

The ANU Mountaineering Club expedition to the Himalayas, Australia's first major climbing and scientific expedition to the high Himalayas, gets under way next week.

An advance party of three will leave Canberra with the expedition's two tonnes of equipment on Tuesday and the main party of 12 leaves on 11 April.

Their goal is the 7066-metres peak of Mt Dunagiri in the Indian Himalayas. They will attempt to reach it by scaling the so-far unclimbed east ridge.

Most of the team are ANU graduates or students in scientific disciplines and for this reason the expedition has dual mountaineering and scientific objectives (see inset). Some of them come originally from overseas, particularly the United Kingdom, but all now work and live in Australia, the majority in Canberra and near the ACT.

The expedition members are: Peter A. Cocker (aged 39 years), Expedition Leader; Charles J. Massy (25), Deputy Leader and Treasurer; Kenneth G.H. Baldwin (23), Expedition Secretary and Co-ordinator; John J. Finnigan (31), Equipment Officer; Charles Barton (34); Lincoln R. Hall (22), Assistant Equipment Officer; John S. Armstrong (43), Packaging and Stores Officer; Tim Macartney-Snape (22); Ken Bell (25); Andrew H. Bond (23); Andrew W. Blakers (22), in charge of food arrangements with Andrew Bond and Keith Burns; Martin Stone (21); Keith H. Burns (21), Scientific Program Co-ordinator; Theodore S. Hooy (23); Graeme Davis (23), Communications Officer; Mark Podkolinski (28), Medical Officer and in charge of the medical scientific program. Ben Sandilands, a climbing reporter, from the *Sydney Morning Herald* will cover the expedition's program by reports carried from base-camp by runners.

Before making the actual assault on Dunagiri during two to three weeks in May, the team will spend three or four days in Delhi and two days reaching the road head at Lata Village. A day will be spent hiring porters before the week-long march into the base camp site on Camani Glacier. The following week an advance base camp will be established on the snowfields at the top of the glacier from where the main climb will begin.

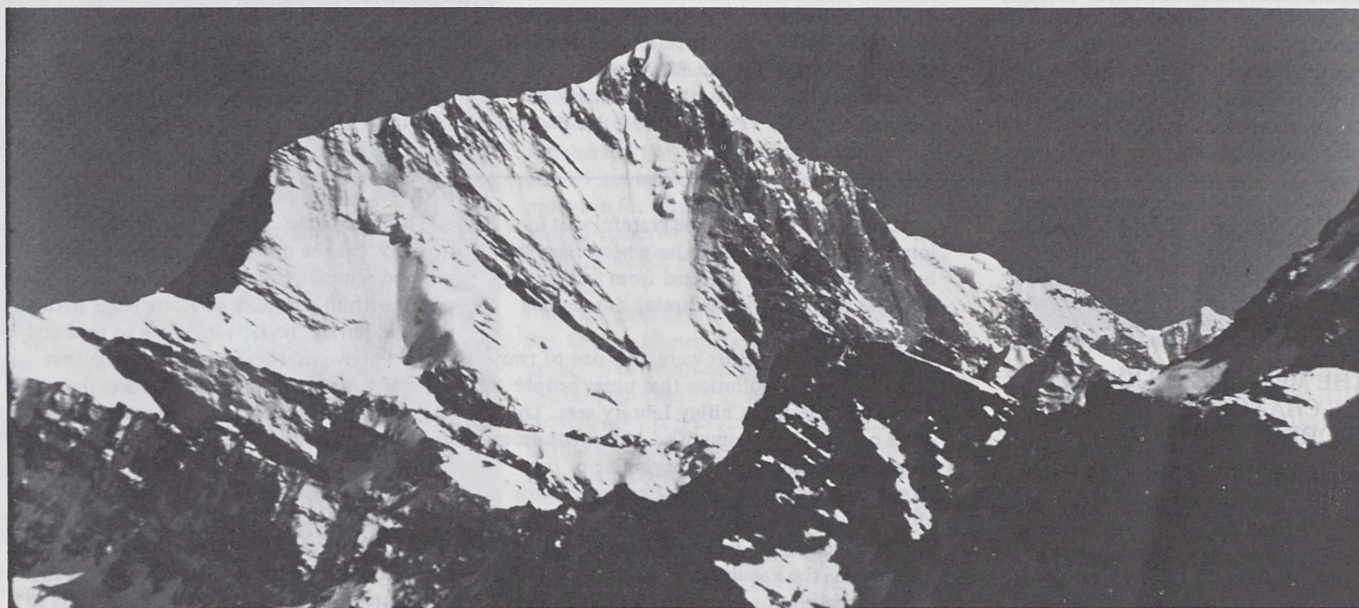
The expedition cost was originally budgeted at more than \$3000 per member, payable by the members themselves, but assistance from many sponsors has reduced this cost to nearly half.

The expedition is being backed by the John Fairfax and Sons Ltd newspaper group. Air India has also agreed to sponsor the team and is helping with the expedition's travel arrangements. Other national companies have joined in too: Ansett is assisting with freight, Motorola with communications and Cargo Nupack and Rheem Australia with packaging. Gear companies are supplying the team with special high-quality, lightweight equipment, chiefly from Rick White's Mountain Experience shop in Brisbane.

Added to this are the many donations of food, preserved especially for high altitude use, from Cerebos, John West, Arnotts, Rowntree-Hoadley, Kraft, Richards-McCallum, Bountiful, Nestles, Wattie Pict, ETA, Harris, Quaker, Foremost, Golden Days, White Wings, Incorporated Agencies, and the Australian Honey Board.

Support is also being given by Canberra enterprises. Kevin Jones of Central Pharmacy is supplying pharmaceutical goods and David McKay and Co. is supplying hardware for use at base camp. Both the Paddy Pallin and Bushgear equipment shops have supplied some high quality equipment being used and tested on the expedition. J.B. Youngs have made a donation as has the Department of the Capital Territory's Sport and Recreation Branch for help with promotion of its 'Life Be In It' campaign.

ANU mountaineers poised for Aust.'s first Himalayan assault



Thrusting its 7066-metres challenge from surrounding lesser peaks, majestic yet chilling Mount Dunagiri awaits the assault from Australia's first large scale Himalayan expedition - a team from the ANU Mountaineering Club.

Socks for science ...

Socks will be an all-important part of the scientific program being undertaken by the ANU mountaineers during their Himalayan expedition.

The socks worn by the expedition members on their march in to Mt Dunagiri will be studied by Dr Nigel Wace of the Department of Biogeography and Geomorphology in ANU's Research School of Pacific Studies.

He is interested in seed transport processes - particularly the 'mobility' of plant seeds with human carriers - in the Indian Himalayas.

Expedition members will wear socks at various stages of the march to collect seeds. Having been removed at the end of each section of the trek, the socks will then be placed in sterile potting mixture and allowed to 'grow', so encouraging the seeds in them to germinate. Their parent plants can then be identified and the distance they have been inadvertently transported plotted.

Several other projects form part of the expedition's scientific program.

Not only will the mountaineers have to face the difficulties of high altitude climbing but they will also be acting as human guinea pigs in a controlled experiment to study man's adaptation to the rigours of high altitude.

Studies on the climbers themselves will test the fitness of the team and examine the effects of altitude on their physiology. One of these effects is what is known as 'altitude or mountain sickness' - a sometimes crippling disability which results in headaches, nausea, hallucination, breathing difficulties and general misery. All climbers are expected to be affected to some extent, although the fitter climbers will be less susceptible.

To help combat these effects, the team will be testing two new drug regimes in co-operation with Dr John Sutton of McMaster University in Ontario, Canada.

The responsibility for the medical side of the scientific program will be that of the expedition doctor, Dr Mark Podkolinski, who is being provided in co-operation with the Division of Antarctic Research in the Department of Science. The health and fitness of the team before departure is being checked by Dr Bryan Furness of the ANU Health Centre.

The scientific studies are not simply confined to research on the members themselves. A project designed by Professor J. Lovering of Melbourne University will measure the rate at which the Himalayas are being uplifted, a process which has been continuing for many hundreds of thousands of years during the formation of this giant mountain chain. Uranium atoms undergoing fission during the production of metamorphic rocks such as apatites leave tiny tracks in the rock crystal as the atoms disintegrate. These tracks can be observed with a microscope, and are known to be destroyed if heated above 120°C.

So, by examining the number of fission tracks and estimating the rate at which uranium disintegrates, a measure of the time period since the crystals last cooled below 120°C can be made.

This, in turn, indicates the time since the hot rock from inside the earth rose and cooled to form the Himalayan chain. This method has been used successfully in the European Alps, and with the collection of rock samples by the expedition, this will be the first attempt to apply it to the Himalayas.

A sizeable forestry representation in the team (five in all) will be put to use in a project designed by Dr John Ogden, of ANU's Department of Biogeography and Geomorphology, RSPaCS. The study involves the collection of tree ring samples using a wood boring instrument to examine their potential for tree ring dating and climatic control. Selected ancient Himalayan trees will be used in the project and a study of their surrounding environment made.

