

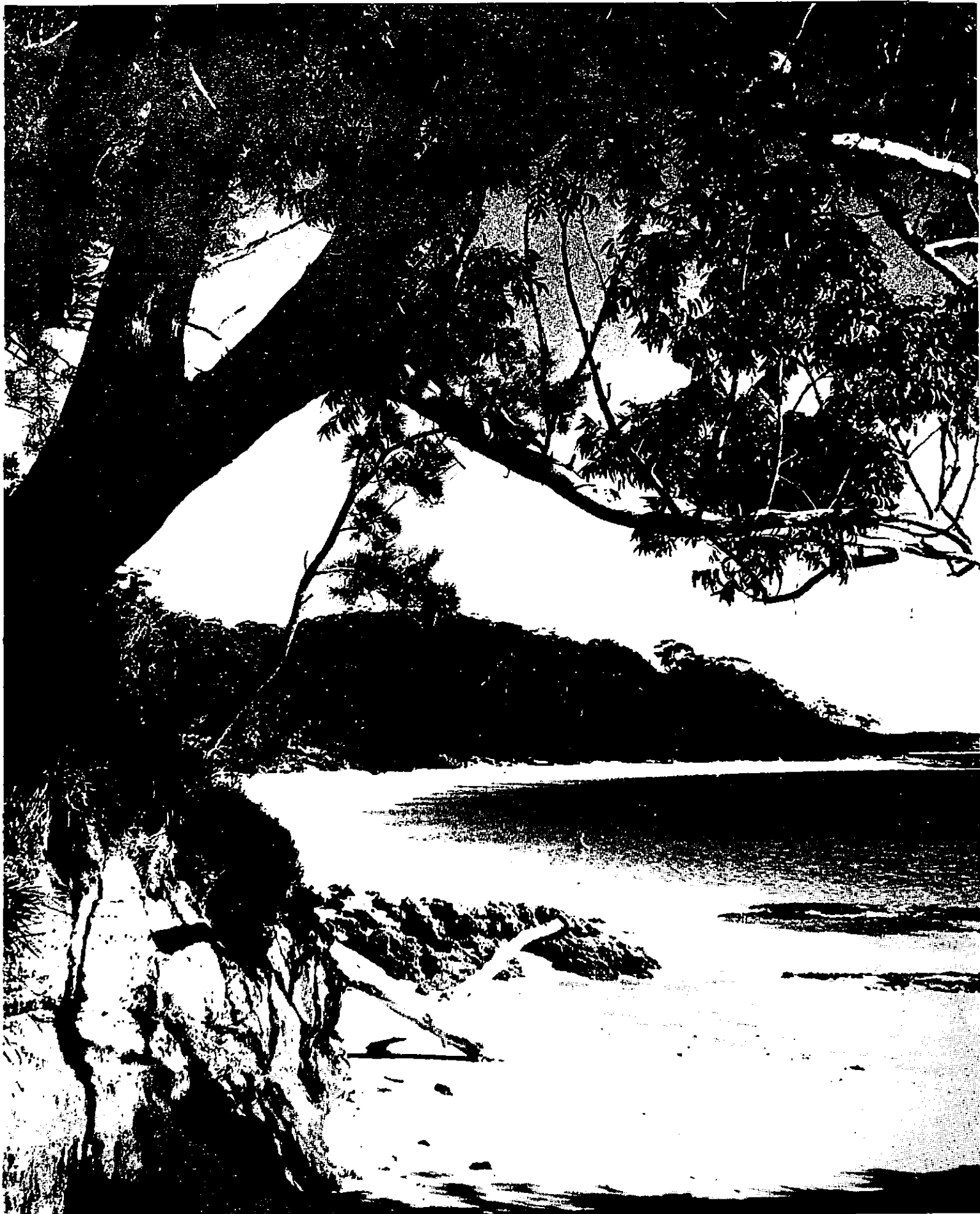


NPA Bulletin

National Parks Association of the A.C.T.

Vol. 24 No 1

September 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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The NPA of the ACT office is located in Kingsley Street,
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*Articles by contributors may not necessarily reflect
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COVER

Murray's Beach, Jervis Bay

Photo by Reg Alder

PRESIDENT'S FOREWORD

The challenges facing our Association are changing but are nonetheless real and important. Our cooperative role with the authorities in relation to the management and development of Namadgi National Park will become even more significant as the pressures on the park increase in the future. The threats to the environment of the ACT and the surrounding areas of NSW will no doubt be different but no less intense than they have been in the past. And our increasing membership will put pressure on our ability to mount a walks program which meets everybody's need. We will need more leaders and more training for both leaders and walkers if we are to continue to safely introduce people to the bush and open their eyes to what it contains. However, the Association has a long history and a sound core of dedicated members and I have no doubt that it will continue to play a vital conservation role in our corner of the world.

This is my last foreword as President. Two years ago I accepted this position because I felt I owed something to the organisation which had given me so much and because, at the time, all the other possible contenders were keeping their heads down. I can now say that I have found the job so rewarding that, far from reducing my debt to the Association, I believe I have increased it. The committee has been a joy to work with and I have been able to share in all the activities of the Association and get to know many more of the members personally. My thanks to you all.



COMMITTEE NEWS

At its June meeting the Committee welcomed Keith McRae to its ranks. Keith has particular interests in education and public awareness. The Orroral Homestead Conservation Project has been considered at each meeting this quarter as various approaches have been pursued to enable work to recommence. At the time of writing the Association remains frustrated in these attempts. Another item which has become more difficult to resolve than expected is determination of the best way to meet our insurance requirements; Kevin Totterdall is still pursuing this. The NPA has joined with other Childers Street residents in considering the future use of buildings in the area. There is general support for the retention of a central location for the Environment Centre. The Community Development Fund heritage grants for 1986/87 brought good news for the Association with the approval of \$10,000 for office salaries and expenses and \$1200 to assist in the publication and distribution of the Bulletin.

NEW MEMBERS

The following new members are welcomed to the Association:

Robyn ALDERS, Canberra; Mr & Mrs C. BARTHOLOMEW, Griffith; Chris BELLAMY, Downer; Mrs J. BENNETTS, Deakin; Tom & Wilma BOSMAN, Bungendore; Paul and Adrienne BRADLEY and family, Weston; John BUTLER, Macgregor; Mr & Mrs T. CORBELL, Chapman; S. CRAIG, Canberra; Norma CROSBIE, Curtin, Sean DAVIDSON, Deakin; Dianne DEANS, Kambah; Deborah EDWARDS, Turner; Celia FARQUHARSON, Manuka; Neil FLINN, Gilmore; Alan & Margo FRASER, Yarralumla, Ian GARVEN, O'Connor; Mr & Mrs HADLOW, Fisher; Katherine HALL, Griffith; Rochelle HANSON, Fisher; G. HEARLEY, Wanniasa; Roger HOLDEN, Belconnen; Lindy JEFFERSON-BROWN, Deakin; Carolyn & Derek JURY, Melba; Mr & Mrs KERR, Page; Mrs E. McEWAN & Mr J. SAVAGE, Holder; Mr & Mrs MEDER, Dickson; Mr & Mrs J.A. MILES, Pearce; Annet PETERSSON, Flynn; Mr & Mrs PARKER, Macquarie; Eileen QUINN, Yarralumla; Stanley RUSSELL-SMITH, Hughes; Scott SIEVERTS, Holder; M. Lorraine THOMSON, Griffith; R. & E. TULIP, Waramanga; Katie WHITE, Dickson.

HERITAGE WEEK 1987

"A Week of Discovery"
5 - 12 April

The ACT Heritage Week Committee has been allocated \$12000 from the 1986/87 Community Development Fund, the Minister for Territories, Mr Gordon Scholes, announced recently. The grant will help meet operational expenses associated with staging Heritage Week 1987, and in particular, will enable the Committee to employ a part-time co-ordinator to handle promotional and administrative duties. The Committee, comprising representatives from various local community groups including NPA, will meet shortly to begin planning the 1987 festival.

Members are invited to suggest activities that the Association could present during Heritage Week 1987. Please contact Anne Robertson (ph. 82 1141 ah) with your ideas.



NAMADGI CONSULTATIVE COMMITTEE

Den Robin

Management Plan

Adequate resources for management and amendments to the ACT Nature Conservation Ordinance are still the two most pressing concerns of the Namadgi Consultative Committee.

The committee believes that the management plan, adopted in June, is of high quality and addresses the issues as well as could possibly be done with existing information.

However, in its letter to the Minister for Territories on the completion of the plan, the committee has stressed the fact that the acceptance of the plan is an initial step only. Funds must be made available to implement it, to develop more specific plans and to review the plan in five years time.

The committee also advised the Minister of the need to overcome the inadequacies of the ACT Nature Conservation Ordinance. His attention has been drawn to the following three points:

- The dedication or revocation of reserved areas or wilderness

zones needs to be a more formal procedure than a Minister publishing a notice in the Gazette. The Committee's preference would be for a procedure that required public notice and a formal laying on the Table of Parliament for a specified period allowing for disallowance of the proposal.

- The Ordinance should include provisions requiring a plan of management to be prepared, with statutory force, so that the area is managed in accord with such a plan once it is approved. There should be a specified review period for such plans.
- The Ordinance should include provisions that require public participation in changes to boundaries, the planning process, and ongoing management of protected areas.

Alpine Parks System

The Consultative Committee has been closely following the moves towards an Australian Alpine Parks Agreement. Recently a Memorandum of Understanding was signed by relevant Commonwealth and State Ministers aimed at ensuring recognition of the alps

as one entity and at achieving co-operative management over the state boundaries.

The Consultative Committee has discussed the need for community understanding and support for moves in this direction and will be meeting soon with the Kosciusko Advisory Committee and representatives from Victoria to develop means of providing more support for the initiative.

While there are governments of the same shade in the two states and Territory, it would be a good time to move on to a formal agreement to follow the Memorandum of Understanding.

Education and Namadgi

A working group has been formed to examine the committee's role in community education relating to Namadgi and other nature conservation issues in the ACT. The group will be looking at the feasibility of a number of ideas, ranging from the development of curriculum materials for schools to the involvement of community groups and the development of field studies centres.

The next meeting of the Consultative Committee will be held late September.

Namadgi Sub-Committee Report

Fiona Brand

The Plan of Management for Namadgi National Park is now complete and you can get your copy from the ACT Parks and Conservation Service. The sub-committee has spent much time over the past year in presenting the Association's views about management to the ACT Parks and Conservation Service and the House of Representatives Standing Committee on Environment and Conservation.

It is important that all members become familiar with the Plan and alert the Association to any straying by the managers from the plan. It is with disquiet that the Association has been informed by a member that military manoeuvres have been noted in the national park. We are seeking clarification on this event and the Management Plan's policy towards such happenings.



In the management plan the Cotter Hut has a 5 year reprieve from demolition. Is it an intrusion in the already modified landscape within a wilderness area or is it part of the history of human use of the area? What do you think?

Photo by Reg Alder

Letters

Care of Boots

Dear Sir,

Our attention has been drawn to an article published in your Bulletin, June 1986, p. 16 entitled: "Fitting Your Feet" by Peter Marshall

We are concerned to read under maintenance, the advice:

"Don't use Neatsfoot Oil or Dubbin"
As manufacturers of both Neatsfoot Oil and Dubbin (from amongst our range of total shoe care products) we draw your attention to a Special Investigation Report prepared by SATRA, (Shoe and Allied Trade Research Association) on the use of oils and greases in waterproofing sporting footwear.

Neither Neatsfoot nor Dubbin will rot boots. What sometimes happens is that certain Neoprene adhesives used in adhering the sole react with overuse of oil on the boots, eg. some users actually saturate new boots overnight in Neatsfoot Oil.

Neatsfoot Oil (as distinct from Compound Neatsfoot Oil - ie., usually an admixture of Parafinic Mineral oils) is used as a softening agent in the tanning process of leather.

Use of genuine Neatsfoot Oil replaces the natural oils leached out from leather boots in general wear and tear.

We make a number of balanced leather conditioners to be recommended for hiking, mountaineering, sports and heavy walking footwear. These include:

Joseph Lyddy - Beeswax Leather Dressing
Joseph Lyddy - Leathaphane Leather Oil

Other items of possible interest can be seen from the attached leaflet: How to Waterproof

I hope that these details will be of interest to your readers.

Yours faithfully
R A DALLAS
General Manager
WAPROO PTY LTD

(Lack of space prevented us from reproducing 'How to Waterproof' but we will endeavour to do so in the next issue. - Ed)

No Uncertainties

Dear Sir,

The final paragraph of our President's report (NPA June Bulletin) on the Association's submission to the House of Representatives *Standing Committee on Environment and Conservation Inquiry on Namadgi National Park*, concluded with the statement that it was an unsatisfactory one, as the uncertainties made it impossible to do otherwise.

Our approach should have been more specific with firm objectives and recommendations as the issues were clear.

To many of there were no uncertainties, for under the present ACT Nature Conservation Ordinance, Namadgi is no more than a reserve named Namadgi National Park. It was declared thus by the then Minister and with equal facility could be partitioned or revoked at any future date by a Minister who has no environmental consciousness. An amendment to the Ordinance may give it true national park status, but no further protection from the whim of a Minister or under self government than that afforded by a shire to its reserves under single house legislature with purely local interests. The authority of the NCDC in the regulation of the use of rural lands has been disputed in some submissions to the Parliamentary Committee.

