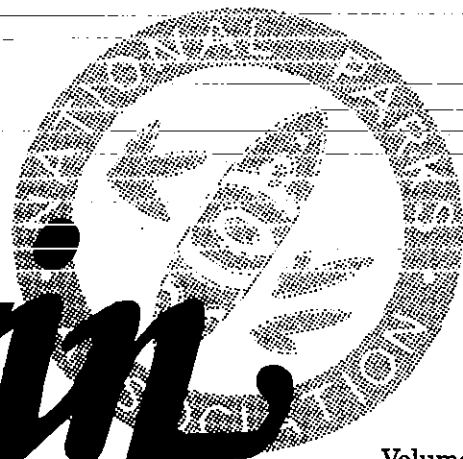
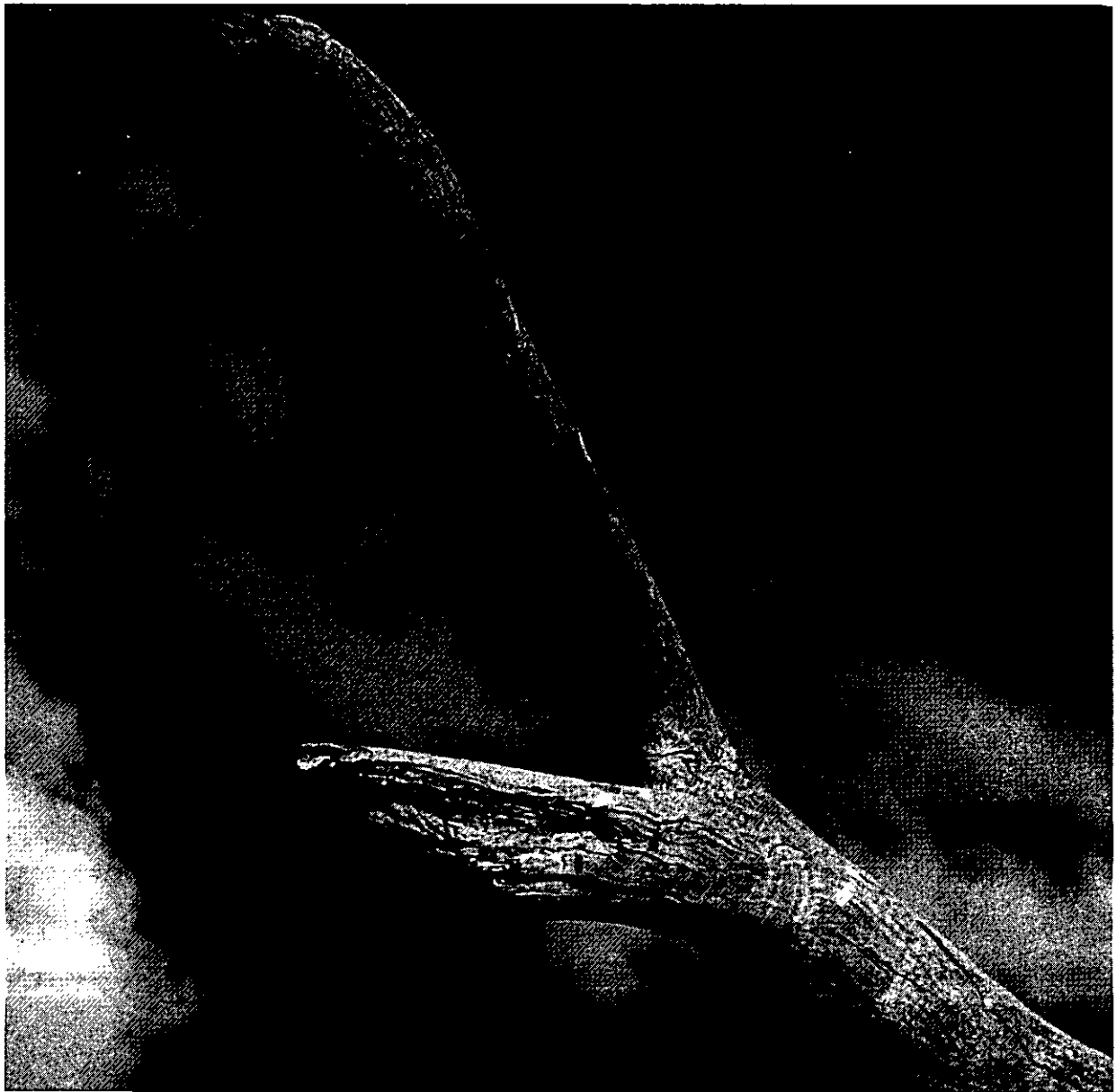


NPA Bulletin



Volume 32 number 1
March 1995

NATIONAL PARKS ASSOCIATION / ACF / INCORPORATED



Nature study books for children

Railway informality in the mountains

CONTENTS

Minister's morning out with NPA	5
The Pinnacle	6
Memorial Bushwalk	8
Escape of the aliens	9
Old Growth Forest Project	12
Nature study books for children	14
Aboriginal occupation?	18
Railway informality	23

Cover

Photo by Jane Rawson

On Mount Painter, Canberra Nature Park

National Parks Association (ACT) Incorporated

Inaugurated 1960

Aims and objects of the Association

- Promotion of national parks and of measures for the protection of fauna and flora, scenery, natural features and cultural heritage 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 and cultural heritage by organised field outings, meetings or any other means.
- Cooperation with organisations and persons having similar interests and objectives.
- Promotion of, and education for, conservation, and the planning of land-use to achieve conservation.

Office-bearers and committee

<i>President</i>	Vacant
<i>Vice-president</i>	Eleanor Stodart 281 5004(h)
<i>Immediate past president</i>	Beverley Hammond 288 6577(h)
<i>Secretary</i>	Len Haskew 281 4268(h); fax 281 4257
<i>Treasurer</i>	Mike Smith 286 2984(h); 248 3624(w)

Committee

Stephen Johnston	254 3738(h); 264 4276(w) 264 2364 (fax)
Phil Bubb	248 6769(h); 266 5128(w)
Steven Forst	251 6817(h); 279 1326(w)
Clive Hurlstone	288 7592(h); 246 5516(w)
Doreen Wilson	288 5215(h)
Max Lawrence	288 1370(h); 272 2032(w)

Subscription rates (1 July to 30 June)

Household members \$25 Single members \$20
Corporate members \$15 *Bulletin* only \$15
Concession \$10

For new subscriptions joining between:

1 January and 31 March—half specified rate

1 April and 30 June—annual subscription

Membership inquiries welcome

Please phone the NPA office.

The NPA (ACT) office is located in Maclaurin Cres, Chifley. Office hours are:

10am to 2pm Mondays

9am to 2pm Tuesdays and Thursdays

Telephone/Fax: (06) 282 5813

Address: PO Box 1940, Woden ACT 2606

Contribute to your *Bulletin*

Contributions of articles (news, descriptions or fiction), black-and-white photographs and line drawings are keenly sought for the *Bulletin*. Please label photographs with the name of the subject, the name of the photographer and the date. Leave contributions at the office or phone the editor, Roger Green, on (06) 247 0059. The editorial fax is (06) 249 7373.

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

Deadline for June issue: 1 May 1995.

NPA Bulletin is produced by Green Words for the National Parks Association (ACT) Incorporated. It is produced with the assistance of an ACT Heritage grant.

Printed on recycled paper by Koomarri Printers, Belconnen, ACT.

ISSN 0727-8837

New NPA office manager

When you telephone the National Parks Association office in Chifley, the cheerful voice that greets you is that of our new office manager, Maureen Blackmore. Maureen began working for our association on 5 December and has very quickly settled in. Whilst many of the office tasks are routine, some telephone queries from the general public require a degree of tact and imagination as callers need to be referred on to a more appropriate source for the information they seek.

Maureen enjoys walking and is very interested in environmental issues. She has recently worked as a school secretary and is familiar with our computer programs and other procedures. Call to say hello.

Charmian Crimmins, who resigned to take up a full-time position, will be remembered fondly by members. We were especially fortunate that she was our office manager at the time of a vacancy in the position of NPA president. Her familiarity with NPA meant she was able to handle correspondence, referrals, meetings, *Bulletin* matters and membership requirements and to keep our office running very efficiently. We wish her well in her new office.

Clive Hurlstone has done a marvellous job as acting president for the last six months and the committee is pleased to welcome our vice-president, Eleanor Stodart, as acting president until the AGM in August.

Beverley Hammond

Hilltop towers

Towards the end of last year Senator Margaret Reid, Senator for the ACT, contacted the NPA about the issue of hilltop telecommunications towers. She too is very concerned about the proliferation of these towers on hilltops which most Canberrans thought were protected. She has issued a number of press releases on the matter, as well as calling on the Senate to strengthen provisions in the Telecommunications National Code to allow better community consultation before further towers are constructed.

Letter to the editor

Over the Hills just an introduction

While we do not approve of the principle of authors debating the point with their reviewers, we would like the opportunity of making a couple of observations on Alastair Morrison's review of our *Over the Hills and Tharwa Way* in the last *Bulletin*.

One slip of the pen that we must correct at the outset is that the book was published by the Environment Centre, rather than the Conservation Council as suggested by Alastair.

Our intent in writing the book was to provide a detailed *introduction* to the area; we would never have presumed to think that we could tell anything new to someone who knows the area as intimately as Alastair. In this context we are just a tiny bit disappointed at a couple of his complaints about our omissions. While we would readily agree that there is insufficient information on the social history of

the area (apart from Orroral Homestead and the Gudenby Homestead complex), and we lay even less claims to expertise in this area than in others, we honestly believed that we had brought more information on the subject together than had previously been published in a readily accessible form. We too believe that the lives of ordinary people trying to alter the land's productivity to their own ends, and their impact on the land, are important and too often ignored. We guess we can but try harder next time to fill this gap.

The suggestion that the book is unbalanced to the detriment of birds surprises us a little, since we are 'birdos' first and foremost, and had again thought we'd shared a fair amount of what we know of the birds of the region. The problem in writing such a guide to the natural history of an area is that plants tend to move around rather less than

animals, so can be defined for the reader with more confidence. The other point is that thanks in no small measure to the NPA itself, there are excellent informative bird guides to the ACT, unlike the situation for other animal groups and for plants. If Alastair thinks we have provided insufficient information on the birds, he may spare a thought for the poor herpetologists and entomologists, for instance! Having said that, however, we could well have mentioned the olive whistler population at Smokers Flat, though we're less sure about Alastair's 'yellow-eared' honeyeaters...

Our omission of Reg Alder's role in the development of the Yerrabi Track has already been brought to our attention—the day after the book's launch in fact—by Reg himself, to whom we have already offered our apologies. The problem lay in Reg's modesty, because our

Over the Hills

main reference for this one was an interview in the KHA's *Voices from the Hills* by one R Alder, who failed to mention his own role!

We had decided not to detail the controversial history of Brandy Flat Hut, but since Alastair has raised it, we may offer another interpretation, which will doubtless draw someone's fire! When the ACT Parks and Conservation Service proposed a shelter hut at Booroomba saddle, they probably did not ask the permission of rock-climbing groups, but after all no single interest group determines management policy. No one was actually going to be *compelled* to use it rather than to camp. Nonetheless the response of a few, presumably non-representative individuals, was to threaten to burn it down if erected where proposed (!), leading to its present location.

Style is of course entirely subjective; our job is to write as clearly as possible, to express ourselves in the way that seems to offer the best chance of communication, and take our chance on others' preferences. But 'travel agent jargon'! Oh Alastair, *what a cruel barb!*

Finally, there is one aspect of the book, very important to us, which we would like to be brought to the attention of NPA members. The dedication reads 'To the founders of the ACT National Parks Association and to all those who have since worked to make Namadgi National Park possible'. We are in your debt and this book is our small attempt to add to the task you have carried on for all these years.

**Ian Fraser and
Margaret McJannett**

Environment Subcommittee

Priorities for grants, future projects and the subcommittee were some of the topics discussed at this year's Environment Subcommittee meet-ings.

All grants are now project-based and therefore desired outcomes need to be identified. It may be necessary to have someone who keeps abreast of which grants are available and when grant applications close so that we can be prepared to take advantage of the opportunities available. We can no longer rely on money coming in regularly without a major effort on our part.

