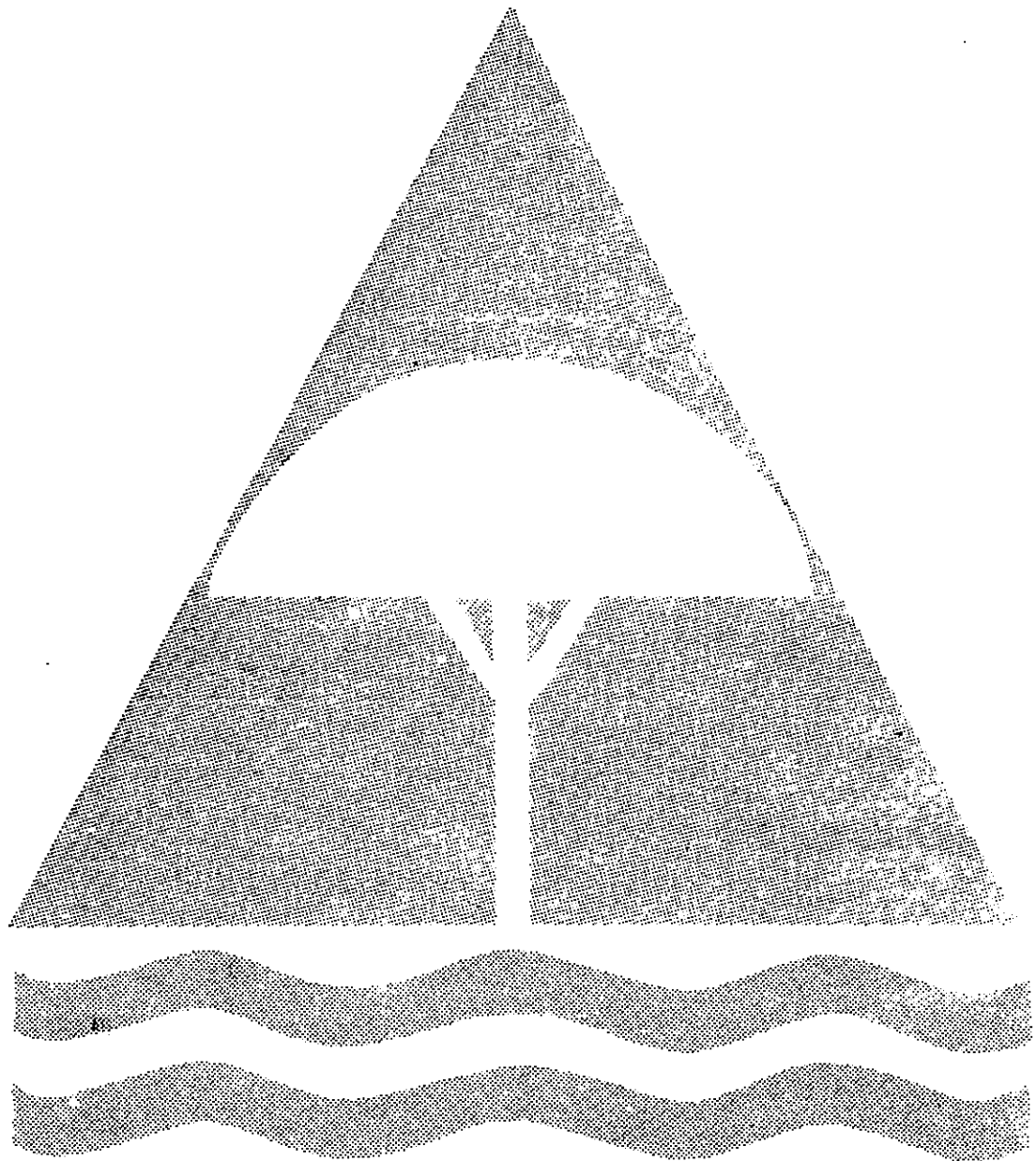


NPA Bulletin

National Parks Association of the A.C.T. Inc.



*Issued March, June
September, December*

Vol.18 No.2

December 1980

Registered in Australia for transmission by post as a periodical Category B

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PRESIDENT'S FORWARD

In this issue I would like to bring to your attention a conservation issue here in the ACT, and appeal for your support. It concerns the Gudgenby Nature Reserve, dedicated, you will remember in 1979, after many years of planning and urging by your Association. It has been revealed that a recent ministerial decision would allow the construction of a fire trail in the Left Hand Creek valley near Mt Clear, to link the Mt Clear trail and the Naas trail. Further trails in the western area of the Reserve were also mooted. We can only regard all such proposals as a serious menace to the natural values of the Reserve. From past practice we know that such trails are located without regard to natural features, and apart from their unnatural visual impact, can cause severe environmental damage through erosion and the introduction of alien flora. In the western areas they would spoil the wilderness aspects of the Reserve. Further, uncontrolled access to the Reserve along fire trails creates immense management problems through illegal activities such as shooting, which is already at a disturbingly high level throughout the Reserve. In addition,

additional trails are unnecessary for fire management in the Reserve which is already well served with perimeter trails in areas bordering human habitation.

Everyone who values the Gudgenby Nature Reserve as an outstanding natural area must be concerned to see its natural resources degraded in this way. Unfortunately, no overall management plan for Gudgenby has yet been published, due, we are told, to lack of staff within the Department of the Capital Territory. Ad hoc decisions affecting the Reserve, such as the Left Hand Creek trail continue, however, to be made with repercussions far beyond their immediate short term goals. Until such time as an overall plan for the Reserve is published and discussed, we believe no changes likely to degrade the Reserve should be made. Interested groups and individuals, who are the users and protectors of the Reserve should have a voice in decisions affecting its future.

The Gudgenby Nature Reserve is a major part of our natural heritage and a major recreation and scientific resource within the ACT. Decisions affecting its future should not be taken without detailed examination of their long term consequences.

AUSTRALIAN NATIONAL PARKS COUNCIL - ANNUAL CONFERENCE

Over the weekend of 20-21 September the Australian National Parks Council held its Annual Conference in Canberra. On this occasion our Association was host to the delegates who came as representatives of the National Parks Associations of Queensland, New South Wales and Victoria, Nature Conservation Council of South Australia, Western Australian Parks and Reserves Association, Conservation Council of Western Australia, Environment Council of Northern Territory, Tasmanian Conservation Trust and Australian Conservation Foundation.

Our President Neville Esau in welcoming the delegates made the following remarks.

On behalf of the National Parks Association of the ACT, I would like to extend a very warm welcome to delegates and visitors, to Canberra and to this ANPC conference. I hope your stay will be a pleasant and productive one. As hosts, we welcome this opportunity, not only to show you a little of Canberra and its surroundings, but also to meet and discuss mutual concerns in conservation. I hope we may have the

opportunity to explore some of these topics during your stay. The opportunity to meet with such a group of experts does not come to us too frequently.

I know you have a long agenda and busy days ahead so may I just put two thoughts before you.

From the date of our first white settlement, much of the Australian environment has been considerably altered for future generations. Complex ecosystems were totally destroyed, seriously endangered, or rendered unproductive from any viewpoint. Others have been drastically modified to pose serious management problems even if given unlimited resources. All this grew, I think, out of attitudes to the land, to land management and to our indigenous flora and fauna, which saw these as either having no intrinsic value or being worthy only of exploitation to extinction, the sad tale of the exploitation of red cedar, *Toona Australis*, is just one example. Some of these attitudes became, I feel, deeply entrenched.

During the past couple of decades, we have become increasingly to realise the harm these attitudes have wrought on our countryside and on our way of life. We have made steps to rectify some of the mistakes by regulating and restricting where necessary particular land use and to rethink our approach to land management, including the dedication of many new national parks. The sixties and seventies, particularly, were marked by an upsurge in environmental consciousness, which was translated, at least to some degree, into an increase in the numbers and sizes of national parks and other reserved areas.

During the past year or so, however, new environmental attitudes seem to be rising in the political sphere and in the community; attitudes marked by a concern for economic growth, particularly in energy production, but also in those industries able to take advantage of cheap and abundant energy supplies. The economical well-being of the community, our standard of living, is of vital concern to us all, not least to our political masters. I want to echo Murray Wilcox, who spoke recently on this topic, and ask you, should we sacrifice our most precious natural areas to the gods of energy production or economic growth; can we propose viable and acceptable alternatives which may safeguard our environment and ensure our continued prosperity; I cannot give any easy answers, I'm afraid, as you debate the various items here this weekend. I believe these questions must be faced. I feel I must add also, that in questions of environmental protection, to compromise standards is very often to fail completely. As we now know well, the Australian environment is often a very fragile and vulnerable resource. The unthinking destruction of rain forest, or coastal dune systems and heathland, of the mulga scrub or spinifex plains of the inland, come to mind as just three examples.