The security of Namadgi is the first and principal consideration of the Association and all allegiances to a system or personalities in it should be secondary to this prime objective.

The Commonwealth National Parks and Wildlife Service Act requires a national park to be declared with the approval of both Houses of Parliament and proclaimed by the Governor General. It can only be revoked by a similar procedure.

The Commonwealth Act has provision for public consultation in the preparation of Plans of Management, which have a currency of 10 years and likewise have the approval of both Houses of Parliament. A Plan of Management has been prepared with public consultation and issued by the Parks and Conservation Service. It has no legal status at present but an amendment of the Ordinance could give it some legal force.

Local control rather than by a

Federal Service was seen as an important issue by some members, but the day to day management of the Parks and Conservation Service, which has not been questioned, can still be maintained. There is provision in the Commonwealth Act for the Director, subject to the approval of his Minister, to delegate all or some of his authority to another body. Norfolk Island provides a pattern for this style of operation and no doubt a formula could be evolved to satisfy the different conditions applicable to Namadgi.

Funding approval for a specific project is always difficult to predict and no doubt in the ACT there will be tussles in the division of funds between urban parks and a reserve which is mainly wilderness and out of sight. Funds to the National Parks and Wildlife Service are by parliamentary vote and at least, once allocated, must be spent on the project for which the funding was applied for. Adequate and ongoing sources of funding come second to the integrity of the park.

The Association had a long fight to have a reserve called Namadgi National Park. Its future is precarious under the present ordinance, under self government it would be little better. Grazing could be resumed, the forests denuded, ski runs built or other recreation based activities commenced with little public input or effect on the proposals.

The fight is not finished, Namadgi still falls short of its potential boundaries, the Lower Cotter Catchment is still under the threat of logging for the brown barrel and alpine ash timber it contains and until the threat is removed the Lower Cotter is unlikely to be included in Namadgi. We should not rest until Namadgi is extended to its natural boundaries to include all the natural forested areas surrounding it. They are important as a buffer and to preserve the visual line of mountains to the south of Canberra. Only in this way can the name and visual impact of the mountain ranges as perceived and first recorded by Dr Lhotsky in 1834 be perpetuated.

Namadgi should be a model to all states for the management and integrity of a national park. Our objective should be to make Namadgi a model national park, an oasis in the surrounding cleared pasture and urban lands.

Reg Alder

Jervis Bay – A Brief History

Neville Esau

The current status of land around Jervis Bay reflects decisions by New South Wales and Commonwealth Governments for over 150 years. A brief history of these decisions can give some insight into the present situation and provide a pointer to strategies for conservation of the Bay and hinterland. The pre-history of the area is also extensive and has significance for conservation plans, although this aspect will not be covered here in any detail.

Early History

The first European to explore the Bay was a Lieutenant Bowen (hence Bowen Island) in 1791, who named it *Jervis Bay after a Sir John Jervis*. The district was explored in more detail by George Bass when his ship *Cumberland* was wrecked south of Jervis Bay in 1797. In 1805 Lieutenant Kent (HMS *Buffalo*) and James Meehan, Assistant Surveyor General, explored the Shoalhaven area and reported on the timber resources discovered. As a result of this report cedar quickly began to be removed. Landward exploration began in 1818 when James Meehan and Charles Throsby set out to find an overland route to Jervis Bay.

In the 1820s the Government began issuing land grants in the vicinity of Jervis Bay and by 1840 wool was being shipped from the Bay. By the 1870s cattle were also being grazed, and timber was being harvested and shipped on an extensive scale. Later, fishing and whaling developed from the Bay and also shipbuilding, in support of these industries.

Recent History

In 1915, the New South Wales Government ceded some 73 square kilometers of land and water at Jervis Bay to the Commonwealth in accordance with the terms of the Seat of Government Act. This act provided the Commonwealth Territory would have access to the sea. Jervis Bay was to be that access.

Some of the significant decisions affecting the Commonwealth Territory since that time have been:

- The Royal Australian Naval College was opened in 1915 at Captains Point. In the economic depression of 1930 the College

was transferred to Flinders Naval Base in Victoria and the College buildings were adapted to tourist accommodation; the Navy returned during the Second World War. The present access from Nowra and the airstrip were also constructed at this time. The College reopened in 1957 as HMAS *Cresswell* incorporating the airstrip and other associated facilities. During the 1960s the airstrip was upgraded and a radar station constructed at Bherwerre Trig. Although some Naval training has now been transferred to the *Defence Force Academy* in Canberra, current policy is to retain training facilities at Jervis Bay.

- In 1951 an annexe to the National Botanic Gardens was established at Jervis Bay. Initially of 2 ha., this has subsequently been expanded to 78 ha.

- In 1954 hardwood logging was approved in forest areas; pine plantations were established in the logged areas.

- In 1969, the Government decided to construct a nuclear power station in the Territory. A site at Murrays Beach was excavated and an access road constructed. Houses were built in Jervis Bay village for staff of the proposed station. Construction was abandoned at the excavation stage.

- Two-thirds of the Territory was declared a public park under the ACT Public Parks Ordinance in 1971, following a land-use report on the Territory, and is known as the Jervis Bay Nature Reserve. Despite the availability now of the Nature Conservation Ordinance, and the greater protection this would afford for the secure conservation of the Reserve, no plans to effect the transfer to the NCO are under way.

- All commercial primary production activities have now ceased. The remaining pine plantations are not considered commercially viable and are managed as experimental areas. Most of the land not included in the Reserve or the Naval areas is managed in sympathy with the Reserve. It should be noted that popular beach and camping areas including Green Patch, Bristol Point, and Murrays Beach are *not* in the Reserve.

- A lease on Bowen Island (part of the Commonwealth Territory), was granted in 1953. The lease was extended in 1967, to expire in 1977, when the intention was to include the Island in the Jervis Bay Nature Reserve. Following a vigorous campaign by the lessees, however, the lease was again extended to 1985. In December 1985 the Island was declared under the Nature Conservation Ordinance and the lessees were asked to leave. Instead they have initiated an action in the ACT Courts to force the Minister to reverse this decision and extend the lease again. This case is due for hearing later this year.

- Apart from the Commonwealth Territory the balance of the Jervis Bay area is part of the Shoalhaven Shire and some 60% of the foreshore is zoned for village/holiday development. Recent moves along these lines have seen the Shire buying further areas of hinterland for speculative sales in anticipation of further transfers of Naval facilities to the Bay area.

- Along with the nuclear power station the most damaging proposal for the Bay foreshores was establishment of a steel works adjacent to Callala Beach to produce semi-finished steel products for export. The New South Wales Government announced a feasibility study into this proposal in 1969. Fortunately the project has not proceeded beyond the feasibility stage.

- Beecroft Peninsula (the northern arm of the Bay), was leased by the Commonwealth from the New South Wales Government for defence purposes, primarily as a naval *gunnery range*. The greater part of the Peninsula was purchased by the Commonwealth in 1974. Two smaller areas on the Peninsula are also part of the ACT.

As this brief survey shows, many and varied proposals have been made for the use of the bay and foreshores. Some have been implemented, many have fortunately petered out. Apart from the declaration of the Jervis Bay Nature Reserve, none was designed to achieve conservation of the natural values of this area, with its rich and varied flora and fauna. Until all remaining natural foreshore and marine areas are included in parks or reserves the Bay must be considered at risk from alien developments.

The Natural Values of Jervis Bay

Kevin Frawley

The Jervis Bay area is rich in natural values of both a marine and terrestrial kind. Combined, they result in a landscape of high scientific value and scenic quality. The ecosystems of the area resemble those of the sandstone areas to the west and north (eg, the Budawangs and the Blue Mountains) but are particularly valuable at Jervis Bay because they have been less affected, so far, by human activity.

The waters of Jervis Bay vary in depth from 22 metres in the centre to extensive relatively shallow areas such as Hare Bay (5 metres). They support a rich and diverse fish fauna. About 180 species belonging to more than 80 families have been recorded. These form the basis of a tuna baitfish industry. The marine plant communities have attracted much interest. They appear to be in a natural state and taken as a whole, are unique and of considerable scientific importance. The sea-grass beds are probably the most extensive in New South Wales, with the sheltered conditions and clear water allowing growth in depths of 10 metres. The largest beds occur in Hare Bay (north-west) where dense *Posidonia australis* (strap-weed) meadows cover several square kilometres of shallow bottom. Eel grass (*Zostera capricorni*) is also very abundant in the Bay in deeper waters. Their extensive coverage of Jervis Bay might be compared with their reduced extent in the turbid and polluted waters of Botany Bay.

A striking visual feature of the Bay is its fringe of long beaches with fine, white sand. These are broken by low rocky headlands and tidal creeks while on the southern part of Beecroft Peninsula, cliffs emerge directly from the sea. The creeks and wetlands adjacent to the Bay are an important habitat for fish breeding.

The Jervis Bay Territory and Beecroft Peninsula are sandstone areas with a flora similar to the Sydney and Blue Mountains area.

Heath and sclerophyll forests and woodlands predominate with smaller areas of coastal scrub, wet heath and relict rainforest patches. Similar vegetation is found on the western margins of the Bay. There are also limited areas of mangroves on small estuarine mudflats. Thus

within a small area there is a great diversity of vegetation – of scientific interest because of its relatively undisturbed state, and particularly in the spectacular spring floral displays in the heaths – of great attraction to visitors.

The diverse plant communities around Jervis Bay could be expected to support an equally varied fauna, however, there have been no systematic long term surveys in the area. An overview of the fauna can only be obtained from the brief studies conducted, and inference from similar ecosystems on the south coast. Mammals common in the Jervis Bay Nature Reserve include the Greater Glider, Ringtail Possum, Grey Kangaroo, Swamp Wallaby, Red-necked Wallaby, and the small marsupial carnivore, Stuart's Antechinus. The Grey-headed Flying Fox is also found in the area.

Bowen Island, at the entrance to the Bay has a particularly interesting birdlife. It has been estimated that 1,000 breeding pairs of Little Penguins inhabit the island. Three species of Shearwater are also found there – the Short-tailed (or Muttonbird), Sooty, and Fluttering. All are migratory.

Some rare and endangered birds have been recorded from the Jervis Bay area, and it is thought others may occur there due to the suitable undisturbed habitat. The sedentary Ground or Swamp Parrot has been

recorded from sedge land and wet heaths on Beecroft Peninsula. This species is now considered to be extremely rare, as its habitat has been progressively destroyed by coastal development. The Eastern Bristle Bird is expected to occur in dense heaths such as those on Beecroft Peninsula and behind Hyam's Beach. Birds found in the area which have suffered habitat destruction elsewhere include the Little Tern, Pied Oyster Catcher, Top Knot Pigeon, Bar Shouldered Dove and the Peregrine Falcon.

This is only a brief introduction to some of the natural values of the area, but to even the casual observer, the natural attractiveness of the area derived from a combination of striking geology, crystal clear waters and undisturbed bushland is obvious. Much of the use of Jervis Bay is concentrated in foreshore areas where these natural aspects juxtapose. It is in this zone also that the greatest changes are proposed.

The foregoing has been drawn from the following sources:

1. Dept. of the Capital Territory, 1979 *Jervis Bay Nature Reserve: Draft Development and Management Plan* (AGPS, Canberra).
2. Ingwersen, F., 1976 *Vegetation of the Jervis Bay Territory*, Dept. of the Capital Territory Cons. Ser. No. 3 (AGPS, Canberra).
3. Pollard, D.A. (Ed), 1973 *Jervis Bay: The Future?* (Special Publ. Aust. Littoral Society, Sydney).
4. Shoalhaven City Council, n.d. *Jervis bay Part 1: Situation Paper* (S.C.C., Nowra).



Governor Head and Bowen Island.

Photo by Den Robin

The Navy and Jervis Bay

The adjoining article by Neville Esau (Jervis Bay – A Brief History) shows that the Navy's perception of the usefulness of Jervis Bay has waxed and waned. Until recently, the Navy was contracting and withdrawing from the Jervis Bay area. With the demise of the Fleet Air Arm HMAS Albatross had lost its *raison d'être*. The opening of the Australian Defence Forces Academy had greatly reduced the requirement for HMAS Creswell. All this changed on 3 October 1985 when the Minister for Defence hastily announced the construction of an ammunition depot and armaments loading wharf on Jervis Bay, and the initiation of investigations to relocate the Fleet Base to Jervis Bay.

Why has the RAN suddenly re-discovered Jervis Bay? Unfortunately it is not for the area's exceptional conservation and recreational values. It is rather that the foreshadowed moves to Jervis Bay were seen as solving three pressing (largely political) problems.

The principal RAN Fleet Base is at Garden Island, in Sydney Harbour. As well as being the home port of major Australian naval vessels it is visited, on occasion, by US ships. These visits generate considerable political controversy and public concern, especially when the ships are nuclear powered and, probably, nuclear armed. The State Government 'cops' much of the political flak for the Commonwealth's political decisions on these visits.

The second problem is that Sydney's urban spread has enveloped the principal Naval ammunition depot at Silverwater, and it does not satisfy recently promulgated NATO safety standards. Furthermore the local member² wants 90ha of the present depot to be used to build facilities for the World Student Games³ in 1989.

Thirdly, the RAN occupies a number of highly desirable waterfront sites on Sydney Harbour. The State Government has been pressing the Commonwealth for years to vacate much of this land.