Another botanical project in the same department is being organised by Dr Gurdip Singh, who is interested in pollen fallout from the vegetation in the area. Specimens of moss cushions containing the fallen pollen will be collected for later examination.

The expedition will also be on the lookout for snow algae in the glacial neves for Dr Harvey Marchant of ANU's Research School of Biological Sciences.

(For *ANU Reporter*, expedition members will also try for an interview with the Yeti - if he/she can be located.)

Beach studies will help protect our coastline from development

A team of scientists from three universities, including ANU, is developing a model of beach dynamics which is likely to help protect Australia's beaches from the effects of human activity such as building development and mining.

Now in their third year of the research project, supported by the Australian Research Grants Committee, Dr John Chappell, Reader in Geography in ANU's School of General Studies, Associate Professor L.D. Wright, from the Geography Department at Sydney University, and Professor B.G. Thom, from the Geography Department, Faculty of Military Studies, Duntroon, are using beaches from Moruya to those of the Newcastle bight area as their laboratories.

Dr Chappell says high demand for land near many beaches has so interfered with their natural behaviour and movement that many have been altered for the worse, almost irrevocably, while others increasingly are at risk. 'Used more intensively than other parts of the landscape for recreation, sport and leisure, surf beaches are very vulnerable to man's activities', he says.

To protect them, Dr Chappell says, it is essential to understand the natural variability of beaches.

In the natural state, surf beaches move to and fro through a zone of variation, typically retreating into the vegetated dunes behind the beach during storms and migrating slowly seawards during periods of fair seas. During these changes, sand is moved from foreshore to offshore seabed, or vice versa.

The vegetation on the dunes plays a key role, not only in moderating the effect of storms, but also in aiding sand recapture during the times of beach recovery.

Continued on page five

University Council meeting

At its meeting on Friday 10 March the Council of the Australian National University considered those items mentioned below. Further matters dealt with by Council appear on other pages.

Chair of Astronomy. Council adopted the recommendation of a Department of Astronomy review committee that the Chair of Astronomy be filled 'at the earliest opportunity'.

The Chair became vacant in September last year with the resignation of Professor O.J. Eggen.

Eight other recommendations, including two that the Department of Astronomy and the Observatory Services Unit be merged under the official title 'Mount Stromlo and Siding Spring Observatories' and that it be a department of the Research School of Physical Sciences, will go before Standing Committee in April following their consideration by the Board of the Institute of Advanced Studies.

University House working party. A four-person working party is to be appointed by the Vice-Chancellor to report to him and the Governing Body of University House on the future objectives of the House and its role within the University.

The working party's final report will also go to Council.

At its last meeting, Council was told that discussions between the Vice-Chancellor, Assistant Vice-Chancellor and the Master of University House had disclosed that apart from the need for considerable deferred maintenance work, the main problem for the House is the uncertainty about its appropriate role within the University.

Registrar's retirement. The Chancellor, Sir John Crawford, presented the retiring Registrar, Mr Bill Hamilton, with a wooden bookstand inlaid with the crest of the University and crafted by Mr Kurt Kloska and Mr Frank Burden, both of the Research School of Earth Sciences.

The presentation was in appreciation of Mr Hamilton's contributions to Council and the University during the past 27 years.

Mr Hamilton joined the University as accountant on 20 February 1950. He became

ANU's first Bursar in July 1956 and in March 1974 was appointed Registrar. In the capacity of Registrar he also served as Secretary of the Council.

He was a member of the Board of Management of the University Union from 1963 to 1971 and for many years assisted the Australian Vice-Chancellors' Committee in its submissions to inquiries into academic salaries and to the Academic Salaries Tribunal.

Council also noted that Mr Hamilton's work in connection with the University's art collection 'has been of singular value, its development being due largely to his knowledge and energy in the field.'

Honorary degrees. Two ANU honorary degrees will be conferred at the April Conferring of Degrees ceremonies.

Dr Douglas Frew Waterhouse will be admitted to the honorary degree of Doctor of Science for his 'distinguished creative achievement as a scholar' and Sir Leslie Melville will be admitted to the honorary degree of Doctor of Laws for his 'distinguished creative contributions in the service of society'.

Faculty of Law membership. Mr Justice I.F. Sheppard of the New South Wales Supreme

Court has been appointed a member of ANU's Faculty of Law for one year from 1 March 1978.

Headship extension. Professor S.J. Stoljar's Headship of the Department of Law in the Research School of Social Sciences has been extended for one year from 30 March 1978.

BIAS membership. Mr R.W. Rickards has been appointed a member of the Board of the Institute of Advanced Studies until 14 September 1978 or until the Australian National University Act is amended to alter the Board's membership arrangements.

Professorial Fellowship. Council approved the taking of steps to fill the Professorial Fellowship in Geomorphology which became vacant at the end of 1977 with the retirement of Dr J.N. Jennings.

Union Board membership. Mrs M.Y. Coleman has been appointed Council's representative on the Union Board of Management for one year from 10 March 1978.

Mrs Coleman will replace Mr G.A. Colman who resigned from Council on 31 December last year.

Letters to the Editor

HAS THE MEANING OF 'QUIET HAVEN' CHANGED? ASKS CORRESPONDENT

Your headline in the *Reporter* of 17 March ('Union Court a quiet haven') is too unconsciously ironic, too crassly inaccurate, to pass uncriticised. It may be the result of misreporting, wishful thinking, a sick sense of humour, sheer unconscionable ignorance of the truth or some semantic change, unfamiliar to me, in the words 'quiet haven'. But it certainly does not properly describe the place overlooked by my window in the Hope Building.

Many must, of course, be grateful that at long last the motorcyclists have been (largely but not completely) deterred from endangering our lives or limbs and disrupting our reading and teaching.

But the motorcyclists were only one of two varieties of noise-pollution that upset people working in the Arts-Chifley Library area. The other one was and is amplified hullabaloo from alleged entertainers. If the beginning of first term is any indication of the likely incidence of noise-pollution created in Union Court, then this year bids fair to be worse than last, when members of the Faculty of Arts objected on several occasions to the noise levels and the frequency of the nuisance, classes were disrupted and at least one seminar in the Humanities Research Centre had to be hurriedly and humanely evacuated.

The Humanities Research Centre exists, I may say, for the prime purpose of bringing selected scholars from overseas; and this it does partly with the promise of a congenial setting (a 'quiet haven', no less) in which to read and write. Forgive us, therefore, for feeling that parts of your report on Union Court (the 'attractive-precinct-congenial-human-setting-leisurely-stroll-quiet-character-of-the-Court' bit) are insult added to injury.

Perhaps you could ask Mr Cardwell for some reliable information about his Association's plans for further noise-pollution this year, so that those of us who wish Union Court really was a 'quiet haven' can make arrangements to go and look for one elsewhere (possibly in or about the Chancelry)?

Perhaps you could also send a reporter to the next noise-production of the Students' Assoc-

iation, to help assess the aptness of your headline?

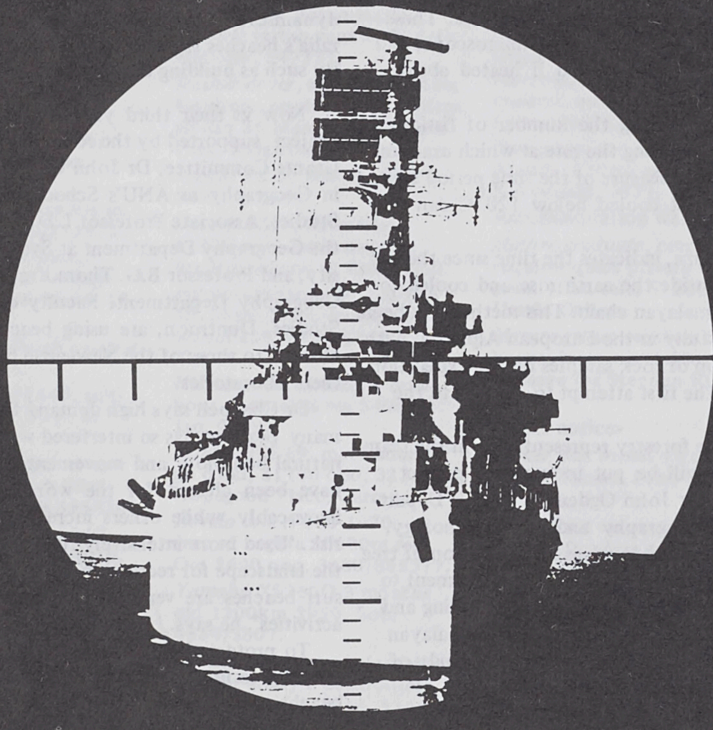
Is it too much to hope, finally that a student or two might be found to agree with me that this sort of noise is grossly inconsiderate, largely unwanted about the place and should only, if ever, be made far away from Union Court, say on North Oval (or about the Chancelry)? And am I too cynical in thinking that, if it was made on the doorstep of the Chancelry a stop would be put to it pretty quickly?

Congratulations, then, to Mr Plowman and anyone else who had a hand in rescuing us, after years of complaint, from the motorbikes. But let's hope we don't have to wait a few more years before we are rescued from the noise-makers of Union Court.

