had been unable to recover quickly enough to compete with the elements and wind-borne sand encroached - swallowing up the heath and shrubs and creating these huge bare dunes.

This is why Nadgee has been made into a Reserve - coastal

heathland is very fragile and much has been lost. To keep human pressure to a minimum but permit some researchers, bushwalkers and others to use and enjoy the area, certain restrictions are imposed on car camping and bushwalking.

At the border a marker had been mounted on a slab of concrete on top of a concrete cylinder which originally went 10ft into the sand. However, the sands had been blown away and now the slab stands about 8ft above the present sand level.

Remnants of two old wrecks were on this exposed rocky beach. Some pieces of the hull and machinery were wedged tightly under rocks. There was part of an anchor, its chain and the anchor windlass with its gypsy. These were all interestingly corroded in rusted layers and the once movable parts were now quite rigid.

Continuing south along the beach we crossed into the Croajingalong National Park in Victoria. Great strands of kelp were strewn across the rocks and further up on the sand was a lot of driftwood - large planks and scantlings used as dunnage on ships - ie packing between cargo. This was then dumped at sea when there was no more need for it. Other flotsam included the usual plastic containers, thick fishing nets, ropes and floats, an intact spotlight, fluorescent tubes and quite ordinary bottles transformed into objects of beauty - sandblasted to give a frosted or pearly appearance. Amid all this were the criss-crossing



Crossing Nadgee River.

Photo by Judith Webster

tracks of the dingoes which obviously roam far and wide in the Reserve

We then came to a shallow stretch of water lying at the edge of the dunes behind a sand bar. This was the creek flowing from Lake Wau Wauke. Leaving the beach we found a sheltered hollow among the banksias where we camped for two nights in the jolly company of noisy friar birds and talkative wattle birds.

The creek from the lake to the sea ran close to our camp beyond a few metres of reeds like a canal of regular width and depth. The water was dark in colour from tea tree tannin and brackish to drink; it rather spoilt the flavour of our beverages!

After setting up camp, we had lunch and then it began to rain. We spent an hour or so sheltering in our tents and when the rain eased, set off in search of driftwood for our camp fire. The sky began to clear and there were pale golden clouds atop Howe Hill. The creek reflected the soft evening colours and illumed the pre-dusk bathers in reddish golden light.

In the evening we had a lively fire with our 'dunnage' and were beginning to cook when down came the rain again. It was most uncomfortable cooking and eating in the rain everything became soggy or gritty. We huddled round the fire in raincoats or capes. When we went to bed another heavy shower had started but when I awoke in the night the stars were shining. I opened the outer tent flap so that I could breathe the cool night air and see the stars without moving my head from the pillow. I drifted back to sleep feeling wonderfully content.

Wednesday morning dawned fresh and bright. The wattle birds were calling noisily for us to get up', 'get up'. We spread our gear out on bushes to dry and set off to walk up the creek to Lake Wau Wauke. To keep the creek in view, we stuck close to it and this proved slow going through the thick young tea tree saplings along the banks. Drawing near to the lake, the scrub thinned out into a forest of huge old tea trees - 'like a primeval forest' to quote Reg. The lake presented an attractive large, reed-fringed, expanse of blue water with the peak of Howe Hill rising 1000ft behind.

In the afternoon we set off on a beach walk south to a point directly opposite Gabo Island. The wind was very fresh and invigorating; the sky now cloudless. It felt marvellous to be on that vast expanse of beach with just sand dunes, sea, sky, sunshine and wind.

Back in our sheltered hollow we began preparing our meal early before dusk overtook us. The wind dropped and in the gaps between the banksias we could glimpse a starry sky. We sat around our fire enjoying the peace, mellowed by muscat or cumquat brandy and mesmerised by the various changing colours of the flames in our driftwood fire.

On Thursday we began retracing our route to Newton's Beach. Once more the weather had changed the sky had clouded over, the air was still and humid. The seas were calmer and there were quite a number of fishing boats which must have come out from Mallacoota. Later in the morning a light sprinkling of rain dampened us but soon cleared. We had lunch at the lovely little campsite at Nadgee Lake. A fire was lit and we boiled the billy wholesomely fresh water from the creek - tea tasted good again. much to Neville's relief! The sun came out, a breeze shook the tree tops and it seemed the weather might clear. But no, the breeze died off again and it remained overcast. We walked on for about another 40 minutes to above Nadgee Beach where we set up camp.