If the armaments depot, fleet port and the other facilities went elsewhere, hey presto!, everybody (especially NSW State politicians) would be happy. Hence Jervis Bay. It is Commonwealth territory, hence the 'Feds' get the political brickbats;

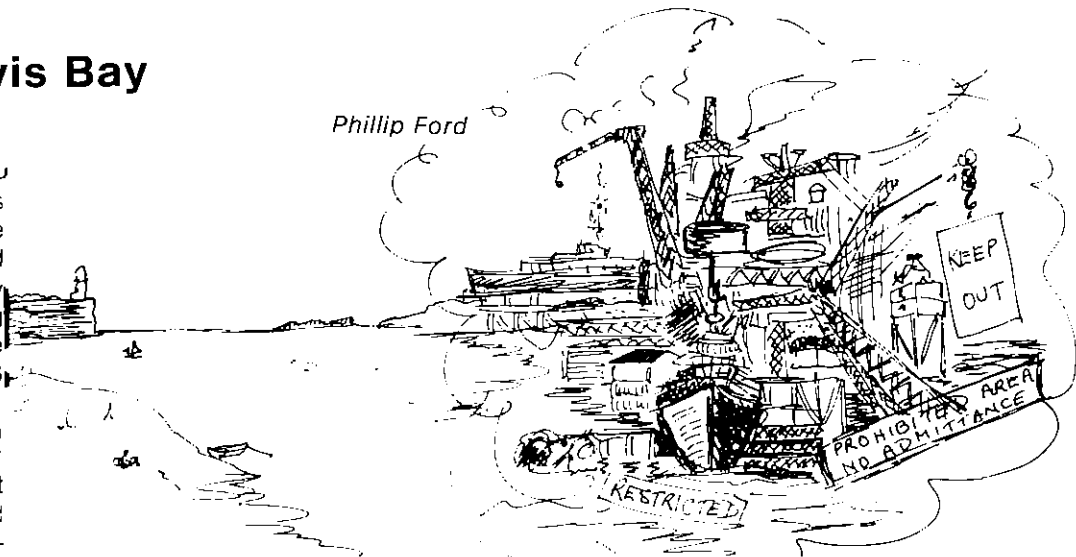
it is quite remote from any concentration of likely protesters; and the NSW Government would get lots of prime waterfront real estate.

The present situation⁴ is that the Prime Minister and the then State Premier declared (17 November 1985) that the armaments depot and loading facility will move to Jervis Bay at a cost of more than \$100M, and that the relocation of other Naval facilities including the Fleet Base be investigated 'back of the envelope' cost estimate is \$1,500M).

The preferred site of the armaments wharf (see map) is Greenpoint on the Beroft Peninsula. The indicative site for the Fleet Base (see map) is on the Bherewere Peninsula on Jervis Bay. It would occupy about 2km of the presently unspoilt foreshore from Murray's Beach to Scottish Rocks. A number of *breakwaters* and wharves would be built in this area and public access would be prohibited. About 120ha would be required for the waterfront area and barracks accommodation. The hinterland of *E.pilularis* and *E.botryoides* forest and relic rainforest⁵, now carefully and successfully managed by the ACT Parks and Conservation Service in sympathy with the adjoining Jervis Bay Nature Reserve, would be totally transformed into an industrial/urban area. The character of Green Patch, and of the Bristol Point Beach would be irrevocably changed.

What is to be done? Whether any of the Navy's proposals go ahead depends largely on the public response to them. Whilst there are political advantages, the economic costs are enormous. There is considerable hostility (for different reasons), both within the Navy and within the ALP, to the proposals.

Phillip Ford

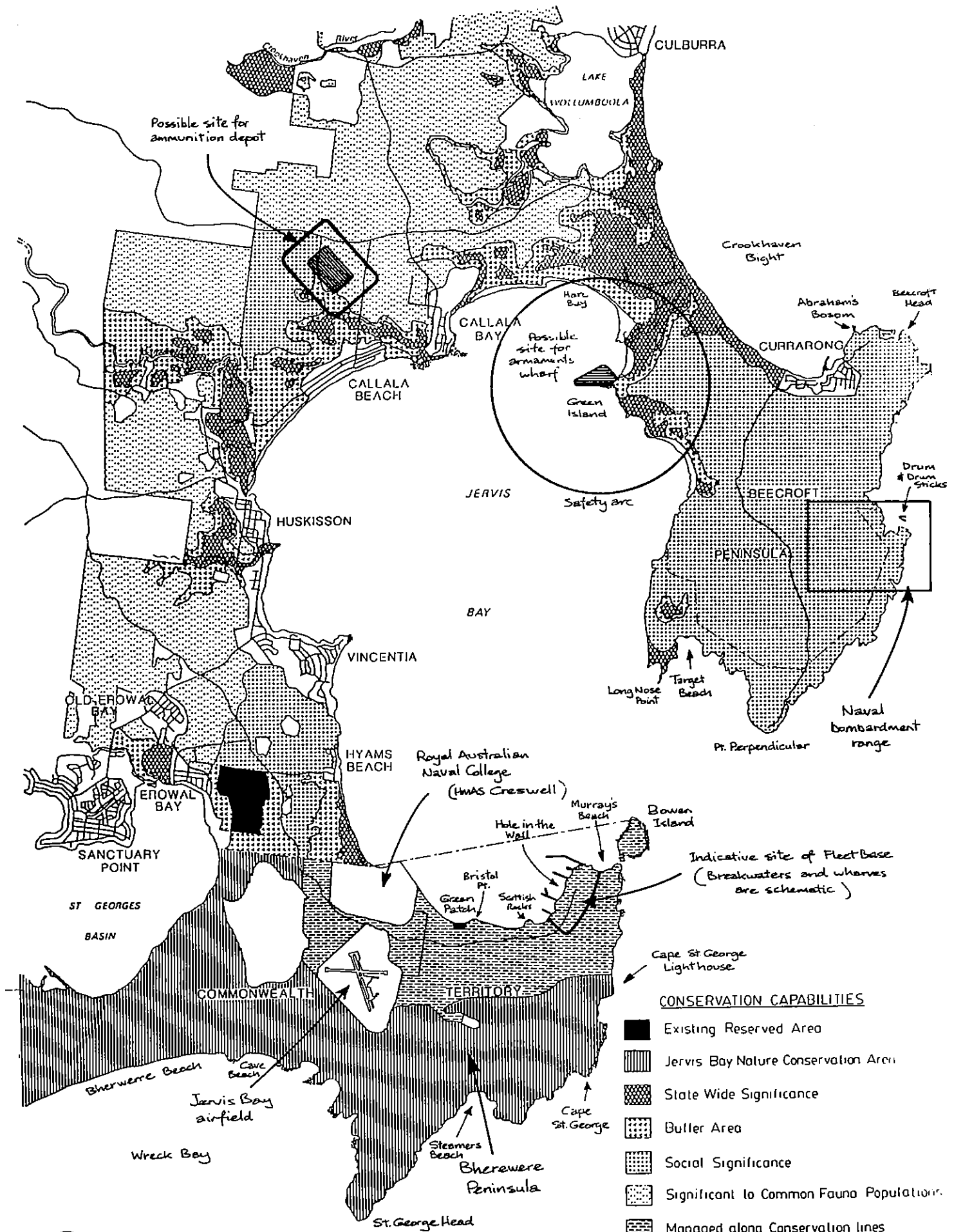


The conservation values of the areas have been long known and recognised by incorporation in the National Heritage Register. Inputs by NPA of ACT could be influential in determining the outcome.

References:

1. I use the term "Jervis Bay" broadly to mean not only the waters of the Bay, but also the Bherewere and Beroft Peninsulas.
2. Mr John Brown, Member for Parramatta and Minister for Sport, Recreation and Tourism and (coincidentally?) Minister Assisting the Minister for Defence.
3. This paragraph is based on a forthcoming article by Mr John Langmore (Member for Fraser which includes the Jervis Bay Territory) in *Bogong*. I am indebted to Mr Langmore for providing a preprint.
4. Anonymous: *The Navy and Jervis Bay – How it would affect you* (an 8 page pamphlet issued by Defence Public Relations and letterboxed throughout the Nowra area).
5. F. Ingwersen: *Vegetation of the Jervis Bay Territory*. ACT Conservation Series No. 3. AGPS Canberra 1976.

Map showing conservation capabilities of the Jervis Bay area, and possible sites for proposed Naval installations. It is taken from 'Jervis Bay Situation Paper' prepared by the Town Planning Department of the Shoalhaven City Council and incorporates information from the Navy's circular to local residents.



Map by Greg Heath, CSIRO.

SOURCE : National Parks & Wildlife Service

The Beecroft¹ Peninsula

Phillip Ford

The Beecroft Peninsula is the protective land arm defining the eastern and northeastern shores of Jervis Bay. From the Jervis Bay Territory it appears as a single giant heath-covered block tilted upwards towards the coast, with 90m high cliffs plunging into the ocean all along its eastern face. This giant cliff line marks the Point Perpendicular Fault². There are no rock platforms at sea level, and the cliffs 'plunge' on a further 30-60m under water. These vertical walls are covered with spectacular displays of marine life. This area, as well as the sheltered and sparkling clear waters of Jervis Bay, is a mecca for under-water enthusiasts³.

Closer inspection reveals a more varied and diverse topography. Clefs and gaps dissect the cliffs giving access to several small beaches, including Target Beach. On the Jervis Bay side the cliffs give way to a variety of woodlands and forests, extended sandy beaches, and finally to seagrass beds near Green Point and mangroves in Carama Inlet.

Ownership

The whole of the Beecroft Peninsula up to Carama Creek is now owned by the Commonwealth. Originally only a narrow coastal strip running around the cliff tops was ceded to the Commonwealth in 1909 for defence purposes. The area was used as a gunnery range and, subsequently, a separate bombing range was established near Carama Inlet when the Mt Jervis Estate was acquired by the Commonwealth. The rest of the Peninsula, apart from Currarong Village and the Abraham's Bosom Flora Reserve in the north-eastern corner, was acquired by the Commonwealth (for 'defence purposes') in 1981. This ended one of the strangest examples of multiple land use I know of. The Beecroft Gunnery Range and the Currarong Flora Reserve overlapped⁴ to the considerable disadvantage of the latter; Commonwealth ownership effectively disestablishes the Reserve.

A Beecroft Peninsula National Park?

The Beecroft Peninsula is of major conservation significance. The bombing and shelling have ensured that the area has escaped the 'development' commonplace on most of Jervis Bay. Apart from the shell and bomb craters there have been fires arising from the bombardments and heath fires deliberately lit to improve pasture quality when the area was open to grazing.

The flora is especially diverse due to the wide variety of different niches, having at the one time an unusual southern extension of the heathland and flora of Sydney and the Blue Mountains, and remnant rainforests closely akin to the northern NSW rainforests.

The sedgeland and wet heaths of the Beecroft Peninsula provide a home for the Ground Parrot, now a rare species; and Lake Wollumboola provides breeding grounds for the Little Tern and the Pied Oyster Catcher, two species under threat due to loss of habitat. The rainforest patches provide shelter for the now rare Top Knot Pigeon and the Bar-shouldered Dove.

The diversity of environments, the juxtaposition of land and sea, and the relatively unspoilt nature of the area make it a fascinating place to explore on foot (but watch out for the big (ca. 2m) black snakes!). The area's virtues have been long recognised. In 1944 the National Parks and Primitive Areas Council (Myles J. Dunphy, Hon. Sec.) proposed measures to preserve the land, and its flora and wildlife, over the bulk of the Peninsula up to, and including, Lake Wollumboola. This met with a particularly enlightened response from the then Minister for Lands, who withdrew from sale all state controlled land in the area and promulgated measures for the preservation of the native flora and its use for public recreation. The Commonwealth subsequently acquired a 20-year lease (expiring 1974) for the gunnery range. Further initiatives, in 1968, by the Nature Conservation Council led the then Minister, Mr Tom Lewis, to

assign a 'high priority to' recreation and conservation in the area. In 1974 he refused a further extension of the Commonwealth's lease in what was widely reported as a prelude to the designation of the whole area as either a National Park or State Recreation Area.

These promising moves were largely undone by the sale of the land to the Commonwealth. Clearly the Department of Defence has other prime uses for the area and has neither the expertise nor the enthusiasm to manage the area for its conservation values. At present a single ranger on loan from the ACT Parks and Conservation Branch in the Jervis Bay Territory is responsible for overseeing a 4,600 ha area. There is a Management Plan for the area but as far as I can establish it has not been published, nor subjected to public scrutiny, comment, and inputs. Only token efforts are going into implementing the plan and despite the best efforts of the overburdened ranger many of the prettiest and most valuable areas are being damaged, and erosion of vehicle tracks is a growing problem.

The final assault is the proposed ammunition wharf and associated breakwater to be built on the extensive sea grass beds at Green Point (see map). It involves considerable construction work in an area of national conservation significance. To my mind the sensible solution is to abandon these proposals and realise Myles Dunphy's original vision of a National Park encompassing all of the Beecroft Peninsula and reaching up to and including, Lake Wollumboola. This has long been the position of our sister organisation, the NPA of NSW. With the area now a *de facto* part of the ACT perhaps NPA of ACT should take a similar stand.