—James Grieve
Research Secretary

INSECURITY!

The spread of weapons in the Indian and Pacific oceans



Mary-Jane Taylor

Arms proliferation could be more effectively controlled and the stability of regional relationships enhanced if obsolete World War II - type defence forces were replaced with sophisticated, new technology weaponry such as long range detection systems and highly accurate defensive missiles.

This unusual suggestion is made by Dr Robert O'Neill, Head of ANU's Strategic and Defence Studies Centre, in a controversial book *Insecurity! The spread of weapons in the Indian*

and Pacific Oceans, just published by ANU Press.

Edited by Dr O'Neill, the book comprises nine chapters by distinguished international experts who present and evaluate a mass of data which has not been systematically examined before from the point of view of this region as a whole.

In the book's conclusion, Dr O'Neill admits that total disarmament is impossible — 'it is nonsense to preach disarmament to the society

of sovereign states' — but he suggests ways in which arms proliferation might be controlled.

'The high pace of modern warfare is not likely to permit both the slow mobilisation of reserves and their transportation to the front over hundreds of miles in sufficient time to achieve or prevent the taking of a decision', Dr O'Neill says.

'Hence the force structures of many states could be improved by surgery. In particular the members of both NATO and the Warsaw Pact would be well advised to reckon their opponents' strengths in terms other than numbers of divisions or of men, discounting particularly their lower categories of reserve formations. At least they may thereby individually come to question the utility of further numerical increases in their military establishments.

'They may even move towards modest reductions.

'While the pace of events in any clash between the Soviet Union and China may be slower than in a NATO - Warsaw Pact engagement, thereby conferring greater utility on reserve forces, both sides would be well advised to opt for qualitative rather than quantitative competition', Dr O'Neill argues.

'In the cases of regional conflicts, sharp questioning from appropriate places within the countries concerned may have more spectacular results than lecturing from the outside in limiting the numerical expansion of existing forces. The high commands of some of the larger armies could be given a hard time in having to justify their existing establishments in terms of defence worth.

'What is the point of many of the obsolete destroyers of coastal navies which are inviting PGM attack by opposing small craft in time of hostilities? What is the value of the squadrons of MiG-15s and Sabres which fill out many of the smaller air forces of this region? Provided that these sorts of questions can continually be posed to and within defence establishments by officials, servicemen and politicians who are sufficiently well informed to be able to assess the replies given, I would be surprised not to see a move away from the predominance of numbers in most defence forces and towards better tactical defensive weaponry.

'Now, of course, it may be pointed out that

what I am proposing is not arms control at all, simply a replacement of quantity by quality, and doing nothing to modify the existing animosities within the international system. And much of that charge is true. However, I believe that, in many cases, change away from massive, World War II-type forces to more slender, new technology forces, can be a significant step for arms control.

'There is an intrinsically threatening quality about numbers in the armed forces of a potential enemy which is not engendered by pieces of weaponry. Numbers of soldiers inevitably have a conditioning effect on their political environments, whether they run the country, whether they merely vote or whether through their collective opinions they simply act as a pressure group. They are people with initiative to be displayed, with morale to be sustained, with families to be appeased and with political causes to be supported. In particular they tend to look much more frightening to a potential enemy who naturally tends to give their effectiveness those benefits of the doubt which he usually denies to his assessment of the effectiveness of his own forces, quite apart from the benign nature of his own intentions compared with the obvious malevolence of everything his enemy does', Dr O'Neill writes.

'The capabilities of technology-intensive weapons systems are more easily assessed with objectivity, which can be supported by the observations of other nations more reliably than can estimates of human capabilities.

'Also, the intrinsic flexibility of weapons systems may be less than that of men in some cases, making the nature of the defence posture of a technologically-oriented nation less ambiguous than that of a manpower-intensive state.

'This last factor is particularly important because if a state looks to have a reasonably effective defensive system it is not likely to invite attack. Although the absolute magnitudes of the forces of an attacker may be much greater than those of a defender, the former faces high marginal costs in subduing the latter if the latter is well prepared. Therefore, the stability of a regional relationship is enhanced by the type of defensive strength which modern but modest tactical weapons systems can provide if possessed by both sides of a group of rivals', Dr O'Neill says.

New worm strain sheep industry threat

Australian sheep farmers are facing disaster if controls can't be found for a new drug-resistant strain of the sheep parasite, barber's pole worm, ANU researchers working on the problem believe.

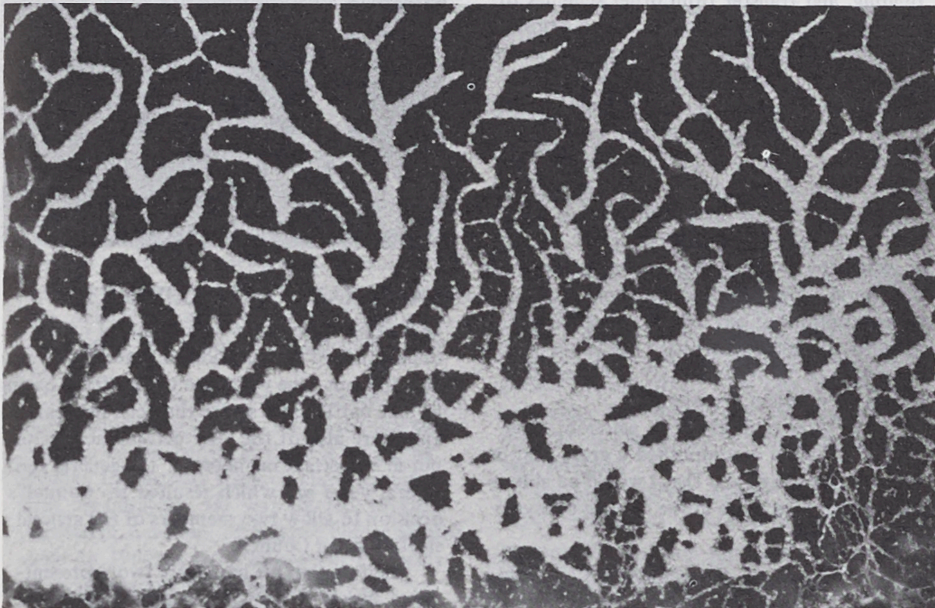
Strains of the worm, *Haemonchus contortus* have become resistant to the entire spectrum of anthelmintic drugs and are causing serious concern to both sheep farmers and the pharmaceutical industry.

Called the bankrupt worm in parts of Africa, it could easily have that effect on the Australian sheep industry if left unchecked.

Dr Chris Bryant, Reader in ANU's

the sheep and is the longest and most notable of the common stomach worms of sheep. The worms attach themselves to the walls of the stomach and remain attached for about 12 minutes at a time. It has been estimated that 2000 worms can draw up to 30 ml of blood daily. Additionally, blood is lost as a result of haemorrhage which occurs after the worms have detached and leave abrasions of the mucous membrane.

The actual effects of the worms on the sheep depend on the age, health and nutritional state of the individual animal but generally sheep become anaemic, fleece becomes broken



Larvae of *Haemonchus contortus*, out of a sample of sheep's faeces, photographed on the inside of a glass jar during daily migration upwards towards light. Magnification 1 : 4.

Department of Zoology, is co-ordinating a research program to investigate the biochemistry of the parasite, with special emphasis on anthelmintic action and resistance.

He thinks the problem needs tackling from several different angles. 'No doubt many factors play a role in the phenomenon of resistance', Dr Bryant says. 'Among them are the biochemical ones; a study of the biochemical changes involved in the acquisition of resistance may lead to early detection of resistance and therefore the early control of resistant strains. It is likely also that alternative susceptible points of metabolism in resistant nematodes will be identified, offering the chance of control by new formulations of anthelmintics.'

Research is in progress in both these fields in the Department of Zoology, with Dr Carolyn Behm as Research Assistant and Mrs Eva Bennet as a PhD scholar. The project is funded by the Australian Wool Corporation and its aim is to explore the problem of resistance at the metabolic level. Although the results will depend on factors outside the Department's control, Dr Bryant is optimistic about the prospects.

He sees the main objectives as a further understanding of parasite metabolism; the nature of action of existing anthelmintics; the development of a biochemical screen as an adjunct to existing screening methods; biochemical nature of resistance and biochemical mechanisms underlying the phenomenon of 'arrested' larvae; and design of anthelmintics.

H. contortus occurs in the true stomach of

and lustreless, the animals lose appetite and milk production declines greatly. For the farmer it is a tough proposition: the treatment is costly but if he does not want to lose his sheep and the worm's brain is a resistant one, dosage and drenching must be increased which, apart from additional cost, leads to problems of residues in the meat.

H. contortus is a prolific egg layer too. Females may produce between 5000 and 10 000 eggs in a single day resulting in the rapid contamination of pasture under favourable conditions.

Dr Behm says that ever since the disease caused by *H. contortus* was recognised in the 19th Century, drugs have been used for its control, the first of these being a compound of copper sulphate. The aim in recent anthelmintic development has been to obtain a drug characterised by a low degree of toxicity coupled with a highly effective action against virtually the complete range of nematode parasites of sheep.