On the way we saw some black cockatoos feeding in the heath. Usually one only catches glimpses of black cockatoos flying high over tree tops. As we moved nearer about 20 cockatoos suddenly rose from the cover of the heath. We all gasped with appreciation – these big black birds with their yellow cheek and tail feathers made an impressive sight taking off at close range.

Our campsite was near a rather dirty-looking, dried up swamp and amongst tea tree. The water at this site was from an uninviting hole in the swamp, very thick and dark in colour.

Some of us had a dip in the cold, grey sea and then walked along the beach to the Nadgee river to try to gauge the tide level for the crossing next day. There was a sea snake beached on the sand, writhing occasionally in its death throes and also 'crystal' jelly fish that looked like 'blobs' of clear ice. While on the beach we eyed the sky apprehensively and wondered if we would

escape a big black storm further north. Inland there were breaks in the cloud – bright holes with shafts of light beaming down to earth.

Back at the camp, as evening drew on, a lovely rainbow appeared, sharply defined against the black mass of cloud which had now shifted east and out to sea. In the west the sky was clear and at dusk a delicate cool pink beneath the massive starry arc. As we star-gazed that evening, we were puzzled by what appeared to be irregularity of the Green Cape lighthouse flashes. Later, a walk along the beach solved the puzzle. We could now see Green Cape lighthouse was flashing regularly though with somewhat feeble beam compared with the spectacular irregular flashes which we identified as lightning out to sea.

We again surveyed the river mouth. The tide was high and the river much wider. In the dark, with the incoming waves swirling in, it was difficult to assess the depth of the crossing, but we gained the impression that it might compel us to take the longer inland route next day.

Next morning dawned fine, clear and still. When we reached the river mouth, we discovered the water was only knee deep and the crossing easy. In fact, it was an anticlimax! We had visions of wading naked, chest deep in water with our packs balanced precariously on our heads, or swimming with packs across a strong current. Despite Fiona's additiction to total immersion, she had been nervous of the prospect of such a crossing!

We continued over heath and shore until we reached Little River. Before leaving this pretty spot some of us had the last swim of the trip. I must have 'toughened up' during the previous five days as the water didn't seem *quite* as cold as on that first morning! The remainder of the walk was over the moors in beautiful sunshine with one small side trip to Osprey Outlook which gave a great view of cliffs and coast-line.

We arrived at Wally Newton's Beach at lunchtime after an exceedingly relaxing and enjoyable walk. The terrain at Nadgee makes walking easy – tracks through the heath and beaches with no great big hills to climb. The weather is the unknown factor that can turn this into a 'hard' trip. We were lucky!



Bournda State Recreation Area (2,244 ha)

A short distance further down the coast from Mimosa Rocks is Bournda State Recreation Area. The first thing that impresses most visitors to Bournda is the natural beauty of the area. The park is well serviced with camping and recreation facilities, yet the natural environment is unspoiled, with a strong sense of primeval wilderness.

The diversity of water environments at Bournda — salt and freshwater lakes, an attractive lagoon and creek, amd a magnificent coastline — make the park unique among state recreation areas.

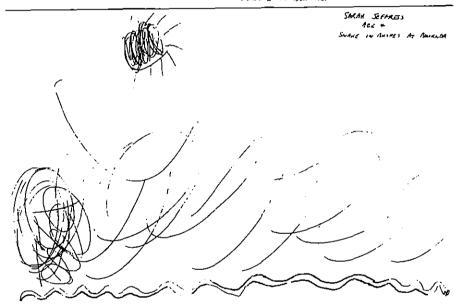
Tura, Bournda and Wallagoot Beaches are popular with swimmers, surfers and beach anglers. The shallows of Wallagoot Lake offer safe swimming to young and old alike. Sailing, power boating and water skiing are all catered for on the lake and visitors are invited to use the launching ramp at the Wallagoot Lake Boat Club area for which the club charges a launching fee.