References

1. Beecroft was the maiden name of Hannah and Mary Copeland, successive wives of the Minister for Lands in 1886.
2. Catford, A., 1984. 'Jervis Bay - A plea for small "d" development.' *Habitat*, 12(4), pp. 20-25.
3. Spencer, M., 1984. Jervis Bay: Pristine Wilderness. *Ibid.* pp. 25-26.
4. Currarong 1:25,000 (Map: 9027-1-N). Central Mapping Authority, 1981.

Jervis Bay: A Special Place

Diane Garrood^o

Situated a mere 200 km south of Sydney, the white sandy beaches of Jervis Bay encompassing sheltered clear waters are truly a tranquiliser for the smoke-filled, noise-rattled soul.

Jervis Bay Nature Reserve lies on the bay's southern peninsula. It is located within the Commonwealth Territory of Jervis Bay and is managed by the ACT Parks and Conservation Service. The Territory's total area of 7360 hectares includes 800 hectares of bay waters.

The management objectives for the territorial waters are to maintain the marine ecosystems in a naturally evolving state to provide opportunities for scientific, educational and recreational use consistent with their protection. Commercial fishing is not considered compatible with the management objectives and lapsed licences are not renewed. No new licences are being issued.

Approximately 700,000 people visit Jervis Bay Territory each year and the sheltered water of the Territory attracts swimmers, anglers sail board riders, boating enthusiasts, SCUBA divers, snorkellers and underwater photographers. Unfortunately, the area also attracts shell collectors and food gatherers and the littoral zone is especially suffering under the pressure of the increasing numbers.

During the early 1980s, the scallop population boomed in Jervis Bay. Despite the passing of protective legislation forbidding the dredging for scallops in ACT waters, illegal



Murray's Beach.

Photo by Phil Gatenby

dredging was carried out, mainly under the cover of night. Random marine patrols by nature reserve staff were increased in frequency and through learning by mistakes, a successful prosecution was accomplished and suitably advertised!

Now, three years after the boom, the scallop population is slowly recovering. Recreational divers, however, are exerting considerable pressure on the remaining scattered scallop beds in Territorial waters.

In addition to protective legislation, public awareness and support is imperative if the bay is to survive in its natural state. To kindle this awareness, the nature reserve interpretive programs are designed to promote understanding and appreciation of the marine environment as well as the terrestrial environment. Activities range from slide shows and film nights with a marine theme, to rock platform

walks which are conducted both day and night.

Both the ACT Parks and Conservation Service and the NSW State Fisheries are aware of the ecological value of Jervis Bay, particularly as a nursery area for many of the commercially and recreationally important fish species in the area. The NSW State Fisheries is currently considering a wide variety of sea grass and mangrove habitats in Jervis Bay as potential aquatic reserves. Hopefully, through appropriate legislation and widespread public support, the whole of Jervis Bay can be protected so that visitors in a hundred years' time can look at its unspoilt, natural beauty and still say 'Jervis Bay is truly special!'.

^o Edited from an article in *Australian Ranger Bulletin* Vol. 3 No. 3 1985 pp 35-36.

WANTED

Speakers for General Meetings

The NPA holds general meetings on the third Thursday of each month from February to November inclusive.

These meetings are planned to provide a variety of guest speakers and films on conservation and national parks issues.

Volunteers and/or suggestions for topics are always needed. If you would like to know more about a particular subject, or know someone who is willing to speak, we'd like to know!

Please contact Anne Robertson (ph. 82 1141) with your ideas.

Renewal of Subscriptions

The response of members to 1986/87 renewal notices has been very good. However, a red spot on the label of your Bulletin indicates that Association records show you as unfinancial and that Mrs Laraine Frawley would just love to hear from you. The Bulletin distribution list will be revised in December by deleting any unfinancial members.

Just Briefly—!



Some of the best things of life in Canberra are free, eg magnificent music, gorgeous gardens, and ... excellent exhibitions. Regarding the latter, I wish to thank Rodney Harvey, Interpretation Officer at the Australian National Botanic Gardens for the following information. Taking the place of the 'Kakadu' Display in the Visitors' Centre finishing on 1 September, will be 'Gardening in Australia' which will last until early January. This promises to be an intriguing insight into ... influences on Australian gardening from early days to the present'.

In late September there will be a unique opportunity for those interested in the endangered species of Australian plants to see some of these growing at the ANBG. Guided tours with discussions are to be held on 24-26 September. Guided tours will also be held on 28 September, after a public lecture in the Theatre at 2pm, given by the Director, Dr R. Boden, on 'The Role of Botanic Gardens in the Conservation of Endangered Plants'. Unfortunately by the time you read this, it will be too late to act upon the information regarding Wattle Week. During the last week in August, activities organised by the ANBG included wattle propagation workshops and guided tours around the Acacia sections. It may be that these could be repeated next year.

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It seems that the NPA has become traditionally associated with the Life Be In It walks sponsored by the Department of Territories and Reid TAFE. A handful of members generously give their time and efforts to lead these urban bush rambles.

The first series in 1984 was led by Muriel (Story) Edwards, who later called upon Jenny Morrison to help because of the large number of people participating - 45 and upwards. The following year when Muriel was unable to continue, Bob and Sybil Story and Shirley Lewis led the autumn walks, with Sheila Kruse and Ken Johnson taking over in the spring. By the time you read this, the 1986 spring series will be underway, with Sheila Kruse and Ken Johnson leading the Northside walks and Shirley Lewis and Bob Story leading those on the Southside. These walks are comfortable two-hour rambles in urban bushland and there is no age limit. The meeting places are always at bus stops to facilitate use of public transport. Contact 46 2174.

★ ★ ★

Welcome back to Sophie Caton who has returned from a month's visit to Europe. After the heat of summer in London and Paris, she is anxious to resume mountain walks with the NPA which will, in her own words '... enable me to breathe again'. After a long walk through forests in her native Germany, she brings the good news that the trees affected by 'die-back' are in forests of mono-culture, mainly pines. The forests containing oaks and beeches seem to be healthy and thriving.

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Residing in Brisbane since late last year, Sylvia Outridge made a brief stop in Canberra during July. She came south to attend a week's CC E ecology course held at Jervis Bay. Sylvia returned to Canberra to join some of her back-packing cronies including the Thompsons, Reg Alder, etc. for a long weekend in the Weddin Mountains, Conimbla and Nangar National Parks. She misses her Canberra friends, but is enjoying bushwalking around the Brisbane area.

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Another NPA member at Jervis Bay was Joan Hegarty who enjoyed the ecology course to the utmost and

has not stopped talking about it since.

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Congratulations to Phil Gatenby and Jan Ogden on their recent marriage.

★ ★ ★

Charles Hill tells of a positive, if unexpected by-product of the tree maintenance project. Two Brownies now, have gained their Conservation Badges through joining in a working bee on the scheme. They were set tasks such as checking for damaged trees and insect infestation, weeding and remove scale from leaves. In addition they learned about the different species of trees and a little about the surrounding area. Encouraging to know that some Brownies are now Greenies!

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Could it be that Kakadu National Park is the flavour of the year? It appears in the film 'Crocodile Dundee'. Recently there was a beautiful and informative exhibition complete with live olive python at the Visitors' Centre of the National Botanic Gardens. This was held in conjunction with the launching of the book 'Kakadu - A World Heritage of Unsurpassed Beauty' (ANPWS) published by AGPS. Then in the June issue of the NPA Bulletin was a delightful short article on Kakadu by the young Vanessa Lee. Memories of this fascinating place were evoked for an NPA member during a recent visit to Melbourne when she attended an exhibition of 30 works by well-known Victorian artist Clifton Pugh. Through the rain-spotted windows of the old marble banking chamber, the wind-torn trees of Bourke Street provided a perfect contrast for the warmth of some of these paintings. Works such as 'Waterfall, Arnhem Land', 'Billabong, N.T.', and 'Black Cockatoo and Falls, N.T.' vividly recalled to this member the irresistible atmosphere of Kakadu National Park, captured so perfectly in Vanessa Lee's beautiful article.

★ ★ ★

12 November – Wednesday Weekday Walk (A)
The Pinnacle/Mt Painter Ref: UBD Canberra
Leader: Ingrid Friedrich 54 3218
 Meet at Higgins Shopping Centre 1000. A 12 km walk on regular tracks with very short climbs to The Pinnacle and Mt Painter with excellent views over Canberra.

15/16 November – Flexi Car Camp
Green Patch Ref: Sussex Inlet 1:25 000
Leader: Ian Currie 95 8112
 Contact leader early for details of this car camp in the threatened Jervis Bay area with its distinctive plant and bird communities.

15 November – Saturday Walk (C)
Sentry Box Ref: Yaouk 1:25 000
Leader: Phillip Gatenby 52 6994 (W)
 Meet at Kambah Village Shops 0730. A 550m climb up to Sentry Box from the Yaouk Valley. Off track; but relatively open bush with rock scramble. Easier than the Sheep Station Creek route. A 12 km walk which is well worth the effort. 170 km drive.

16 November – Sunday Walk (C)
The Pimple Ref: Tidbinbilla 1:25 000
Leader: Lyle Mark 86 2801
 Meet at Eucumbene Drive/Cotter Road 0815. A 10 km walk with a climb of 700m partially along Camel Back fire trail to Tidbinbilla Peak and The Pimple, returning via Tidbinbilla Mtn and Lyre Bird Spur. Chance to see rare (for ACT) *Eucalyptus Glaucescens*. Unsuitable for beginners. 40 km drive.

23 November – Pack Walk (1)
Quilty's Mountain Ref: Endrick 1:25 000
Leader: Reg Alder 54 2240
 Contact leader early for details of this easy introduction to camping and the Budawangs, wildflowers and historic Quilty's Pass with an ideal campsite on Blacket Ck. 16 km fire trail walking. 270 km drive.

23 November – Sunday Walk (C)
Mt McKeahnle Ref: Corin Dam 1:25 000
Leader: Neville Esau 86 4176
 Meet at Orroral Tracking Station site 0800. A 22 km walk along Orroral Valley with a 500m climb at the end of the valley. Spectacular views over the northern end of Namadgi National Park. Please ring leader for details as this is not a walk for beginners. 100 km drive.

29/30 November – Pack Walk (3/5)
Booijah Creek Ref: Sassafras 1:25 000
Leader: Phillip Gatenby 41 8284
 Contact leader by Wednesday for details of this walk in the Morton National Park. No tracks and some rock scrambling may be involved. Total climb of about 500m. 240 km drive.

30 November – Sunday Walk (C)
Gibraltar Ref: Tidbinbilla/Corin Dam 1:25 000
Leader: Lyn Richardson
 Meet at Kambah Village Shops 0830. An 8 km walk to a peak SE of Gibraltar Falls. Some track and some bush with a climb of 200m, views across 'Booroomba' and Paddys River. 40 km drive.

6 December – Saturday Tree Maintenance
Glendale Ref: ACT 1:100 000
Leader: Charles Hill 95 8929
 Arrive anytime after 0930 with gloves and heavy gardening tools for tree and guard maintenance.

6/7 December – Pack Walk (2)
Klandra: Ref: Tantangara 1:100 000
Leader: Denise Robin 81 4837
 Contact leader by Wednesday for details of this walk from Klandra 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 intriguing Big Hole and then to the fascinating Marble Arch. 190 km drive.

14 December – Canoe Sunday
Casuarina Sands/Uriarra Crossing Ref: ACT 1:100 000
Leader: Peter Marshal 47 4999
 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
Orroral ACT 1:100 000
Leader: President
 Meet at Orroral picnic grounds for NPA Xmas party.

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 Ian 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.

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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.

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OUTINGS PROGRAM

October – December 1986



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.
 - 2 Up to 20 km a day, may involve long ascents.
 - 3 As for '2' may include rougher terrain, ie, 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.

14 September — Sunday Walk (A/B)

Nursery Swamp Ref: Rendezvous Creek 1:25 000
Leader: Shirley Lewis 95 2720
Meet: Kambah Village shops 0830. An 8 km walk mostly on bush tracks to the swamp. A total rise of 200m. Approx 100 km drive.

20 September – Saturday Nature Ramble (A)

Black Mountain Ref: Canberra UBD
Leader: George Chippendale 81 2454
Meet at Belconnen Way Entrance 0930. Morning ramble to see flowers for those aged 4 to 80. Bring morning tea. Finishes midday.

21 September – Sunday Walk (A/B)

Boboyan Hill Ref: Yaouk 1:25 000
Leader: Beverly Hammond 88 6577
Meet at Kambah Village shops 0900. A pleasant 12 km walk beginning with a gradual climb of 200m through open bushland to Boboyan Hill, descend to Bulls Flat Creek then join the Old Boboyan Road passing the ruined homestead. A 120 km drive.

20/21 September – Car Camp

Kangaroo Valley Ref: Kiama 1:100 000
Leader: Russ Kefford 26 2631
Contact leader for details of this car camp and walks in the Kangaroo Valley for views and flowers. A 400 km drive.

20/21 September – Ski Weekend

Venue depending on snow.
Leader: Craig Allen 52 5746 (W)
Beginners snow camp. Contact leader early for details of this trip. Numbers limited. NPA members only.

27 September – Saturday Map and Compass Instruction

Black Mountain Ref: ACT 1:100 000
Leader: Margus Karilaid 48 6149
Numbers limited. Please contact leader early for details of this much awaited tuition on map and compass use. This will include a morning of instruction followed by an afternoon of field experience on Black Mountain and further field experience on Sunday.