Although there have been some wonder drugs, experimentally it has been shown that there is a rapid development of resistance in *H. contortus* under conditions of constant and repeated drug exposure. An important question which arises is whether a control program using several different anthelmintics together or in rotation is less likely to produce a resistant strain than a single anthelmintic.

Dr Bryant says that the well being of the sheep farmer will depend on answers to such questions. The problem is not yet acute but if an effective antidote is not found, it could spell disaster for the sheep industry.

The University has asked the Federal Government to amend the Commonwealth Employees (Employment Provisions) Act 1977 so that, if proclaimed, the Act would not apply to ANU.

In a letter to the Minister for Education on behalf of the University Council, the Vice-Chancellor, Professor Anthony Low, says the University's main concern is that the Act 'sets aside the principle of autonomy bestowed on the (ANU) Council under the Australian National University Act, which places with the Council the responsibility for the entire management of the University, including the appointment of staff'.

Under the Act as it stands, the University would have to comply with the instructions of a Minister to dismiss one or more members of staff even when, in the University Council's opinion, it might not be in ANU's interest or in the public interest to do so.

'The Council's aim is to protect the interests of teaching and research and it holds the view that that aim is best achieved if it has full control of the services of all categories of staff, both academic and non-academic', the Vice-Chancellor's letter says.

Noting that the Act already excluded members of the Defence Forces, Professor Low said: 'I am invited to suggest that legislative provision for dismissal by an external authority of a member of staff of a university is unsuitable and, should it endure, potentially alarming.'

'Though it has no qualms in relation to the Act for the immediate future, the University urges the Government most strongly to amend the Commonwealth Employees (Employment Provisions) Act 1977, at an appropriate time, so that if proclaimed it would not apply to the Australian National University.'

Council had noted that the stated purpose of the Commonwealth Employees Act was to safeguard the economic life of the country against disruption of public services by industrial action and that the legislation, if proclaimed, was unlikely to be applied to tertiary education activities.

Major national history project for Australia's bicentenary

Historians and other social scientists throughout Australia have begun work on a project, 'Australia 1788-1988', intended to be completed in time to mark the bicentenary of European settlement in the continent.

They are planning a series of books which they hope will offer students and general readers new understandings of our past, particularly our social history.

Dr A.W. Martin, of ANU's Research School of Social Sciences, announced details of the project late last week.

Professors Geoffrey Blainey of the University of Melbourne and John Mulvaney of ANU are to convene a group of collaborators for a book about Australia from the beginning of human settlement to 1788. Professor Blainey is author of *Triumph of the Nomads: A History of Ancient Australia*, and Professor Mulvaney is author of *The Prehistory of Australia*.

Three books on Australia in 1838, 1888 and 1938, are to be written under the general editorship of ANU's Professor K.S. Inglis. The purpose of these volumes is to show what it was like to be living in Australia in each of those years, for young and old, men and women, rich and poor, immigrant and native-born, black and white in town and bush. Those already planning them with Professor Inglis come from a range of disciplines including

ANU asks Govt. for amendment of C'wealth Employees Act

However, the danger existed that, as framed, the legislation could be used to stifle free academic expression and affect the ways in which teaching and research are conducted, notional though these prospects may be'.

The Vice-Chancellor's letter said the Council also noted that it might be possible to provide by regulation for the exclusion of the University from the ambit of the Act but would regard this as less satisfactory than amendment of the Act itself.

Professor Low pointed out that Council regarded section 23 of the Australian National University Act as the core of its charter. Section 23 reads: 'Subject to this Act and the Statutes, the Council may from time to time appoint deans, professors, lecturers, examiners and other officers and servants of the University, and shall have the entire control and management of the affairs and concerns of the University, and may act in all matters concerning the University in such manner as appears to it best calculated to promote the interests of the University'.

He added that 'quite adequate provisions have already been made by the Council, under its existing powers, for the termination of appointment of a member of the staff who has become incapacitated or inefficient or who is guilty of misconduct'.

Finally, Professor Low suggested that the Parliamentary Draftsman and the Attorney-General's Department might be invited to keep in mind the peculiar circumstances of the University and the provisions of its Act when framing future legislation, 'as they seem to have done on this occasion in respect of the Defence Forces'.

economic history, historical geography and urban sociology. In the early stages of this part of the project, high priority will be given to getting people who were living in Australia in 1938 to set down their recollections of life in that year.

Dr Martin is convener of a group which is discussing how best to write about the years 1939 and 1988. The group hopes to organise a series of conferences on this subject and also wants to collect and preserve people's memories of the earlier part of the period.

Four reference books are to be produced under the general editorship of Professor F.K. Crowley of the University of New South Wales. They are a guide to printed and other sources for the study of Australian history, an historical atlas, a book of historical statistics and a one-volume encyclopedia or reference history designed for the school library, study and living room.

An interim management committee for the project, consisting of senior historians from nine Australian universities, has been meeting since early 1977 under the chairmanship of Professor O.O. MacDonagh of the Australian National University (Dr Martin is at present acting chairman during Professor MacDonagh's absence abroad on leave).

DISTINGUISHED COMMITTEES FOR RESEARCH SCHOOLS' REVIEWS

The Vice-Chancellor, Professor Anthony Low, reported to the University Council at its last meeting that very distinguished review committees had been appointed for reviews of the Research Schools of Social Sciences and Pacific Studies and the John Curtin School of Medical Research.

For the John Curtin School of Medical Research: Professor Marcel C. Bessis, Director, Institute Pathologie Cellulaire, Hospital Kremlin, Bicentre, Paris and Professor of Haematology, Faculty of Medicine, University of Paris; Sir Arnold Burgen, FRS, Director, National Institute for Medical Research,

London; Dr Edward Reich, Professor of Biology, Rockefeller University, New York; and Dr M.G.P. Stoker, FRS, Director of Research at the Imperial Cancer Research Fund Laboratories, Lincoln's Inn Fields, London and Foreign Secretary of the Royal Society.

For the Research School of Social Sciences: Dr Gardner Lindzey, Director of the Centre for Advanced Study in the Behavioral Sciences, Palo Alto, California; Mrs Jean Floud, Principal, Newham College, Cambridge; Professor Alan Prest, Professor of Economics at the London School of Economics; and Professor John Poynter, Professor of History and Pro-Vice-Chancellor (Research) at the University of Melbourne.

For the Research School of Pacific Studies: Professor H.L.A. Mynt, Professor of Economics at the London School of Economics; Professor G. William Skinner, Professor of Anthropology, Stanford University, California; Professor Sir Rutherford Robertson, Director, Research School of Biological Sciences; and Professor Keith Sinclair, Professor of History at the University of Auckland.

Council was also told that Professor C.D. Cowan, Director of the School of Oriental and African Studies at the University of London, had agreed to join the Review Committee of the Faculty of Asian Studies which is being established in the School of General Studies.

ELECTION OF MEMBERS OF COUNCIL BY CONVOCATION

Convocation elects four of its members to membership of Council each three years.

Council has deleted the requirement in the Membership of Council Rules that at the time of an election a notice of election and invitation for nominations be sent to each member of Convocation. Instead, the notice of election and invitation for nominations will be printed in an appropriate Convocation Issue of the *Reporter*.

Each member of Convocation is sent a copy of the Convocation Issue of the *Reporter*.

General staff election to Council: candidates' policies

Ballot papers for the election of members of the University Council by members of the non-academic (general) staff have been sent out and must be received by the Returning Officer, Mr John Brocklehurst, by 5pm on Monday 1 May 1978.

Two seats on Council are to be filled at this election.

Biographical notes on the candidates have already been distributed with the ballot papers and today *ANU Reporter* presents the policy statements of the six candidates:



GRIMSHAW, PETER JOHN

I came to the ANU in 1962 as a Laboratory Technician; now a Senior Technical Officer. Two children, live in Sutton. Hobbies: electric cars, environmental protection, solar energy, reptiles.

Three years ago my family was reasonably well off — now, caused mainly by disappointing handling of indexation — we 'really feel the pinch'.

More disastrous are the still prevailing conditions under which many of our ANU staff are paid substantially less than Public Servants, doing the same jobs. Inferior pay is normally the reward for inferior service — are we giving inferior service? This unjustified practice must be brought to an end.

Staff ask for more simple facilities for relaxing outside, during lunchtime, especially around the older buildings. People supporting a family can rarely afford regular lunches at the Staff Centre.

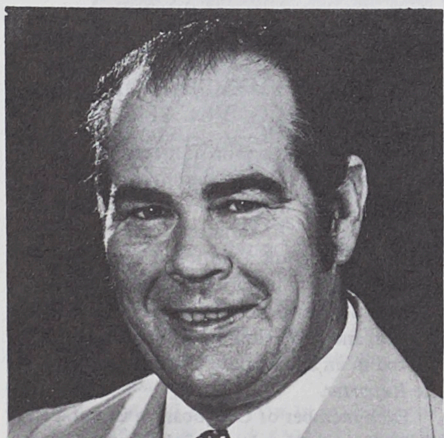
Are there other Universities without swimming facilities? Are there any who might charge their staff for parking without reserving a parking place.