Suggestions as to how to raise more money included:

- more paid employee hours to enable the NPA to develop and run more projects and thus attract more funds.
- the preparation and sale of more high quality environment publications.

Possible projects for NPA include:

- a program to raise public awareness of nature conservation issues

- identification and recommendations for protection of threatened areas in the ACT and adjacent region
- production of field guides and other publications
- assistance with the rehabilitation work after Boboyan pines removal.

Issues relating to Canberra Nature Park were discussed, such as ways and means for including areas which are being managed by the service but are not in the nature park; cooperation between NPA and Parkcare groups; and producing informative material for the general public on what areas are included in the park and how to get there.

The subcommittee has adopted an ambitious set of objectives.

Everyone is welcome to join the subcommittee, which meets once a month. For information, contact the NPA office.

Stephen Johnston

Our native grasslands need friends

The Friends of Grasslands was launched recently by the ACT Minister for the Environment, Mr Bill Wood, at the National Museum, one of a few sites of native grasslands in the ACT. The Friends of Grasslands was formed out of concern for the disappearing native grasslands.

Much of what is now Canberra was a carpet of native grasses and flowering herbs 200 years ago. The arrival of sheep and cattle cropped the grasslands in a way that native herbivores had not. Fertilisers and exotic grasses introduced to 'improve' the native pasture created conditions intolerable for many grassland species. Urban development was the final straw for what little grasslands remained when Canberra was settled. In the ACT we have around 8 per cent of the original natural lowland grasslands left. Much of that is in patches and vulnerable to invasion by exotic weeds and to destruction through urban development. Our grasslands need friends! For more information, write to the Society for Growing Australian Plants at PO Box 217 ACT 2608.

Minister has a morning out with the NPA

The ACT Minister for the Environment, Land and Planning, Mr Bill Wood, and his wife Beverley joined NPA members for a walk along the Yerrabi Track in Namadgi National Park. Two days after rain, the track was an absolute delight with a wide range of plants and flowers and a clear sky gave us 360° views of the park. The minister and his wife heard the story of the track's construction by the NPA and changes in the trackside vegetation.

During the outing, informal discussions included the World Heritage nomination for the Alps and the removal and rehabilitation of the Boboyan pine plantation, weed and feral animal control and staffing of Namadgi National Park.

Bill Wood returning to Yerrabi lookout from a tor inspection. The background shows the peaks of central Namadgi as well as the dark patch of those troublesome Boboyan pines.

High-level discussions: Bill Wood with NPA members at Yerrabi lookout on what was a very pleasant and informative outing. Photos by Reg Alder.

The Pinnacle, Canberra Nature Park



The Pinnacle, Canberra Nature Park. Photo by Phyl Goddard

In recent years I have spent so many happy hours at the nearby Pinnacle, part of Canberra Nature Park, walking, birding and occasionally planting, that the time has come to share it around before an emerging proprietary air takes over completely. It's easy to be mistress of all I survey there because there's no one else around other than the occasional dog-walker, and so I possessively check up on how the latest tree plantings are surviving or worry about 'my' kangaroos and lizards when an unleashed dog frisks by.

The Pinnacle is an area of some 77 hectares with an elevation of 708 metres bounded by Hawker and Springvale Drive, Weetangera to the north and horse paddocks and a farm lease to the south and west. To the east, uninterrupted by suburbia and reaching practically to the heart of Canberra, lie Mount Painter, Aranda Bushland and Black Mountain. From the Pinnacle westwards the corridor opens out through pine plantations and farmland to the Molonglo and Murrumbidgee rivers and the ranges beyond.

The names of early settlers and homesteads in the region are re-

flected in the names of nearby streets like Schumack, Southwell, Springvale, Gillespie, Harcourt. Selection began in the Parish of Weetangera in 1865. One of the first to select there was Richard Schumack who later established his home *Springvale* on his land. Many new selectors came in the 1870s and most of the Parish of Weetangera had been taken up by 1883. In 1915, following the choice of Canberra in 1908 as the site for the national capital, the Commonwealth Government resumed the lease of *Springvale* and other properties but the Pinnacle continued to be used for agistment grazing. In 1981 the former National Capital Development Commission began an assessment of Canberra's hill areas, resulting in the resumption of the Pinnacle, and since approximately 1982 it has been managed by Canberra Nature Park, now part of the ACT Parks and Conservation Service. A Parkcare group of volunteers, the Pinnacle Environment Group, was formed in 1989. Along with other areas of similar status, the Pinnacle was declared Public Land (Nature Reserve) in the Territory Plan in October 1993 which under

the *Nature Conservation Act 1980* gave greatly needed legal backing for its protection and management.

Prior to settlement the Pinnacle appears to have been savanna woodland of predominantly yellow box (*Eucalyptus melliodora*) and red gum (*E. blakelyi*) along with dry sclerophyll forest of mainly red stringybark (*E. macrorhyncha*). Little evidence of the savanna remains but there is still a 12-hectare block of red stringybark at the north-west corner, a small representation of what was once there but nevertheless of some ecological value, especially for birds. Regeneration there is slow, probably due to crown dieback caused by increased exposure to wind, and some of the saplings have succumbed to fire. A short walk through this woodland, however, turned up quite a few native flowers and shrubs: *Glycine clandestina*, *Indigofera australis*, *Melichrus urceolatus*, *Daviesia mimosoides*, *Hibertia obtusifolia*, *Bracteantha viscosa* (we used to call it *Helichrysum*), *Hardenbergia violacea*, *Cryptandra amara*, *Senecio quadridentatus*, *Bursaria lasiophylla* (blackthorn).

The ground cover of the cleared areas consists of introduced pasture grasses, mainly phalaris, and other weeds such as thistles and briars interspersed with patches of native grasses. As we are by now well aware, only a small proportion of the original native grassland is left in Australia and its protection is urgent, both for itself and the native fauna depending upon it for survival. One such dependant, now a vulnerable species, is the pink-tailed legless lizard (*Aprasia parapulchella*) which requires a cover of kangaroo grass (*Themeda triandra*) for its survival. This lizard has been identified at the Pinnacle (and a few other local areas) in a survey conducted in 1993 by the Wildlife Research Unit, Canberra Nature Park, assisted by the Australian Trust for Conservation Volunteers. The overall manage-

ment of the Pinnacle is geared to biodiversity and takes care to protect this species where possible.

As to other wildlife, a mob of about 30 eastern grey kangaroos as well as echidnas, bats, possums and bearded dragons are resident on the Pinnacle, along with the usual feral animals such as rabbits, foxes and cats. But for me it's the birds that make the Pinnacle such a joy. On a joint NPA/Canberra Ornithologists Group outing in October 1994, 50 species were turned up in a couple of hours and at least 60 species have been recorded there altogether including leaden flycatcher, southern whiteface, speckled warbler, varied sitella, five raptor species, dollarbird, white-bellied cuckoo-shrike, rainbow bee-eater, sacred kingfisher and red-capped robin. My most exciting encounter there was being attacked by a brown goshawk, and not even in the breeding season!

The National Capital Development Commission paper on Mount Painter and the Pinnacle of March 1982 refers frequently to the degraded condition and low ecological value of these hills. It is pleasing to be able to report, therefore, that much restoration work has been and is being done both by government and non-government organisations to turn the tide. The main effort has gone into the planting of thousands of native trees by various groups including the Pinnacle Environment Group, Greening Australia, Belconnen schools, Rotary, scouts, Australian Trust for Conservation Volunteers and Community Aid Abroad, under the auspices of Canberra Nature Park. In 1984 30 000 trees were planted as part of the Commonwealth Employment Program and 5000 trees and 2000 grasses were planted in 1993 by the Pinnacle Environment Group, Greening Australia and many volunteers from the general public. There have been several smaller plantings, mostly since 1990.

Some 60 000 trees in all have been put in during the 12 years since resumption of the agistment lease. As

well as the species mentioned above, large numbers of *E. rossii*, *E. mannifera*, *E. bridgesiana* and a variety of acacias have gone in. The survivors of the early plantings are now small trees. Some *Callitris endlicheri* and acacias planted in 1984 are well in evidence. Of the 1993 plantings, the acacias are surviving well but some of the eucalypts have succumbed to the drought. Detailed surveys were undertaken by Canberra Nature Park to determine appropriate species and areas for planting, taking ecological and aesthetic values into account. For

erate success. As a result of grant funding to the Pinnacle Environment Group, the Australian Trust for Conservation Volunteers are engaged from time to time under the direction of Canberra Nature Park for plantation maintenance and the removal of woody weeds such as briar and cotoneaster.

On the downside, the dog-walkers don't seem to know that they are obliged to keep dogs on a leash, although an improvement in the policing of this offence is soon to be allowed. Horse-riding is permitted only on the designated equestrian route



Encouraging results from tree planting. Photo by Phyl Goddard

example, care has been taken to ensure the views from the higher points are not obscured when the trees grow. In 1993 the Pinnacle Environment Group commissioned a series of maps including the likely nature of the original vegetation, as it was in 1984, and the current vegetation since more recent plantings.

The large areas of introduced grasses present a problem but Canberra Nature Park is hoping that as the nutrient levels from (previous) fertilisation drop, the 'improved' pasture will deteriorate, enabling native grasses which prefer the low nutrient soil to become more competitive. The trial planting of native grasses in 1993 met with only mod-

which runs along the northern end of the park but there are signs that riders use other tracks, too.

Of course the Pinnacle was a prime target for a telecommunications tower. Even prior to 1982 it had been identified as a potential site for telecommunications purposes but Canberra Nature Park successfully negotiated for installation near the reservoirs on ACTEW land rather than on one of the hills or limestone outcrops. (The Canberra Nature Park pamphlet on the Pinnacle tells us that these limestone outcrops contain fossils of plants and animals that lived there over 400 million years ago and that

continued on page 20

C E Lane-Poole Memorial Bushwalk

Saturday 21 January, the day after the drought broke, appeared as if it could have been the worst day to have selected for the C E Lane-Poole Memorial Bushwalk.

Charles' daughter 'Charles' (Charlotte) had travelled especially from Euroa, Victoria, to join in the reminiscences of her own experiences of Mount Franklin and the role of her father as the founding president of the Canberra Alpine Club. Friday's weather was sufficiently bad to deter some from joining in; however, eleven had faith in the weatherman and enjoyed a perfect day for walking.

Charles Edward Lane-Poole was born in England in the 1880s. His father, an academic, obtained a posting to Trinity College, Dublin, and the family moved there. Whilst in Ireland Charles, aged 18, lost his left hand in a shooting accident and from that time had to wear a hook on the injured limb. Plans to study engineering had to be abandoned but Charles decided to study forestry instead. Completing his studies in France, he then worked in Africa where he married his wife Ruth in 1911. In 1917 he was appointed Western Australia's conservator of forests. Ten years later he came to Canberra as the acting principal of the Australian Forestry School at Yarralumla. He also held the appointment of inspector-general of forests for the Commonwealth Government.

In the course of forestry students' field work, Lane-Poole led students in walking trips along the

Brindabellas. Prior to the mid-1930s there was, of course, no Mount Franklin road. These trips were a very pleasurable time for him, although in winter on a hutless and roadless range they were more of an endurance test than a pleasure excursion.

until he retired and moved to Sydney in 1945. He played a prominent part in the deputation to the Minister for Interior in November 1934 which resulted in the construction of the Mount Franklin road.

Lane-Poole made a major contribution during the formative years of the Canberra Alpine Club and was behind the ski-making classes which were a feature of the club at that time. He, with other members, pushed ahead with the construction of the Mount Franklin Chalet and with his daughters Charlotte (better known as Charles) and Mary took part in expeditions to locate a suitable lodge site on the Brindabellas. The Mount Franklin Chalet was opened on 2 July 1938. Charles Lane-Poole died in Sydney in November 1970. A street in Yarralumla commemorates his name.

The memorial walk wound among the snow gums, alpine ash, snowgrass and various sub-alpine shrubs of the section of the Brindabellas from the northern end of Mount Aggie over Mount Franklin to the chalet and on to the

Little Ginini ski run where several border markers are seen on the way.

It was a day to be remembered and a loss to those who did not have faith in the knowledge that Canberra's weather generally clears earlier than predicted.