28 September – Sunday Walk (B/C)

Mt Domain Saddle Ref: Tidbinbilla 1:25 000
Leader: Margus Karilaid 48 6149
Meet at Kambah Village Shops 0800. This walk is an extension of Saturday's map and compass instruction. A 12 km round trip up the Fishing Gap fire trail then on bush tracks to climb Mt Domain. A climb of 300m returning along saddle with view of Cotter and Tidbinbilla down Lyre Bird Spur. Short car shuffle. A 60 km drive.

4/5/6 October – Pack Walk (3/5)

Mt Tarn/Crooked Falls Ref: Corang 1:25 000
Leader: Neville Esau 86 4176
Walks to Mt Tarn, Crooked Falls (Angel Falls) and Holland Gorge. Some rock scrambling and scrub, partly on tracks. Numbers limited. 300 km drive. Contact leader by Wednesday.

4/5/6 October – Car Camp

Bournda Ref: Eden Forests Map/Bega 1:100 000
Leaders: Shirley and Glyn Lewis 95 2720
Camp at Bournda State Recreation Area on shore of Lake Wallagoot. Beach and forest walks, canoeing. About 520 km drive. Meet at camping ground, noon on Saturday. Contact leaders before Wednesday for transport or information.

5 October – Sunday Walk

Stockyard Creek Ref: Corin Dam 1:25 000
Leader: Kevin Frawley 82 3080
Meet Eucumbene Drive/Cotter Road 0830. Visit the highest remaining arboretum in the ACT, parking vehicles on top of Mt Ginini which affords views of parts of Namadgi NP, Kosciusko NP and Bimberi Wilderness Area. 120 km drive.

9 October – Thursday Week-Day Walk (A)

Murrumbidgee Corridor/Uriarra Forest Ref: ACT 1:100 000
Leader: Robert Crutwell 81 3100
Meet at Cotter Road/Eucumbene Drive 0930. A pleasant walk on good tracks overlooking the Murrumbidgee.

12 October – Sunday Walk (A)

Mt Lowden Ref: Bendoura 1:25 000
Leader: Arno Wynd 47 8542
Meet at Canberra Railway Station at 0830. Drive via Captain's Flat to Tallaganda State Forest. Walk on tracks with climb through forest to the top of Mt Lowden. There is a lovely park with short marked walks for family members who want an easier day.

12 October – Sunday Walk (C)

Bogong Creek Valley Ref: Yaouk/Rendezvous Creek 1:25 000
Leader: Frank Clements 31 7005
Meet at Kambah Village Shops 0730. A 20 km walk with more than half through rough bush with a steep 200m climb to a waterfall high up in the Bogong Creek Valley. 100 km drive.

19 October – Canoe Sunday

Casuarina Sands/Uriarra Crossing Ref: ACT 1:100 000
Leader: Peter Marshal 47 4899
Meet at Casuarina Sands car park 0800. A canoeing Sunday down the Murrumbidgee from Casuarina Sands to Uriarra Crossing. All equipment, instruction and bus shuttle provided. All inclusive cost \$60.00 for this full day event. Contact leader early for details.

19 October – Sunday Walk (C)

Yaouk Peak Ref: Yaouk 1:25 000
Leader: Garth Abercrombie 81 4907
Meet at Shannons Flat at 0830. A 14 km walk via trackless ridge with 600m climb for good views of the Main Range and also Namadgi. 170 km drive.

25 October – Saturday Walk

Jerrabomberra Wetlands Ref: UBD Canberra
Leader: Ian Currie 95 8112
Meet at Canberra Railway Station 1400. A lazy Saturday afternoon with the birds of the Wetlands.

25 October – Saturday Walk (A)

Pierces Creek Falls Ref: Cotter Dam 1:25 000
Leader: Lyle Mark 86 2801
Meet at Eucumbene Drive/Cotter Road 0830. For beginners, this is a medium to hard 12 km walk at an easy pace via Hardy Range. A 12 km walk with 180m climb. 30 km drive.

25/26 October – Pack Walk (1)

Gudgenby/Orroral Valley Ref: Rendezvous Creek 1:25 000
Leader: Dianne Thompson 88 6084
Introductory pack walk from Gudgenby to Orroral Valley via Rendezvous Creek and Nursery Swamp. A 16 km walk with 250m climb. A car shuttle will be necessary. 160 km drive. Contact leader by Wednesday.

1/2 November – Pack Walk (2)

Dubbo Falls Ref: Brindabella 1:25 000
Leader: Garth Abercrombie 81 4907
Contact leader for details of this walk into Feint's Range with the main point of interest, Dubbo Falls.

2 November – Canoe Sunday

Casuarina Sands/Uriarra Crossing Ref: ACT 1:100 000
Leader: Peter Marshal 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.

2 November – Sunday Walk (A)

Honeysuckle Creek Ref: Corin Dam 1:25 000
Leader: Shirley Lewis 95 2720
Meet at Kambah Village Shops 0830. A 14 km walk along fire trails and through bush in the Honeysuckle Creek area.

7/8/9 November – Ski Lodge Weekend

Charlotte Pass Ref: Kosciusko 1:100 000
Leader: Ian Haynes 51 4762
Arrive Friday or Saturday morning by 0900. Do your own thing or join a walk. See the *Caltha introloba* which develops under the snow or just relax. Bring sheets, pillow slips (or sleeping bags) and food (cook your own). Please contact leader by 29 October to confirm bookings – NPA members only. 420 km drive.

9 November – Sunday Walk (B)

Billy Billy Rocks Ref: Corin Dam 1:25 000
Leader: Syd Comfort 86 2578
Meet at Kambah Village Shops 0830. A forest walk from Smokers Flat with 200m climb to the granite tors of Billy Billy Rocks overlooking Tidbinbilla Valley. 70 km drive.

9 November – Sunday Walk (A)

Orroral Valley Ref: Rendezvous Creek 1:25 000
Leader: Margaret Aston 88 7563
Meet at Kambah Village Shops 0930. A leisurely walk of 6 to 8 km in an open grassed valley beyond the Orroral Valley Tracking Station site, returning along timbered fire trail (if hot). 100 km drive.

Some NPA members have been enjoying tours of Kakadu. Among those recently returned are Audrey and Charles Hill who, travelling in an International Park Tours 20-seater bus, spent 3 weeks camping in national parks of the Northern Territory. After visiting Katherine and Kakadu, they were fortunate enough to spend time in the less-frequented Gurig National Park on the Cobourg Peninsula.

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Travelling with the same group of people was another NPA member, Penny Hebbard, a keen bird observer who made an impressive list of sightings. Containing altogether over 120 bird species, it included about 50 which Penny saw for the first time—some not found in southern Australia, such as the great bowerbird, others uncommonly sighted in the south. She reported many types of honey-eaters endemic to the northern regions of the continent. Waterbirds included jabiru, brolgas, egrets, herons, two kinds of whistling ducks, the glossy ibis, pygmy and magpie geese, and the fascinating jacana or 'lotus bird' which struts with large feet over the water-lily pads. Penny suggests that anyone intending to visit Kakadu NP should avail themselves of the excellent bird-list put out by the Australian National Parks and Wildlife Service in Canberra.

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NPA member John Ashman found it hard to come to terms with the idea of a sealed bitumen road running through a national park, and burning off being carried out throughout the area. He feels that these factors are not compatible with the concept of a national park. Information on the subject of fire management in Kakadu National Park has been received from ANPWS, and will be summarized in the Bulletin at a later date.

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Other NPA members still touring with International Park Tours, at the time of writing this, are Gladys Joyce

and Mary MacDonnell, from whom we anticipate some travellers' tales of the tropical north.

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At the other end of the climatic spectrum, we not-so-fortunate stay-at-home Canberrans were experiencing a fairly severe winter. Imagine then, the surprise of walk leader Ian Haynes when at 8.30 on a -6° morning of thick fog, sixteen people arrived to join in a walk to Tidbinbilla Mountain. (This was to have been Olive Buckman's walk to Tidbinbilla Peak, but as she was unable to attend, Ian took over at short notice. He decided to extend the walk to the summit of Tidbinbilla Mountain.) Whereas Canberra remained enveloped in fog until after 11 am, Ian and his courageous companions were rid of it much sooner, and enjoyed clear crisp air and breathtaking views. They rested for lunch on the saddle between Tidbinbilla Peak and the Mountain before climbing to the summit. After taking in the almost 360° views from Tidbinbilla Mountain, they returned via Lyrebird Spur, reaching the car park by about 4pm. Ian tells of catching a momentary glimpse of Mt Bimberi before it was obscured by a snowcloud, and of the 'fairyland' effect of thick rime on a stand of bare-branched trees.

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Ian Currie's car camp at Durras South on the June long weekend seems to have been a great success. The children, (big kids too, I'll bet), enjoyed cracker night, and the little ones loved the 'sparklers'. Apart from the first day, the weather was good, making it possible to enjoy the millionaires' breakfast table on the beach one morning. However, it seems there are some people who can't bear peace and quiet. Stalking, with a camera, someone well-known for not wanting to be photographed, is just asking for trouble. So when the unwilling subject retaliates with a bucket of water, can he be blamed? The camera escaped the deluge so where is the resulting 'action' photograph?

★ ★ ★

From the Story Book 'From a Farmyard'

It is probably not generally known even among our own members that whereas birds have one occipital condyle (the pivot at the base of the skull), we have two. Thanks to this, birds have a more flexible arrangement and contemplate their tails whenever they wish, while beyond a certain limit, our arrangement catches and the more introspective of us would need a system of mirrors.

This nature note now switches not to a national park but to a farmyard and not to our native birds but to the sparrow. It is spring, and after feeding, nest-building takes precedence. The hen bird has found just the very thing for that unstable side of the nest – a long piece of string or whatever. She picks up the end and takes off. But she overlooks two matters – one, that every string has two ends, and two, that this other end is firmly jammed in the rubbish. One of our helicopter pilots on survey once told us 'There's only one thing that comes down faster than a helicopter upside down, and that's a greased crowbar'. Well, of course he hadn't seen this episode! But come on, get groggily to your feet and never give in, think of Margaret Thatcher; fluff out your feathers, pick up the end, and put a little more beef in it this time... The cock bird had seen it all. He flew down. 'Hens!' he said (as plain as plain) 'Here, mind out of the way and I'll give you a demon...' *Crash!* A sneeze and a long pause. 'But no wonder, and how silly of me, I took off to the left instead of vertically like this...' *Smash!*

You see the point of the single condyle? But for that wise provision of nature for bird-brains he would have broken his tomfool neck.

★ ★ ★

Well...that all 'til next time, and its not *only* 'fairy floss' and trivia. There's some good solid stuff in there to get your teeth into. How many of you knew, before reading this column, that you have *two* occipital condyles? How about phoning *your* thought-provoking and intellectually-stimulating ideas to 88 1889.

Meliiodora



A Weekend Away

Alice Thompson
age 9½ years

In the mid term break my family, Reg, Tim and Bill went to several national parks. We left Canberra and stopped at the Wallaby Track in Conimbla National Park and we went on that. When we got back we had lunch. It was about 2pm when we reached the camping spot in the Nangar State Forest.

There was a nice, clear, civilized camping spot but knowing Reg, he chose a rough bush camp to stay in but still I liked it. When we had unpacked all our gear and put up our tents we had tea. The first thing we did when we reached the camp we lit a warm fire. We waited and waited for Sylvia who had driven down from Queensland via Jervis Bay. She finally saw our fire at dark and was ready to wave to us when she drove through a long, deep hole. It was very muddy, and slippery. Earlier on Reg had drained the water into the creek but the mud remained.

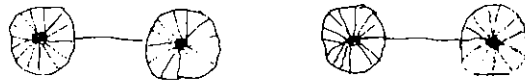
It was very cold compared to Canberra that night. We went on a walk to the top of Mt Nangar and we saw a ramp that hang-gliders jump off. I saw a little rock pool and found 10c in it. We stayed at our camp for



the rest of the day and cooked tea. That night was cold too and as we drove out we saw all the puddles and grass were frozen at the civilized campsite. I was glad Reg didn't pick that.

We packed up to go home and on the way to the 'Weddin Mountains' we went to the Escort Rock, Ben Hall and his gang used to hide behind it and hold up the stage

coach. The first walk we went on in the Weddin Mountains was up a really high cliff. We had lunch up there. Then when we came down we went on our second walk to see the creek and camping site. The creek was empty. When we came back we had a snack before heading home. We went to Yass and had tea there and after that we went home.



Students Again Help Tree Project

Charles Hill

The main task for tree maintenance at Glendale on Saturday 19 July 1986 was to provide all the trees under 90cm height in weedy areas with tall stakes. The trees are not tied to stakes, but there is a need to readily locate them when the weeds are high both to guide the operator of the weed slashing tractor and for maintenance tasks by members.

NPA member and teacher at Narrabundah College, Lois Perry, arranged for a group of College students to help and she and husband John worked with them. A

small number of regular, dedicated NPA members made up the team together with the father of a Brownie who was working for her Conservation Badge.

Two hundred hardwood "tomato" stakes were kindly provided by Namadgi management. The stakes had to be pointed and this was soon achieved with various carpentry tools and no lost fingers. The rain, as hoped, had softened the sometimes concrete-like soil and we rarely needed to use a crowbar or pick which I had brought along. Two tubular starpost drivers had been hired for the occasion and these proved very good.