My hopes for the future are continued harmony between University and staff based on continued upgrading and not downgrading of conditions. I feel AAESDA and HAREA have become lethargic and need revitalising.

I am politically independent, have committee experience, can negotiate. I would like to hear more from our clerical staff and our ladies to appreciate their opinions.

Young people should have jobs, an earlier retirement will suit 'slower old faithfuls' and make space for the dynamic young.

If elected, I will do my best for staff and University.



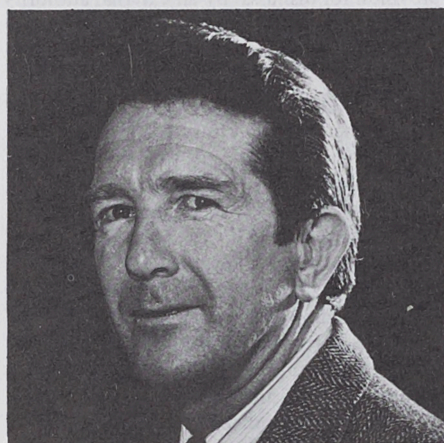
GRIMSHAW, PETER JOHN

From March 1975 to May 1976 I was appointed

as one of the General Staff observers on Council. Subsequently the General Staff were good enough to elect me as one of their representatives on Council for a two year term on 27 May 1976.

Despite a three year association with Council's operations I still regard myself as a novice. The reason for this is simple. Council, as the final decision making process covers a broad spectrum of University activities. Reading-up and, where necessary, researching background material is vital if a Council member votes according to his or her conscience, not as a representative of a particular interest group. 'Homework' is essential if one is to be fully equipped to counter the criticism a constituent may level for a particular stand taken.

Mrs Pam Kennedy and I have served your interests on Council as your representatives for the next two years and hope you will provide us with the opportunity to fulfil this aim.



JONES, HARVEY ALEXANDER

It was said in a paper presented to a course attended by University Administrators in the early 1970's that Universities exist to perform academic functions; to preserve, create, transmit and apply knowledge. What an apt description of the aims of a University. It was with this philosophy in mind that I accepted nomination for election to the University Council as a representative of the Non-Academic (General) Staff.

I am conscious of the contribution and assistance that general staff have provided in the past and will continue to provide in the future to enable this University to achieve and maintain these objectives. I am also aware of the active interest that some take in campus life generally.

It is my belief that we have much to offer in the smooth running of a research and teaching institution and because of this should become involved in the framework of the government and policy decision making processes of the University.

I do not represent any sectional group. I would on behalf of all general staff endeavour to see that their interests and views are heard at the highest level and promote and support the development of good relationships, communication and co-operation between the various parts of the University and the community at large, while at the same time recognising the University's proper objectives.



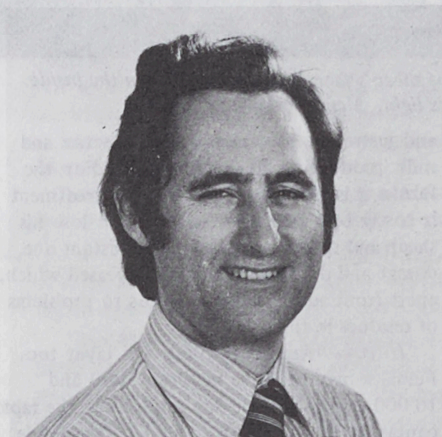
KENNEDY, PAMELA MORRIS

I was elected to Council in 1976 as a represent-

ative of the general staff, and now seek re-election. On first joining Council, I found a certain amount of reluctance, in some quarters, to accept a general staff member as a useful contributor to the proceedings. However, I overcame this problem and am now accepted as one whose ideas and opinions are worthy of consideration, and therefore have provided an effective voice for the general staff.

At present I serve also on three Council committees: the Superannuation Committee, which considers such matters as superannuation funding, and transfer from other schemes to Commonwealth Superannuation; the Registrarship Committee, which will recommend a candidate for appointment as Registrar; and the Working Party on fractional full-time staffing, which is looking at the possibilities of 'job-sharing', or 'part-time' appointments with pro-rata benefits. All these are matters of concern to general staff, and my membership of these committees allows me to do a great deal in guarding the interests and putting the viewpoint of general staff, and in some cases to correct misconceptions of our role and aspirations. On a number of occasions I have been able to give assistance to individual staff members in a variety of problem situations.

I seek your support in this election, confident that I have accomplished a great deal in the past two years, and that I would be able to accomplish even more in the coming two-year term.



TYLER, JOHN

During my thirteen years with the University, I believe I have become familiar with the needs and sometimes almost unique difficulties of staff members in the quite diverse areas of the University. The general staff members are involved in the University's teaching and research programs and also I believe it is important that there is greater acknowledgement at the Council level of the contribution that high calibre support staff now make and could make to the University's life and work. Such staff need recognition including financial entitlement for the work they do.

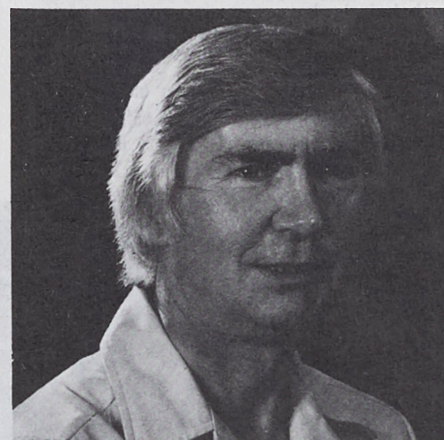
Tangible monetary rewards are presently being sought by the various staff associations through the arbitration system. Although monetary reward is essential it is not sufficient. Quite justifiable salary issues should not crush the needs for a personnel function in the University which is at present sadly lacking.

It would be my duty as an elected general staff representative to seek the means whereby the role of the general staff, in the maintenance of high standards of teaching and research works, be recognised, both in terms of remuneration and personal satisfaction.

I hold that every member of an organisation should be willing to serve that organisation as an office bearer. At present I am not holding an executive office in any group within the University. I believe therefore that this situation will enable me to approach particular proposals affecting staff with less bias than I might otherwise be able to do.

In recent years the *ANU Reporter* has improved the communication service throughout the University; however more can be done. If elected, I will undertake to visit staff members in as many buildings as possible. The purpose of such visits would be to provide opportunities for question and answer sessions,

to report Council matters generally, in particular those Council items which affect staff members, and especially to listen for and seek the views of staff members.



WALL, RAYMOND FREDERICK

In writing these notes I am mindful of the importance of this election to general staff at this difficult time when the University is having to face particularly severe financial restraints. I am aware also of the very considerable effort put in by certain members of the general staff several years ago which resulted in Council's decision to allow two members of the general staff to sit on Council.

The fact that we have only two representatives makes it vitally important that those elected have as prerequisites a keen interest in and a good knowledge of industrial relations and the decision-making processes of the University. Let's face it, our representatives are on Council to advance *our* interests and to safeguard the benefits and working conditions which have been negotiated by the major staff associations.

I have worked at ANU for almost 13 years and during the past five years have served continuously as Area Representative, President and currently as Secretary of the ANU Branch of the Health and Research Employees' Association (HAREA) which now has nearly 700 financial members on campus. I am also a member of the Administrative and Allied Officers' Association. These activities have given me a good insight into the way a staff association is able to represent the interests and welfare of all its members.

Even so, it is not only a question of a watching brief. There is still much to be done. This year we have a Branch Committee of HAREA which in my opinion, is the most active and informed for many years past. It is the Committee's earnest wish that this time we have two representatives returned, but be that as it may, should I be elected to Council, I would do my utmost to represent *all* general staff. I would greatly appreciate your support.

HOW TO FILL IN THE BALLOT PAPER YOU HAVE RECEIVED THROUGH THE MAIL

The voter shall indicate his preference, or the order of his preference, on the voting paper by writing the number one against the name of the candidate for whom he wishes to vote, or by writing a series of consecutive numbers, beginning with the number one, against the names of the candidates for whom he wishes to vote, one number being written against the name of each candidate. The voter is not required to write a number against the name of every candidate.

The voter's name must not be written on the voting paper.

Prof. Slatyer appointed Australia's ambassador to UNESCO

Professor Ralph Slatyer, Professor and Head of the Department of Environmental Biology in ANU's Research School of Biological Sciences, has been appointed Australia's ambassador to the United Nations' Educational Scientific and Cultural Organisation (UNESCO).

Speaking with *ANU Reporter*, Professor Slatyer said he would not have considered accepting the appointment unless the job was more important than what he was already doing — 'and what I am already doing is very important and challenging'. He said he felt the UNESCO post was worth giving up three years of his academic career for but stressed that he would return to his research after the end of his term of office.

'UNESCO, I feel, is one of the most important agencies in the world for reducing international tensions', Professor Slatyer said. 'It aims to increase understanding between people using education, science and culture as tools. These are challenging and encouraging things to work for.'