**Reg Alder
with assistance from notes
provided by Matthew Higgins**



*'Charles' Burston (Lane-Poole) on Mount Aggie.
Photo by Reg Alder*

Charles and the family had first gone skiing at the Hotel Kosciusko in 1931. Charles, with his love of timber, believed that Australian skiers should make their own skis from Australian material rather than buy imported ones.

When the Canberra Alpine Club was formed in 1934 Charles Lane-Poole was elected inaugural president, a position held by him

Escape of the aliens

Slowly but surely, aliens are invading our wonderful Brindabella Ranges. They're not newcomers—some have been there for 70 years or more, and they are becoming naturalised; that is, their seedlings are establishing of their own accord. These aliens are the trees of the arboreta, planted to determine which were the best species of trees to grow commercially in the ACT.

In the late 1920s the need to create plantations of trees for future timber and firewood production throughout Australia was espoused at the Third Empire Forestry Conference. The ACT had just over 1000 acres of plantations at that time. Seventy-five per cent (96 000 acres) of the Cotter catchment area was covered in eucalypt forest. Five thousand acres of the remaining 25 per cent had been partially cleared. The remainder was bare rock. Just over a third of 96 000 forested acres was considered by the Commonwealth Home and Territories Department to be suitable for conversion to conifer plantation. The remainder was either too poor or too inaccessible for conversion.

Which tree species would be most suitable? The arboreta were to provide the answer. An arboretum is simply a plot of land planted with a variety of trees or shrubs for study or interest. By locating arboreta over a wide range of soil types, altitudes and aspects, the most suitable species soon become apparent. Between 1928 and 1966, 35 arboreta were planted in the ACT including two at Jervis Bay. The earliest plantings were mostly in the ranges. Closer to Canberra, Westbourne Woods was planted in 1947 and Stromlo in 1954. The Cotter Homestead arboretum, familiar to many bushwalkers, appears to have been planted in about 1940. One of the last to be established was at Boboyan in 1966. Most of the plots within an arboretum were 20 metres by 20 metres. These were planted

with 60 trees at a spacing of 2.4 metres by 2.4 metres.

A wide range of species were selected for planting. These were known to grow in similar climatic conditions to those experienced in the areas to be put under plantation. The seeds came from comparable regions in several countries including New Zealand, Japan, Germany, Canada, Mexico and the USA as well as from other Australian plantation forests. One hundred and forty-four species, varieties and hybrids of softwoods (conifers) and 38 species, varieties and hybrids of hardwoods were selected. The majority of the hardwoods were not successful. At all but the highest altitudes, it soon became evident that radiata pine was far superior to any other conifer species.

With the passage of time, the values of the arboreta have changed. Now the values are cultural and educational rather than scientific. A good example is Blundell's Farm arboretum, established from 1929 to 1959. It is well worth a visit and can be easily reached from Blundell's Flat Road off Brindabella Road. The 150 plots on 6 hectares contain over 80 species, varieties and hybrids of conifers. This arboretum is surrounded by pine plantation. The Bendora arboretum is also worth a visit. It is a pleasant four-kilometre return walk along a fire trail from a gate on the Mount Franklin road. The 36 conifer species at Bendora include the fascinating 'big-cone pine' and the attractive red spruce. This arboretum is now within Namadgi National Park and is surrounded by eucalypt forest. These, and many other arboreta, can readily be located on the Central Mapping Authority 1:25 000 scale topographic maps, *Tidbinbilla* and *Cotter Dam*. Unfortunately the arboreta are not well maintained. Many of the labels identifying the species and plots need replacing. Some trails have been overgrown

and the plantings need weeding and thinning.

However, I have digressed from the problem of the naturalising aliens. Like the radiata pines of the plantations, conifers of the arboreta are invading our native forests. The seeds of many species are able to germinate and grow beneath the eucalypt forest canopy. These plants are called wildlings. Many species in the arboreta of the Brindabellas are already producing wildlings and many more may produce wildlings as they reach maturity and produce seed. In a study of the arboreta in 1991, lodgepole or contorta pine, *Pinus contorta*, was identified as one of the worst culprits. Other culprits include *P. radiata*, *P. mugo*, *P. nigra*, *P. pinaster*, *P. flexilis*, *P. strobus*, *P. torreyana*, *P. jeffrei* and *P. ponderosa* as well as *Larix eurolepis* and *Juniperus* species. The problem of wildling pines is widespread in other parts of Australia. *Pinus radiata* has become naturalised in large areas of Tasmania, central Victoria and South Australia, and *P. nigra* and *P. pinaster* readily become naturalised in north-eastern and southern Victoria.

It may take a long time for large areas of native forest to be invaded by pines. Seeds are not usually dispersed very far from the parent plant and it can take many years for the seedlings to become adult trees. For this reason, wildling growth is likely to continue unchecked. However, the dangers need to be recognised and action taken now to eliminate the potential for large-scale invasion. As fires destroy plantations, every effort is made to protect them and the surrounding native forests from fire. However, protecting forests from fire in the vicinity of arboreta and plantations prevents the destruction of seedling wildlings, allowing them to reach

continued on page 12

PARKWATCH

Wollemi's Jurassic wonder

A new genus of conifer which grows as high as 35 metres has been discovered by a National Parks and Wildlife Service field officer in Wollemi National Park, within 200km of Sydney. Less than 40 trees were found in an isolated fire-free grove.

The newly discovered species is in the Araucariaceae family. Although related to other native 'pines' of Australasia such as the Bunya, Hoop and Norfolk Island pines, its closest relatives appear to be fossil pines known from the Jurassic and Cretaceous Periods.

The discovery was described by the Royal Botanic Gardens as 'one of the outstanding botanic finds of this century on a world basis'.

The Wollemi pine discovery hints at the biological riches we are likely to lose through government-sanctioned logging operations—many of which are carried out with no prior environmental impact assessment. It also emphasises the folly of indiscriminately applying artificial fire regimes to natural bushland.

Environment NSW, Newsletter of the Nature Conservation Council, Summer 1995

Fishing for answers

'No-fishing' reserves are generally recognised to be pillars of marine conservation efforts, but now it seems they may sustain surrounding fisheries as well.

Fishery scientists are exploring the idea that 'no-take' reserves benefit fisheries by providing areas for recruitment of surplus adults and juvenile larvae. However, they agree that more research on the topic is needed. CSIRO and Queensland's Department of Primary Industries are currently looking at the effect closures in the northern section of the Great Barrier Reef have on ocean-dwelling plant and animal communities in the area.

Ecos, CSIRO, Summer 1994/95

Ten new NSW national parks but no victory celebration

On 1 December 1994, the Fahey government declared more than 70 000 hectares of new national park. While the declaration of the Gardens of Stone National Park can only be described as a positive step, many of the other parks received only lukewarm reception from the conservation movement, with Popran and Nangar national parks being notable exceptions.

The new parks simply link existing national parks with thin strips of steep lands and unproductive forest types that the timber industry does not want. During the Legislative Council debate on this subject, opposition member, the Honourable Jan Burnswoods, said, 'the opposition does not believe that the pathetic bits and pieces of state forests offered by the government will do anything to conserve the precious south-east forests.'

While Diamond Creek was added to the Deua National Park, logging will continue in 9500 hectares of Deua wilderness. State forests in several other identified wilderness areas will also continue to be destroyed. Small coastal areas have also been made national parks, but the area is far less than that proposed by the National Parks Association.

Mr Jeff Angel, co-director of the Total Environment Centre, described the decision to declare the south-east forest national parks as sentencing some of the best old growth forests in Australia to death by woodchipping.

The Colong Bulletin, the Colong Foundation for Wilderness, January 1995

Indonesian government sued over forests

Emy Hafild, coordinator of the Indonesian Forum for the Environment, has won unexpected court approval to sue President Suharto for diverting \$A251 million intended for rainforest preservation to a state-run aircraft maker.

Ms Hafild says intensive logging has dramatically reduced the humidity of tropical forests in Kalimantan, leaving them vulnerable to fires.

Indonesia, home to the world's largest tropical rainforest after Brazil, recently lost enormous areas of forest in the worst fires since 1982, when forests the size of the Netherlands were destroyed.

Canopy, Office of Democrat Senator for South Australia, John Coulter, December 1994

Water makes the walk easier

How many of us have returned from a walk feeling rather weary, perhaps having developed a headache and suffering with sore muscles and cramps for a day or two afterwards.

Well, here is a very simple solution to a not so pleasant problem. The answer is *water consumption*.

We all know we should drink plenty of water while walking, but the trick is how much we drink the day *before* the walk and how much we drink the day *after*. What we drink while actually walking should be considered as a top-up.

It has been suggested that anyone going on a 15km or longer walk should drink two litres of water (not including cups of tea) the day

before. Top up with 1.5 to two litres during the walk and follow up on the next day with above normal water intake. Of course, what comes in usually has to go out, and not everyone is comfortable with bush toileting. But to restrict fluid intake while walking just because there is no powder room along the track is doing your body great harm. So try this drinking plan just once—the difference will amaze you.

NPA News, National Parks Association of Queensland, December 1994.

Eductor dredging ban upheld

The Victorian Government has announced that it will accept the findings of the Parliamentary Inquiry by the Environmental and Natural Resources Committee released last May that eductor dredging should continue to be banned in Victoria.

The Committee report cited effects of eductor dredging on stream bed stability, water turbidity, in-stream vegetation, invertebrates, fish, mobilisation of mercury, social impacts on other stream users and the ability of regulation to ameliorate or eliminate the above effects.

The report also concluded that past regulation has been ineffective and that the costs of regulation are substantial. We congratulate the government for its stand on this issue.

Victorian National Parks Association Newsletter, December 1994

Councils support nature conservation

The support of nature conservation by several local councils is to be welcomed. The Blue Mountains City Council has worked enthusiastically to achieve the Colong Foundation's

World Heritage listing proposal. Kiama Council, which controls one of the state's most beautiful landscapes, has published *Quoll*, the first edition of its environment newsletter. Its first goal is 'to maintain the council area's biodiversity'.

The Port Stephens Shire Council has also been working hard, releasing a draft management plan aimed at protecting koalas outside the state's parks and reserves. The NPWS is also developing similar plans with other councils.

The Colong Bulletin, the Colong Foundation for Wilderness, November 1994

Cleaning up means jobs

The House of Representatives Environment, Recreation and Arts Committee has found that at least 20 000 jobs can be created in Australia in the pollution control industry alone.

As many as 150 000 jobs and \$8 billion worth of business could be generated if Australia captures even 2 per cent of the world pollution control market by the year 2000.

Developing a fuel ethanol industry to provide 10 per cent of road transport fuel needs would create more than 10 000 jobs, the committee said.

It recommended that Treasury look at introducing an energy tax to replace payroll and other taxes which are a disincentive to employment.

Canopy, Office of Democrat Senator for South Australia, John Coulter, December 1994

Mining threatens Victorian species

The Victorian Government has decided to allow marble mining in a unique and nationally significant plant community at Marble Gully in East Gippsland.

The Victorian Minister for Natural Resources and the Department of CNR planned in November to issue a permit to allow mining within the critical habitat of a unique silurian limestone *Pomaderris* shrubland vegetation community. This will allow the taking of protected flora and fauna and will set an extraordinary precedent for 'taking' other endangered species. The decision flies in the face of scientific views that to disturb the vegetation community will threaten the existence and survival of this truly unique plant community.

Victorian National Parks Association Newsletter, November 1994

Environment conference

A 'NSW Election Environment Conference' will be held on Saturday 11 March for members of NSW conservation groups, following the success of last August's 'NSW—Environment in Crisis' conference.

Several hundred conservationists are expected to attend and spokespersons from key political forces contesting the 25 March state election will be invited to speak. Those attending will get an analysis of the results of the Nature Conservation Council's environment questionnaire, which asks candidates for the election about their environmental views. Where possible, conference attendees will also be provided with information about parties' and candidates' voting records.

The conference will be the culmination of a lengthy and systematic process of engagement by the NSW environment movement in the state election. Last time a conference like this was held, 250 environmentalists attended, generating over 100 unanimous policy goals for the NSW election.