A hand net, torch and lots of enthusiasm will often produce a good catch of prawns from the lake.

Bushwalkers, wildlife watchers and photographers make good use of the park's many walking tracks. These lead from the picnic and camping areas to key scenic points such as Bournda Island and Bournda Lagoon (with its charming suspension bridge).

Bournda State Recreation Area (0649) 41 209.





Bournda seen through the eyes of the children.

Field Guide to the Native Trees of the A.C.T.

Fi

This pocketbook describes 60 species of trees of four metres or more that are known to grow naturally within the boundaries of the ACT. It is written for the non-specialist and has instructions on how to use a botanical key. For easy reference it is divided into three parts – Eucalypts; Acacias and other species, with trees that are similar placed side by side.

Each species is treated separately and is fully illustrated, with a thumbnail map to show where authenticated specimens have been collected. A key to all species, index and glossary are provided.

The Field Guide is useful in the neighbouring Southern Tablelands (Goulburn, Cooma, Kosciusko National Park).

Price \$4.00

(plus \$1.00 to cover postage and packaging)

Produced by the National Parks Association of the Australian Capital Territory Inc, assisted by a Heritage Grant from the Department of Territories and Local Government.

Concept Of A National Capital Open Space System

Richard Freeman

The origins of the National Capital Open Space System date back to 1908 when the government of the day drew up the selection criteria to be used in choosing a site for the National Capital in the Yass-Canberra District. The Minister for Home Affairs, Mr Hugh Mahon. directed the District Surveyor, Mr. Scrivener to undertake a thorough examination of the area and recommend the most suitable territory for the purpose of the Seat of Government', Included in the selection criteria was the need for the National Capital to include the catchment area of the water supply for the capital' and that 'the Federal Capital should be a beautiful city. occupying a commanding position. with extensive views and embracing distinctive features which will lend themselves to the evolution of a design worthy of the object, not only for the present but for all time'. An often forgotten sentiment that was expressed at the time of selecting a site for the National Capital was that the Capital should symbolise a united people.

In 1909, the Australian Capital Territory, comprising 235,600 ha or 900 square miles, was ceded to the Commonwealth of Australia from the State of New South Wales. The task of transforming the sheep grazing properties of the limestone plains to the National Capital began in 1912 when it was announced that the competition for the design of the city had been won by the Chicago architect Walter Burley Griffin.

Griffin's winning design owed much to the pioneering planning work undertaken in the United States by Frederick Law Olmstead. He adopted the concept of providing linked open space systems to Canberra's local topography to create a large landscaped bowl dominated by the surrounding hills. Within this bowl, Griffin created a formal geometric design with axes radiating from Capital Hill. The primary land axis between Mt Ainslie and Capital Hill is intersected at right angles with a water axis along Lake Burley Griffin, originating at Black Mountain. The creation of Lake Burley Griffin and the retention of the inner hills, as a landscape backdrop to the city, now forms the heart of the National Capital Open Space System.

Growth of Canberra was slow in its early years of development. By the late-1950s there were only 39,000 people living in the aptly named 'Bush Capital'. The Federal Government stimulated a resurgence of interest and growth in 1957 with the creation of the National Capital Development Commission. A series of self-contained new towns were planned along the lines of what is commonly known as the Y-Plan. Development of these new towns followed the principles established by Griffin of retaining the local topography as a backdrop of open space to each of the towns.

Many of the hills and ridges now included in the open space system were originally sparsely treed and often badly eroded, due to overgrazing by stock and rabbits. Thomas Weston was the first Chief Afforestation Officer and Horticulturist appointed to the National Capital in 1913 and it was due to his early work that the treed hills and ridges are in the condition that we see them today. A policy of revegetation of the local hills with native species continues with efforts now being concentrated on the hills and ridges around Belconnen and Tuggeranong.

As the city has grown to a population now in excess of 260,000. there has been a change in community attitudes and expectations. A greater concern for the natural environment and changing recreation patterns has placed greater emphasis on the natural open spaces of the ACT. In response to these changes and the anticipated rise in population to 350,000 by 2000 AD, the National Capital Development Commission and the Department of Territories have now formalised the concept of the National Capital Open Space System and agreed to plan and manage the open space as a system.