I personally believe that the dedication of areas of Australia as national parks is an enhancement of our way of life; not a denial of opportunities or resources, but a positive gain to our spiritual and material well-being. For me, wilderness is not an abstraction, an irrelevant utopia, but a resource which can sustain and enrich life all year round. I believe we must learn to live in harmony with nature, within the limits of our resources. Wilderness helps here also, to show stable, balanced, ecological forces

in action.

I know you represent many thousands of people who have similar feelings for our environment, who are looking to you to advance the dedication of national parks in Australia, to protect and preserve our wonderful and unique environment.

I wish you well in this difficult but richly rewarding task.

The agenda for the weekend was a full one and the motions passed can be but briefly dealt with in this bulletin. Some of the principal ones were:

- . The ANPC will press for the retention of Commonwealth right of review of the environmental aspects of potentially damaging export-based projects and to make Environmental Impact Statements mandatory should these seem necessary.
- . The ANPC would support a proposal for a 76,000 hectare reserve aimed at preserving a sample of the remaining jarrah forest of Western Australia. The proposed reserve would include the valley of the Murray River, a stream greatly used for public recreation.
- . The ANPC congratulated the Tasmanian Government on its decision to save the Lower Gordon and Franklin River systems by creating a Wild River National Park of national and international significance. The Tasmanian Government would also be urged to establish a public enquiry into the impact of forestry operations on the South Western Tasmanian wilderness and to create a South Western Authority with responsibility for management of land use in the region.
- . The Commonwealth would be requested to redefine the boundaries of the Christmas Island National Park to include the nesting sites of the Abbots Booby, an endangered bird species.
- . National parks must be protected from all forms of degradation by development for commercial exploitation such as by both underground or open-cut mining.
- . A large National Park to be declared on Lord Howe Island with the off-shore islands as reserves and the lagoon and coral reef as a marine national park. The island was of world heritage potential and should be nominated as such.

On Monday 22 September, delegates met

Professor D. Ovington, Director, Australian National Parks and Wildlife Service, for discussions on items of mutual interest.

FORTY YEARS ON

Or almost, anyhow it sounds better when part of a walking trip planned almost that long ago eventuates. For some time during 1941, I, with a group of Sydney Bushwalkers, had planned to walk in the in the Pilot, Cobberas, Thredbo, Kosciusko area over the Christmas period. Plans were well advanced even to the stage of purchasing food and taking some preliminary photographs of the preparations for a full slide picture record with the recently introduced Kodachrome colour film. Myles Dunphy - 'Australia's Father of the Wilderness' gave us most explicit directions (by some quirk I still have them) even to being asked to be remembered to a farmer whose property he had passed through some ten years previously. At 89 he is still drawing on his great memories for detail and meticulously kept diaries to advise a further generation of walkers.

The walk was not to be, Japan entered the war, our remoteness from the European war was over and by government direction we were to be made to realise that we were really at war. We had to do our bit, all holidays were cancelled, travel drastically restricted, six-day working weeks became the norm and other deterrents to pleasure were imposed. Instead I ate my dried foods on the occasional days I had off and the idea of the walk became but a memory. In recent years, walks down around the Kosciusko area showed The Pilot still beckoning and as far as I was concerned unconquered.

Perhaps in earlier days with the present easier access, a Friday night walk in the moonlight and I might have stood on the top over a two-day weekend, but four days seemed better with a chance to explore some of the surrounding country. The extra time would also give a margin on the weather to give time to climb the peak on a clear day and so a trip was organised to start from Dead Horse Gap over the Easter weekend. An earlier walk to the Cascade Hut had quickened interest in the country and made us familiar with about a third of the way. The route follows the Cascade firetrail over a fairly level direct course except for a couple of ups and downs of about a thousand feet.

We made the Tin Mine Huts in one day after passing through some of the most beautiful forest country and used the flats near the huts as our base for the next two days. Records of alluvial tin,

and gold deposits in this locality date back to 1875 and in 1892 the NSW Government was asked to provide assistance from the prospecting vote to develop the area. No serious attempts at development took place until the Mount Pilot Syndicate took up operations in the 1930s. Their operations were not successful and after spending \$18,000 mainly on access roads and some mining activity the syndicate went into liquidation. Charlie Carter lived as a recluse in one of the Tin Mine huts until his death from starvation in 1952 when he was unable to go into Jindabyne for supplies after his horses had escaped. The distance by pedometer from Dead Horse Gap was 27 kms, although the map only measured 23-24 kms; 1:100,000 scale cannot take into account all the bends of the firetrail and it may be as well to add about 15% to any measured map distance in similar country. The 40 metre contour lines also did not give much indication of location since for most of the distance the thick forest obscured distant views. Apart from seeing The Pilot on the way down Bob's Ridge, our next fleeting glimpse was near Tin Mine Creek and then when almost under it.

The main axis of the Pilot and Little Pilot runs parallel with the firetrail and a note in the visitor's book at the Tin Mine hut mentioned a sign pointing to it from the firetrail and with a comment that it was better to start the ascent some 100 metres further on. We had had doubts on our arrival at the Tin Mine huts that our views from The Pilot may have been severely restricted since a controlled burn had been started on the Suggan Buggan Range and a change of wind had filled the sky with smoke. Next day, however, a westerly developed and we had a sparkling morning to commence our walk. We missed the sign and went on possibly about another kilometre from where we later learnt where the sign was. It is apparently only a small notice nailed to a tree and we had expected an official sign more in the manner of the firetrail ones we had seen on the way. Anyhow it didn't really matter as the route we took up was fairly easy and open. On the way back we came down to near where the sign would have been so that it must be a fairly natural route.

Signs of brumbies were everywhere from their characteristic piles of manure, even up to the grassy top of The Pilot which surmounts its rocky crown. Three Victorians arriving soon after us made company for lunch and an exchange of experiences. Wonderful views all around except in one quarter where the controlled burn had really taken. Further along towards Thredbo could be seen the line of fires started from the incendiaries dropped from a plane. One fire was within a mile of our camp at the Tin Mine huts. A new visitor's book had been placed on The Pilot and ^{we} were the third entry. The

previous one was Milo Dunphy, son of Miles Dunphy and what a coincidence that should be and later to meet him back at the huts with the ranger.

The visitor's book at the Tin Mine huts shows that the area is regularly visited and entries have been made at almost weekly intervals. There were many interesting comments in the visitor's book between 4-wheel drive enthusiasts and walkers over their respective rights to be in the area. The ranger told us that the Service had several prosecutions pending against owners of 4-wheel drive vehicles and trailbikes found in the area. We only saw one 4-wheel drive and that was on Bob's Ridge.

Only one other visitor came to stay whilst we were at the Tin Mine huts and he had come on a push bike. We featured, with our comings and goings, as fill-ins in a movie film he was making. The brumbies were his friends and he had brought carrots and apples to feed them. The noise of his transistor at 100 metres, however, somewhat spoilt the wilderness effect.

On Sunday we went looking for the tin mines and fortunately we had chosen our days well since as we emerged from our tents we found the valley filled with a very wet mist which remained until mid-day. There was a good deal of evidence of past mining with mullock heaps, dams, aqueducts, etc., but nature since the last mining in 1936 was fast obliterating man's desecration. It was interesting after the lecture to the Association on dingoes to surprise a pack of six, they scattered quickly and by their colouring seemed to be pure bred animals. The ranger was interested to hear of our sighting. Strangely, we didn't see one brumby.

Milo Dunphy told us about how incendiaries had rained around them from the sky during the controlled burn activity. It is realised that only short warnings can be given about a controlled burn because of changing weather conditions, but a newspaper advertisement only is little help to persons in remote areas. Increased ranger activity should be carried out to give some possible warning.

As mentioned previously, one fire was within a mile of the Tin Mine huts and posed a possible threat with a change of wind. At night the glow was very bright and timber could be heard to fall.

The walk out was made a little easier by leaving after lunch on Sunday, walking about half the distance back to Dead Horse Gap and camping in the beautiful mountain ash forest. In all we covered 82 kms.

Reg Alder

ECOLOGICAL RESOURCES OF THE ACT

At our General Meeting of 17 July, Dr David Shorthouse gave a talk on "A New Look at the Ecological Resources of the ACT." The study was made in the first 6 months of 1979 whilst on study leave from the CCAE at the NCDC, and its authorisation shows the increasing recognition being given by planners to the protection for the general community of features of ecological interest. In the past there had been only an ad hoc approach leading to failure to appreciate some values and overlooking sites of value to only a few. There has been a lack of priorities and a lack of early awareness of value during new developments. The Parliamentary Committee on the ACT has suggested the need to allow the NCDC's role in planning and development to be extended to include the whole of the ACT so there is then a need to know what the ecological resources are for the whole of the area.