Environment NSW, the Nature Conservation Council, Summer 1995

NSW Joint Old Growth Forests Project

I think it is fair to say that in the frequent debates that have been held over the last 10 to 15 years, loggers, foresters, scientists and conservationists have found little, if any, common ground when it comes to defining an 'old growth' forest. And while the arguments have gone back and forth, I think it is also fair to say that we, as interested community members, have seen large areas logged that we, without too much expertise, would readily define as ecologically mature native forest. Intuitively, I'm sure, we felt that it should be possible to arrive at a definition that was scientifically and ecologically correct and thus would be acceptable to all interests.

Sometime about August 1994 I read a report concerning the formation of a committee that would have as its principal focus the task of defining an old growth forest. What caught my eye was the composition of this committee and I thought that it would probably have more chance of reaching a satisfactory outcome than many of its predecessors.

The Joint Old Growth Forest Project has been initiated to develop a methodology to identify clearly old growth forests. It is a joint initiative of the NSW National Parks and Wildlife Service and State Forests of New South Wales. The project manager is Mr Rob Preston who has had extensive experience in forest inventory mapping. His previous job was with the Queensland Department of Primary Industries. It is the joint approach that attracted my attention and, together with the fact that community input will be encouraged and recognised, I'm hopeful that the project committee will produce a definition that is acceptable to the professionals and to the general community.

The Commonwealth Government's 1992 National Forest Policy statement gave the following conceptual definition:

'A forest that is ecologically mature and has been subject to *negligible* (my emphasis) unnatural disturbance such as logging, roading and clearing. The definition focuses on forest in which the upper stratum or overstorey is in the late mature to over-mature growth phases.'

This definition is a far cry from a commonly held view in certain interest groups that once a forest has been subjected to any disturbance, whether human or natural, it is no longer eligible for consideration as an old growth forest irrespective of the extent of the recovery. I feel that the joint committee has gone a step further than the Commonwealth's stand by adopting as its provisional definition:

'A forest which contains *significant amounts of its oldest growth stage* (my emphasis) in the upper stratum—usually senescing trees—and has been subject to any disturbance, the effect of which is now negligible.'

The definition's suitability will be evaluated during the course of the project.

The committee will have representatives from a wide range of interest groups including government, scientists, environmental and conservation groups, timber industry, local government, primary production, and the Aboriginal community. In other words, the committee is seeking to gain and evaluate a range of divergent views. Significantly for us, though, the committee's Interim Community Consultation Strategy states:

'Community consultation on the Joint Old Growth Project is recognised as an integral component of the process for development and finalisation

of a methodology for identification of old growth forest.'

So it seems to me that the committee is actively seeking our knowledge, views and advice. I am sure that there are many NPA members who would be willing to take advantage of this opportunity. If you are one of these I urge you to forward your thoughts to:

The Manager
Joint Old Growth Forests Project
PO Box 642
Grafton NSW 2460

Len Haskew

Aliens *continued from page 9*

cone-bearing age and to produce more wildlings. Many pines, like eucalypts, depend largely on fire for regeneration. After fire has killed or damaged the adult pine, masses of seed are released from the cones just as masses of seed are released from the woody fruits of eucalypts. In the burnt eucalypt forest the pine seedlings would be competing directly with eucalypt seedlings for light and space. Once established, pine trees can modify the forest to give them the competitive edge over the eucalypts. For example, their acidic litter alters the soil, depleting the profile of the plant nutrients, iron and aluminium.

It is unacceptable to have such invasive and potentially invasive species within and adjoining national parks. There is an urgent need to control the wildlings from the arboreta and plantations. There is a need for action now, while the problem is still manageable. It's time to catch the escapees and prevent further escapes.

Sandy Berry

Outings program

March to June
December to March 1995



Outings guide

- Day walks** carry lunch, drinks and protective clothing.
Pack walks two or more days, carry all food and camping requirements. CONTACT LEADER BY WEDNESDAY.
Car camps facilities often limited or non-existent. vehicles taken to site can be used for camping. BOOK EARLY WITH LEADER.

Other activities include nature rambles, environmental and field guide studies and ski tours.

Walks gradings

Distance grading (per day)

- 1 - up to 10 km
- 2 - 10 km to 15 km
- 3 - 15 km to 20 km
- 4 - above 20 km

Terrain grading

- A - Road, firetrail, track
- B - Open forest
- C - Light scrub
- D - Patches of thick scrub, regrowth
- E - Rock scrambling
- F - Exploratory.

The walks program contains additional information. If necessary, contact the leader.

Third Wednesday of every month
 Phone Phyl Goddard on 254 8279(h) or NPA office on 282 5813 for details.

5 March Sunday Wander 1/A
National Botanic Gardens
Leader: Doreen Wilson Phone: 288 5215(h)
 Meet at the Visitor Information Centre at 9.30 am. Tour the 'back fence' of the Gardens and have morning tea near the bark hut. We shall pause from time to time to observe the birdlife.

11-12 March Weekend Pack Walk 2/A/B
Quilty Mountain Circuit,
Morton National Park Ref: Endrick 1:25000
Leader: Mike Smith Phone 286 2984(h) 248 3624(w)
 Contact leader by Wednesday for details. A walk from the Nerriga entrance to the Budawang National Park to Styles Creek to set up camp about lunchtime. Afternoon side trip into Hidden Valley. Sunday, circuit around Quilty Mountain through the Vines with side trips to the Aboriginal Bora Ground and Quilty's Pass. 250km drive \$50 per car.

15 March Wednesday Walk
 Phone Phyl Goddard on 254 8279(h) or NPA office on 282 5813 for details.

18 March Saturday Walk 2/A
Murrumbidgee Corridor, Ref: ACT 1:100000
Canberra Nature Park
Leader: Phil Bubb Phone: 248 6769(h) 275 8028(w)
 Meet at Kambah Pool top car park at 9.00 am. Walk along the track above the Murrumbidgee River to Casuarina Sands. Short car shuttle.

20 March Canberra Day
Lawns opposite the Old Parliament House
ACT Alive Exhibition
Coordinator: Doreen Wilson Phone: 288 5215(h)
 We are asking members to help the NPA by calling in to our tent and spending up to a couple of hours answering questions about the Association and its aims, and about the display. You will have an opportunity to see the other interesting stalls at this popular exhibition.

25-26 March Weekend Pack Walk 2/A/C
Mount Kelly, Ref: Rendezvous Creek,
Namadgi National Park Yaouk 1:25000
Leader: Frank Clements Phone: 231 7005(h)
 Contact leader by Wednesday for details. Pack walk to Mt Kelly through Gudgenby Saddle and along Naas and Sams Creeks. Mostly by fire trail, but some off track walking. Cooking stoves are preferred, but not essential. 100km \$20 per car.

1-2 April Work Party
Namadgi National Park Ref: ACT 1:100000
Leader: Len Haskew Phone: 281 4268 (h)
 Meet at 8.30 am at Kambah Village shops. Please confirm attendance with the leader beforehand for planning purposes. The work is likely to be track construction. 120 km \$24 per car.

8 April Saturday Walk 1A
Brandy Flat Hut Ref: ACT 1:100000
Leader: Mick Kelly Phone 241 2330
 Meet at 9.00 am at Kambah Village shops. A return walk of 10 km from Glendale Crossing to Brandy Flat Hut for lunch. 90 km \$18 per car.

9 April Sunday Walk 2AD
Pierce's Creek Falls Ref: ACT 1:100000
Leader: Mike Smith Phone 286 2984 (h) 248 3624 (w)
 Meet at 8.30 am at Kambah Village shops. From the locked gate at start of the Pipeline Road to Bendora Dam, follow the firetrail to the top of the Hardy Range. Follow the range south-west and drop down to falls on Pierce's Creek. Return along creek and forest tracks. Steep 300m climb and 375 m descent and some thick scrub. 90 km \$18 per car.

14-16 April Easter Pack Walk 1AB
Mt Talaterang Ref: CMW Budawangs
Leader: Steve Forst Phone: 279 1326 (w) 251 6817 (h)
 Contact leader by Wednesday for details. After a long drive, an easy pack walk of 2.5 hours over flat terrain to a camp site at the top of Nyanga Falls (no sleepwalkers please!). A solid day walk to the top of Mt Talaterang through some scrub. 500 km \$100 per car.

14-17 April Pack Walk 3-4DF
Mt Ginini to Mt Kelly Ridge Ref: Corin Dam,
Rendezvous Creek 1:25000
Leader: Phil Bubb Phone: 248 6769 (h) 275 8028 (w)
 Exploratory pack walk for a small party of experienced and fit walkers, with one or two long days, following the ridgeline: Gingera, Bimberi, Murray, Scabby, Kelly, maybe Namadgi, Boboyan Pines. Long car shuttle.

22 April Saturday Heritage Walk 2AB
with KHA—'Unfolding Bushfold' Ref: ACT 1:100000
Leader: Mathew Higgins Phone 247 7285
 A joint walk with Kosciusko Huts Association. Phone leader for details and to book for the walk because numbers are limited. A bushwalk for people with walking experience. Visit Bushfold near Mt Tennent, newly part of Namadgi National Park. Two 1950s huts and some hut ruins dating back to the 1880s. Impressive views and possible side trip to Blue Gum Creek. 60 km \$12 per car.

23 April Sunday Heritage Drive 1A
Blue Range Area Ref: ACT 1:100000
Leader: Doreen Wilson Phone: 288 5215 (h)
Meet at the corner of Eucumbene and Cotter Roads at 8.30 am. Easy walk in the Blue Range to the site of Sherwood Homestead. Area of some historic significance and autumn colour. Walk mainly on fire trails. 35km \$7 per car.

22-25 April Packwalk with FBI 3DEF
Shoalhaven Region of Morton NP Ref: Moss Vale 1:100000
Leaders: Pat and Eric Pickering Phone: 286 2128 (h)
Contact leaders before April 17 for details of this joint walk with the Family Bushwalkers. Four days exploring some of the ridges, creeks and gullies in this interesting and remote area. Rock scrambling, possibly swimming if warm, and magnificent views. 375 km \$75 per car.

22-30 April Heritage Week
The theme this year is *Heritage in your hands*. The week is an opportunity for community groups, schools and businesses to focus on what makes the ACT a special place to live. If you would like to be involved, ring the Heritage Week Hotline on 282 5213.

25 April Anzac Day Walk with CBC 2AB
Jumbuk Flat and Emu Flat Ref: Corin Dam 1:100000
Leader Murray Dow Phone: 257 4371
Contact leader for details of this joint walk with the Canberra Bushwalkers. A cook's tour of sub-alpine valleys in one of my favourite walking areas near Canberra. Starts at Smokers trail. See two brumby yards near Jumbuk Flat and boil billy at Emu Flat, where the daisies and gentians should be flowering. Mostly off tracks with light scrub, about 10 kms. 60 km \$12 per car.

26 April Oral History and Slide Evening presented by Mathew Higgins
'The Brindabellas: a little history of our big range'
Joint National Trust/KHA/NPA/Historical Society
Book with National Trust Phone: 281071
Selection of slides and extracts from oral history interviews, looks at some of the major themes in the European history and heritage of the beautiful Brindabellas. Extends to history of grazing, water catchment protection, border survey, brumby-running, skiing and forestry. Venue: National Trust rooms, 6 Geils Court Deakin at 7.30 pm. \$5 entry includes supper, with proceeds to organisations listed above (may be repeated next night if sufficient interest).

29 April Saturday joint walk with KHA 1A
Four forestry sites in the northern Brindabellas
Leader: Mathew Higgins Phone 247 7285
Bookings and details from the leader (numbers limited). A leisurely drive and bushwalk visiting a 1932 arboretum, the ruins of a 1934 sawmill, the site of the ACT's highest former forestry settlement, and the remains of what was the ACT's most unusual firetower. Lots of history, beautiful trees and some very good views. About 5 kms of walking and driving between sites. 120 km \$24 per car.

1 May Outings Meeting
27 Geerilong Gardens, Reid
Phil Bubb Phone 248 6769 (h) 275 8028 (w)
Contact Phil to attend a 6.30 pm picnic tea (inside or outside depending on the weather), to discuss possible walks, to thank walk leaders or just to chat about walking. Food and beverages supplied unless numbers are large (in which case participants might bring a plate). A social evening.