Now regarded as a world leader in the study of environmental biology, Professor Slatyer's research career began in CSIRO where he reached the highest research classification in that organisation. He was elected to the Australian Academy of Science before joining ANU in 1967 as the Foundation Professor of Environmental Biology, RSBS.

He immediately began to develop a strong research group in which special emphasis has



University Information Office

been placed on studies of physiological processes which are regarded as being basic to organism function, and on ecological processes which underlie structural and functional relationships of communities and eco-systems.

Although Professor Slatyer's own work has extended across this whole range of activities, in recent years he has concentrated on community ecology, where he is attempting to develop an overall understanding of the dynamics of various communities and how they replace themselves in the face of perturbations such as fire, forestry operations or grazing.

In the process, he has become prominent in seeking ways of reconciling the often competing demands of land development organisations, on one hand, and of conservation groups on the other. This area of activity reflecting the social responsibility of a scientist, is one which Professor Slatyer takes very seriously.

Professor Slatyer already has close links with UNESCO as Chairman of its Australian National Commission and Chairman of UNESCO's Man and the Biosphere Program.

It is expected that he will take up his new appointment in Paris about August.

PERSPECTIVE ON SCIENCE

A new ABC series, *Perspective on Science*, went on air this month and explores several current issues. It is a mix of local documentaries and documentaries produced by BBC/Horizon and by NOVA (a North American science unit).

Among the locally made films, 'According to Your Cloth' looks at the textile industry in Australia and will be broadcast on Tuesday 4 April. (Scheduled broadcast times are about 10pm.) In 'Dr Tick and Termites' on Tuesday 2 May, a young Sydney scientist develops a rather bizarre method of controlling termites or white ants. It is almost in the realm of science fiction for it involves getting the pests to self-destruct by turning into fungi. 'Ground-truth: System 6' on Tuesday 9 May deals with serious environmental problems posed by Perth's growth.

With an international flavour are 'The Dawn of the Solar Age' on Tuesday 11 April, examining developments occurring in this field, particularly in the USA and Japan; 'The Red Planet' on Tuesday 18 April, about the Voyager expedition to Mars; and 'Across the Silence Barrier', on Tuesday 16 May, exploring the world of the deaf and development of new techniques in the USA to help them articulate.

VACANCIES IN HALLS AND COLLEGES

A count during the week ended Friday 3 March showed that the University's residential halls and affiliated colleges began the year with 234 of their 1712 places vacant.

Non-collegiate type residence had 11 of their 249 places vacant.

At its last meeting, the University Council was told that if trends in other years persist in 1978, the number of vacant places is likely to increase during the year, particularly in the halls and colleges.

The Vice-Chancellor is arranging for the recently-established Committee on Residential Policy to report to him on the matter.

JAPANESE TRANSLATION

A Japanese translation of Professor Eugene Kamenka's *The Philosophy of Ludwig Feuerbach*, first published in London in 1970, is being issued by the Tokyo publishing house, Kinokuniya Shoten this summer. It is the third of Professor Kamenka's books to be translated into Japanese.

MAN'S FUTURE CONCERN — STUDY ASSISTANCE SOUGHT

An interdisciplinary study team at Macquarie University is seeking the co-operation of students and staff from other Australian universities for its new project to explore independent indicators of man's future concern.

These include aspects like life insurance, long term investment and undertakings at man's personal level, as well as examples of long term planning demonstrated in his corporate (public) role. These include various economic projects, such as the Snowy Mountain Scheme and other large scale projects, from which the benefit is received many years after their commencement.

The project co-ordinator, George Boniecki of the Environmental Studies Program, Macquarie University, says that the study will involve in-depth interviewing of a representative sample of a few hundred Australians. The study will also serve as a pilot for the international project of the same nature under the direction of Professor S. Klineberg, of Rice University, USA, involving several countries.

The study is trying to find answers to questions such as: the time limits of man's future concern and how distant is his practical time horizon, how much of a delayed gratification is he prepared to accept under the conditions of present reality and what are the factors limiting his concern and the obstacles to its extension? Answers to these questions are of immense importance and may be decisive for the fate of the present global community, according to Dr Boniecki. People interested may write to Dr Boniecki at the Environmental Studies Program, Macquarie University, North Ryde, NSW, 2113.

ANU Creative Arts Fellows for 1978 arrive

The 1978 ANU Creative Arts Fellows were guests at a recent informal get-together. From left, Penny Tweedie, Clive Scollay, Margaret Benyon, Xavier Herbert and Alan Gould. Their fellowships are in photography, video media, holography, writing and poetry, respectively.

Beaches become laboratories

Continued from page one

Man-made structures such as seawalls and beachfront buildings usually affect these processes adversely, Dr Chappell says. 'So commonsense dictates that this zone of natural variation should be treated as a "buffer zone" — as free as possible from human interference', he adds.

The research team is examining the long term behaviour of the buffer zone by geomorphic, stratigraphic and carbon dating studies of dune systems behind beaches. To reach an understanding of the natural variability of beaches, the team is also looking at beach dynamics in terms of waves, currents and sediment movements.

Because the southeastern Australian coast commonly experiences wave trains of higher energy than in most other places, our beaches are highly changeable and the research team recently has successfully linked the patterns of beach change to variations of waves, winds and currents near the shore. Currently, they are investigating flows and sediment movements on the seabed beyond the surf zone — an area critical for the understanding of the processes of beach recovery after storms and one in which the dynamics are poorly understood.

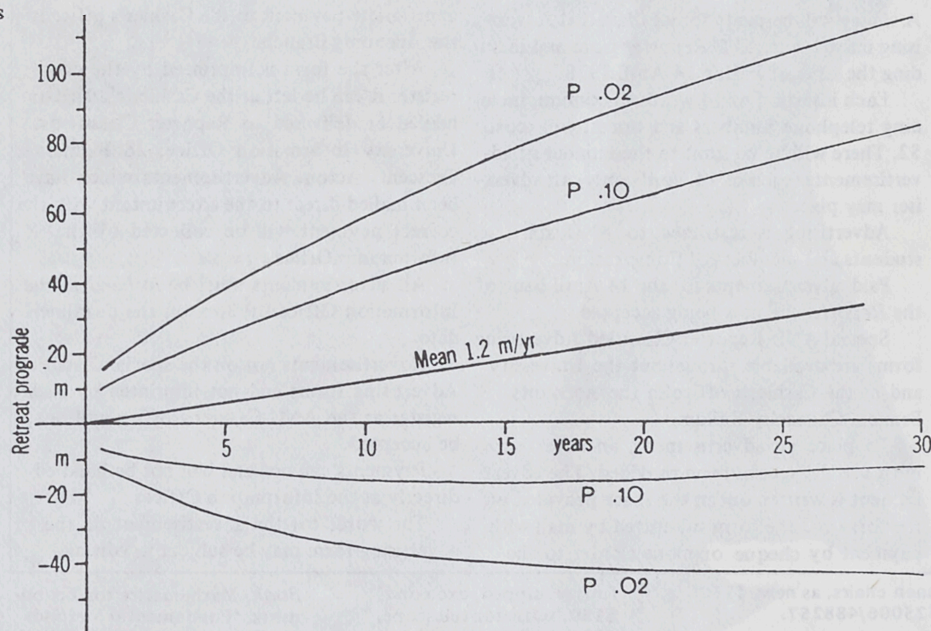
Dr Chappell says the zone of foreshore variation has itself changed in the past 6,000 years. Not only has the mean foreshore position varied but the width of the buffer zone has altered. These factors differ between beaches and an understanding of the history

and causes of change is being worked towards by coupling stratigraphic studies by Professor Thom to the dynamic models of beach and nearshore behaviour being developed by Drs Chappell and Wright. Such a model, which predicts the development of equilibrium seabed form and sediment movement under any given wave conditions, has been used recently to estimate the effects of offshore sand mining.

The team has developed a mobile system for studying waves, nearshore water circulation, sediment movements and beach changes. It includes a van containing data logging facilities and a mini computer for recording and analysing the complex processes which occur in the surf zone and on the seabed.

Instruments which detect waves and instantaneous currents are deployed from the van and fastened to portable anchors in the sea. Dr Chappell says this system — sophisticated by comparison with previous techniques for studying beach dynamics — is necessary because many of the important processes occurring on surf beaches cannot be understood in terms of simple factors such as average wave height. In fact, many are related to hydrodynamic phenomena which are virtually invisible against the background of sea and surf, he says. 'For example, through the instrument system, we have detected long stationary waves in the surf zone and have shown that these, in turn, affect the formation of rip current, the strong seaward-flowing lanes of water which have been responsible for many drownings.'

PROBABILITIES OF SHORELINE SHIFT THROUGH TIME



An example of how the beach research can be applied. To be more precise about the buffer zone one must think in terms of probabilities, Dr Chappell says. Just as the wave climate in years ahead can be predicted in terms of past statistics, so too can the probable variation of foreshore position be estimated from present dynamics and past movements of the beach. The diagram shows an example of predicted variation for a coast in New Zealand studied recently by Dr Chappell. The shoreline in this case is migrating slowly seawards at an average of one to two metres per year.