A wide variety of topics were studied and these included:

- . Ecological types of the ACT and conservation needs
- . Uncommon species
- . Wildlife movement corridors
- . Fish population and movements
- . Wetlands
- . Ecological values of streams
- . Ecological role of man-made systems
- . Ecological aspects of urban development
- . Bibliography

Professor Sprecht of the Queensland University had made an inventory of ecological types over the whole of Australia based on structural and floristic characteristics. Out of 900 groupings for the whole of Australia, 65 are in the Southern Tablelands of NSW with 14 inadequately conserved and of these 65 groupings 17 occur in the ACT, so the ACT has a regional responsibility. In the ACT most groups are well conserved if the Cotter catchment area is included. Those groups which give cause for concern are casuarinas and native grasslands which have been particularly degraded through grazing and the application of fertilizers. Present resource inventories, management plans, impact statements internal studies, theses etc. need a common denominator and the Sprecht categories are suggested as a standard. There is a need to know more about the small alliances, mostly the sub-alpine species of which there are many good examples in the ACT.

In the ACT, depending on viewpoint, there are 111 species of plants considered uncommon of which seven species are on the national list as being "plants at risk". Most of the uncommon plants are in the nature reserves and the Cotter catchment,

whereas of the seven rare species most are not in the nature reserves and one is in the city area. With animals it was not possible to do the same sort of inventory, but rare grasshoppers are found at Hall and Royalla and the ACT has more species of frogs than Western Europe and for them farm dams form an important habitat. Reptiles are on a small scale, so diversity is important and one species is only found at a site near Coppins Crossing. With mammals little has been done or known. There are large numbers of bats in the ACT living in caves or cave substitutes. Birds need special habitats and it is important that corridors be maintained to allow for migration and to provide resting places which are particularly suitable to their needs. Kangaroos have definite corridors through which they move and nature reserves cannot provide all that is needed for conservation.

ACT political boundaries provide a natural boundary but there is a need to supplement reserves by protected small sites. Man-made features do provide habitats for some species and with care remaining natural features can be incorporated in their design. The landscape and rivers should not be tidied up too much as logs and natural litter provide homes for some species and a source of food for others. Tree and garden corridors are important to be made and preserved so as to maintain wildlife and to bring them into the city boundaries. Farm dams can be incorporated into suburban design to provide homes for some species and a source of water for local and migratory birds. Hides could be provided at wetlands and in reserves so that birds can be observed, and on bikeways and in reserves interpretive signs could be erected to educate the public and increase their awareness of ecological matters. There is a need for a systematic inventory to be made as a basis for planning newly-developed areas.

Reg Alder

A REVIEW OF QUEENSLAND NATIONAL PARKS

The national park story in Queensland begins with a grazier, who lived the greater part of his life in the vicinity of the MacPherson Range. Robert Collins returned from a visit to America imbued with the then novel idea of national parks. The remainder of his life was spent striving to have a park established on the MacPherson Range. He did not succeed in this endeavour, but the interest he aroused led to legislation providing for a national park system.

His role was assumed by Romeo Watkins Lahey, the son of a sawmilling family in Canungra. Considering his background he came to the remarkable conclusion that the forest on the heights of the MacPherson

Range should not be logged but should be preserved for all time in a national park. Eventually by rallying local support, he convinced the state government, and a national park was proclaimed. His interest encompassed the whole state, and finally he decided that the effort was too great for one man and that he needed support. A public meeting was held in 1930 and NPAQ was born, it was indeed the NPA movement in Australia.

Queensland was fortunate in that national parks were administered from the beginning by the National Parks Section of the Forestry Department. The guidelines were laid down early, and a group of officers was formed which while pityfully small in numbers was dedicated to its task. They readily co-operated with NPAQ in the identification of suitable areas for national parks. The foregoing may partially explain why to date at least national parks in Queensland have not been the source of as much acrimony as would appear to be the case in some other states. One small but important point. The track system in Queensland parks has a maximum grade of 1 to 10, and is designed for easy walking. This was adopted on the advice of Romeo Lahey, who was an engineer by profession.

In a state the size of Queensland it could only be expected that there would be a wide range of natural environments. From south-west to north-east are sandridge desert, gibber plains, grasslands, eucalypt and tropical rain-forest, and finally the Great Barrier Reef. Some of these are reasonably represented in the national park system, some not at all.

Studded in the Great Barrier Reef are a number of coral cays, low sandy islands, the breeding ground for sea birds and turtles. They are clothed with pisonia, tournifortia, pandanus, and casuarina. Eight of these cays are national parks. The coral flats surrounding two of them, the tourist islands Green and Heron, are marine national parks. The reefs in general are the concern of the Great Barrier Marine Park Authority, which is currently planning a marine national park in the Capricorn section, and is projecting another one in the vicinity of Cairns.

Adjacent to the east coast of Queensland is a string of high islands, which are vestiges of ranges separated from the mainland by a drowned corridor. Their geology and biology are closely related to that of the nearby coast. A large number of these islands are national parks, including Hinchinbrook and the islands of the Whitsunday Group. Special leases have been granted over parts of these islands to provide tourist accommodation, and some have track systems. However the larger islands are

still mainly wilderness. The mangrove-lined west shore of Hinchinbrook complements the mangrove forests of the Hinchinbrook Channel National Park on the adjacent mainland.

Along the east coast are poorly drained sandy areas with acidic soils. This is the Wallum, whose glory is a profusion of wildflowers in spring and early summer. Its principal tree is *Melaleuca quinquinervia*, which formed dense stands in swampy areas. Large areas are now lost to urbanisation or pasture improvement ventures. Woodgate, Fraser Island and Cooloola National Parks together with a number of little parks preserve a remnant of these heathlands.

The south coast of the state has a string of high sandy islands covered with wallum, wet and dry sclerophyl forest, and even rain forest. All these communities are growing in sand. Mt Tempest on Moreton Island at 900 feet is claimed to be the highest sand dune in the world. The coloured sands and perched freshwater lakes interest the tourist, while the formation and revegetation of major sandblows, and the freshwater cell beneath the island is of interest to the more scientifically minded. Everyone can experience the solitude of such places. Cooloola's eastern sandmass is a former island and is part of Coloola National Park. Fraser, Moreton and North Stradbroke Islands also have national parks. Efforts are being made to increase the area of these parks, indeed to secure whole islands as parks, but the opposition from miners and sawmillers has great political weight.

Other coastal parks preserve interesting samples of coastal lowland such as hoop pine on sand, rain forest on sand, eucalypt woodlands, palm forest, and mangroves. Recently three parks have created to safeguard the nesting sites of loggerhead, green, and flatback turtles.

Most of Queensland east of the Great Dividing Range was covered by eucalypt forest or woodland. This is represented in most of the parks in south-east Queensland. Usually these parks are hilly and are very suitable for bush walking and camping. The summits of the higher peaks are good wildflower areas, as is Girraween National Park on the Granite. This park on the northern end of the New England Tableland has good walking in cooler conditions than is usual in Queensland.

Brigalow formerly spread from central Queensland south over the range on to the Darling Downs. This acacia woodland has now been extensively cleared, but has been preserved in Dipperu National Park in the north and in Southwood National Park in the south. Small stands are found in other parks.

Along the Divide in south-central Queensland steep escarpments, in sandstone, which is sometimes capped with basalt, face north or east. Here along the intake beds of the Great Artesian Basin is a series of national parks, Carnarvon, Mt Moffat, Kakamundi, and Salvador Rosa. Only one more is needed to form a continuous chain. They feature sandstone either fractured vertically as in Carnarvon Gorge or eroded into fantastic shapes as in Salvador Rosa, and are covered by open sclerophyl woodland. Deep in gorges where sufficient moisture is found are cabbage tree palms and a variety of ferns, relics of wetter conditions. In the higher parts of these parks the lack of water is a real problem, but despite this handicap the parks are becoming increasingly popular.

In the eastern part of the state are twelve major vegetation formations. One of these, the Simpson Desert sandridge country, is well represented and Goneaway Environmental Park has residual tablelands and rocky spinifex areas, but the Mitchell and Flinders grass plains, the Gulf littoral, the Channel Country, the mulga and gidgee formations, the Central Queensland desert are as yet not represented, nor their fauna given anymore protection than the general level in the West. For years the NPAQ has advocated a park around Gregory River springs. This stream drains into the Gulf from the Barkley Tableland, and is lined with cabbage tree palms and pandanus backed by a fringing eucalypt forest, which in turn gives way to tall tropical grassland.

The dedication of national parks in districts which have been grazed for a century, will be attended by serious problems. Not only is much of the land no longer in its original state, but great diplomacy will be necessary in making the new parks acceptable to previous owners, and to the grazing community in general. It might be advisable to limit the number of parks, and yet achieve a reasonable representation by selecting areas which include more than one type of country. These parks must be accessible to visitors. It can be anticipated that any towns in the vicinity will welcome the extra revenue brought into the district. This factor would in some degree mitigate opposition to the creation of a park.