6 May Saturday walk 3A
Mt Clear area ACT 1:100000 or Namadgi 1:100000
Leader: Max Lawrence Phone: 272 2032
Meet at 8 am at Kambah Village shops. From Mt Clear campground, walk to Long Flat and the southernmost point of the ACT. A longish but easy walk through attractive forest and frost hollows, mostly on fire trails. 130 km \$26 per car.

6-7 May Canoe Trip (with CBC)
Tallowa Dam Kangaroo Valley
Contact: Kevin Frawley Phone 282 2973, 299 3995 or 271 2883 (w)
Easy flatwater canoe trip from Tallowa Dam in Kangaroo Valley. Paddle up the Shoalhaven arm of the lake towards Fossickers Flat where the Shoalhaven enters the lake. Options include swimming, lazing on lovely beaches and some short walks. Local canoe hire available. 400 km \$100 per car.

13-14 May Work Party
Namadgi National Park
Leader: Len Haskeew Phone: 281 4268 (h)
Meet at 8.30 am at Kambah Village shops. Please confirm attendance with the leader beforehand for planning purposes. The work is likely to be track construction. 120 km \$24 per car.

20 May Saturday Walk (with CBC) 1C
Orroral Tor Ref: Rendezvous Creek 1:25000
Leader: Murray Dow Phone: 257 4371
Book with the leader this joint walk with the Canberra Bushwalking Club. Orroral Tor is the rock-climbers' name for the outcrop at GR 786548, east of Orroral gate, across the river. Starting at the gate and finishing at Nursery Swamp car park, exploring the Tor's spectacular caves, tunnels and platforms, some covered with rock climbers' bolts. Generally easy, but some light scrub, scratchy rock and a 240 m climb. 80 km \$16 per car.

21 May Sunday Walk 3ABC
Cotter Rocks Ref: ACT 1:100000
Leader: Mick Kelly Phone: 241 2330
Meet at 8.00 am at Kambah Village shops. A return walk of 23 km from Orroral Valley, mostly along a fire trail and tracks, with some scrub on the final climb to the summit. 100 km \$20 per car.

28 May Sunday Morning Walk 1A
Mulligan's Flat, Gungahlin Ref: Canberra UBD
Leader: Beverley Hammond Phone: 288 6577 (h)
Meet at 9.00 am in the Mulligan's Flat Nature Reserve car park. To

reach it drive through Gungahlin and continue on the gravel section of the Gundaroo Road for just over 2 km. This is one of the few natural lowland areas remaining in the ACT, and the NPA was one of seven conservation groups making a joint submission to the Government for its protection. A Nature Reserve has now been declared. Come and see this special area. Bring a snack for morning tea.

3-4 June Weekend Pack Walk 2A-E
Tarlo River National Park Ref: Taralga, Chatsbury 1:25000
Leader: Phil Bubb Phone 248 6769 (h) 275 8028 (w)
Contact leader for details. An opportunity to visit a little known national park north of Goulburn. Short walk to campsite, then explore river and dry rocky ridges. 300 km \$60 per car.

11-13 June Long Weekend Pack Walk 2AB
Quilty's Mountain Ref: CMW Budawangs
Leader: Steve Forst Phone: 279 1326 (w) 251 6817 (h)
Contact leader by Wednesday for detail of two and a half day pack walk. A late lunch at Braidwood Pub on Monday. Easy-medium pack walk to a base camp on the Endrick River. Visit Styles Pass, the Bora Ground and Round Mountain. 340 km \$68 per car.

18 June Sunday Walk (with CBC) 1BE
Booroomba Rocks circuit Ref: Corin Dam 1:25000
Leader: Murray Dow Phone: 257 4371
Contact leader to book. Joint walk with Canberra Bushwalkers. Follow the rock climbers' tracks around Booroomba to the north, around the buttress, and scramble up the descent gully, finishing on the summit of ACT's Uluru. Interesting plants and great scenery. 70 km \$14.

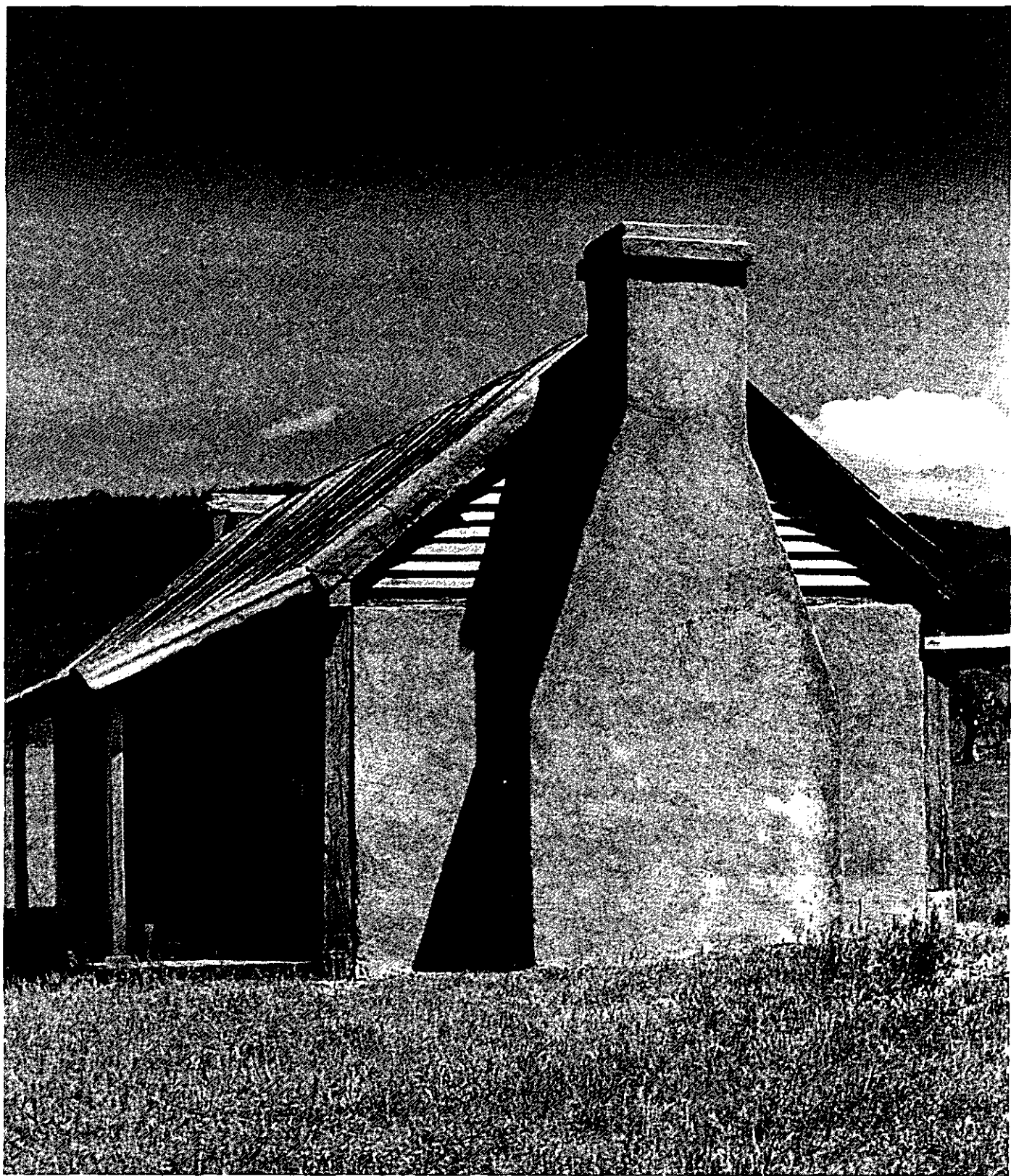
Points to note

Please help keep our outings program alive by volunteering to lead outings. New leaders are welcome. The outings covenor is happy to suggest locations suitable for a walk if you do not have something in mind yourself. Feel free to send in suggestions for outings to the association's office as soon as you think of them, with a suggested date.

All persons joining an outing of the National Parks Association of the ACT 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 ACT, its office bearers and appointed leaders are absolved from any liability in respect of injury or damage suffered whilst engaged in any such outing.

The committee suggests a donation of TWENTY cents per kilometre DIVIDED BY THE NUMBER OF OCCUPANTS in the car, including the driver, (to the nearest dollar) be offered to the driver by each passenger accepting transport. Drive and walk distances quoted in the program are approximate distances for return journeys.

Almost complete—Orroral Homestead



The plastering, both inside the building and on the chimneys, has been completed. The last job will be to replace the doors which are ill-fitting and odd in design. Hopefully this will be done soon so that the old homestead will then be completely weatherproof. Photo and caption by Fiona MacDonald Brand

Over twenty years of writing nature study books for children

I have had 20 books for children published over the last 24 years and I have found the process both immensely satisfying and enormously frustrating.

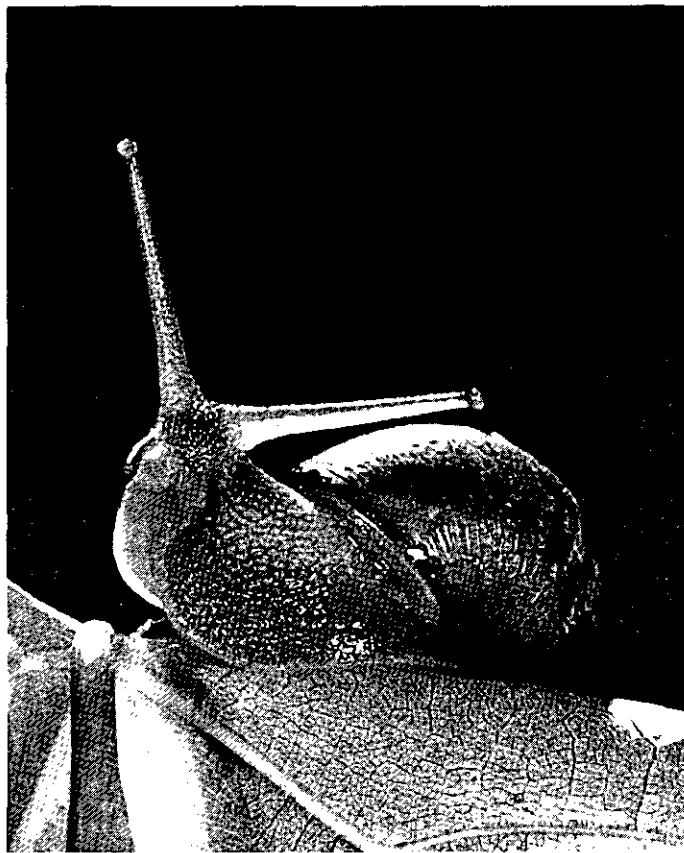
The frustration comes because I am an idealist. I believe that science books for children should be written with some literary grace. Accuracy, glossaries and all the rest are important but most important is some inspiration and that, unfortunately, does not seem to be recognised in education circles. As well, in the real world out there the writer of children's non-fiction is a nonentity. Books supposedly about children's books or about authors for children usually discuss children's fiction only and the authors do not even acknowledge that they have chosen to ignore a large part of children's literature. It is as though the non-fiction part did not exist.

The first books I am going to talk about may not seem initially the most appropriate for an audience interested in national parks, but I think a closer look will show that they are. They were written for very young children, and to establish an interest in nature we need to use what easily comes to hand.

When my children were small, in the late sixties, it was difficult to find suitable books with good pictures of animals to illustrate things we talked about so, with my background in biology, I set about filling the gap. The only animals the children could catch and observe were snails, so my first book was about the introduced garden snail.

With all the innocence of the novice, I obtained a list of publishers in Australia and I was actually

prepared to work all the way down it, or I thought I was, but I was fortunate in having the text accepted on the second try at the second publisher. I now know that if I had not struck Barbara Ker Wilson at Angus & Robertson I would never have got started, and I sometimes wonder if that might not have been a good thing.



From Snails. Photo by Ederic Slater

I expected the book to be illustrated with drawings but Barbara suggested photographs. I had doubts because visually you get a block of photographs sitting separately from the block of text. Also she suggested a photographer in the history department at the university in Hobart. He may have been a very good photographer but I could see all sorts of problems just because he did not know the subject

so I suggested Ederic Slater, and that was the start of a very good partnership.

