Not surprisingly, this is a special end-of-year for the Georges as we say goodbye to the University and so many friends who have assisted us over the past twelve years in our endeavours on behalf of the University. The generosity of comments at various farewell functions has been very heart-warming and your good wishes for our future have been greatly appreciated. But all adventures come to an end and we leave confident that Keith and Hilary Morgan will receive the same warmth of welcome and loyal support that we have been privileged to enjoy.

Lorna joins me in wishing all readers of University NEWS the compliments of the season with the hope that Christmas and the New Year will provide opportunities both for quiet relaxation after a very busy year and also much traditional rejoicing with friends and families.

We will watch the University in future years with great interest and affection as it continues to grow and will be wishing every happiness to each and every member of its community.

Vice-Chancellor

In the last few days preceding Christmas, the children of Kinaiba Community Child Care Centre at the University have been as good as they can be. Acting director, Lisa Wood (left), agreed to some of the children appearing with the staff of University NEWS in this photograph of Christmas on campus.
Report on higher education put to Council

Recommendations of the Commonwealth Government Committee appointed by the Minister for Education, Senator Susan Ryan, to review efficiency and effectiveness in higher education have been submitted to the Council.

The Vice-Chancellor, who provided Council with a report on the review, including the response of the Australian Vice-Chancellors' Committee, said the parallels between some of the recommendations and some matters which this University had been grappling with were striking.

Some of the key proposals contained in the report of the committee (known as the Hudson Committee after the Chairman of the CTEC. Mr Hugh Hudson, who headed the committee) are:

- A system of salary loadings (five per cent to twenty per cent) for excellence and to allow a more flexible approach to remuneration;
- More encouragement be given to individual staff to engage in consulting and other work which will make academic expertise more widely available. Arrangements be based on a time limit on consulting rather than a financial limit;
- Salary loadings for limited-term appointments;
- Clearly defined procedures for termination of appointments, with due process for appeal;
- Appropriate benefits for termination on the grounds of redundancy;
- Trial period before tenure is confirmed;
- Regular staff assessment procedures;
- Introduction of early retirement schemes.

The Hudson Committee's report was considered recently at a conference in Canberra organised by the Royal Australian Institute of Public Affairs.

Introduction of early retirement schemes.

The following members of staff have been promoted from Lecturer in the Department of Community Programmes; Dr B.J. Cook of the Department of Electrical & Computer Engineering; Dr C. Hanna of the Department of English; Mr J. Hill of the Department of Community Programmes; Dr W. Jonas of the Department of Economics; Dr D. MacDonald of the Department of Civil Engineering and Surveying; Mr M. Park of the Faculty of Architecture and Dr B.J. Williams of the Department of Civil Engineering and Surveying.

"Look Ahead to Safety"

The University's safety slogan, which will shortly be posted up all over the campus, is Look Ahead to Safety. It was the idea of the Department of Management.

The slogan was the winner in a competition conducted by the Safety Committee to foster safety on campus. Thirty-four safety slogans were entered, which is a very good response by departments and units.

The competition carried a prize worth $2,500. The prize is a selection of ergonomic products made by Sylex.

The actual products will be chosen by staff in the Department of Management and a presentation will be held early in the New Year.

The Safety Officer, Mr Mar Edmonds, intends to obtain designs for posters, car stickers and other promotional items which incorporate the slogan and submit them to the Safety Committee for consideration.

The panel of judges for the safety slogan competition are members of the Council, Mrs E. Morrison, Professor C. Rentwick and Dr P. Hendry.
WHY DOES WINE PRODUCTION WORK IN THE HV?

Professor Colhoun said students of physical geography studied land forms and soils. They were able to assess the productive capacity of land and this information helped them to determine the actual yield from grapevines.

The significance of the Rothbury Estate Scholarship is the opportunity it affords students to apply their knowledge to practical subjects which can bear economic returns and the general relevance of the research.

The problems being faced by the Rothbury Estate at Pokolbin are fairly common to members of the wine industry. Once the problems are identified, we could extend the range of our research and receive support from other companies’.

Following the meeting of the Faculty of Science on 10 December, Dr McIntyre announced that Ian McLean, who will be a Geography IV honours student next year, is the first recipient of the Rothbury Estate Scholarship.

The Department of Geography has received $1,500 to start research at Pokolbin that could have relevance to the whole wine industry in the Hunter Valley.