Geological features are preserved in a number of parks. Close to Brisbane are the volcanic plugs of the Glasshouse Mountains. In the north, Chillagoe Caves National Park covers a small part of a line of limestone hills. The Atherton Tableland was the site of Queensland's last volcanic activity, which ceased about 8,000 years ago. Kinrara Crater and its two lava flows are still relatively unchanged. They are not yet included in the park system, nor are the Undara Lava

Tunnels or the Great Basalt Wall. The bat caves of Mt Etna have received much publicity in recent years, but it seems that they will be lost unless the mining company ceases to operate. However the nearby Fitzroy Caves National Park has a cave system, which is said to be extensive. Lakes Eacham and Barrine National Parks on the Atherton Tableland have crater lakes.

In such a dry continent the existence of wetlands is of utmost importance in maintaining bird life. NPA News July 1980 listed 39 national or environmental parks containing wetlands along the coast.

On the Cape York Peninsula the Dividing Range is mainly formed by low hills close to the east coast. Long rivers flow to the Gulf through undulating to flat country. Only in the Tozer and McIllwraith Ranges does the Divide rise sufficiently to permit extensive rain forest. This is the monsoon type, in which many trees lose their leaves in the long dry season. Several new parks have been gazetted, which are large in area and are at present difficult of access. The Jardine River National Park is noteworthy in that the Jardine is one of the few unpolluted streams in Australia. Its system of swamps enables the river to carry vast volumes of water throughout the year. In this valley Australia's only Pitcher Plant, *Nepenthes mirabilis*, is found. At present Lakefield is Queensland's largest park. It is a habitat for both land and water birds, and is designed to protect the vulnerable golden shouldered parrot.

The present parks, together with further proposed parks as in the McIllwraith Range, are of great scientific importance. The Peninsula is Australia's line of contact with the flora and fauna of New Guinea. A number of animals, including birds, are common to both the Peninsula and New Guinea, or are closely related. The habitat of these creatures is not continuous, since dry woodlands interrupt the rain forest, and so the species are confined to relatively small areas. The present and projected parks are vital for their survival.

In a country as dry as Australia, which has a preponderant supply of Acacia vegetation, it is understandable that rain forest should be so very different and so very attractive. Growing in the wetter parts of eastern Australia a rain forest is a closed system, requiring a high annual rainfall, with at least moderate falls every month. Due to its closed canopy it crates its own micro-climate, which offsets seasonal irregularities. The classical lowland tropical rain forest consists of tall regularly spaced trees, and is characterised by a canopy of several layers. There are plank

buttresses, woody lianas, vascular epiphytes, large or compound leaves with drip tips, and an absence of ground cover.

The floor of the forest is surprisingly bare. It is floristically complex, with a large number of species in any area.

While some of the best rain forest grows on potentially good agricultural soils this is not necessarily always the case. Owing to the heat and humidity bacterial activity is high and the recycling of nutrients is rapid. In other words a high proportion of the total nutrient is in the vegetation rather than the soil. The rain forests of Queensland do not all correspond to this classical pattern. A decrease in moisture and temperature results in a change to sub-tropical rain-forest south of Ingham, while north of Archer Point it changes to monsoonal rain-forest. Likewise, an increase in altitude causes a gradation through sub-tropical to temperate forest on the high peaks of north Queensland. The nature of the parent rock, soil drainage, and the length of the wet season cause further modifications. The authority on this subject is Dr L.J. Webb, CSIRO, who recognises 12 sub-formations based on leaf size, height and continuity of the tree layer, the proportion of deciduous and evergreen trees, emergents, lianas, epiphytes, palms, plank buttresses.

Such diversity calls for a number of national parks if each sub-division and its related fauna is to be preserved. Sadly in some instances the hand of man has made that nearly impossible. Bellenden-Ker, Mossman Gorge, and Thornton Peak National Parks carry highland formations of tropical rain-forest, but low-land rain forest is restricted to fringe areas on their lower slopes. Submissions have been placed before the Department recommending an extension of Thornton Peak National Park to Mt Pieter Botte and down to the coast in the vicinity of Cowie Point and Cape Tribulation. This is Queensland's last opportunity to preserve a gradation of rain forest types from coast to mountain top. After careful investigation Dr Webb recommended 20 small areas of various kinds of lowland rain forest as national parks. Some of these have been proclaimed in whole or in part. It is hoped that more are yet to come.

In central Queensland Eungella National Park has a large area of montane rain forest, while Conway Range National Park has some lowland rain forest. Various other parks along the coast or on the coastal islands have patches of rain forest often with hoop pine emergents. Lowland rain forest in south Queensland is restricted to remnants in Burleigh and Noosa National Parks. The rain forest areas of Fraser Island and Cooloola are not in those parks. Small patches of rain forest are found along the ranges north of

Brisbane, but the best montane sub-tropical rain forest is in the Lamington National Park, with which we opened the story. Areas of rain forest occur in parks along the incomplete Scenic Rim. Probably the finest example is the Bunya Mountains National Park where the aurocaria emergents are Bunya Pines (*Aurucaria bidwillii*).

If this address appears to dwell largely on the flora and fauna of the parks it is due to an awareness that an expanded park system will make a large contribution to the protection of that flora and fauna. This is not meant to detract in any way from the human aspect. People must have access to parks in order to benefit from them. To date, management has effected a compromise. In some park track systems provide easy access to representative sections, and while entry to the remainder of the park is not prohibited, usage by large numbers of people is discouraged by the absences of facilities.

In Girraween National Park it is necessary to ballot for camp-sites at popular times. Other parks are experiencing similar pressure. The Minister recently intimated that a new category of park is being contemplated, possibly Recreational Parks, in areas of reduced national park value.

(Lecture given to the Association on 18 September 1980 by Dr Horwood Cossins, Queensland National Parks Association. The lecture was illustrated by a most comprehensive selection of colour slides of Queensland's National Parks.)

NANCY T. BURBIDGE MEMORIAL

Many friends and colleagues of Nancy's were among the 200 who attended the official opening of the Nancy T. Burbidge Memorial in the National Botanic Gardens on Sunday 14 September, 1980.

The ceremony was conducted by Dr Robert Bowden who paid tribute to the President of the Pan Pacific and South East Asian Women's Organisation, Mrs Mary Wood, for initiating the proposal that an open air classroom for the use of groups visiting the Gardens would be a fitting memorial.

Thanks for financial assistance and time were also tendered to the National Parks Association of the ACT, the Royal Society of Canberra, the Australian Federation of University Women, the Australian Systematic Botany Society and to all who had made individual donations.

Lady Cowen then addressed the gathering and spoke simply and sincerely of her impressions of Nancy as a person interested in her work and in conveying her love of plants and the natural environment to persons of all ages and interests.

Professor Sir Rutherford Robertson followed with comments on her scientific career from the days as a student and post-graduate botanist in Western Australia through the years of research, publications, and taxonomy in CSIRO and the National Herbarium where she proved her ability in botany and in her refusal to move the Herbarium collection until new premises were ready - thereby causing the diversion of Barry Drive for a time.

After this official opening ceremony and a short walk to view the Gardens, afternoon tea was provided in the Display Room hosted by Mr L. Gillespie, the City Manager, from the Department of the Capital Territory.

It is hoped that the classroom, a small amphitheatre set in the corner of the Eucalypt Lawn in the Gardens, will be used by school groups and others who wish to learn more of the flora of Australia and provide some with memories of a remarkable person. A secondary teacher of plant biology is to be appointed to conduct classes for secondary students within the National Botanic Gardens.

NATIONAL PARKS OF NEW SOUTH WALES, Graham Groves and NPWS of NSW. Gregory's, 199pp., \$6.99.

A car glove box sized publication which sets out to give an easy readable summary of all the present national parks in NSW.

Each park is described in some detail with information on its locality, topography and geological features followed by a brief description of the flora and fauna present in the area. This information is followed up with details of access, activities, facilities and accommodation. A full page map showing the locality and salient features of the park is included for each park description.

Although the descriptions seem full and complete, on reading them through local knowledge shows up a number of omissions and errors. The list of NPWS District Offices varies widely with that published by the Service and all the regional offices are omitted. Descriptions of features which are unaccessible to the public because of private access blocking the way are still

described in the same manner as they are in the Service bulletins. The Big Hole in the Deua National Park is a good example. In the Weddin National Park it is said that there are no facilities or developments of any kind in the Park - sign posts and walking tracks are non-existent, whereas picnic facilities are available at the end of the Holy Camp Road from which a marked trail goes part of the way up to Eualdrie Trig.