We surmounted the problem of text and illustration being separate blocks by putting in a couple of pages of snails photographed on a white background which, incidentally, is the technique now used by Dorling Kindersley, British publishers who have almost taken over children's non-fiction publishing.

Dorling Kindersley books are published in Australia under a variety of imprints, such as the Collins Eyewitness Guides, and illustrations are always shown on a white background. The text is very brief and most of the information is given in captions, so they are books for browsing rather than reading straight through. They are well researched and attractive but to cover the expensive production they must be sold worldwide and that limits their approach to many topics.

Dorling Kindersley books are all done in colour, of course, but in 1971 when *Snails* was printed, publishers felt they could get away with the cheaper option of black and white photographs. I think that was a pity because if the

publishers had been more adventurous the books probably would have been marketable for much longer. I probably would have made more money, but with the extra expense the publisher may not have.

After the reaction to *Snails* was quite favourable, the publisher suggested books on ants and the honeybee. As there were books available on these subjects I had not given them much priority, but these

two books sold best out of the series of five.

I now discovered how clever I had been in choosing the subject of snails first. Have you ever tried to keep an ant still to photograph it? These books were produced before laser and infrared switches were readily available to photographers and all the pictures in these two books were taken manually.

I have often had fun asking groups of schoolchildren how they would keep an ant still and they usually suggest squash it, glue it down and various other techniques which would not give clear, natural images. The technique we actually used was to put the ants in the freezer, not to freeze them but to cool the container with the ant inside quickly. Then the photograph had to be taken just as the ant warmed up enough to look natural but before it ran away. The field of view for the close-up of an ant is very small. All the pictures of ants on white backgrounds were taken this way. We found that bull ants react in a much more individual way than one would expect.

In writing these books for young children I have given each text a rhythm that matches the subject—slow for snails, quick for ants and a slow buzzing for bees—so the words inform through their rhythm as well as through their meaning. I also began by describing what children can actually see (with young children we are teaching language as well as science) and then I went on to add less obvious points about the animal's behaviour or structure. This meant I had to look closely at each animal to check that I was describing what I could actually see and not what I had learned in my studies. While I was writing *Ants* one winter I would sit outside for lunch in the courtyard

with the children and take my time, for wasn't I busy working, sitting there watching the ants in the sun?

Ants also gives me a wonderful mental picture of Ed Slater dressed in gumboots, overalls, scarf—everything he could think of to keep the meat ants off his skin—for we dug into a meat ant mound to get pictures of the ants, larvae and pupae in the various chambers, and you know how aggressive meat ants are. The protection worked well but not perfectly. By the time Ed had been crouching in the hole for long



From Ants. Photo by Ederic Slater

enough to get all the pictures he wanted, the ants had made their way up past the scarf and he did get some bites on his neck. Fortunately meat ants do not sting as well as bite.

For *Bees* all the pictures which I thought would be very difficult to obtain—the ones within the beehive—actually proved to be quite easy. Peter Ormay, whom many of you know in the ACT Parks and Conservation Service, had a mild strain of bees and an observation

beehive, and he very kindly lent me the beehive one summer. We installed it in our dining room, as that room had double hung windows and we could easily arrange entrance for the bees to the hive and not to the whole room. That summer the sweet smell of honey accompanied dinner every night.

We found, however, that we had to give the bees free access to the dining room during photographic sessions. The glass covering the hive was too dirty and too distorting to photograph through it. A side effect of this was that my children got the idea that bees were not at all dangerous and they would go around the garden picking them off the flowers by their wings. I don't think they were ever stung then, though they have been at other times, and they do now know that one should be careful around bees. I don't think Ed was stung at all, despite his close exposure to the bees, and I only received one sting over the period.

The next book in the series was *Grass*, and that was when I discovered that publishers and authors often have very different ideas. I had had some problems with *Ants* in not seeing the page proofs in time to instruct the editor to remove a few changes, one of which made the text inaccurate. That was due to problems within

Angus & Robertson as a result of which Barbara Ker Wilson had left. At this time our supposedly most Australian of publishing firms transferred its head office to London. With Ed's and my books they had had the opportunity for a uniquely Australian nature study series, but when *Grass* came out I discovered that they had asked another author to contribute to the series without first checking whether I could produce books

faster, perhaps with another photographer. Also this new author was English so her books had an English viewpoint. I was so angry after discovering the editor's perfidy, which of course he saw as sound economics, that I gave myself a week to simmer down before replying. Even then he was amazed at the anger which came through in my reply.

My books are unique in the use of rhythm in parts of the text and I put months of thought into getting each one right. Excerpts could be used in poetry anthologies, except that no one would ever think to look at nature study books as a source of poetry. It was very deflating to have all my effort and the potential for a truly Australian nature study series totally unappreciated.

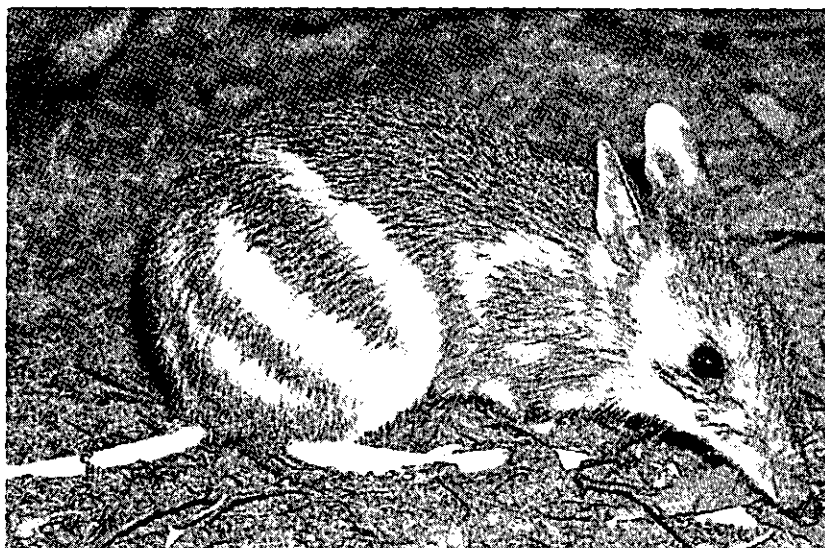
But worse was to come. The last book in the series, *Trees*, was accepted for publication. Canberra is a wonderful place to be based when preparing a book on trees to be illustrated with photographs and, as well, Ed dug out other pictures from his extensive collection.

When we were taking pictures of deciduous trees in the mist by the lake we even said to each other how pleased the London office would be, but no! They did not like the Namatjira trees (a pair of gums near Alice Springs which Namatjira painted) or the funny stick nest with that odd-looking spoonbill sitting on it. The snow gum did not have a mantle of snow, and worse, I had thought it necessary to explain that trees could go on living when the heartwood had been burnt out but the London office assured me that trees needed the heartwood for strength. Eventually the book was published without the spoonbill and with a different snow gum, but by

then the series had gone cold, black and white was becoming dated, and it did not do well.

We had plans for a book on the rocky shore but Angus & Robertson did not want any more. Rigby liked the idea if it was expanded to fit their Pageant of Australia series. We supplied Rigby with what they wanted but it was not what the market wanted, apart from libraries, and it did not do well.

My next approach was a book about the senses for upper primary to early secondary children. It had a long text divided into chapters but



Eastern barred bandicoot from Bandicoots and Bilbies of Australia.
Photo courtesy of National Photographic Index of Australia

without subheadings and it had illustrations in the margins with captions. The illustrations were drawn by Frank Knight who also worked at CSIRO's Division of Wildlife Research.

The popular press praised the book but school library reviews criticised the slabs of text. Educators really have bowed to the lowest common denominator when slabs of text are only deemed appropriate in fiction. No one seemed to realise that one could browse through the book using the captions which were carefully worded to relate to the adjacent text. And there were some dreadful errors in the production. As I did not see the page proofs I did not have the opportunity to pick

them up.

Several labels were left off diagrams, but the worst problem was the index. I prepared the index as I did not trust the publisher to do a good job and I prepared it on the basis of Frank Knight's layout. Frank made the first page of the text page one, but in the final book it is page seven. The publisher changed the pages of the text but did not think to change the page numbers in the index. So to use the index, one must add six to each page number given.

I then did a matching book on how people and animals move. It did not do at all well although the book about the senses had gone to a reprint. I don't know how much the index of the first book influenced the sales of the second, but it does seem that science books for upper primary to secondary level are very difficult to sell. Introducing knowledge for younger children is fine, but try to add some real science and sales drop.

Being thoroughly fed up with not being credited with imagination or literary skill—if one writes non-fiction one just copies facts, it seems—I decided to try my hand at fiction to show that it did not require more imagination, just a different approach. That is probably not a good reason for writing fiction but the result, *When the Mountains Change Their Tune*, is a story which a number of people have said they enjoyed. It is about a group of teenagers going on a ski tour in the Snowy Mountains. I made the younger two boys sixteen, as I thought that would be as young as parents would allow boys to go off without experienced adults, and it turned out that a couple of years

later we let our middle son at that age go off to tour and camp in the snow with some older boys.

The book did not get on the short list for the Children's Book of the Year Awards, however, and faded from sight as usually happens to books which are not short-listed. It was definitely not of award-winning standard although it was as good as many short-listed books, I think, but since the judges were not mountain people and straight adventures were out of vogue, the votes went elsewhere.

Next came the book on echidnas in 1989. By this time, to get a children's science book published one had to write a straightforward, informative text, the duller the better it seems, in order to 'empower' children by giving them examples of how to write science reports. It is fascinating how ideology can dominate an area even though many individuals disagree with it. The books of the seventies which combined factual information and the poetry of feeling were no longer acceptable. I actually had a text on silkworms rejected on the basis of it being a mixture of fact and fiction. It had no fiction in it but was written in a narrative style and, to the editor, narrative style meant fiction. Even though editors specialise in language they are not always aware that they are not saying what they mean.

By this time I was learning to be somewhat pragmatic. I was still an idealist but not completely naive and I called the book *The Australian Echidna* rather than 'Echidnas' or even 'The Short-beaked Echidna', as it should properly be called, because I had an eye on overseas markets.

For this and the following books I have consulted photo libraries such as the National Photographic Index rather than trying to get a photographer to take pictures especially. I was able to get critical pictures of young echidnas through the ABC's filming of *Nature of Australia*.

Dent Australia agreed to publish *The Australian Echidna* but they could not interest their London office, even for a short run-on which would have helped spread costs. However, the American company Houghton Mifflin bought out Dent Australia before the book was published and their head office in Boston bought the rights to 5000 copies, presumably mainly for library sales. By comparison, Australian sales have not gone much over 3000 even though we have many more schools and public libraries than that.

Royalties from 3000 copies just covered the cost of the rights to use the photographs, so the only money I have made from this book has come from the American sales and from fees for talking to schools.

Knowing I would be asked to give talks during Children's Book Week, I made a glove puppet of a female echidna with an egg in the pouch and a tongue that moves in and out. It always gets a good response, and I am sure that children who have seen my talk will remember the salient points about echidna biology.

From my brief reference to sales numbers, you can see why our libraries are not full of books about our native animals. It is just too expensive to produce books in full colour for a small market. The market could increase if more individuals, or even most schools, bought such books. However, once you get more than an introductory amount of information in a book people seem to feel they can rely on the public libraries, thus completing a vicious circle.

Next I branched into a series of junior field guides which I did on commission for Weldon. Although they each have the same basic format, I thought a lot about how to present each type of animal, what features to encourage children to look for and so on. When you are given a brief to cover Australian birds with 40 photographs, for example, you have to select

carefully. I tried to introduce the ideas that would give a child enough background to be able to cope with a full field guide.

In writing texts I used simple straightforward language for the introductory sections and note form for the descriptions, so I cannot claim any particular literary grace for these books although their style is appropriate to the form.

Weldon did a very good job of designing the field guides with humorous drawings and some other informal features that make them attractive to children, although they also made mistakes in redrawing my diagrams. For the last couple I insisted that they use my drawings, which are not always as clear as could be, but the insects have the right number of segments and veins in the right places.

The nine field guides, written over three years, are *Backyard; Creeks and Ponds; Seashore; Beetles; Birds; Bites and Stingers; Butterflies and Moths; Frogs and Reptiles*.