The concept creates a series of linked open spaces extending from the city along the hills and river valleys to the mountains and bushland to the west of the ACT. This system of open space now enshrines the original planning principles of creating a beautiful setting and permanent water supply for the National Capital. It also protects many of the important habitats and cultural resources found within the Territory. In the longer term

NCOSS will provide for many of the increasing recreational needs of the local residents and visitors to Canberra.

A full appreciation of the concept of NCOSS requires some thought and active experience. As the city of Canberra has no immediate parallels to other cities in Australia, NCOSS bears no immediate parallel to other open space or park systems, at least in Australia. It is part National Park, part regional park and part symbolic park at the heart of the nation.

In area it is huge – 170,000 ha. In character, it is diverse with alpine meadows and wet sclerophyll forest in the mountains, extensive pine forests and grazing country outside the city, eucalypt covered hills surrounding the city and rivers and lakes providing the thread of continuity between the different areas. The Table shows the various components of the system.

To give substance and meaning to the system a number of initiatives are being taken to inform the public and provide appropriate opportunities to experience NCOSS. In the last 18 months a brochure and series of four posters have been printed. A comprehensive signage system is being developed to identify recreation areas and provide information about the area.

Increased access is being encouraged with the continued development of the cycleway network. The latest section is being constructed along the Molonglo River from Scrivener Dam to Weston Creek. In addition, a series of walking tracks is planned to link all parts of NCOSS. Recently, walking tracks have been constructed from Woods Reserve to Gibraltar Falls and from Kambah Pool to Pine Island, the first stage of the Murrumbidgee Walking Track. A network of equestrian trails is being expanded within and around the periphery of Canberra. It is hoped that by 1988 the National Trail will pass through the ACT providing a link in the route from Cooktown in Queensland to Melbourne.

To help integrate the Murrumbidgee river with the urban development occurring in Tuggeranong an extensive forward planting programme has been initiated. This year alone, over 100,000 native trees and shrubs will be planted along

COMPOSITION OF NATIONAL CAPITAL OPEN SPACE SYSTEM

Inner Area	ha
Hill Areas (dense forest or cleared land)	13,100
Hill Areas (pine forest)	3,600
Murrumbidgee River Corridor (inc. water area)	8,900
Molonglo River Corridor (inc. Lake Burley Griffin and associated parklands)	1,390
Lower Gudgenby River Corridor (inc. water area)	440
Lake Ginninderra and Ginninderra Creek Corridor	370
sub-total	27,800
Other Areas	
Namadgi National Park	94,240
Tidbinbilla Nature Reserve	5,060
Cotter Catchment (not included in Namadgi)	12,700
Other forests and pine plantations	30,500
sub-total	142,500
Total	170,300

the river between Point Hut and Tuggeranong Creek. With associated fencing it is intended that this planting will reinforce the visual and habitat quality of the river corridor and allow effective management of this sensitive area close to urban development.

A high proportion of both Canberra residents and visitors use NCOSS for recreation throughout the year. On a typical summer Sunday in 1985, it is estimated that 45,000 people visited river and lakeside recreation areas in the ACT. This daily total represents a ratio of 165 people per thousand population. To cater for this increasing interest and recreational demand on the Murrumbidgee River, it is proposed to undertake a substantial upgrading of the major recreation areas at Cotter/Casuarina Sands and Pine Island over the next few years. The first phase of this upgrading work has now started.

Interpretation and education are perhaps the key factors influencing full public appreciation and enjoyment of NCOSS. An understanding of the natural and cultural systems is paramount if we are to enjoy and respect the environment in which we live. Investigations are underway

on how best to interpret these systems for people of all ages. It is hoped in the next few years that visitor information centres can be developed at Jerrabomberra Wetlands and at Riverview on the way to Namadgi National Park. Next year it is expected that the visitor information centre at Tidbinbilla will be expanded to cater for the high level of visitor use.

Multi-use of the pine forests. particularly close to the city, have become increasingly popular in recent years. The 'Deeks Drive' area in Stromlo Forest has now become so popular for jogging and orienteering that car parking and toilet facilties, using a sewage composting system, are now being developed. Later this year, it is proposed to begin the construction of a camping area off the Uriarra Road. This facility will provide a convenient location for tourist and recreation camping within easy reach of the city and natural bush areas to the west.