In spite of these minor comments the book is well set out and the information of value when planning tours to the parks.

The Association has been able to secure an attractive discount from the publishers for a bulk order and, depending on the number of copies ordered, members will be able to secure copies for somewhere about \$4.50 to \$5.00. Orders should be placed with Bernice Anderson 812082 (H), 492669 (W) as soon as possible so that the maximum sized bulk order can be placed.

As some State Recreation Areas have almost the status and features of a National Park, the book would have been more comprehensive in its application if these had been included.

THE MOTH HUNTERS - Dr Josephine Flood.

A worthwhile book on the aborigines in our area. Arrangements are being made to secure copies for Association members at an attractive discount.

ANNUAL GENERAL MEETING - 1980

At our Annual General Meeting in August your new executive was elected unopposed. This gave ample opportunity for the ten members of the Association who had completed a walk to Lake Tarli Karng over the previous Christmas/New Year period to show a miscellany of slides taken by the group. The beauty of the lake area is undeniable and showed the worthwhileness of travelling the long distance to see it.

THE VALUE OF NATIONAL PARKS - Australian Conservation Foundation. 223 pp. \$8.00 including postage.

The Value of National Parks is a book based on the proceedings of the Second National Wilderness Conference held by the Australian Conservation Foundation at the University of Sydney in November 1979.

It provides an Australia-wide spectrum of conservation viewpoints on the contribution of national parks to the community. It looks at ways of developing the creative relationship between people and parks. The book features many black and white illustrations of national parks

as well as a number of illustrative charts, tables and maps complementing the text.

Copies may be obtained from the Australian Conservation Foundation, 672B Glenferrie road, Hawthorn, Victoria, 3122. A copy may be viewed in our library.

GENERAL MEETING - OCTOBER 1980

Our programmed speaker Dr W. Ride was unable to attend, because of illness, to deliver his paper on "Australian Biological Resources Studies: Surveying Australia's Plants and Animals." Instead at short notice our member Lyn Richards gathered together a selection of slides taken on his recent around Australia tour. We were treated to a showing of high technical excellence as well as seeing many new angles of some familiar places.

MR CLEAR PACK WALK: 27-28 OCTOBER 1979

Members might be interested to examine the following statistics which show the weight of each walker's pack at the beginning and end of the above pack walk.

	KILOGRAM			POUNDS		
	BEGIN	END	LOSS	BEGIN	END	LOSS
1	17	14.5	2.5	38	31	7
2	16.5	15	1.5	36	32	4
3	15	11	4	32	24	8
4	12	9	3	26	20	6
5	11.5	9.5	2	25	21	4
6	11.5	10	1.5	25	22	3
7	11	9	2	24	20	4
8	11	9	2	24	20	4
9	11	8	3	24	18	6
10	10.5	8	2.5	23	18	5
11	10.5	9	1.5	23	20	3
12	9	7	2	20	16	4
13	6.5	4.5	2	14	10	4
Average:						
	11.5	9.5	2.3	25.7	20.9	4.8

Some rounding has been made to the figures for ease of presentation and the conversion from metric to imperial is not meant to be precise. This data would suggest that the average two-day pack walker will carry an 11.8kg (25.7lb) pack and will lose 2.3kg (4.8lb) over the walk.

Since a pack walker caters for only four meals this would suggest a food

consumption of 1.7kg (3.3lb) per full (three meal) day. This is a little higher than the 1kg (2lb) suggested by some authorities as a desirable per day food consumption, but is possibly explained by the fact that two-day packers might carry a higher proportion of fresh and luxury food than would be the case on a longer walk. In some instances, consumption of water initially carried would reduce the weight lost by possibly 0.7kg (1.7lb) and thus bring the daily consumption of solid foods nearer to the recommended standard.

Lyle Mark

LIBRARY ACQUISITIONS

Kosciusko: Sub-Region Study, prepared for the NSW Planning and Environment Commission, in conjunction with the National Parks and Wildlife Service, NSW, March 1980.

Notes on Cold Climate Geomorphology in the Snowy Mountains of NSW. Excursion 4-6 February 1972. Leaders: R.W. Galloway and J.N. Jennings. Tenth Conference Institute of Australian Geographers, Canberra.

National Parks of New South Wales. Compiled by Graham Groves, published by Golden Press/Gregory's.

Kakadu National Plan: Plan of Management.

Draft Environmental Impact Statement: Proposed Extension of the National Botanic Gardens, Department of the Capital Territory, 1980.

MAPS AND GUIDES TO NATIONAL PARKS AND

FOREST AREAS

The Association has acquired from the NSW National Parks and Wildlife Service and the NSW Forestry Commission full sets of their current maps and guides for access to the areas under their control.

This information would be of great assistance to members contemplating visits and may be inspected by reference to the Association Librarians.

NEW MEMBERS

The following new members have been welcomed to the Association. Thomas Lloyd Allen, Barton; Bruce Ashley, Yarralumla; Clare Attridge, Griffith; Pat and Richard Cumpston, Deakin; Mary G. Cook, Hawker; Dr Hubert Von Doorn, Royal Canberra Hospital; Joh Fraser, Ainslie; Miss R. Jalbert, Kingston; Mrs L. Miller, Queanbeyan; Garry

and Lee Newman, Griffith; Mr I.R. Noble, Curtin; Phyl Nicholson, Campbell; Elayne May Pownall, New Zealand High Commission; David Starrett, Turner; Peter M. Shepherd, ANU; Robert Taylor, Braddon; M/s J.G. West, Curtin.

MEMBERSHIP RENEWALS

Margaret Aston; M. Allen; Fiona Brand; Ian Beveridge; Juliet and Trevor Bunning; Hazel and Norman Bancroft; R.J. Bird; Joan Cordell; Frank Clements; Heather Clark; John Cornish; J.A. Carnahan; Lindsay Conley; Ross Carlton; Barbara and Sydney Comfort; J.F. Cooney; Margaret Cashmore; Ruth Davidson; Bruce and Helen Drake; Nancy Dunn; Jan and Jack Doyle; Kym Day and family; Korine Else-Mitchell; Ted Edwards and Muriel Story Edwards; Thea Exley; Lovis and Marilyn Folger; Jane Frost; Roma Fisher; M.M.S. Finnis; Rev. Favier; Barbara K. Graham; Hazel Gibson; Kath Gilmour; Shirley A. Gardiner; Charles and Audrey Hill; Mr and Mrs D. Hawke; D. and Penny Hebbard; Eathorne Hanlen; Isobel and Bruce Hamilton; Reg and Cynthia Hook; Brigit Hodgkin; Paul van Haven; Hansen Hansene; Thelma Hunter; Frank Iannuzzi; Gladys Joyce; Graham Kanaley; Pat Kelsey; E. Koch-Emery; Audrey and Gordon Laurie; Brian and M. Lee; Lyndall Longman; Shirley and Glenn Lewis; Jocelyn Long; Lyle Mark; Harriet Michell; Allan Mortlock; Beverly and Ian McLeod; Gary and Diane Medavis; Mary McDonnell; E. Munro-Ashman; Jean and Joe Marshall; Mavis Michell; I. McLeod; John and Lois Perry; Les and Margaret Pyke; Margaret Porter; Judy and John Payne; Kim Pullen; Hilda Russell; Muriel Rafferty; George and Jenny Rothchild, Lyn Richardson; Sybil and Robert Story; Geoff and Maureen Snelgrove; Andrew Snedden; Gerherd and Rosemary Scheider; Lyn and Jim Shelton; J. and E. Smart; Ian and June Smith; Joa Stoffell; Pamela Swaffield; Paul Steele; Mr and Mrs D. Soloman; Andrea and Jack Slobbe; Geraldine Spencer; R. and F. Tomkins; Ivin Thompson; Pat Wardle; Eric and Pamela Wright; Sir Frederick and Lady White; J.P. Walsh; Andrew and Agnes Walker; Jean H. Weber; Gabrielle Watt; Judy and John Webster; Betty Wakefield; C.I. Watson; Professor Worner; Douglas and Michael Young; David and Alison Yoeman.

FROM THE NATIONAL PARKS ASSOCIATION OF THE ACT TO:

The Director, NSW Planning and Environment Commission, 14 October 1980.

Kosciusko Sub-Region Study

1. This submission comments on the above Study. In summary, the National Parks Association of the ACT:

I am sorry to be sending you a late submission on the Kosciusko Study but

hope that our comments will still be accepted.

Commends the amount of information in the document

Notes that environmental impact is not included

Notes the statistical methods used and hopes that the conclusions are accurate

Agrees that Option 1 is likely to cause least environmental damage

Observes that overseas experience may not reflect the danger of damage to the Kosciuszko National Park

Emphasizes that the KNP is vital to the whole ecology in this part of Australia

Emphasizes that environmental impact should be the prime determinant.