Now we come to the latest book, *Bandicoots and Bilbies of Australia*. It was accepted by Houghton and Mifflin to fit in the same series as *The Australian Echidna* but then they closed their Australian branch and Jacaranda Wiley, who bought the Australian books, were not interested in continuing the series. Despite my best persuasive powers I could not get another publisher interested. They knew too well the difficulties of marketing such books. However, because of public lending right and the fact that reference books last a long time, (the original copies of *Snails*, for example, are still held in many libraries), because the Children's Book Council has recently established an award for information books, because of the movement to replace the Easter bunny with an Easter bilby, and because I discovered I had breast cancer, I went ahead and published the book myself.

continued on page 21

Looking for evidence of Aboriginal occupation in Gudgenby Valley

Previous issues of the NPA Bulletin have described Reg's exploration of Aboriginal sites by divining which overcomes the problems of disturbance caused by traditional archaeological methods. In the article below Reg investigates another non-invasive method of exploration using a magnetometer.

It is well known that there used to be an Aboriginal presence in the Gudgenby Valley of Namadgi National Park. Significant indicators are the rock shelter paintings of Yankee Hat and Rendezvous Creek as well as the tool-working sites which are scattered throughout the area. It has also been documented that Aboriginals in groups of 500 to 1000 from Omeo, the coast and further afield used to gather between October and March each year for feasting on bogong moths, ceremonial purposes and trade. Over this period of time for possibly tens of thousands of years, it would be expected that there would be several deaths each year. In other places in and around Canberra remains of Aboriginals have been found buried in graves. Unfortunately, apart from records of assemblage, there is no information available on the burial customs of either the resident or large annual gatherings of Aboriginals in the Gudgenby Valley.

Other indications of their occupation have been left in the grooves on rocks alongside Middle Creek and the Gudgenby River which have been worn through tool-sharpening activities. One site is beside Middle Creek where the boundary fence of the Gudgenby property crosses it and another where the creek cascades onto the valley floor. There are other indications by the Gudgenby River in the cascade area above its junction with Hospital Creek. In this



The original stone arrangement (Site 12, Gudgenby) before its removal. Subsequently a simulated arrangement was made. The area at the base of this boulder was selected as a possible grave site for divining and magnetometer experiments.



The stone arrangement observed in the Gudgenby Valley as being typical of Aboriginal practice in covering graves to prevent animal disturbance.

same area there are piles of stones 3 to 4 metres apart, starting from just above the river and reducing in height over 90 metres. They are not on any known property boundary and are not of a formation which could be the basis of a fence. No reasons have been advanced as to why they should have been gathered and arranged in this fashion.

I have always been interested in the arrangements of stones on or adjacent to or alongside sizeable boulder outcrops in the Gudgenby Valley. This interest was further raised when Aborigines told Joan Goodrum that on the NSW north coast similar stones could mark a significant position or the site of an important event. Additionally Fiona Brand read a NSW NPWS publication on Aboriginal grave sites which led both Fiona and me to think that some of the stones laid out in a rectangular pattern could possibly mark a grave site. One method used by Aborigines for burials was for a grave to be dug and then covered with stones to prevent it being dug up by dingoes. When we had recorded several sites near boulders we notified the Heritage Unit and after visiting the area the unit agreed that there was a probability that these were grave sites. However, archaeologists will not authenticate a grave site unless

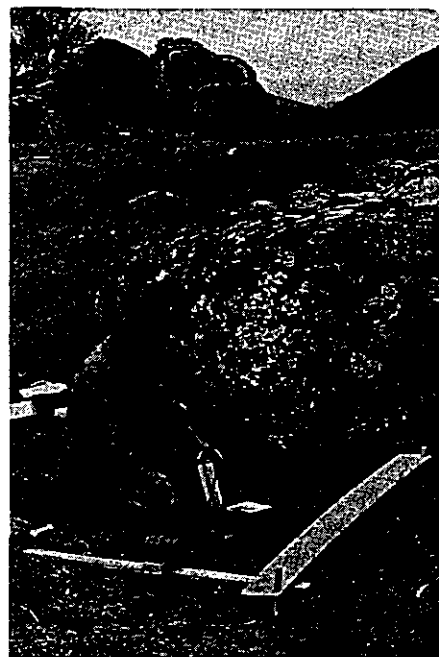
some skeletal remains or artefacts are found. Present attitudes towards the disturbance of Aboriginal grave sites make it highly unlikely that the Ngunnawal Aboriginal community would give approval for a site or sites to be dug over.

When a decision was made to relocate the Yankee Hat car park, the parks service employed consultants to determine the possible origins of the Gudgenby stone arrangements. These consultants reached the conclusion that 'Piles of stones on and beside boulders in the Gudgenby Valley represent the result of a rabbit eradication program.' I and others are not convinced, however, that rabbiters would have the inclination to construct such piles of stones. I decided to test the sites by divining to see if there were any indications of anomalies which might indicate a grave site.

I first discovered that I had the ability to divine in 1951 whilst at work when my superior tested me to see if I could successfully locate a water main buried under a lawn. Divining around the stone arrangements gave indications of anomalies of the proportions of a grave in a number of sites far greater than had been expected from visual indications. Knowing that divining was

unlikely to be accepted by local archaeologists (although it has been used as a preliminary investigation tool overseas) I sought other methods of proof.

While travelling in the USA I learnt that magnetometer surveys had been carried out to successfully locate graves, monuments, building sites, old roads and the like. Similar magnetometer surveys have been carried out in Australia. Before going to the Gudgenby area with the magnetometer I checked, by divining, the cemeteries of Weetangera, Gungahlin and St John's church and received positive indications of grave boundaries. I then negotiated the use of a magnetometer. A magnetometer measures variations in the earth's magnetic field brought about by the magnetic susceptibility of substances in the area under survey. The magnetometer signatures of grave site anomalies were first determined in the Weetangera cemetery for use as a basis for comparison. A stone arrangement was selected in



The magnetometer in use at Site 12 Gudgenby. The subsidence under the gauge board may indicate an earlier digging. A section of the replaced arrangement can be seen on top of the boulder.

The Pinnacle

continued from page 7

dacite is the most common rock in the area).

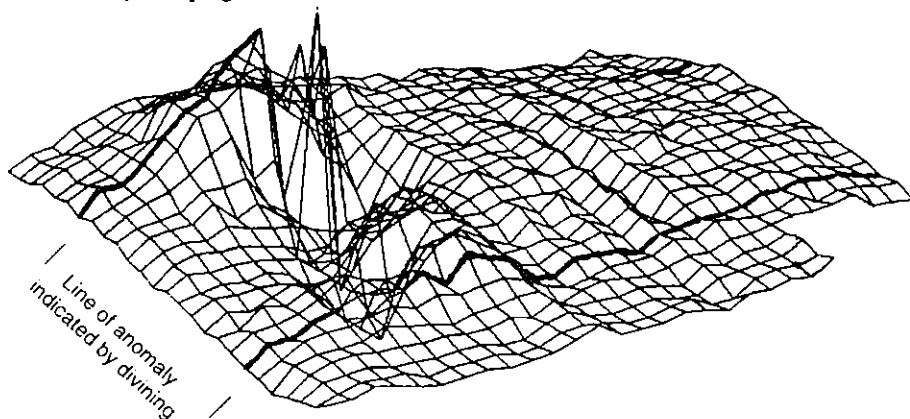
Further on the downside, there are the vandals who move rocks to build walls on some of the elevated rocky areas, walls that Canberra Nature Park and the Pinnacle Environment Group are tired of taking down. The pink-tailed legless lizard needs rocks and native grasses to survive, yet every rocky outcrop on the Pinnacle has been disturbed by the building of walls and camp fires with rocks dug out of the ground. One such construction at the start of the nature walk is an enclosure of 12 metres by 8 metres with a metre-high wall around it containing some heavy boulders. A fireplace has been built inside the enclosure and the entire area is strewn with smashed wine and beer bottles. Worse still, arson has become more of a problem recently and there are now several blackened areas strewn with piles of broken bottles. An organised clean-up of this glass and other rubbish would probably attract volunteer labour and would give the place a face-lift.

We all appreciate Namadgi and know how hard NPA has worked to achieve a national park for the ACT but we have to live in the city and want it to remain a bush capital. The more people out there planting, walking or whatever and showing an interest in Canberra Nature Park the less likely it is that future politicians of this constantly expanding city will be tempted to think in terms of rezoning our city parks for development. As proposed by Stephen Johnston of the Environment Subcommittee (NPA *Bulletin* September 1994), we as individuals should get involved in Parkcare activities. Canberra Nature Park are doing a good job; I too believe we should support them.

Phyl Goddard

Searching for evidence of Aboriginal occupation

continued from page 19



Computer-generated graph of magnetometer readings of an anomaly at the base of the rock shown in the photograph of the magnetometer in use.

Gudgenby for survey on the basis that I believed that the arrangement was such that it was highly unlikely that it was a random placement of rocks on a boulder. The area around the boulder was carefully surveyed by divining and a particular site in the proportions of a grave was selected. Readings were then taken using the magnetometer over a 5 centimetre square grid. In all some 800 readings were taken and tabulated. Peak readings were found to align with the boundary found by divining. The readings were then graphed by making an isometric stack of the magnetic field profiles. The profiles were of similar shape to those recorded at Weetangera. Geologists have assured me that the magnetometer procedures taken were correct and that the results obtained are indicative of an anomaly. What this anomaly is could only be determined by inspection and, as mentioned earlier, it is unlikely that digging would be approved. The only suggestion made by a geologist was that the survey could have been extended over another 1 to 1.5 metres on a coarser grid to give indications of any adjoining anomalies.

The matter of the origin of the stone arrangements has now been considered by government-insti-

gated committees which have concluded that there has been possible Aboriginal involvement in the placement of some of the stone arrangements in the Gudgenby Valley.

Whether these arrangements indicate the location of graves will remain a matter for discussion unless the service undertakes surveys with scientific instruments (magnetometer and/or ground penetrating radar) to determine, at least, that anomalies surrounding the sites are of the proportions of a grave. Positive proof could only be provided by digging but this may not provide the answer since human remains do not last indefinitely in the acidic granitic soils of this region. Approval to dig is also understandably unlikely to be given by the Aboriginal community. What the stones may indicate will remain an enigma unless use of the technology available in Australia is instigated.

However, measures to protect the stone arrangements from disturbance or removal have been promised. These measures will be ineffectual unless the stone arrangements are given heritage listing, identified on site and regularly monitored.

**Article and photos by
Reg Alder**

Twenty years of writing books for children

continued from page 17

I really enjoyed designing the book and dealing with the printer, National Capital Printing here in Canberra, but now I have to sell it, and that is not so good. The bilby campaign is going well and public libraries are buying the book but it did not make the Children's Book Council short list (which I actually think shows more of a problem with the book council than with my book) and so I offered to come and tell you about it.

Perhaps rather than using my own words I should quote from a review in *Reading Time*, the review journal of the Children's Book Council:

'Here is an Australian information book of comparable quality to the market-dominant Franklin Watts and Wayland books and within its 32 pages, greater textual depth. The characteristic styles of the major publishers—double-page spread content organisation and the abundant use of headings and sub-heads to divide the text into brief topical sections—is not employed in this book. Instead, it reads as a continuous exposition in language that should be clearly comprehended by most children from 10 upwards. In this way the reader is encouraged to read through the whole text and thus become well informed about the subject. The text distinguishes between the bilby and bandicoot, surveys past and present distribution and describes habitat, social, nesting, foraging and reproductive behaviour.'

In preparing the book I have tried to do things which are done best in books. For example, the first double-page spread with a photograph of bandicoot diggings, a drawing of footprints and text starting 'Not many people see bandicoots' gives readers something more than they would get from a CD ROM, and I

have tried at times to introduce a little poetic feeling into the text as in 'After sunset, as darkness descends over the land, bandicoots emerge from their nests one by one, one here and one there, and they begin to feed.'

Where to now? Books like *Echidna* and *Bandicoots and Bilbies* are evidently not the way to go, despite the need for them. One publisher, Allen & Unwin in the Little Ark imprint, is producing some good nature study books at the moment, but that editor has chosen to work with photographers and coach them in writing their own texts rather than bringing in another person as writer.