The Rothbury Estate, which has extensive vineyards in this region, has provided a scholarship for an honours student to undertake studies of local wine production.

Professor Eric Colhoun, Head of the Department of Geography, believes the project could repay its cost very quickly and prove most advantageous to the industry. He said it could lead to further funding and associated wine industry studies.

Students who have qualified for honours in Geography are eligible for the Rothbury Estate Scholarship. Next year the Estate will pay the successful student $1,000 and the Department of Geography $500 to meet running costs.

Mr David Lowe, the Rothbury Estate’s Company Winemaker, said he believed the research would lead to ongoing studies of wine production and the Rothbury Estate would be happy to provide continuing support.

Dr Graeme McIntyre, Lecturer in Geography, who is pursuing research into the impact of climate on grapevines, will supervise the honours student.

Mr Lowe said that, while the Hunter Valley had been famous for the quality of its wines for about 150 years, little was actually known about why wine growing worked so well in the valley.

‘Ours is a small industry which has maintained its regional identity. We are proud of it and value its contribution to tourism and the Australian lifestyle.

'However, because of the strong competition coming from wine growers overseas we need to learn more about the importance of climate, soils and other factors in wine production.

'The most knowledgeable wine growers in the world are supposed to be the French, who often say that their wine is made “in the vineyard”.

'With the ownership of several small vineyards being transferred to large companies, investment in the wine industry is increasing at the present time and, therefore, the research could prove profitable’, Mr Lowe said.

Wine research could also have relevance to the small concerns which produced hand-crafted vintages and which wine producers called “boutique”.

KAKADU NATIONAL PARK & COBURG PENINSULA
16-28 August 1987
A walking holiday concentrating on the rich natural and Aboriginal heritage. Also historic tour of Darwin.
Organised jointly by the University’s Department of Community Programmes and Scobies’ Walkabout Tours.
Cost: $940, plus concession air fares.
Limit: 20.
For further information, please telephone 685 600 or 685 522.
Prof. Guttmann to go to Melbourne

Tony Guttmann

Professor of Mathematics, Dr Tony Guttmann, leaves the University in February to take up a Readership in Mathematics at the University of Melbourne.

Professor Guttmann's primary research activities have been conducted in statistical mechanics. Research being pursued in this field and the University of Melbourne's specialised computing equipment have persuaded him to leave Newcastle.

Melbourne University's research group covers the full spectrum - from rigorous mathematical models to experimental applications of statistical mechanics. I will work with six colleagues in this area, with access to the fastest conventional computer in Australia.

During the last fifteen years, between 1971 and the present time, he has been a staff member in the Department of Mathematics, Statistics and Computer Science. During this time he has been promoted from Lecturer to Senior Lecturer and Associate Professor and in 1984 was appointed to fill the Chair of Mathematics which became vacant on the retirement of Professor R. Keats. In the last twenty years Professor Guttmann has published some 100 scholarly articles and books.

He has been Visiting Professor, Fulbright Scholar or Visiting Fellow to such Universities as the University of London, the University of Waterloo, Canada, Stanford University, USA, and the University of Exeter, England.

In the late 1970s he was a member of the executive of the Staff Association and a member of the Committee of the Staff House.

As a member of the Senate Research Committee, he has been helping to implement recommendations on improving the University's research environment.

Since the early 1980s he has been a keen member of the University's Amateur Athletics Club and served as President for three terms.

In an interview with the News, he expressed his appreciation of Newcastle, the University and the Department of Mathematics, Statistics and Computer Science, all of which had been very good to him, he said.

'The one thing I regret, and have always regretted, is the fact that the Department has nearly as many research areas as it has researchers. Consequently, the great benefit to be derived from group research has sometimes been missed.

'This state of affairs is due partly to the smallness of Newcastle University and partly to the Department's policy of covering many interests. A comparatively small university like this cannot have it both ways and finally research has to suffer.'

Professor Guttmann added that he also regretted the constant atmosphere of uncertainty that had resulted from the amalgamation issue.

'During the last five years energy and resources that could much more appropriately be used to enhance the University's standing have been dissipated in discussing this issue.'

We wish Tony Guttmann and members of his family the very best in their new life in Melbourne and as far as his running is concerned hope that he achieves his ambition of breaking three hours for the marathon.

Arabian Gulf consultancy

Three executive officers of the Arabian Gulf University visited this University recently as part of a review of the scheme which provides for the AGU's Medical School to be given consulting assistance by the Faculty of Medicine.