The team worked with enthusiasm and by 1pm the stakes were in

position and most of the work done, including a subsurface coating of creosote and sumpoil. To assist ready identification the tops of the stakes were painted red, together with the fingers of some members!

The weather was kind — calm and bright sun; outer clothing was soon discarded. After lunch the College group climbed up to the rocky outcrops on the range to the west of the tree site, and reported some impeding scrub in places.

The Association expresses its appreciation of the efforts of all concerned, particularly the helpers from Narrabundah College who have a busy programme of outdoor recreation at weekends.

Brownie Points for Conservation

*Rebecca Lehrer
(Aged 10)*

I have wanted to do my conservation badge for Brownies for some time. In the list of things to earn it, you have to do a Pack Nature Calendar or go on some sort of outing activity helping with conservation. My mother had some problems organising an outing for me but eventually was able to arrange one for me.

So I went to Namadgi National Park on a tree maintenance day to an area in Glendale. The leader of the outing was called Mr Charlie Hill, an elderly man who had raised from seeds the trees in the area in which we were and had gone on many of these tree maintenance trips.

I went on Saturday, 19th July at 11 o'clock. Namadgi National Park is all in the ACT. Mr Hill had warned Mum that the area could get very cold and windy at times and to rug up well. As it turned out it was a beautiful day and I boiled in all my clothes. I ended up carrying them

all (Mrs Hill sometimes kindly carried them).

When I was told that I was going on a tree maintenance outing I had a picture of going to an oakwood. So when I got there I was surprised. It was dry even though there was a river running through it. Mr and Mrs Hill were trying to put back the natural vegetation because this area had been used for grazing property and for a dump when people were building the road. Mr and Mrs Hill, with the help from some other people cleaned it up. Then they went around with a botanist and collected some seeds from the area. They got someone in the ANU to germinate them. The trees are three foot in height now and, on the day, Mr Hill and some students from Narrabundah College were staking the trees to show the Rangers where they are when the grass is cut. In the spring the grass is so long that without stakes to

show where the trees are, the Rangers were cutting down the trees as well.

While they were staking trees, Mrs Hill, my father and I went around looking at the trees to see if they were infected or if there were many insect eggs because the insects killed them by chewing on the leaves and when we found some we squashed them or scraped them off with an old toothbrush. I collected some interesting ones. At the end of this time I had quite a collection.

Most of the trees looked dead. But Mrs Hill showed me where new shoots were coming from the bottom of the plants.

After lunch I went on a nature ramble with Mrs Hill and a retired anthropologist. It was a tough job going up that hill (or is it that I am unfit?). When we returned to where the cars were, I had quite a collection of bones.

I thoroughly enjoyed the day and hope that other children can go on outings like it.

CONSERVATION FOR EVER.

Mt Anne

Col Simpson

Walking through the streets of South Hobart I easily found the house where my walking companion lived. I dropped my pack on the footpath, safe enough at 7 am mid-week. She was ready, more fully equipped than I, for she was walking on over to Melaleuca, while I was returning to Hobart the next day.

I drove, down through the city and out along the Derwent. Like Canberra, you're quickly out of the city. I didn't know exactly where we were headed or how far we were driving and the journey stretched pleasantly on. Through New Norfolk, then Maydena and we were starting to get into the south-west: bush, distant peaks, Mt Tim Shea, Mt Wedge; my guide listed off their names. After a couple of hours we finally turned off a narrow gravel road into a parking/camping area.

Mid March, a blue, still day, so we decided to share a day pack – it was certainly a day for walking in shorts and T-shirts. I had insisted on a map which seemed to amuse my com-

panion. The walking I soon discovered was on a track and then above the tree line the route was well marked with small rock cairns which, while unnecessary on a clear day would be of much assistance in fog or rain.

Up a ridge, from which large Lake Pedder can be seen, and an hour or so walking leads to a small, well-maintained hut with a welcome water tank. Built by the Hobart Walking Club it commemorates, among others, Olegas Truchanas; the roof is wired down against the wind. From the hut, rock scrambling is necessary until a long rolling plateau is reached, reminiscent of the approach to Blue Lake. In deference to an old knee problem and the three day walk ahead of her, Grace decided to rest while I went on, rock hopping again, following the cairn line. Surprisingly, small drifts of snow began to appear, but the summit with a couple of exposed scrambles eluded me that day. Back on the plateau we lunched and drank from one of the shallow pools; on the northerly horizon Frenchmans Cap, to the south Precipitous Bluff – our view was half

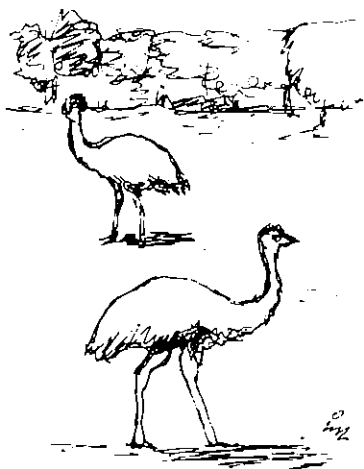
way across the State.

As we descended the ridge, Lake Pedder lay still and exposed, receding behind islands and peninsulas. Grace agreed that it was a panoramic view but not sufficiently atmospheric for her to want to put it down with her oils onto masonite.

Condominium Creek water is red-brown from the tannin off the button grass; Grace had the tent up while I was still assessing the pros and cons of camping under the enormous paper-barks on the bank of the creek. Cups of tea led to a leisurely meal finished with something warming from an old vanilla essence bottle. Chatting, I learned of the possible commercialisation of huts in some of the wilderness areas and of the danger of the peat-like soil allowing a camp fire to smoulder down below ground level, to be later fanned by the wind into flame.

Seven-fifteen next morning and my companion headed off down the track which led past the distant Arthurs on what I hope was a pleasant walk.





A New Breed of Leaders?

Olive Buckman.

The nine takers for Lyle Mark's Black Springs walk one Saturday at the end of May were more than happy to have him as leader. However, word of the shortage of leaders for NPA must have got around, for soon after starting up the fire trail to Fishing Gap, there ahead of us, bang in the middle of the path, stood a large emu. Like all good leaders, he/she waited till we caught up a bit, then set off ahead in front of us tossing his head from side to side, counting numbers and checking on the slower ones. In this way, we were carefully guided along for half a kilometre - or more. Were we too fast? too slow? - we shall never know, as she (I am sure of that now - by the rear end sway) finally thought we were quite capable of going it alone.

However, word spread quicker than thought, for another *three* awaited us, again keeping an eye on us, as they too led us for a considerable distance before deviating into the bush.

The animal grapevine must have still been a little wary of our capabilities to keep to the trail, as a small, almost black wallaby sat bright and alert, a metre or so off the track, counting each head as we passed by.

From there, we must have passed the test, and a very pleasant walk it proved too, including a most ingenious bridge of stones - built by the male members, and complete with handrail - to cross the delightful Cotter for lunch in the sunshine.

Lyle had to lead the group back - no more 'natural' leaders appeared, but a dear baby wombat *did* trot alongside our cars to check that we left the reserve at the end of a memorable day.

Australian Alps National Parks Agreement: Recreation Management Workshop

Ian Garven

A workshop on recreation management in the Australian Alps National Parks is to be held in Canberra during October 1986. This will be the third in a series of workshops focusing on the development of the Australian Alps National Parks Agreement.

The workshop will include a public forum held at the Australian Academy of Science on the evening of Wednesday 1 October 1986 commencing at 7.30pm. The forum will include a keynote address followed by a discussion period in which community groups and individuals will have an opportunity to raise issues and questions which will be considered within the rest of the workshop and by the Liaison Committee which is developing the agreement.

A similar forum held at the Canberra College of Advanced Education in June proved most fruitful, leaving the representatives of the various government authorities with plenty to think about.

The area covered by the Australian Alps National Parks Agreement is approximately 1.2 million hectares and encompasses Namadgi National Park in the ACT, Kosciusko National Park and Bimberi and Scabby Nature Reserves in NSW and the Snowy River, Cobberas, Tingaringy, Bogong and Wonnangatta - Moroka National Parks, Wabonga Plateau State Park and the Avon Wilderness in Victoria. Together these areas contain some of Australia's outstanding and unique natural features.

Victorian, New South Wales, Australian Capital Territory and Commonwealth Ministers responsible for national parks recently

signed a Memorandum of Understanding aimed at developing co-operative management for the Australian Alps as well as recognizing this region's national significance. This agreement does not seek to change management arrangements, leaving the three state and territorial agencies with their existing responsibilities while the Australian National Parks and Wildlife Service will co-operate with these agencies providing assistance to selected programs.

The workshop will be considering a wide array of recreation management strategies and planning issues including:

- a common code of ethics for various management philosophies, eg. fire risk and hazard management, feral animal, grazing and erosion control,
- management of horseriding/equestrian access,
- the integration and co-ordination of educational and interpretation programmes to promote more than the 'Man from Snowy River' image of the high country, and
- arrangements for co-operation between community advisory bodies in NSW, Victoria and the ACT.

More detailed publicity about the public forum will be available in due course. Additional information can be obtained from Ian Garven of the ACT Parks and Conservation Service - phone 46 2189.

Ian Garven works in the Policy and Projects Branch of the ACT Parks and Conservation Service.

Australia's Alpine Areas: Management for Conservation

Papers from a conference organised by the National Parks Association of the ACT, to foster a co-operative approach to the management of Australia's Alpine areas. Edited by Kevin Frawley.

This illustrated publication now available.

Enquiries to NPA Office - Ph 57 1063 or Box 457 GPO Canberra 2601

An Environmental Code for the Bush

Keith McRae

Over the past decade there has been a dramatic upsurge of interest and participation in bushwalking and other outdoor leisure activities. Organizations such as the National Parks Association are helping to meet the growing demand for activities ranging from those which are relaxed and contemplative to those which are vigorous and challenging. These activities, if well organized and led, can provide participants with many positive benefits including enjoyment and satisfaction; relaxation; a sense of well-being or personal achievement; and an appreciation of the beauty and importance of nature.

Two dangers are, however, inherent in any increased participation in outdoor leisure activities. First, it is likely that some leaders may not have the leadership competencies necessary to ensure safe outdoor outings or to avoid negative outcomes for participants. In the President's Foreword in the December edition of the Bulletin, Ross Carlton drew attention to the proud record of the Association for safety and to the need for leaders and walkers to act responsibly in the bush so that everyone can enjoy the experience. Second, the impact of larger numbers of people could lead to unnecessary damage being caused to natural environments. Concerned environmentalists who have ventured off the beaten track in Australian national parks or wilderness areas will have had the experience of being appalled at the thoughtless behaviour of some of the people who use 'the bush' for leisure purposes: the discarded tin or plastic wrapping; the broken bottle; branches torn off a living tree; scraps of food in a small creek. Concern to eliminate such gross examples of behaviour generally considered to be anti-environmental and to ensure that outdoor experiences are enjoyable and worthwhile has prompted various organizations throughout the world to promulgate behavioural guidelines for natural environments.

In the United States, organizations such as the National Outdoor Leadership School, the Wilderness Education Association and the Sierra Club have issued sets of guidelines. Similarly, the Canadian

Camping Association and the Conservation Council of Canada have established codes of behaviour. In Australia, our Association and a number of other groups have issued guidelines. The pamphlet *Enjoy the Bush* has proved a useful source of ideas for NPA members over a number of years. Maybe, however, the time is right for consideration to be given to developing a new set of guidelines? In a series of articles in this Bulletin, a tentative set of guidelines which is both comprehensive and environmentally 'protectionist' will be outlined. The guidelines will draw upon existing codes but modifications will be made to make them as appropriate as possible to Australian conditions. Many of the guidelines will be widely accepted as they stand. It is anticipated that other items will be subject to criticism for different reasons and with different levels of intensity. Hopefully, the code will promote a healthy debate which will lead eventually to the promulgation and wide acceptance of an environmentally sound set of guidelines.

Subsequent editions of the Bulletin will contain guidelines relating to travelling through the bush, campsites, fires and firewood, human waste, rubbish, washing and special measures needed to protect natural communities and entities. The first section of the code deals with the planning responsibilities of leaders. It is suggested that leaders should:

(a) Consult with relevant authorities and other knowledgeable persons about management guidelines; pre-

vailing and developing conditions (e.g. weather, fire, water); particular precautions and care required both for the environment (e.g. endangered species, compacted campsites) and the participants (e.g., overgrown trails, polluted water); and other matters of interest or concern.

(b) Keep the group size small enough to protect the particular environment(s) involved. Remember, however, that the impact of a group is not necessarily or only a function of numbers. A party of twelve knowledgeable and careful people can cause far less ecological damage than one or two people who are ignorant and/or careless.

(c) Undertake a careful reconnaissance of the proposed route (close to the time of the event), locate suitable and sound campsites and assess the environmental implications of any proposed activity.

(d) Ensure that at least two party members have the knowledge and skills required (e.g., first aid, map-reading and navigation, emergency and safety procedures).

(e) Conduct pre-trip discussions and instruction so that all members of the group are aware of the requirements of minimum impact camping, the trip plan and of the food, clothing and equipment needed. The environment should not be relied upon to keep people dry, warm, well-fed or comfortable.

(f) Consult with authorities at the completion of each trip about conditions and problems encountered and suggest any follow-up activity required to protect the area.