I have at times judged children's own writing and I have been saddened by the way an apparently Australian story will finish around an oak tree in the middle of a forest. The children have so absorbed European and North American literature that they do not even know it does not suit their own environment. I have heard the comment that Australian children know what banksias are because of May Gibbs and I think that perhaps the best way of bringing a feel for our own environment into our unconscious is through fiction. However, very few of our fiction writers have any feel for the natural environment. They are nearly all urban and they write for an urban audience and although many of their books are important, I think we need to balance them with some about our own particular natural environment.

Over the last year or so I have been trying some ideas in fiction. So far I have not met with success. How much the problem is with my lack of skill and how much the difficulty in finding a kindred spirit among publishers I do not know, but I do

intend to keep trying for a bit longer. Creating books is addictive and despite the enormous frustrations I find that I want to keep doing it.

Of the books I have talked about this evening only *Snails*, *The Australian Echidna* and *Bandicoots and Bilbies of Australia* are in print and can be ordered through any bookshop. People are always interested in the field guides but one of the frustrations of modern publishing is that it depends on a turnover of new books and it is hard to keep special interest books in print and, at the moment, I don't see any prospect of their being reprinted.

For anyone interested, *Snails* is available from me for \$7 and *Bandicoots and Bilbies* for \$17.95.

Eleanor Stodart
From the talk given at the
February meeting.

New NPA members as at 1 February 1995

Anne Sulinski, Jackie Lee & Ivan Bestel	Holder
Leah & Rodney Taylor	Page
Maureen & Ray Blackmore	Farrer
Kathleen & Ian Richman	Jerrabomberra
Elizabeth Morrison	Farrer
David & Barbara Pryce	Wanniassa

Native Title claims

The National Native Title Tribunal's role is to process claims by Aboriginal and Torres Strait Islander peoples over Australian lands and waters. The tribunal is not a court and disputed claims that fail to be resolved by mediation will be referred to the Federal Court for litigation.

The NPA has received notification of Native Title claims by the following people or peoples.

- The Yidinji people of north Queensland
- Mr Stjepan of Lightning Ridge, NSW
- The Wondunna Clan of the Butchella Tribe from south-east Queensland
- The Yirrganydji peoples of Queensland
- Mr R Bropho on behalf of the Swan Valley Nyungah Community of south-west WA
- Mr Bart Plasier of the Parish of Bodalla, Land District of Moruya, NSW
- Ben Ward on behalf of Miriwung and Gajerrong people of west Northern Territory
- Mr Abraham Omeenyo on behalf of the Umpila people of Cape York Peninsula and nearby islands and reefs
- DHC Legal group on behalf of Ngaluma and Injibandi people
- Corser and Corser on behalf of Mr Mark McKenzie Senior of Flinders Ranges National Park
- Boe and Hogan Lawyers on behalf of Quandamooka Land Council of Quandamooka (Moreton Bay)
- Terara Sand Pty Ltd of Pig Island, Shoalhaven River near Nowra.

Further information about these claims is available from the NPA office.

Publications received by NPA

Publisher/Author	Publication
Economic & Energy Analysis Pty Ltd & Georgie Wilkenfeld & Assoc Pty Ltd	<i>Solar & Heat Pump Hot Water Systems</i>
Environment Protection Agency	<i>Discussion Paper: Public Review of Commonwealth Environmental Impact Assessment Process</i>
Josephine Flood	<i>The Moth Hunters</i>
House of Reps Standing Committee	<i>Biodiversity—The Contribution of Community-based Programs</i>
Australian Conservation Foundation	<i>Habitat</i>
Australian Environment News	<i>Newsletter</i>
Australian Geological Survey Organisation	<i>Aus Geo News</i>
Canberra & District Historical Society	<i>Newsletter</i>
CASEREC	<i>Bogong</i>
Colong Foundation for Wilderness Ltd	<i>Colong Bulletin</i>
CSIRO	<i>ECOS News</i>
Dept of Environment Land & Planning	<i>Land Information Newsletter</i>
Environment Centre & Conservation Council	<i>Sustainable Times</i>
Environmental Planning Association	<i>News</i>
Field Naturalists Association of Canberra	<i>Newsletter</i>
Greening Australia	<i>Broadcast</i>
Humane Society	<i>Habitat—Exploration of Platypus</i>
Kosciusko Huts Association	<i>Newsletter</i>
National Trust of Australia	<i>Trust News</i>
NPA (NSW)	<i>Journal</i>
NPA (NSW)	<i>Bettongs Can't Talk</i>
NPA (NSW)	<i>National Parks & Wildlife News</i>
NPA (NSW)	<i>Southern Highlands Branch Newsletter</i>
NPA (NSW)	<i>Milton Branch Newsletter</i>
NPA (Qld)	<i>Newsletter</i>
Pacific Friend	<i>Photos of Japan</i>
The Wilderness Society (ACT)	<i>ACT Wild</i>
The Wilderness Society (ACT)	<i>Wilderness News</i>
United Nations Environment Program	<i>Our Planet</i>
Victorian National Parks Association	<i>Newsletters</i>
Victorian National Parks Association	<i>Park Watch</i>
Reports received	
Annual Report	<i>National Trust of Australia (ACT)</i>
Office of Commissioner for the Environment ACT	<i>Australian Capital Territory—State of the Environment Report</i>

Railway informality among the mountains

There's an endearing air of informality about the TranzAlpine, the New Zealand train which, in the space of a few hours, carries camera-bedecked tourists across the middle of the South Island and some of the most spectacular country on earth.

The PA system introduces the staff: Bob, Ray, Denis and Helen. Complimentary peanuts (a daunting sight at 9.30 in the morning) and juice are distributed followed by tea and coffee which slops out of cups as the train lifts its speed.

Amused staff take delight in homespun humour as the TranzAlpine dashes across the Canterbury Plains before pushing through mountain passes and tunnels and heading towards the Tasman Sea, some 210 kilometres from where it started.

'Lake Sarah was named after his wife by her husband who named a larger lake after himself—he was an early chauvinist.'

'The cold wind is known as the Barber—it's sharp enough to cut your throat.'

'Sheep on the west coast can read. There's a sign on a gate that says "Sheep close gate please".'

On the return journey a traveller is let off at an unscheduled stop and walks jauntily off to his home near the tracks. 'That's Stephen O'Leary. He's the third generation of his family to be set down by trains outside his front gate.'

Wide observation windows on the TranzAlpine give passengers unrestricted views of peerless scenery, although it pays to have a window seat. This allows you to frighten yourself without risk by peering into deep gorges across which the train sways on skinny viaducts. Attendant Bob says that one of these, the Staircase Viaduct, could accommodate the neo-Gothic Christchurch Cathedral and still leave three metres between it and

the cathedral's towering spire. Another viaduct was prefabricated in England and assembled on site, Meccano-style, in two weeks.

The TranzAlpine travels daily between Christchurch on the east coast of the South Island and Greymouth on the west coast. It leaves at 9.15am and arrives at 1.25pm or thereabouts. There's a stop of about an hour before the TranzAlpine departs from Greymouth on its return journey at 2.35pm, reaching Christchurch at 6.40pm. My fare cost \$NZ55 each way and it was essential to book. Meals and liquor can be bought on the train.

The first part of the journey takes travellers across the rich Canterbury Plains—an idyllic pastoral patchwork of sheep paddocks, pine plantations, various cropping ventures and small towns. There are almost as many pine trees as sheep in these neat fields, with the trees providing windbreaks and shelter for stock. The contrast with empty Australian paddocks in which miserable stock burn in the sun made this passenger ashamed. Beyond the plains rise the sublime Southern Alps, in October their summits and flanks shining against a blue sky with the whiteness of freshly dumped snow.

The hamlet of Springfield is reached after an hour and the TranzAlpine heads into the foothills of the Alps, rushing through 16 tunnels as it proceeds towards Arthurs Pass, a village crouching below forested peaks and which, at 737 metres, represents the highest point of the journey. The vista of mountains, broad valleys and ravines through which milky rivers stampede or saunter is astonishing in its grandeur. In keeping with this dramatic landscape, huge landslides scar the flanks of the

peaks and contribute to the massed shingle of the river banks.

Beyond Arthurs Pass, where the train stops for a few minutes, is the Otira Tunnel, 8.5 kilometres long, which took 15 years to build, from 1908 to 1923. The TranzAlpine whizzes through this engineering marvel, the third longest rail tunnel in New Zealand, in ten minutes.

Otira, in contrast to smart Arthurs Pass, a jumping-off point for alpine trampers and skiers, looks run-down and shabby, a view reinforced by the state of many west coast buildings and farms along the TranzAlpine's route. Life is harder on this side of the South Island, a region of high rainfall where frequent downpours turn corrugated iron roofs to rust while bush, scrub and flax are unrelenting in their drive to reclaim cleared fields.

The scenery remains, however. Peaks and snow drifts are gradually left behind as the TranzAlpine travels alongside immense rivers and the 42 square kilometres of the mountain-backed Lake Brunner where the local yacht club races at what must be one of the most sensational sailing venues yachties could ever imagine.

Greymouth railway station marks the end of the journey. Like many buildings seen on the west coast, it needs brightening up—fresh paint and flowers and plants would help as would a touch of luxury, even warmth, about the refreshment rooms and souvenir shops. Still, passengers have only an hour to kick their heels at this quintessential railway station before the TranzAlpine departs on its return journey. Some passengers take a quick tour of the town while others stay overnight or longer in this challenging and still raw district of mountain, forest, river and lake.

Graeme Barrow

Calendar

MARCH

- Thursday 2 Committee meeting 7.30pm, for location contact Eleanor Stodart, 281 5004(h)
Thursday 9 Namadgi Subcommittee 7.30pm, for location contact Steven Forst, 279 1326(w), 251 6817(h)
Thursday 23 Environment Subcommittee 7.45pm, for location contact Stephen Johnston, 254 3738(h)

APRIL

- Thursday 6 Committee meeting 7.30pm, for location contact Eleanor Stodart, 281 5004(h)
Thursday 13 Namadgi Subcommittee 7.30pm, for location contact Steven Forst, 279 1326(w), 251 6817(h)
Thursday 27 Environment Subcommittee 7.45pm, for location contact Stephen Johnston, 254 3738(h)

MAY

- Thursday 4 Committee meeting 7.30pm, for location contact Eleanor Stodart, 281 5004(h)
Thursday 11 Namadgi Subcommittee 7.30pm, for location contact Steven Forst, 279 1326(w), 251 6817(h)
Thursday 25 Environment Subcommittee 7.45pm, for location contact Stephen Johnston, 254 3738(h)

JUNE

- Thursday 1 Committee meeting 7.30pm, for location contact Eleanor Stodart, 281 5004(h)
Thursday 8 Namadgi Subcommittee 7.30pm, for location contact Steven Forst, 279 1326(w), 251 6817(h)
Thursday 22 Environment Subcommittee 7.45pm, for location contact Stephen Johnston, 254 3738(h)

NPA Bulletin

If undelivered please return to:
National Parks Association of the ACT
PO Box 1940 Woden ACT 2606
Print Post Approved
P 248831/00041

SURFACE
MAIL

General meetings

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

Thursday 16 March: The sustainable use of timber

Alan Davy from ACT Forests will talk about the sustainable use of forest resources, with particular focus on Canberra and its use of firewood.

Thursday 20 April: Travels in the Camargue

NPA member, Elizabeth Smith, will show slides of the fascinating wetland environment on the Rhône Delta. She will explore the interactions of conflicting land uses.

Thursday 18 May: Skis on the Brindabellas

Historian, bushwalker and ski tourer, Matthew Higgins will tell us some of the fascinating stories about the history of skiing on the Brindabella Range. He will have copies of his book for sale at the meeting.

Thursday 15 June: Green politics

Simon Grose, who is the science and technology editor at the *Canberra Times* and the paper's environmental features writer, will give us an informed view on this highly relevant topic.

Thursday 20 July: Vegetation dynamics in lowland grasslands in the ACT

Sarah Sharp, grasslands project officer with the Parks and Conservation Service, has been undertaking an extensive research project on grassland protection and regeneration and conservation. She will speak to us about how grasslands respond to different treatments.