Revegetation of denuded areas has taken on a new direction in recent years with the increased demand for fuelwood. The Department of Territories' Forest Branch and the National Capital Development Commission recently undertook a full field trial on North Lyneham Ridge. The hill has been planned as multi-use recreation area but will be managed for fuelwood production using a coppice with standards technique. This will ensure the hill retains its wooded appearance as selective areas are cropped over a 10 or 12 year cycle. Other suitable areas around the territory are being investigated with a view to creating a viable fuelwood industry.

As can be appreciated from the above description and the initiatives that are being taken, NCOSS is in its very early years of its establishment. Much needs to be done to ensure that the open space is planned and managed as a single fully integrated system. Not least of these needs is a public recognition and support for the role of NCOSS as a vital element in the National Capital.

Richard Freeman is Principal Landscape Architect, National Capital Development Commission.

NEW MEMBERS

The following new members are welcomed to the Association:

David ABELA, Figtree; Sue ARM-STRONG, Aranda; **BOMFORD** Family, Campbell; Richard BOM-FORD, O'Connor; Robert BRIGGS, Lvons: Rosemary BURGESS. Braddon; Mr Andrew CHIN, Mawson; Maureen CLARK, Rivett; Dawn CROCKFORD, Campbell; Olivia DICKERSON, Curtin; DOWD Family. Spence; Julie ENGLAND, Chapman; Anne ETHERIDGE, Farrer; Mr & Mrs M. EVANS, Canberra; Ian FENTON, Weston; Alan FORD, Curtin; Mr & Mrs Phillip FORD, Turner; Mr & Mrs P. FRY, Melba; Bernadette HARD-ING, O'Connor; Mr Christopher HOLLY, Weston; Sigrid KIRSCH, Fadden: Fleur LEARY, Kaleen; Judith MARTIN, Macarthur, Laurel LOWE, Goulburn; Mr & Mrs G. MARKS, Curtin; Dennis MCALLIS-TER, Lyneham; Christine ORR, Farrer; Phil PRITCHARD, Aranda; Marian SHAW, Curtin; Michelle SMITHERAM, Ainslie; Colin and Heather SOUTHWELL, Aranda; Shirley STEPHENSON, Goulburn; J. TASSIE, Chifley; Alex TUCKER, Barton; Mr and Mrs TURNER and family, Farrer.

The Navy In Jervis Bay.

Rea Alder

The September issue of the NPA Bulletin was a Jervis Bay special intended to be a wide ranging survey of the effect that the location of an ammunition depot and a naval base would have on the environment in and surrounding Jervis Bay.

I submitted a half dozen pictures, specially taken for the cover, to convey what words could not adequately express on the impact a naval base would have on the southern beaches. It has been said that a photograph can convey a thousand words. My photograph of Murray's Beach in the September Bulletin pictured concisely all that could be written about the clear crystal waters, the clean white sand, the unspoiled natural bush, the peacefulness, the solitude and the serenity, all of which was emphasised by the lone swimmer. However, the picture could only convey half of the story.

There are limitations to a photograph. It cannot look beyond its angle of view into the future to the looming threat of half of our Navy on a twenty year voyage, steaming inexorably along on a steady course to weather many environmental storms. From the onset the voyage has been neither necessary nor economical. The ordered target is Jervis Bay and the objective, the devastation of its beautiful southern beaches. The other half of my story, in a word picture, conveyed the effect the Navy would have on our other senses, our emotions and the environment, but for some reason it was not printed along with the photograph.

There is more to be said on the effect of the naval base than that which it will have on the natural attributes of Jervis Bay. Some 700,000 people visit the area each year, with little disturbance to the well managed facilities. Whilst there the bay is to them a constant joyful and emotional experience. Any disturbance will greatly modify that experience. I wrote my caption on 44 years of experience of what a naval base would have on the emotions of visitors, the very things that have disturbed the many residents of Kings Cross ever since the Captain Cook Dock was built. The file of protest must be by now feet thick.