Expresses concern at new sites, including the "North Side"

Mentions various aspects of environmental damage

Agrees that convenient and timely public transport has advantages.

2. The members of the NPA of the ACT are interested in conservation, preservation, recreation and in nature generally. Amongst the members are various professions, experienced and inexperienced walkers, experienced and inexperienced skiers (both downhill and cross country), car users and public transport users. We are interested in the KNP in all seasons and in many ways.

3. We commend the publication of the Sub-Region Study and the amount of information in it. We realise that the Study is but one of several inputs to the future plans for KNP and that environmental impact was not part of the Study.

4. We note that your statistical analysis draws on sample data from winter users only. Those users are in the KNP to ski or to follow other closely related forms of winter recreation, a fairly narrow range of activities which produces certain preferred development options. Summer visitors are likely to engage in a wider range of activities within the Park. These summer activities would not necessarily lead to the same range of preferred development options as those for winter activities.

We agree that Option 1 is likely to cause least environmental damage, but point out that expanded use of existing facilities will increase environmental damage in existing areas unless

preventative measures are taken.

5. The KNP, compared to major overseas skiing resorts, is comparatively low in altitude, and the tops of ranges are more rounded or plateau-like. Skiers and most resorts use the high, fragile alpine areas in KNP. These areas are irreplaceable and have a vital effect on the water supply, liveability and the whole ecology of a large part of the eastern portion of Australia. For this reason we consider most strongly that environmental impact should be the prime, basic determinant for expanded use of the Park.

6. The self-interested wishes of individuals of the general public cannot be a prime determinant as if the use of the KNP were merely a commercial proposition to be decided by the law of supply and demand. Section 5.5.3 of the Study needs to be carefully considered and proper, competent investigations made to assess the environmental impact of the various ways in which exploitation is proposed.

7. We are concerned about the compounding damage which may be caused by various additional sites generally. Most sites on the "North Side" of KNP are significantly lower than the main skiing areas. The snow is less reliable, the season shorter and most slopes are timbered. King's Cross is mentioned as one possibility for a new site. Downhill skiing there would mean clearing timber and shrubs from the gullies running S and SE. To eke out the season with light snow, the "runs" are likely to be "groomed" with consequent danger of accelerated water run-off and erosion. Environmental damage by the use of new sites needs careful consideration.

8. Vehicle parking, accommodation and facilities together with people-pressure seem to be the known factors which cause environmental damage. On this point, as far as we are aware, no study has been made on the effect of snow-compacting machinery and oversnow vehicles on the flora of the KNP. Damage from these causes could be significant with resultant loss of water-holding properties.

9. We agree that public transport instead of private vehicles on peak days has many advantages. However, to be acceptable and successful the public transport needs to be convenient in start and stop points and able to compare reasonably with the time taken by private vehicles. This is particularly so when the transport is serving day skiers or walkers.

The Minister for the Capital Territory, 16 October 1980.

Bowen Island, Jervis Bay

It was reported in the press

(Canberra Times, 24.9.80) that the Government was preparing to renew a lease on Bowen Island, Jervis Bay, after 1985, despite conflicting advice from the ACT House of Assembly and a House of Representatives Standing Committee, and that it was understood the lessee had been guaranteed renewal of the lease. The National Parks Association requests that this decision, if in fact it has been made, be reviewed.

Bowen Island has some unique ecological features which make its inclusion in the Jervis Bay Nature Reserve a matter of urgency - certainly no later than the expiration of the present lease in 1985 - as recommended in the Jervis Bay Nature Reserve Draft Development and Management Plan, issued by the Department of the Capital Territory (p.29). The Draft Plan contains detailed descriptions of the flora and fauna of Bowen Island and of its general ecology, and points out how susceptible some communities are to disturbances and to competition from introduced species. The future of the bird colonies, in particular, must be considered at risk until pressure from human habitation is removed.

If the Draft Management Plan is implemented for Bowen Island it will fulfil a great need within the Jervis Bay Reserve as a fine example of the interplay between land and marine ecologies. Under proper guidance and control it will serve as an outstanding educational, scientific and recreational resource. NPA considered that the long term importance of this example of natural environment outweighs any short term economic gain from more intense human occupation.

The need to preserve examples of our natural environment is becoming vitally important, as more and more areas are altered by human activities. Bowen Island contains outstanding examples of our natural environment and must be protected before further damage occurs.

The National Parks Association requests that the original intentions for inclusion of Bowen Island in the Jervis Bay Nature Reserve be adhered to. Further, it asks that any further changes of ecological significance to the Draft Development and Management Plan of the Department of the Capital Territory be subjected to an environmental impact statement.

Mr K.P. Curtin, Secretary and Manager, National Capital Development Commission, 25 August 1980.

Metropolitan Planning Issues

My letter of 30 July foreshadowed a further submission from the National Parks Association on the Metropolitan Issues and I now submit NPS's comments on the Transport section.

1. John Dedman Parkway

As the route of the John Dedman parkway is not identifiable from the maps published in the Public Discussion Paper and the Canberra Times. I telephoned the NCDC office to make sure that this Parkway was in fact what we have hitherto called the proposed Gunghalin freeway, and to obtain information about its proposed alignment. As I understand it, the John Dedman Parkway would run west of the Black Mountain Nature Reserve and that its exact alignment has yet to be determined.

The National Parks Association is concerned for the protection of the Black Mountain Nature Reserve and its boundaries, and would strongly object to any freeway or parkway that would encroach on the Reserve. The Reserve is already in danger of being adversely affected by transport to the Black Mountain summit, and its boundaries may be altered if extensions to the National Botanic Gardens are approved. We urge that the Parkway, if formed, not cut through or encroach on the Reserve in any way, and that it be so aligned that the Reserve boundaries are not altered or adversely affected by it.

2. Monash Drive

We submit that Monash Drive must have an adverse effect on the natural bushland on the lower slopes of Mt. Ainslie and Mt. Majura and the proposed Ainslie/Majura Nature Reserve. We urge that plans for its formation be abandoned.

3. Finally, we urge that NCDC publish a more detailed statement of its planning and proposals for both the John Dedman Parkway and Monash Drive.

Mr R.J. Corrigan, First Assistant Secretary, Lands Branch, Department of the Capital Territory, 11 August 1980.

It has come to the notice of this Association that the Royal Canberra Golf Course intends increasing its lease area to include at least part of the Yarralumla Nursery area. I should be glad if you would advise me if this is so.

Assuming that this is the case, the National Parks Association would like to make it known that it would object to the incorporation of any of the Nursery area into the golf course lease for the following reasons:

- (1) The Yarralumla Nursery is one of the few parkland areas open for public recreation in Canberra which possess mature, or at least old plantings of native and exotic trees.
- (2) Historically, the tree plantings in the grounds of the Nursery are of major significance, with

plantings of many first-time introductions dating back to the early days of Canberra's development.

- (3) Scientifically, many of the trees are of great interest, for example, the provincianc plantings of *Melia dubia*, and *Platanus orientalis*, the grafted eucalyptis, and trial plantings of species of oak, maple, elder and Australian cypress pine.

Any extension of the golf course would grossly affect all these values to the detriment of the public at large.

Further, this Association would appreciate your comment on who has overall responsibility for the management of the remaining trees of the original Westbourne Woods arboretum? How is the management executed in practice? It notes with concern the new plantings along fareways of isolated trees and shrubs, and the misplacing and loss of two name plaques in recent years from many of the plots.

The Hon. D.A. Lowe, M.H.A., Premier of Tasmania, 29 July 1980.

Members of the National Parks Association of the ACT were gratified to hear the decision made by you and your colleagues against the development of the Franklin River for any purpose. We applaud the idea also put forward by you to preserve the Franklin and Davey River catchments as a national park.

Your task is a difficult one in considering pressures from various quarters; therefore we understand your compromise decision to save the Franklin River. We do trust that full consideration of alternative energy sources will be made before any further dams are contemplated in the South West. We support you in this move and hope that good sense and far-sightedness will enable all parties to realise the value of preserving the unique scenery of world class that your island offers.

The Editor, the Canberra Times, 20 August 1980.

On 11 August it was reported that the Royal Canberra Golf Club was negotiating with the Department of the Capital Territory to expand its lease into the Yarralumla Nursery. The National Parks Association views this move with concern as the area has other important values which will be threatened if this lease goes ahead. This part of the Nursery contains many species of trees some representing the first introductions into the Canberra region, which have considerable historic, scientific and teaching values. Further, the area is one of the few mature parklands around the lake foreshore available for public

recreation.

The National Parks Association believes that the Royal Canberra Golf Club should be required to justify its need for this public parkland, and be required to prepare an environmental impact statement in the same way as the National Botanic Gardens has been required to do in proposing extensions to its boundaries.