Large variations can occur, however, such that over any period of a few years to a few tens of years, the shoreline may either advance seawards or retreat landwards. For example, the diagram shows that, 20 years from now, there is a two per cent chance that the shoreline may either be 90 metres seawards or 45 metres inland of its present position. Clearly the buffer zone should be at least 45 metres wide in this particular case.

On the basis of this diagram, developers have been forestalled from building on the buffer zone which they had previously asserted was stable or 'as safe as houses'.



Mike Finn

Classified

Deadline for next issue: 3pm Wednesday 5 April 1978. Publication date: Friday 14 April 1978. Note item on charges for Reporter advertising on this page.

For sale

Academic dress, Philosophy PhD, \$130 or offer. E. Heston, 10/399 Toorak Road, S. Yarra 3141.

Baby stroller, folding 'umbrella' or 'buggy' type, royal blue, nearly new. \$10. 4273/816447.

Banjo, Aria with case, gd cond \$110ono. 479669.

Bookcase, cupboard, desk, Captain chairs, drying cabinet, small freezer, steam iron, frypan, casseroles. 882930.

Buffer, 6', storage and display areas, \$30; divan, 2 matching chairs, \$60. 4444.

Calculator, HP 25, photographic tripod, \$30; squash racket, \$20; mountaineering boots, \$20. Ken, 462344.

Calculator, T157 (programmable), new. \$100. 2894.

Caston tied trout flies. Wittig 2108.

Chairs, 2 studio design style

Punch Card Knitter, Toyota, lace carriage, wool winder, brand new, \$220. McMurray 3494/971096.

Pusher, Steelcraft, polisher, wading pool, highchair, bicycle training wheels. 3618/541280.

Sailing dinghy, Gwen 12, aluminium mast, \$400; boy's bicycle, Malvern Star 26", \$50. 2745/477262.

Sleepingbags, new, \$80ea. New Hiking boots, Rossiter, size 6. 2796/363112.

Tea-trolley, teak, extending top, \$40; white garden furniture, table \$30, chairs \$10. 4435.

Transistor, \$20; pushmower, catcher, \$5; green carpet, underfelt, 2 rooms, \$20; Nite'n'Day \$20. 4483/497729

Tripod Stand, Argus 2500E, \$35, casio fx120 calculator, best offer, brand new. Mervyn, 3477/413810.

Vaporisers (2), \$8ea; child commode chair, carseat, push-along wooden cart, \$5ea. 3675

Violin, 1/2 size, exc tone, cond, superior quality Chinese. \$45. 2346/512252.

Bicycle, Raleigh 10-speed,

VW Campmobile, 1975, gd cond, all extras, 90000k. Selling end April, negotiations now. Allen, 3628.

VW Doormobile, 1800cc, all extras, 55000k, exc cond. \$7500 ono. Krebs, 2707/475664.

Volkswagen kit, includes 67 beetle, manuals, tools, some spares, \$800. Tony, 812690.

Yamaha DT 250B, \$500 ono. Patty, 2655.

House, 4br, study, 1 1/2 bathrooms, wood panelling, 10 mins ANU. \$53000. 3226/411586.

House, new solid brick, attractive, 2br, rural 20 mins drive ANU, \$28000 ono. 478536.

House, O'Connor, 3br, double brick, sep dining, garage, carport, estab garden. 2502/545075 after 3 April.

House, Turner, s. brick, 3br, lge mod kitchen, garage workshop 29'x18', exc cond. \$52500. 512794.

Wanted

Blank 90min cassette tapes recording 'talking books' for blind people. Judy Wise, Linguistics, RSPacS/3151.

Accountant, Accounts Branch, Chancelry Building, ANU. Advertisers wishing to pay by cash can present the completed form with the appropriate payment to the Cashier's office in the Accounts Branch.

After the form is imprinted by the cash register it can be left at the Cashier's office or mailed or delivered to Reporter Classifieds, University Information Office, 28 Balmain Crescent, Acton. Advertisements which have been mailed direct to the Accountant with the correct payment will be collected by the Information Office.

All advertisements must be *in hand* at the Information Office by 3pm on the deadline date.

Advertisements not on the special Classified Advertising forms and not imprinted by cash register at the ANU Cashier's office will not be accepted.

Payments can not and will not be handled directly at the Information Office.

The words for the advertisement on the advertising form may be subject to editing.

CHARGE FOR ANU REPORTER CLASSIFIED ADVERTISING INTRODUCED

A charge will be made for all Classified Advertising insertions in *ANU Reporter* from and including the issue of Friday 14 April 1978.

Each insertion of 14 words maximum, including telephone numbers and prices, will cost \$2. There will be no limit to the number of advertisements (each of 14 words only) an advertiser may place.

Advertising is restricted to ANU staff, students and members of Convocation.

Paid advertisements for the 14 April issue of the *Reporter* are now being accepted.

Special ANU Reporter Classified Advertising forms are available throughout the University and at the Cashier's office in the Accounts Branch, Chancelry Building.

To place an advertisement, an advertiser must use the special form provided. The advertisement is written out in the space provided on the form and the form submitted by mail with payment by cheque or money order to the

linen chairs, as new, \$150. 525006/488257.

Coat, ladies kangaroo skin (winter fur), SW, \$80. 2037.

Drill, variable speed, Skilsher 3099, \$26. 9 Wynella Court, Garran Place, Garran.

Dryer, General Electric, 9-11 lbs, exc cond, \$110. L. Bruce, 4456/823359.

Enlarger, Meopta, Axomat II, with Meopta Belar 4.5/50mm lens. \$90. 2285/487008.

Flute, Buescher 'Aristocrat', as new \$180. Pump-up scooter \$15. M. Watkins, 3536.

Fly rod, new, Hardy's 8 1/2', \$25; waders, size 8, as new, \$23. Turner, 2656.

Fridge, working \$30; papoose \$12; school desks \$8 ea; chest of 5 drawers \$18. 956480.

Golfset, lynx USA, 10 irons, 4 wood, vg cond, \$450. H. Lee 479811.

Guitar, Suzuki, vinyl case, \$45 479669.

Half-share (\$12,000) 2br cottage, Tomago River, Mossy Point (and use of boatshed). Hughes, 4795.

Iron, steam-mist shoot, self cleaning, make 'Sunbeam' latest model, \$20 ono. 4674.

Kayak, 2-man, Ibis with paddles and buoyancy vests. \$200 ono. 479669.

Land, 2 blocks, Moloney Beach Estate. Wittig, 2108.

Lounge suite, large 3 piece, gd cond, \$200 ono. 3746.

Piano, Wurlitzer, electric, model EP203, exc cond. \$1060 ono. 479669.

fully equipped, exc cond, \$150; refractor telescope, 500x60mm, equatorial mount, \$350. 476261.

Bike, Can-Am TNT 175, Enduro kitted, many extras. \$1250 ono. 2141.

Datsun 2300, late 1970, brakes, transmission under warranty. \$2000. Jean Mulholland, Bruce Hall, 4675.

Ford Panel Van, 1969, GTHO paint job, cassette radio, mags, \$2900 ono. Sue, 2655.

Holden, FB, reg June, a goer. \$200. Judy, 3132.

Honda, CB 360, 1975, low mileage, exc cond, \$600 ono. 470172/318174.

Honda, 90, road bike, 8 months reg. gd cond. \$150. G. Lynes 3651/488203.

Morris Major, good runabout. 6 months reg. \$200. Seddon 3358/513212.

Suzuki, GT250, 20000k, 6 months reg, crash bars, carrier, two helmets, \$550. 511490

Toyota Corolla, 1971, exc cond. 10 months reg. radio, extras, owner going overseas, \$2100 ono. 4026.

Toyota Crown, 1969, exc cond, reg Aug 78, many extras steel radials, \$1000 ono. 3291.

Valiant, 66 auto, unreg, \$250; Falcon 64, Stn wgn auto, \$150. Preciado, 3173.

Valiant, VH-215 Stn Wgn, Nov 72, 49000m, one owner, uses std petrol, exc cond, \$2200. 2859/863448.

VW Combi Van, 1976, extras, \$6000. Patty, 2655.

Book, Mathematics for Economists, 'Fundamental Methods for Mathematical Economists', McGraw-Hill 1974. Tam, Burton, Room 391.

Chairs, spindle back, \$25 max; 3' mattress and base; curtains 15' wide. 956480.

Filing cabinet, any offer considered. Geoff, 733320 (2-11pm).

Good homes for 2 affectionate cats, female neutered, owners going abroad. 511101 evenings

Interested coach, ANU netballers, accent on fitness, netball experience not essential. Anne 3230/545373.

Research assistant needed for programming of Emigration Passes using SPSS. Attractive remuneration. Lal, 4790.

Accommodation available Flat, (2br, kitchen, lounge, sub-letting in Hughes from 1 Aug 78. Lal, 4790.

House, Campbell, 4br, carpets, views, cat. Available 15 May 78 to Jan. Reid, 2317.

House, Deakin, furnished, 3-4 br, birs, ducted heating, dishwasher, May-Nov, \$65. 731853.

House, Farrer, comfortable, brick, 3br, available early May-Sept. 3394/863429 after 7pm.