LIVING WITH POSSUMS

Residents of Canberra share their gardens and roofs of their houses with the ubiquitous brushtail possum. To help people better understand these delightful, but at times annoying creatures, the ACT Parks and Conservation Service has produced a pamphlet entitled, 'Living with Possums'. It gives information about the possum's biology and encourages people to develop a more positive attitude towards these animals.



Courtesy of Australian Ranger Bulletin, Vol. 3 No. 4 1986 p. 315.

Flying Foxes and Bald Mice

C. R. Tidemann

Bats, although rarely seen, have attracted the attention of people of all cultures through the ages. The bizarre appearance of many, their almost universal habit of flying only at night and their tendency to occupy sepulchres, churches and other places inhabited by the dead have led to many myths and fallacies about these truly remarkable animals. With the exploration of South America stories of blood-sucking bats became jumbled with tales of human vampires and bats acquired an extremely sinister reputation, which in the Western world has been embellished by horror films and the press. By contrast, the Chinese regard bats as good omens and stylized motifs of five bats are common on artefacts from this culture. On islands of the Pacific and Indian Oceans and in Africa flying foxes are regarded as a delicacy and are enthusiastically hunted. The German word for flying fox is "flughunde" and for the smaller bats "fledermaus". The French call the latter "chauve-souris", which translated literally means bald mouse. Observed and remarked upon throughout their almost world-wide distribution, bats in fact are no less fascinating than their counterparts in fiction.

All bats (over 900 species) belong to the order Chiroptera, which comes from two Greek words meaning hand-wing. They are the only animals apart from birds and insects which can truly fly. This ability has enabled bats to colonize even remote oceanic islands. New Zealand has only two native mammals, both of which are bats and the Indonesian island of Krakatoa has been recolonized by 13 species of bat only 100 years after the complete destruction of its biota in 1883.

Bats are grouped into two sub-orders, the Megachiroptera and the Microchiroptera. Modern scientific opinion tends towards the belief that these two groups have evolved quite independently. This comes from recent evidence of radically different brain organisation in the two sub-orders, which corroborates other anatomical and physiological dissimilarities. In Australia both groups are represented. We have four species of

flying fox and some smaller nectar feeding bats (Megachiroptera) and many microchiropterans, which tend to be smaller. The smallest of these as adults weigh less than three grams, whereas a large flying fox may weigh more than one kilo.

Many microchiropterans have the ability to lower their body temperatures and go into torpor in the face of food shortages or low temperatures. This has enabled the family Vespertilionidae (Latin *vesper* - light evening breeze) to colonise all the continents except Antarctica. Megachiropterans do not go into torpor and consequently are restricted mainly to the tropics and subtropics. Vespertilionids comprise most of the bat species in temperate areas, but are outnumbered in warmer climates by other groups. All microchiropterans have eyes, but in some species they may be very small - hence the saying 'blind as a bat'. The use of vision in these species has to a large extent been supplanted by echolocation, which is also used by some whales and other animals. Echolocation (or sonar) has become extremely sophisticated in microchiropterans. They can use it to fly in complete darkness and avoid obstacles as fine as piano wire. They also use it to locate their prey - mostly insects. Some species, however, eat other vertebrates (bats, fish, birds) and three South American species - the vampires - are true parasites, feeding entirely on blood. They obtain this by shaving a piece of skin from a victim with their very sharp incisor teeth. The consequent bleeding is promoted by anticoagulant saliva. Vampires have become well known for their propensity to spread rabies, although it is not generally known that any mammal can carry the disease. In Europe the main vector is the fox. Rabies is fortunately not yet present in Australia although it occurs on the Indonesian island of Lombok. Bat-related diseases in Australia have been limited to a few cases of histoplasmosis (a fungal disease of the respiratory tract) which is present in some bat-caves, including one at Wee Jasper.

Contrary to popular opinion most bats do not live in caves, particularly in temperate areas. Cavernicolous species can, however, be

conspicuous by virtue of sheer numbers. One colony of bats in Mexico has over 20 million inhabitants and the bent-winged bat in Australia may form colonies numbering hundreds of thousands of bats. In the south-east of Australia there are only two species - the bent-winged bat and the horseshoe bat (see photo) which are obligate cave dwellers, compared with over a dozen which typically roost in tree-holes. Most of these species live in small groups of ten or twenty bats which are widely dispersed through timbered areas. Colonies of cave bats are much more restricted because caves are infrequent in most places.

Megachiropterans, with one exception, do not use sonar, but rely instead on excellent vision and a good sense of smell to navigate and find food. They are without exception, eaters of plant products (fruit, pollen, nectar, leaves). Many species of plant have become dependent on bats for pollination or seed dispersal and exhibit characteristics which make them attractive to bats, but not to other animals. Many tropical fruits (for example, avocado, mango, banana, fig) have been cultivated from species which were originally dependent on bats as pollinators or seed dispersers and the long-term stability of some ecosystems may well be geared to the continued existence of these animals.

Rabies causes substantial economic losses to the cattle industry in South America each year and is a human disease problem in some areas. However, the overall impact of bats on man has been mainly beneficial. Agricultural insect pests are destroyed in their millions by insectivorous species and the interdependence of tropical plants and megachiropterans has already been mentioned. The effects of humans on bats have not been so benign. Two species of flying fox have become extinct through over-hunting and deforestation and in closely settled areas of Europe and North America colonies of tree-hole bats now occur almost exclusively in buildings. In Australia the situation is better, but clearing of timber and, latterly, felling of dead trees for firewood has resulted in

habitat loss for many species. One or two species are regarded as rare or endangered. Flying foxes were placed on the protected fauna list in NSW early this year, although they are not protected in Queensland where they sometimes come into conflict with orchardists.

Bats are unlikely ever to have the popular appeal of obvious groups such as birds. Apart from flying foxes, bats are small, shy and rather secretive creatures, unlikely to be seen at close quarters, except by accident. Nevertheless, many species are quite common around cities in Australia, including Canberra and in the warmer months can be seen flitting about at dusk in the pursuit of insects. For those who are interested, it would be a rewarding experience to participate in the summer interpretation programme run by the ACT Parks and Conservation Service at Tidbinbilla Nature Reserve. Bats are, without doubt, fascinating examples of the products of evolution and an important part of our natural heritage.

Further Reading

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Yalden, D.W. and Morris, P.A. (1975) *The Lives of Bats*. David and Charles Newton Abbott, London.

° Chris Tidemann is Curator of the Zoology Department's Museum at the ANU.



The Eastern Horseshoe-Bat, *Rhinolophus megaphyllus*, is one of the only two species of obligate cave-roosting bat in south-eastern Australia. Most bats are dependent on trees for roost sites. Photo by G.B. Baker

I Thought I Would Be Amongst Friends

Reg Alder

Earlier this year a Sydney walking club, with a long record of environmental achievements and dedication, had on separate occasions the NSW Minister for Planning and Environment, the Hon. Bob Carr and Milo Dunphy, a leading environmental activist, address them on their work and environmental issues.

At the conclusion of his talk, the Minister made the remark 'This

evening is not what I expected it to be... I thought I would be amongst friends.' No doubt Milo Dunphy had the same feeling about some of his questioners. Speakers invited as guests to address an organisation, with similar objectives, in agreeing to answer questions on their work and policy, no doubt expect them to be raised on points of elaboration and not on other past controversial issues on which decisions have been made.

One question, by the same member, at both meetings raised the issue at some length as to why

mining cannot be permitted in national parks. Voicing disagreement of a club policy to a guest speaker is counter-productive and hardly appropriate to the occasion.

It has to be remembered that persons in responsible positions have many demands on their time and if a forum is arranged, the occasion should be used to further objectives and not retard them.

Public embarrassment does little towards their fulfilment and makes the chair's lot hardly a happy one.



Dingoes in Namadgi and Kosciusko

David Wheeler

Are dingoes of the Australian Alpine area a distinct physical type, genetically different from other dingoes? If so, are they in danger of extinction?

Alpine Type

According to Mrs Berenice Walters of the Australian Native Dog Training Society of NSW, dingoes throughout Australia have innate physical characteristics which vary from region to region. These dingoes are classified into 'types', such as the 'Alpine', 'Tropical' and 'Desert'. The dingo which inhabits Kosciusko and Namadgi Parks is said to be the Alpine type, which Mrs Walters believes is rare in its pure form. There is a wildlife park in Victoria which also shares the beliefs of her society. They are also trying to breed up this type to ensure its survival.

I have spoken to several government officers employed in this field who do not share the views of these people. They believe that any physical differences between dingoes of different regions could only be a result of hybridisation or climatic conditions which they think all dingoes can adapt to without being genetically different. They believe that if a pure dingo pup from Marble Bar was raised on the slopes of Mt Kosciusko, it would be indistinguishable from any local Kosciusko dingo by the time it had matured. They believe a cold climate (and not genetics) would cause the coat of the Marble Bar dingo to thicken and would encourage a greater degree of body fat. Mrs Walters believes the Marble Bar dingo would perish in the Kosciusko environment.

An acquaintance of mine wrote to the CSIRO to get their official viewpoint and their evidence for it. Their reply stated that they were not convinced that bushy coats and tails on Kosciusko dingoes were anything more than hybridisation. However, they did admit that when several extensive studies were conducted on a large number of trapped dingoes throughout central and south eastern Australia, it was mainly skull dimensions and coat colour which were noted.

The main differences one would expect to find between members of a species inhabiting varying clim-

ates is coat thickness and length, and body mass and shape. (The larger and more compact the object, the smaller the surface area to volume ratio). In the case of animals a large compact body results in a greater ability to retain heat and less ability to lose heat.

Since no study has compared such characteristics of dingoes distributed throughout Australia, it would be unscientific to state categorically that there is or is not a genetic difference between dingoes of different regions.

Genetic Difference

My own hypothesis is that there is a difference. My reasons are:

. Ancient and 'pure' domestic dogs such as the greyhound occasionally produce long coated individuals such as 'Woolly Wilson', who is famous within the greyhound racing community. Such long coated individuals would have sprung up long ago within the dingo population. A long coated dingo would have a greater chance of coping with the harsh climate of the Kosciusko region. It would be able to inhabit areas its shorter-coated relatives found difficult to cope with. This would increase its chances of survival. Dingoes born with a greater and more compact body mass would also have an advantage in a cold climate.

. Other species divide into types when the climate varies with their distribution. I have observed long coated rats in an Auckland freezing works. This 'type' of rat took only a few years to evolve. Despite the fact that our species has clothing and fire to enable it to adapt to varying climates, it was still unable to survive the climatic extremes without dividing into 'types'. Note the physical differences between the African and the Eskimo.

The dingo has been in Australia up to 8000 years. This would give ample time for the forces of natural selection to run their course.

. Mrs Walters breeds several dingo types on her farm in Bargo. They remain physically different, despite the fact that they dwell in the same climate. They should be of uniform appearance if there were no such thing as 'types'.

Having discussed the question of 'types', I would now like to comment on why the Namadgi-Kosciusko dingo is in danger of extinction, and what could be done to save it and other indigenous fauna.

Extinction Danger

Illegal hunting is common in these parks. The authorities are unable to stop it because the alleged offender must be tried and proven to be guilty beyond reasonable doubt. This is difficult and expensive. It is also hardly worth it when it only results in a small fine.

The killing or injuring of indigenous wildlife must remain a criminal offence. However should a person be found guilty of such a crime, a jail term should be mandatory. A fine is obviously insufficient as a deterrent, particularly when the coat of an alpine dingo could be sold for a considerable sum (it is rumoured that these coats are illegally exported).

On the spot fines of \$200 should be the preventative medicine to ensure prosecutions are rare. If rangers were empowered to search vehicles without having cause for suspicion (as have fruit inspectors), and issue such fines to persons found in possession of dogs, weapons, traps or baits, few people would hunt in national parks. Though amending legislation to allow this would mean a loss of civil liberties, it would be the lesser pain when compared to the loss of various indigenous species.

Dingo and Wild-Dog Control Methods

Within the ACT, the Department of Territories allows NSW wild dog authorities and adjacent rural less-ees and their employees to use poisons and steel-jawed traps to kill dingoes up to one kilometre inside the border of Namadgi National Park. I believe a similar situation occurs within Kosciusko Park. The dingo has no hope of surviving under these conditions, not to mention other indigenous wildlife.

Though I have much sympathy for graziers who lose their livestock to dingoes, there are far more effective methods of control. Alternative methods include:



Dingo Pups. On the left is the tropical dingo and on the right the controversial alpine dingo. Photo by Bernice Walter

- Taste aversion therapy – this involves lacing sheep or calf carcasses with lithium chloride. Once the sheep or calf is eaten, the dingo becomes ill, though it suffers no permanent physical damage. It consequently develops an aversion to eating sheep or calves. This idea was developed from Pavlov's experiments. Pavlov proved that canines would not forget a negative experience.

- Guard dogs – dogs such as German Shepherds were used for guarding sheep against ravaging wolves for centuries. I am not aware of any graziers who have attempted to train such dogs to protect their livestock from dingoes.

- The erection of an electrified dingo fence around Kosciusko and Namadgi Parks. 'Good fences make good neighbours' and this seems the obvious solution. It has been said that some graziers would oppose this because they wish to graze their animals illegally within national parks in times of drought. However, I believe the enlightened grazer would forego this convenience knowing they would be protected from dingoes and feral pigs.

To not erect a dingo fence is 'penny-wise and pound-foolish', when one considers the continual cost of stock losses and baiting and trapping programs. An electrified dingo fence could be solar powered as are such fences elsewhere in Australia.