The Secretary, Department of the Capital Territory, 9 October 1980.

Proposed Extension of the National Botanic Gardens - Comments on Environmental Impact Statement

I apologize for lodging a late submission on the proposed extension of the National Botanic Gardens and hope that it will be accepted.

1. The National Parks Association recognizes that the National Botanic Gardens fulfils an important need in the collection, cultivation and study of Australian flora, and supports the aims of maintaining and enhancing the Gardens to meet this need and of providing a valuable recreational resource for ACT residents and visitors.
2. NPA accepts that the National Botanic Gardens should be enlarged to allow for present and future expansion of the collections, and concedes that, for the reasons given in the EIS, Site A is to be preferred to Site B. In agreeing that extension is necessary, NPA is acutely conscious that such extension is at the expense of the Black Mountain Reserve.
3. Black Mountain Reserve is an area of typical dry sclerophyll forest. Its central location close to the city makes it ideal for educational, scientific and recreational use. Although some parts still show evidence of earlier land use, much of the Reserve is now reverting to natural conditions. Since its inception the Reserve has been subject to many development pressures and is currently under threat from new roads and a proposed gondola system to the summit.
4. NPA is reluctant to see any portion of the Reserve excised for other purposes, thus reducing the area and in the process inevitably degrading its natural values. NPA accepts that the objective of preserving as much as possible of the natural tree cover in the Botanic Gardens does result in a wooded appearance (p.11;4.3) and strongly urges that this policy be retained in any new areas. NPA also urges that where tree cover is restored on bare areas, this be done

using the natural species to preserve a homogenous appearance (p.15; Plate 3).

5. Although the lower slopes of Site A are highly disturbed, and much of the flora of the middle and upper slopes is regeneration, there is nevertheless a large number of the original trees, particularly on the upper slopes. It is strongly urged that these be retained as examples of mature specimens and to preserve a link with the natural appearance of the area (p.23;5.32).
6. NPA has reservations about the stability of the upper areas of Site A if these are disturbed significantly for planting or walking paths. Your map (p.18) shows a significant area with slopes over 40% (approx. 20% of total area) with gully slopes of over 60%. Your development plans (p.34;7.1) seem to envisage leaving the upper slopes as a natural, i.e. undeveloped area. Is this the case? If so, why was this area included in the Botanic Gardens extension area? Inspection of these areas reveals the terrain as extremely steep and rocky, particularly along the main and intersecting gullies. It would not seem feasible or desirable to attempt to develop this area for replanting or walking paths without extensive disturbance. NPA urges that the upper parts of Site A, where slopes exceed 40%, be left in a natural state.
7. NPA accepts that the Botanic Gardens development would help restore the tree canopy around the lower slopes of Site A, particularly near Parkes Way (p.36;7.14). Whether in appearance these plantings would be in harmony with the existing environment as stated needs careful design. NPA urges that new plantings be designed to preserve a homogeneous appearance so that the southerly aspect has as nearly as possible a natural appearance.
8. Your bird survey (p.26;5.49) states that a considerable number of nesting hollows would be removed in developing Site A. As well as altering pruning regimes to limit this impact (p.35;7.7) could not suitable nest boxes be provided, at least to the extent that natural nest sites are removed? These would appear to present no safety problems if suitably sited.
9. Is it necessary to provide additional parking space in Site A (p.36;7.12)? If additional parking is thought to be necessary would it not be more economical to extend the present parking area? This would also

minimise traffic movement and make control simpler by having a single entrance and exit to the National Botanic Gardens.

The National Parks Association thanks the staff of the National Botanic Gardens and their consultants for producing such a detailed and comprehensive environmental impact statement. It should serve as a model for many other organizations.

The Planning Officer, Kosciusko National Park, 16 October 1980.

Kosciusko National Park: Review of Plan of Management - Fire Management

The National Parks Association of the ACT welcomes the opportunity to comment on the Planning Issue Statement on Fire Management.

1. We believe that the move to have the NPWS take over responsibility for fire management in the Kosciusko National Park is a necessary and essential step if the Service is to control the destiny of the Park's biota. In accepting this responsibility the Service must have the resources (financial, manpower, and ecological understanding) to manage fire in the best interests of the biota, park users and installations, and surrounding landholders

2. To use fire as a management tool in the Park requires an undeniable understanding of the ecological role of fire in the ecosystems. Current understanding of fire and biota interactions is limited to say the least and if management aims are to be achieved then much more emphasis and financial support must be given to appropriate research programmes. This significant point is not given the prominence in the Fire Management statement it deserves.

Fire histories urgently need to be understood, as do fire-plant-animal interactions. For example, the sub-alpine woodlands are today in a condition possibly unique in their 10-15,000 year history on the slopes. The same may be true of other major vegetation types in the Park.

3. Fire Hazard reduction burns: This technique for fuel reduction over large areas is still being promoted in the Plan. However, the ecological necessity to use this procedure in wilderness areas is questioned. It is seen as necessary where installations need to be protected and to "break-up" extensive areas of high risk fuels, but its persistent use is likely to have a "straight jacket" effect on vegetation communities.

4. The need for hot burns: Hot burn fires may be part of the natural system and indeed information from snow gums suggests that in pre-European period the occasional hot burn was a regular feature every 30-50 years in some stands. Some hot burns will need to be considered as part of the fire management programme at least in the older sub-alpine stands if the intention is to return at least some areas to their previous condition.

5. Timing of fires: Undoubtedly the high country is mostly too wet to support fire in the spring-early summer period. However this is not always so at lower elevations. We urge that control fires should be allowed at various times throughout the season to ensure variable intensity and vegetation response, thus maintaining diversity.

6. Lightning fires: These should be allowed to burn naturally only when initiated in "natural" vegetation. Since little of the vegetation is in this condition, suppression must be applied for the time being.

7. Fire and aquatic communities: The relationship between wildfire and aquatic communities requires investigation; in particular, the nutrient recharge potential following fire and its effect on aquatic flora and fauna.

8. Size of burns: Aerial ignition burns can be over large areas at little cost. However, from an ecological standpoint there is argument for smaller burns of differing frequency and intensity to ensure diversity.

I am sorry that we were not able to provide these comments by the date suggested and hope that they may still be accepted.

From T. Barrett, District Superintendent, the National Parks and Wildlife Service, Nowra District, 24 July 1980.

I refer to your letter of 11 July, 1980 regarding access into Morton National Park.

It is disturbing news to learn of an increasing incidence of vehicular intrusion into the Budawang area of Morton National Park - as well as your report, I have also received correspondence from the Federation of Bushwalkers giving details of off-road-vehicle activity in the Vines area.

The upgrading of the trail from Sassafras to Newhaven Gap (Vines trail) and construction of other trails on the western side of the park is obviously contributing to this situation. These trails are, however, almost completely outside the park and we therefore have

very little control over their construction and maintenance. Hopefully much of the area through which these trails pass will be added to the park in the near future.

Your proposal to place a gate at the park boundary on the Vines trail would not be practical nor justified at this stage. Due to staff shortages it would be difficult to control the vandalism that would result from such an unpopular action. In addition, the gate would restrict the movement of people who are prepared to keep to the trail. At this stage only 2km. of the trail is within the park and I cannot, therefore justify complete closure to through-traffic. The future of the trail is, however, under review and it is hoped that the issue will be satisfactorily resolved when the plan of management (currently in preparation) is finalised.

Regarding your observations of vehicular activities, it is quite possible that they occurred outside the existing boundaries of the park. If you refer to the Budawangs map you will see that only a small south-eastern segment of Quilty's Mountain is within the park, therefore, even if we had sufficient staff to look after the area, there is tremendous scope for the damage you have described to take place in areas beyond our control. Prerequisites to adequate protection of the area is additional staff and more rational park boundaries.

While appreciating very much the information supplied to us, you could assist us much more should similar incidents occur in the future by recording registration numbers of vehicles, and advising the date and specific locations of the vehicles. Even if legal action is not possible, there may be some benefits in making contact with these people and communicating our concern regarding their activities.

The status of the trail passing through the freehold and leasehold land at Sassafras is not completely clear, but it is known that for some distance it is a Crown Road and the public therefore has legal access. The remainder of the road does not appear to constitute legal access, but the leaseholders have not raised any objections to vehicular access and, unless the public fail to observe the normal courtesies involving the use of the trail (e.g., closing gates) I see no likelihood of the current position changing.

I thank you for your expressions of concern and look forward to your continued support and interest.

NATIONAL PARKS ASSOCIATION OUTINGS

Please notify the leader by the previous Wednesday of your intention to go on any weekend outing.

The Committee suggests a donation of 3 cents per kilometre (calculated to nearest dollar) be offered to the driver by each passenger accepting transportation. Distances quoted, for one way only, are approximate and for guidance only.