House, O'Connor, 3br, furn. early May until late Aug or longer \$60pw. 4483/497729.

House to let in Adelaide. C. Bott, 3575 after 17 April 78.

House, Scullin, 3br, estab garden, carpets, drapes. 2 yrs from mid-April. \$60pw. 3707.

Diary of events

The deadline is 3pm Wednesday 5 April for the next issue which covers the period 17-30 April. Diary items should be brief and written legibly and sent to ANU Reporter, University Information. They cannot be accepted by telephone.

Monday 3 April

HRC sem. Mr M. Alexander (University of Stirling), 'Ezra Pound's translation of *The Seafarer*'. HRC reading rm, Hope Bld, 1pm.

Psychology sem. Prof F Fiedler (University of Washington), 'Dynamics of leadership: a new approach to leadership training'. Rm 210, Physics Bld, 3.30pm.

Tuesday 4 April

Far Eastern History sem. S. Borthwick, 'Consequences of educational reform in late Ch'ing China'. Sem rm E, Coombs Bld, 11am.

Physical & Theoretical Chemistry sem. Dr G Fischer (Ben Gurion University of the Negev), 'The intermediate state in non-exponential fluorescence decay'. Room 57, RSC, 11am.

Biochemistry (JCSMR) sem. Dr J Rood, 'Antibiotic resistance in Clostridium perfringens - from pigs to sexy Tc'. Sem rm 1, JCSMR, 1pm.

Economics (RSPacS) sem. W Corden, 'How the rich countries can help the poor-thoughts on the "New Economic Order"'. Sem rm B, Coombs Bld, 2pm.

Philosophy (RSSS) sem. B Embury, 'Logical analysis of voting'. Sem rm E, Coombs Bld, 2pm.

Political Science (RSSS) sem. M Perks, 'The Australian Conciliation and Arbitration System 1945-56'. Sem rm D, Coombs Bld, 4pm.

HRC sem. Dr M Burrell (University of Canterbury, NZ), 'Thematic structures in two romances of Chretien de Troyes'. HRC reading rm, Hope Bld, 4pm.

ANU film group. 'La Femme du Boulanger' & 'La Kermesse Herioque'. Coombs LT, 7.30pm.

Wednesday 5 April

Inorganic Chemistry sem. Dr D Arnold, 'Unusual reactions of derivatives of nickel octaethyl porphyrins'. Room 134 RSC, 11am.

History of Ideas sem. Prof S Grave, 'The development of Philosophy in Australia'. Sem rm A, Coombs Bld, 11am.

University House dinner, hall, 6.30pm.

Mature female student share flat close to Uni, Turner, \$20pw. 2775.

Found

Gold wedding ring, Copland Building Ladies Toilet. 2446/call at Reception, Union Bld.

Public notices

Home wanted for adult tor-

Thursday 6 April

History (RSSS) sem. A Haig, "'Entering the Church": changing trends and attitudes, 1840-75'. Sem rm G, Coombs Bld, 11am.

Organic Chemistry (RSC, SGS,CSIRO) sem. Mr T-C Khor, 'Alkyl substituent effects by C13 and F19 n.m.r.'. Room 134, RSC, 11am.

MADE sem. Dr C Barlow, 'Whole-farm budgeting: some case studies in Philippines rice-growing areas'. Sem rm B, Coombs Bld, 2pm.

Earth Sciences sem. Dr K Muir head, 'The velocity structure of the mantle'. Sem rm, Jaeger Bld, 4pm.

ANU film group. 'Obsession' & 'Little Girl Who Lives Down The Lane'. Coombs LT, 7.30pm.

Friday 7 April

Political Science (SGS) sem. D Adams, 'Whitlam, Woodhouse and National Compensation: how not to do it?'. Rm 1002, arts III Bld, 11am.

Development Studies discussion. Mr J Tealiklava (Curriculum Development Officer, Solomon Islands), 'Curriculum development in the Solomon Islands'. I block, OHB, 12.30pm.

Experimental Pathology sem. N Hunt, 'Pathophysiology of renal adenocarcinoma'. Sem rm 1, JCSMR, 1pm.

Sunday 9 April

ANU film group. 'Persons' & 'Sawdust and Tinsel'. Coombs LT, 1.30pm.

Burgfilms. 'The Great Gatsby'. Burgmann dining hall, 8pm.

University House film. An evening of westerns. Common room, 8.30pm.

Monday 10 April

Psychology sem. MS K Gillette 'Condition aversions: different strokes for different folks'. Rm 210, Physics Bld, 3.30pm.

ANU Club for Women coffee morning. D Noble, 'Healing yourself naturally'. 20 Balmain Cres, 10.15am.

Far Eastern History sem. B Hooper, 'The end of the western presence in China 1948-54: a thesis proposal'. Sem rm E, Coombs Bld, 11am.

Biochemistry (JCSMR) sem. Mr P Wookey, 'Colicin B action in relation to ferric enterochelin transport'. Sem rm 1, JCSMR, 1pm.

Philosophy (RSSS) sem. R Routly, 'Relevant logic and their rivals'. Sem rm E, Coombs Bld, 2pm.

Political Science (RSSS) sem. G Snider, 'A principal components analysis of party identification'. Sem rm D, Coombs Bld, 4pm.

toiseshell female cat, female flat close to Uni, Turner, \$20pw. 2775.

Take time, Shakespeare songs and madrigals. Bruce Hall, 2 April 8.15pm, admission \$2.

Thesis typing, non scientific, electric typewriter, carbon ribbon, reasonable rates, fast accurate service. 812600.

Prof Hugh Evans, Queen's University Ontario, visiting Nuclear Physics until 15 July; interests—high spin nuclear phenomena through study of fast cascade X-rays. Rm 11, Nuclear Physics Bld, 2424.

Prof G L Goodwin, London School of Economic and Political Science, visiting International Relations until July.

Prof Selwyn Grave, University of WA, visiting History of Ideas until 30 April; interest—history of philosophy in Aust-

HRC sem. Prof Chong-wah Chung (Korea University), 'Kangaroo: a new approach'. HRC reading rm, Hope Bld, 4pm.

ANU film group. 'Gross of Iron' & 'The Good, The Bad and The Ugly'. Coombs LT, 7.30pm.

Wednesday 12 April

Medical Chemistry sem. Prof A Albert, 'The reaction of o-Aminocarboxamides with Amidines'. Florey LT, JCSMR, 11am.

History of Ideas sem. Dr A Megill, 'History and crisis: historical and consciousness in the 19th century and today'. Sem rm A, Coombs Bld, 11am.

Colloquium (RSPHyS). Dr S Hamberger, 'The development of Plasma Physics'. Huxley LT Computer Centre/Solid State Physics Bld, 4pm.

University House dinner, hall, 6.30pm.

Romance Languages film. 'Mort d'un Guide'. Rm 1175, Dedman Bld, 8pm.

Public lecture. Mr Stewart Harris 'Australia's Connections—(with Europe)'. Coombs LT, 8.15pm.

Thursday 13 April

History (RSSS) sem. G Hazlehurst, 'Young Menzies'. Sem rm G, Coombs Bld, 11am.

Organic Chemistry (RSC, SGS,CSIRO) sem. Dr I Lewis, 'Deuterium labelling in the mass spectral screening for the metabolites of Lamperone, an experimental neuroleptic'. Room 134, RSC, 11am.

MADE sem. Dr A K McCoy, 'Regional development & industrialisation in the Philippines'. Sem rm B, Coombs Bld, 2pm.

Earth Sciences sem. Dr K de Jong (University of Cincinnati), 'The geodynamics of Pakistan'. Sem rm, Jaeger Bld, 4pm.

ANU film group. 'Strike' & 'October'. Coombs LT, 7.30pm.

Friday 14 April

Political Science (SGS) sem. J Besemeres, 'Population and politics in socialist eastern Europe'. Rm 1002, Arts III Bld, 11am.

Sunday 16 April

ANU film group. 'Logan's Run' & 'Wild, Wild Planet'. Coombs LT, 7.30pm.

Burgfilms. 'To Kill a Mockingbird'. Burgmann dining hall, 8pm.

University House film. Buster Keaton evening. Common room, 8.30pm.

Typing, neat and fast typist would like work at home. 824113.

Typing, IBM golfball, theses, essays, etc. reasonable rates, 583079.

Typing, theses, essays, manuscripts, etc. reasonable rates, fast accurate service. 493291.

Awards and Fellowships

The British Council Commonwealth University Interchange Scheme details available from University Information (ext. 2633/2229) (Closing 15 December in London).

Visitors in the University

Dr Hugh Collins visiting International Relations until June.

ralia. Rm 2132, Coombs Bld, 4008.

Dr A Kapur, University of Waterloo, Ontario visiting Strategic and Defence Studies Centre until May.

The Right Hon. Lord Lindsay of Birker, The American University, Washington DC, visitor to Australian Institute of International Affairs, RSPacS until May.

Associate Prof J Yonehara, Osaka University Japan, visiting CRFFR until 13 May; interest—local public finance and taxation. Rm 2062, Copland Bld, 4485.