I wrote for the cover picture: "Peace and tranquility at Murray's

Beach, Jervis Bay – a place to relax. Visualise in this scene the changes the building of a naval base will establish. The loss of recreational facilties, areas of exclusion from the waterfront, the blare of order giving loudspeakers, the throbbing, pulsing diesels, the earpiercing whine of gas turbines, the accidental oil spills, the jettisoned rubbish that did not sink, the visual pollution of the facilities, the vessels – a sign of the holocaust to come."

Some millions have been spent over the past few years on modernising Garden Island Dockyard and extending Garden Island into Woolloomooloo Bay as a Fleet Base. The work is not complete and now part of this facility for our major ships is being planned to be relocated or duplicated on the southern foreshores of Jervis Bay. Of the other bases in Sydney Harbour, the Patrol Boat Base at Balls Head is no real threat to Sydney as it is built on the excavated rock platform left after rockfill for the Captain Cook Dock was taken from the headland. The damage has been done and present impact minimal. The only real problem left is the submarine moorings at Neutral Bay, close to the Governor General's residence and high rise residential development. The base at Garden Island. Western Australia has relieved some of the pressure on this facility.

It has been said that one of the reasons for wanting to shift the Fleet Base to Jervis Bay is to restore the foreshores used by the Navy to public use. It is highly improbable that Garden Island Dockyard, as distinct from the wharfage and buildings of the Fleet Base, will be surrendered. The removal of the Fleet Base will have little effect on Garden Island as in some ways it is an integral part of it. The Dockyard will have to remain where it is since its operations are centred around Captain Cook Dock.

Rebuilding Garden Island Dockyard elsewhere is out of the question given the capital expenditure involved and hence the Navy would remain substantially in Sydney Harbour. The need for the shift to Jervis Bay has not been established and yet an EIS is being progressed as if the move will take place. Millions are being squandered on an EIS for a project for which the need has not been demonstrated. whilst duplicating work at Garden Island is continuing on Stage 2 of a project programmed for completion in 1991, with an eventual completion circa 2000 of Stage 3, at a total cost of \$190m at 1979 prices.

If berthing is denied to visiting nuclear powered and/or armed warships and the only alternative is Jervis Bay, I cannot imagine much enthusiasm from the crews for a rest and rehabilitation stopover, moored in a bay 200kms from the highlights and hotspots they have dreamed about after several weeks at sea. Our ships are small in comparison to the leviathan aircraft carriers and battleships of the U.S. and hopefully berthing or dolphins will not be provided for vessels of this size. If Jervis Bay is the only alternative to Sydney, perhaps they may stay away.

Decisions on the actual location of the base still have to be made. Anywhere on the southern foreshores of Jervis Bay will play on your emotions, increase your taxes and spoil the environment.

Funds Allocated For Cultural Conservation In Namadgi

Funds from the National Estate Grants Program have been allocated to the ACT Parks and Conservation Service for two projects in Namadgi National Park.

One is for a project strongly supported by NPA – the conservation of the historic Orroral Homestead. A total of \$12,000 has been allocated over three financial years. It will be used for further research and recording of the whole complex and practical conservation work on the homestead dwelling.

Some of the grant will be used in NPA's work, channelled through the working group set up recently between NPA, the Parks and Conservation Service and the consultant architect, Peter Freeman.

The other grant, of \$10,000 is for a comprehensive study of the natural and cultural significance of the Orroral Valley and development of a detailed management brief, as outlined in the Management Plan.

The National Estate Grants Program, administered by the Department of Arts, Heritage and Environment, is one of the Federal Government's major contributions to the conservation of Australia's heritage.

Living Marine Eco-Systems

Charles Hill

If you happen to visit Darwin, are interested in flora and fauna and intrigued by something unusual, then I recommend spending an hour or two at the 'Indo Pacific Marine'. This is a display of a lifelong hobby of a woman resident which is open to the public for an entrance fee on the outskirts of the city area.