Though the construction of this fence would not be cheap, it would be much less than what is spent on national parks to benefit humans. There are plans underway to upgrade the Boboyan and Mt Franklin roads within Namadgi Park. This will cost several million dollars and will only have a negative effect on wildlife.

I believe the object of a national park should be to preserve nature. Benefits to this generation of humans should be a secondary consideration.

If a strong electrified fence was erected around Kosciusko and Namadgi Parks (it is claimed the smaller types of electric fences have not been successful) future generations of Australians would be extremely grateful to today's authorities for having the foresight to ensure a valuable part of our ecology survives. Should today's

politicians and government officers fail to do the right thing, future generations will hold them in contempt, as we hold in contempt their early 20th century Tasmanian counterparts who failed to protect the Tasmanian tiger.

I have visited the headquarters of the Australian Native Dog Training Society at Bargo and have observed how physically distinct the dingoes from the different areas are, despite being brought up in the same climate.

I have since corresponded with Professor Clyde Manwell and C.M. Ann Baker of Adelaide University. These people are both eminent zoologists and have had much work published on canine origins and the symbiotic relationship of canines and humans. They feel there is ample evidence of regional variation amongst dingoes and have recently written several articles giving such evidence to support their views.

Dr F.K. Bell of the University of Queensland has kindly volunteered to perform several highly sophisticated blood tests on dingoes from various areas, in an effort to settle the debate on types. If such tests can show a genetic difference between known domestic breeds with subtle genetic differences, ie red and blue heelers, miniature and standard fox terriers, long and short haired german shepherds I feel they may be relevant and absolute proof that there is genetic geographic variation amongst dingoes. However, as far as I am concerned, the proof is visual and can be shown with a tape measure. I urge all interested persons to visit the A.N.D.T.S. headquarters at Bargo and see for yourselves.

I have received correspondence from Healesville Sanctuary in Victoria who are conducting a breeding program of the Alpine race of dingo. They believe it is not distinct enough to warrant special programs for protection and they were unable to give a list of characteristics which make the Alpine race distinct from other races. I found their stance totally illogical since they were going to the trouble of breeding the "race" and admitted that they had had to use the desert type in their program because of a lack of breeding stock. Their reasoning became clear to me when they said they were a semi-government agency and supported the government's pol-

icies (No government department will admit to genetic regional variation amongst dingoes and Healesville is dependent on government funding.)

To sum things up, I am totally disgusted by successive Australian governments and their departments, as the question of dingo types should have been known many years ago. All that would have been required was to raise a large number of dingoes from various regions in the same climate and examine any differences with scientific scrutiny. No such work has ever taken place.

Although we should not give up and cease lobbying, history has shown that governments cannot be relied upon to protect and conserve unique animals. It is up to dedicated individuals to ensure the various types of dingo do not become extinct. I urge all interested members to apply to join, or support financially. The Australian Native Dog Training Society

Further information on the Australian Native Dog Training Society of NSW can be obtained from the Secretary, 'Merigal', Arina Road, BARGO NSW 2574. Tel: (046) 841 156.

David Wheeler is an inspector with the RSPCA (ACT). The above article is reprinted with permission from BOGONG, Jan-Feb 1986 pp12-13.

Wanted

Editor

FOR NPA BULLETIN



Jenny (11) and Alice (8) Thompson nearing the end of their 40 km, 4 day winter pack walk in the Budawangs during which they walked around and climbed Quiltys Mountain. Each carried packs equivalent to 25% of their body weight. The notice carries a NPWS prohibition against camping fires in Monolith Valley.

Print by Reg Alder from a colour negative by Dianne Thompson.

Feral Pig Exercise in Namadgi

Mike Braysher

During April/May 1986 the ACT Parks and Conservation Service coordinated a joint study to test the effectiveness of the warfarin/grain baiting technique for controlling feral pigs in the event of an outbreak of exotic disease.

Those involved in the study were the Australian Animal Health and Quarantine Service, NSW Department of Agriculture, CSIRO Wildlife and Rangelands Research, Mr J. Hone (PhD student) and the ACT Parks and Conservation Service.

It was assumed that there was an outbreak of foot and mouth disease on Gudgenby Station within Namadgi National Park. Boundaries to the presumed outbreak were selected as Orroral Valley (Northern) and Boboyan Valley (Southern). For the purposes of the exercise, no eastern or western boundary was delineated.

Prior to laying the poison bait, 44 feral pigs of various age and sex classes were fitted with radio transmitters. These were used to determine the habitat preferences and home range size of the animals. The percentage kill of the radio-tagged pigs in conjunction with the

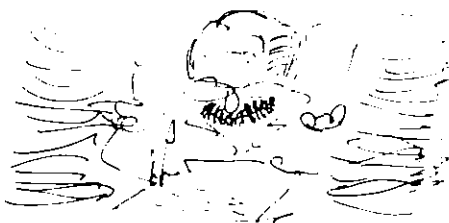
transits for rooting activity and dung occurrence which were established in the control and experimental areas were used to assess the effectiveness of the control technique.

Warfarin, an anticoagulant poison, was chosen because feral pigs are much more susceptible to this poison than most other animals. The selectiveness of this poison was increased by adding it to soaked grain which is not taken by non target animals such as cattle and kangaroos, and by burying the poisoned grain.

The exercise is still being assessed but preliminary examination indicates that warfarin baiting is effective in reducing pigs numbers to an acceptable level. 92% of the radio-tagged animals were killed by the poisoning programme.

There was no evidence of secondary poisoning or poisoning of non-target species.

The ACT Parks and Conservation Service proposes to use this technique to control feral pigs, through the rest of Namadgi National Park and in the other parts of the ACT.



THE EARLY DREAMING

Reg Alder

The Early Dreaming with its Fred William's jacket painting 'Cootamundra Wattles', suggestive of the great outback, is not what it would appear to be at first glance as a story of the Aboriginal dreamtime. The deception covers a collection from ten of Australia's best authors of children's books on their own childhoods and the influences that led to them becoming writers for the young.

Hesba Brinsmead in her story sets the pattern for others to follow in her observations of how writers like herself have made desperate efforts to retain the perceptions of childhood — a place of childhood is what you remember it to be — you see it as a somewhere-nowhere place. Nobody can return there to be proven right or wrong.

The theme that comes through in all but one of the author's stories is the effect the natural environment of their childhood has had on their later life, the direction of their writing and what they wrote. Mavis Thorpe Clark, although born in the city, was always a lover of the country. It was not a passing appreciation but an active demanding love. A love that demanded love in return — the earth — the land that is Australia which moulded the Aborigines and which, she believes, is now moulding white Australians. She feels she has the same affinity to the red earth as any Aborigine whose spirit home is her country.

Max Fatchen spent his early life on a hay farm out of Adelaide and, although now over fifty years old, finds nothing can pull his memory back to his childhood more rapidly than the smell of crushed gum leaves. Later when he talked to a songman on the banks of the Koolatong River in Arnhem Land, he listened fascinated as it was explained to him why the rivers ran, how fish swam, how rain fell — all handed down in legend and sung about around campfires and in the playabout corroborees.

The subject of conservation was becoming a matter of concern and beginning to receive belated attention when the books of Christobel Mattingley were just beginning to be published. Anyone who tagged her stories with the glib phrase 'band wagon conservation' or 'token ecology' would in fact be almost

forty years wide of the mark. She began subconsciously to sense the need for man's harmony with nature and to have a deep affinity with it when she was moved to Sydney in 1940 to be with her father during the construction of a bridge over the Hawkesbury River. On moving later to Tasmania and the Latrobe Valley, her perception of man's responsibility towards the earth and the importance of maintaining balance grew steadily and keenly.

For Lilith Norman, she is the sum of everything heard, seen, touched, felt, tasted, loved, hated, feared, dreamed, believed and done — a different childhood would have made her a different person. Her earliest experience of the land, the black soil plains, the space, the scruffy bush, the coiled and dreaming loneliness, was at the age of six. She says it got into her blood and bone and muscle and down to the marrow of her bones.

The little incidents are the ones remembered most vividly and, as Joan Phipson found, the feelings of experiencing them are the very essence of memory — the smell of cow manure around a muddy gateway on a farm, the sound of horses' hooves on a blue metal road, the sound of carriage wheels on a gravel drive, the smell of paint on the seaside toys, wet from waves and rubbed by the sand, the spring smell of wistaria, the trickle of a shaded brook under hot eucalyptus leaves, the pang of joy at the first experience of mysterious veils of mountain mist.

Unable to sleep, Noreen Shelley's father wrapped her in a blanket and carried her outside into the night. Together they looked at the starry sky, the Southern Cross, the Great Dipper and the Milky Way. They talked about day-time friends, the birds, the shiny beetles, the tiny dainty lizards. There first surf was always before breakfast when the sea had an extra newness, and extra shine and sparkle.

Finding subjects to write about was an early problem for Eleanor Spence until her mother suggested that writers did best by writing about places that they knew; it wasn't until then that she began to look around to see her own landscape. Miles of beaches that were genuinely deserted, sandhills melting into acres of bush, winding country roads, lagoons and scrubby little hills that looked like mountains became all the more promising as a background

to her fictional stores.

The most profound experience that came to Colin Thiele was to be in the natural environment with the freedom to roam incessantly as part of its universal patterns and rhythms. Standing day after day on a hilltop or knoll with the long fall of the valley below and arch of the sky above and the realisation that he was but a speck of no more consequence than an ant or bee taught him humility, just as solitude gave peace.

Later when he came to write books, it was inevitable that the things that had drenched him so wholly and deeply he would share with children. The incredible beauty of natural form and colour, texture and light — hawk's feather and magpie's wing, hilltop rock and creekbed pebble, peeling bark and bending bud, rabbit's fur and dead bird's claw, star flowers in wild grass like a startled spider's eye, bull-rushes and frogs, rosellas and ring-necks, running wind on the hillside, sunshine on ripening wheat, and straw — golden stooks on slopes. All these and a thousand more became for him part of the joy and sorrow of the human heart — the struggle for meaning, the acts of living and dying.

The early childhood experiences, the influence of the environment in moulding the adult cannot be underestimated. They are experiences never to be forgotten. The influence of childhood on these adult writers is testimony enough. All reached their goals by different paths and it is what they passed on the way that makes the book so interesting to read. A walk through the bush can provide a wealth of experience to young formative minds.

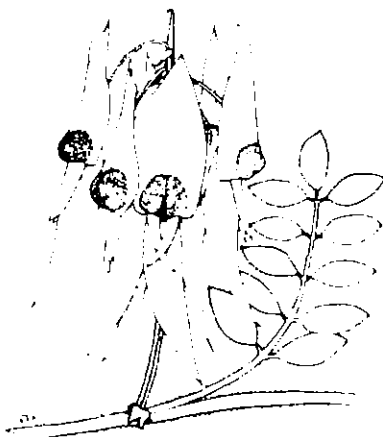
The Early Dreaming. Australian children's authors on childhood, compiled by Michael Dugan, Jacaranda Press, 1980.



FLORAL EMBLEMS OF AUSTRALIA

Can you name the floral emblem of your State or Territory? If not, then you should refer to the new poster depicting the Floral Emblems of Australia, produced jointly by the Australian National Botanic Gardens, Canberra and Kodak, Australasia. An information sheet accompanies the poster. Available free of charge from the Australian National Botanic Gardens, GPO Box 1777, Canberra ACT 2601.

Courtesy of *Australian Ranger Bulletin*, Vol. 3 No. 4 1986 p.32.



Sturt's desert pea (*Chianthus formosus*), floral emblem of South Australia



Common heath (*Epacris impressa*), floral emblem of Victoria.

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GENERAL MEETINGS

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

SEPTEMBER — Thursday 18

In 1985 the Federal Government announced its intention to transfer the Commonwealth's naval facilities from Sydney to Jervis Bay. Conservationists are concerned about the impact this decision will have on the physical and human environment of the Shoalhaven region, and are monitoring the Commonwealth's proposal closely. At this evening's meeting, *Mr Chris Egan* will describe the region's natural and cultural significance and discuss the ramifications of the proposed defence installations. Mr Egan is affiliated with the Jervis Bay Protection Committee and the Jervis Bay Coalition lobby.

OCTOBER — Thursday 16

The NCDC has designated 70% of the ACT under the National Capital Open Space System. The objective of the NCOSS is to ensure that the lakes, rivers, hills, ridges, mountains and bushland of the ACT are managed as an integrated system balancing the needs of both development and conservation. This evening, *Mr Richard Freeman*, Principal Landscape Architect, NCDC, and *Mr Paul Davies*, ACT Parks and Conservation Service, will jointly present an illustrated talk on the concept and development of the NCOSS.

NOVEMBER — Thursday 20

Photographer *Colin Tolterdell* is well known to members of the NPA as co-author of *Kosciusko Alpine Flora*. His superb photographs have appeared in a wide range of environmental publications including, most recently, *Derrick Ovington's book Kakadu - A World Heritage of Unsurpassed Beauty*. At this evening's meeting Colin will introduce members to the largely unfamiliar landscapes of the Alligator Rivers region in the Northern Territory, and the Kimberley region in north-west Western Australia. Colin has participated in government-funded expeditions to record the flora, landforms and aboriginal art of both these regions. His illustrated talk will provide a scientific and artistic account of his journeys.