There have been changes in dates from the previous programme.

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 on any such outing.

December 7 Sunday
Leader: Hela Lindemann 864926
Meet: Eucumbene Drive/Cotter Road 8.30 a.m.
A walk along the ridge from Mt Ginini with views along the Brindabellas.
70 kms.

Ginini-Gingera: Walk
Ref: A.C.T. 1:100,000

December 14 Sunday
Venue: Yarralumla Nursery Picnic Area at the head of Nursery Bay from 3.30 p.m. onwards.
Don't miss this annual get-together.

Christmas Barbeque/Party

December 21 Sunday
Leader: Nick Blandford 723933 (W)
Meet: Jamison Shopping Centre (corner Catchpole and Bowman Streets) 10.00 a.m.
A visit to the falls (admittance \$1.30), with easy walking and a climb down to the Murrumbidgee River. Swimming possible.

Ginninderra Falls: Walk
Ref: A.C.T. 1:100,000

January 24-26 Australia Day
Leader: Fiona Brand 479538
A long pack walk, south from Dead Horse Gap to the Tin Mines and a climb up The Pilot. 170 kms.

The Pilot: Pack Walk
Ref: Jacobs River 1:100,000

January 24-26 Australia Day
Leader: Ian Currie 958112
Numbers limited, contact leader for details.
A car camp by the Thredbo River, with walks downstream and a possible trip to see the wildflowers higher up. 150 kms.

Thredbo Diggings: Car Camp

February 1 Sunday
Leader: Frank Clements 317005
Meet: Kambah Shopping Centre/Marconi Crescent 9.00 a.m.
A walk upstream along the Murrumbidgee for swimming, li-loing etc.

Kambah Pool: Walk
Ref: A.C.T. 1:100,000

February 8 Sunday
Leader: Les Pyke 812982
Meet: Eucumbene Drive/Cotter Road, 9.00 a.m.
An easy exploratory walk, partly along a track from Smoker's Flat. 50 kms.

Smoker's Flat: Walk
Ref: A.C.T. 1:100,000

February 14/15 Sat & Sunday
Leader: Neville Esau 864176
Meet: Guthega Power Station, 10 a.m.
A medium pack walk north from the power station via Schlink Pass. 170 kms.

Gungarton and Brassy Mts
Ref: Kosciusko 1:100,000

February 14 Saturday Point Hut Crossing: Walk
Leader: Cla Allen 953824 Ref: A.C.T. 1:100,000
Meet: Monaro Highway and Mugga Road 11 a.m. A bird watching walk
upstream from Point Hut Crossing. 30 kms.

February 21 Saturday Tidbinbilla: Walk
Leader: John Webster 476768
Meet: Eucumbene Drive/Cotter Road 4.30 p.m. or, Tidbinbilla Visitors'
Centre 5.00 p.m.
A 'spot lighting' walk to look at some of the nocturnal animals, preceded
by an evening barbeque. 50 kms.

February 22 Sunday Yankee Hat: Walk
Leader: Beverly Hammond 886566 Ref: A.C.T. 1:00,000
Meet: Monaro Highway and Mugga Road 9.30 a.m.
An easy walk in the southern A.C.T. to view the rock paintings. 50 kms.

March 1 Sunday Queanbeyan River: Walk
Leader: Nick Blandford 723933 (W) Ref: A.C.T. 1:100,000
Meet: Canberra Railway Station 9.00 a.m.
A walk south-west of Mt Foxlow, near Captains Flat. Swimming possible.
60 kms.

March 7 Saturday Westbourne Woods: Walk
Details in March Bulletin.

March 7-8 Sat/Sunday Admiration Point: Walk
Leader: Babette Scougal 487008 Ref: Corang 1:100,000
A day walk in the Budawang area, with an overnight stop in Braidwood
beforehand. Numbers limited. Contact leader for details. 160 kms.

March 15 Sunday Old Fitz's Hill: Walk
Leader: Cla Allen 953824 Ref: A.C.T. 1:100,000
Meet: Monaro Highway and Mugga Road 10.00 a.m.
An easy walk following the old road over Fitz's Hill. 40 kms.

March 14-16 Canberra Day Ettrema: Pack Walk
Leader: Harriet Michell 473264 Ref: Nerriga 1:25,000
Meet: Nerriga 9.30 a.m.
A medium pack walk into the Ettrema Gorge area. Contact leader for
details. Numbers limited.

March 14-16 Canberra Day Barren Grounds: Car Camp
Leader: Ian Currie 958122
A car camp at Barren Grounds Nature Reserve at the edge of Morton National
Park. Contact leader for details.

March 22 Sunday Hospital Hill: Walk
Leader: Frank Clements 317005 Ref: A.C.T. 1:100,000
Meet: Monaro Highway/Mugga Road 9.00 a.m.
A medium day walk in the Gudgenby Nature Reserve. 50 kms.

March 29 Sunday Honeysuckle Creek: Walk
Leader: Lyn Richardson 412425 Ref: A.C.T. 1:100,000
Meet: Monaro Highway/Mugga Road 9.00 a.m.
A medium/easy walk from Honeysuckle Creek Tracking Station. 50 kms.

Any member interested in spending the weekend of 17/18 January, 1981, at
a lodge at Perisher to walk and view the Kosciusko alpine flowers, please
contact Margaret Aston by 14th December. (H) 88-7563 (W) 89-3320

NATIONAL PARKS ASSOCIATION OF THE AUSTRALIAN CAPITAL TERRITORY INC.

Inaugurated 1960

President: Neville Esau, 11 Rymill Place, MAWSON ACT 2605
49.4554(W) 86.4176(H)

Vice-President: Ian Currie, 10 Arnhem Place, RED HILL ACT 2603
95.8107(W) 95.8112(H)

Secretary: Sheila Kruse, 50/C, Currong Flats, BRADDON ACT 2601
48.6104(H)

Treasurer: Lyle Mark, 6/45 Hampton Circuit, YARRALUMLA ACT 2600
49.7488(W) 81.6985(H)

Assistant Secretary: Fiona Brand, 11 Dyson Street, LYNEHAM ACT 2602
47.9538(H)

Publicity Officer: Harriet Michell, 6 Raymond Street, AINSLIE ACT 2602
47.3264(H)

Committee Members: Reg Alder, Ross Carlton, Darryl Hawke, Charles Hill,
John Schunke, John Webster

Immediate Past President: John Banks, 9 Furphy Place, GARRAN ACT 2605
49.3232(W) 81.6641(H)

Bulletin Editor: Reg Alder, 45 Starke Street, HIGGINS ACT 2615
54.2240(H)

Membership Secretary: Fiona Brand, 11 Dyson Street, LYNEHAM ACT 2602
47.9538(H)

Outings Convenor: John Webster, 46 Dumaresq Street, DICKSON ACT 2601
47.6769(H)

Correspondence to: Box 457, PO CANBERRA CITY ACT 2601

Telephone: 48.6104 (Secretary) or 95.6037

Annual Subscription Rates

1 July - 30 June: Family members \$10 Student members \$3
Single members \$ 8 Corporate members \$5

For members joining between:

1 January - 30 June: Half specified rate
1 April - 30 June: Fifteen months' subscription

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.

Cooperation 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.

National Parks Association outings summary

DECEMBER

7	Sunday	Ginini-Gingera	Walk
14	Sunday	Yarralumla	Christmas Barbeque Party
21	Sunday	Ginninderra Falls	Walk

JANUARY

24-24	Sat/Monday	The Pilot	Pack Walk
24-26	Sat/Monday	Thredbo Diggings	Car Camp

FEBRUARY

1	Sunday	Kambah Pool	Walk
8	Sunday	Smoker's Flat	Walk
14	Saturday	Point Hut Crossing	Walk
14/15	Sat/Sunday	Gungarton & Brassy Mts	Pack Walk
21	Saturday	Tidbinbilla	Walk
22	Sunday	Yankee Hat	Walk

MARCH

1	Sunday	Queanbeyan River	Walk
7	Saturday	Westbourne Woods	Walk
7-8	Sat/Sunday	Admiration Point	Walk
15	Sunday	Old Fitz's Hill	Walk
14-16	Sat/Monday	Ettrema Gorge	Pack Walk
14-16	Sat/Monday	Barren Grounds	Car Camp
22	Sunday	Hospital Hill	Walk
29	Sunday	Honeysuckle Creek	Walk

GENERAL MEETINGS

8.00 p.m. in Room 1, Griffin Centre, Bunda Street, Civic.

December - NO meeting.

January - NO meeting.

February - Thursday 19, 1981 - Mr Bruce Leaver, Director, S.E. Region, NSW National Parks and Wildlife Service, will speak on management process as undertaken in the Kosciusko National Park Plan of Management review, and how the management of the other resources in the region will be approached following that experience.