There are about a dozen aquarium glass tanks carefully lit for living display. Each is a complete self sufficient eco-system to which no food etc. is added. Local sea water is used and is not changed but aeration provides some water movement. Each tank has a community of marine organisms, carefully selected to be mutually supporting and non-destructive to the other occupants of that tank. They range from fish, nudibranchs, crabs and shellfish to sponges, living corals, worms, seaweeds, algae, plankton, etc. (no crocodiles included; 'Crocodile Dundee' fans please notel) The content and set up of each tank are the result of much trial and error without the benefit of formal marine biologist qualifications. All the occupants are living as they do in nature, finding food in their surroundings, reproducing and contributing to the normal total life in the tank.

There are two exceptions to these closed systems: both stone-fish and angler fish in separate tanks need to kill and eat other fish fairly regularly. To these two tanks a new fish is introduced about once a fortnight destined to be food if falling for the trapping procedures of the



fish-eating resident of that particular eco-system.

Stools are placed in front of the tanks so that observers can sit and watch such things as coral polyps and worms extending their beautiful tentacles to feed, decorator crabs feeding and decorating, colourful nudibranchs undulating about, fish feeding, tiny coral polyp eggs moving freely in the water, etc.

Information at the tanks informs and guides observers, and one of the principals walks around regularly to answer questions and point out interesting occurrences such as the small parasitic male anglerfish fertilising the eggs of his much larger female host. While we were there, some children with their parents were intensely interested in what they saw and the explanations given.

All the organisms have been collected on the reefs around Darwin. This collection process is continuing, but these days is done at extreme low tide looking for rarely seen specimens.

Kangaroo Valley Car Camp

Pam Kefford

On 20 and 21 September last, a group of 28 attended the car camp, led by Russ Kefford, held on the grassy banks of the Kangaroo River at Lake Yurrunga. They were treated to a weekend of perfect weather at a picturesque spot, under huge sheoaks.

After setting up camp on Saturday and having lunch, most of the group drove to Upper Kangaroo Valley, amongst the green rolling hills with rocky cliffs as a backdrop, and with views of a high waterfall from time to time.

The cars were left beside the Kangaroo River just past the Gerringong Creek Road, at the Kings Creek crossing. The party walked to the top of a hill, seeing a great variety of flowers on the way, including clematis, indigo, goodia, pimelia, kennedia, pomaderris, and the unusual flowers of the cabbage tree palms.

That evening, with firewood provided by the Water Board, good fires were soon under way for cooking the evening meals, and providing warmth while the campers chatted.

Sunday morning began with a

light fog which looked ghostly amongst the huge sheoaks, and which soon began to rise, revealing the far river bank and hills perfectly reflected in the river. The calls of many birds were heard around the camping area, including firetails, wrens, a variety of parrots, currawongs, tree creepers and magpies.

After breakfast, nineteen of the group (including 5 children) walked

up the zig zag fire trail, then up a steep scramble and a chimney, to reach the top of Mt Carrialoo, the highest mountain in the area, and a prominent feature of the view from Fitzroy Falls lookout. Lunch was eaten overlooking Mt Moollattoo, and afterwards a walk northwards provided spectacular cliff and valley views, and a long distance glimpse of Fitzroy Falls.

After an energetic but most interesting day, the walkers returned to the cars by the same route taken in the morning.



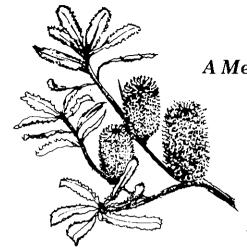
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Monday

10am - 4pm



The President and Committee wish all members

A Merry Christmas and Prosperous New Year

and invite everyone to the

Christmas Party

at Orroral Valley Picnic Ground at 3 p.m. on Sunday, December 14

Bring an evening meal —
Wine, cheese, biscuits provided – maybe a cake —

NPA Bulletin

National Parks Association of the A.C.T. P.O. Box 457, Canberra City 2601

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GENERAL MEETINGS

Held at 8 pm. Room 1, Griffin Centre, Bunda Street, Civic

DECEMBER - No meeting.

JANUARY - No meeting.

FEBRUARY - Thursday 19

lan Taylor. Record Officer of the Canberra Ornithologists' Group, will speak on the subject of "A Bird Atlas for the ACT".

MARCH - Thursday 19

Dr Brian Pratt, who has recently been appointed as Manager of ACT Forests, will give an overview of forests and forest policy, in the ACT including Jervis Bay.