Progress with the scheme, which has run two years so far, was discussed with the Project Liaison/Evaluation Officer, Professor G. Kellerman, and staff members of the Faculty, including some whose involvement in the project has meant making visits to the Arabian Gulf University.

Moreover, the officers of the AGU, Professor Aziz Chawhan, Assistant Professor Abdul Wahab, and Dr Yousif Malaika were briefed on educational methods and other topics of interest to them.

Our photograph shows Professor Chawhan (left) and Professor Abdul Wahab (right) with Associate Professor Sandy Reid, of Community Medicine.
Higher retention rate for Science in PNG

A start has been made in reducing attrition from science courses at the University of Papua New Guinea and, in the longer term, in increasing the economic and technical independence of Papua New Guinea.

This state of affairs is the result of a case study made by Dr Audrey Wilson of the cognitive development and performance of science students at the University of Papua New Guinea. The study was Dr Wilson's doctoral thesis.

According to Dr Wilson, Papua New Guinea in common with other third world countries does not produce sufficient scientific manpower.

"In Papua New Guinea, this is due partly to a shortfall in suitably qualified applicants for science-based courses at tertiary institutions and partly to the high attrition from these courses. This results in under-utilisation of expensive facilities and staff at tertiary institutions."

"The bottom line is the large number of expensive expatriates continuing to dominate the science-based professions in Papua New Guinea ten years after independence."

"Resolution of this situation initially involves influencing the subject choice of secondary students, many of whom see science and mathematics as particularly difficult and therefore unattractive subjects."

However, Dr Wilson points out, the problem of attrition among those admitted to science and science-based courses is perhaps of deeper significance and indeed has a 'backwash' effect on student choice of science in the first place.

Science students at work in a laboratory at the University of Papua New Guinea.

Directly resulting from Dr Wilson's study, teachers in secondary and tertiary institutions in Papua New Guinea have become more aware of the importance of matching their teaching to the cognitive levels of their students.

Interest has been expressed, and advice sought, by the national Department of Education and by a number of institutions in finding appropriate instruments for early identification of those in need of remedial instruction.

The study showed that most students improved their level of cognitive development during this first year of science study, with only twenty-eight per cent remaining at their initial level. Since academic success in science correlates significantly with higher cognitive levels, those remaining for the whole academic year, who advance cognitively, are also more likely to succeed academically.

As a result of these findings, remedial measures have been trialled during 1986, at the University of Papua New Guinea, to test their effectiveness in raising students' cognitive level, and thus retaining those students whom the study has shown would be at high risk of 'dropping out' during the year.

Among those students at risk undertaking remedial measures, fifty-six per cent were retained for the academic year as opposed to thirty-eight per cent of those at risk who did not undertake the remedial programme.

RADIO THEATRE READY TO START

Auditions have been completed for the new radio drama company of the University, the NUR Theatre.

Dr Jane Goodall, artistic director of the company, said the response and the standard of the tapes made by those who auditioned were impressive.

She said eighty people had recorded short readings and fifteen had been chosen as the core radio drama company.

The NUR Theatre has been formed by the Department of Drama in partnership with 2NUR-FM. The new initiative is attempting to revive 'an Australian tradition of excellence in radio theatre'.

The project has elicited considerable interest from the members of the local drama fraternity - actors, writers and producers.

The actors who successfully auditioned are: Tana Barfield, Dennis Biggins, Marjorie Biggins, Lance Close, Belinda Delaney, Natalie Downing, Deborah Jones, Richard Kearney, Adam Macaulay, Dorrit Nesmith, Ron New, Barry O'Connor, Mark O'Neill, Phyllis Robson, Ed Skipsey, Jean Talbot, Michael Taper and Nancy Tarran.

Experienced producers will include Victor Emeljanow, John Robson, Merilyn Hey, Lance Close and Peter Trist.

The titles of the NUR Theatre's first season of plays will be announced shortly.

Dr Goodall said that rights for several plays from Australia, New Zealand and Britain were being negotiated.

They included an early play by Newcastle author John O'Donoghue and a new adaptation of Henry James's The Aspern Papers by Peter Trist.


DECEMBER COUNCIL

Changes in Council

Coal and energy consultant, Dr Thomas Callcott, has been appointed a member of the Council by the Minister for Education, Mr R. Cavalier.

Dr Callcott is the new sixth Ministerial appointee.

His term of office will begin on 1 January and conclude on 6 June, 1990, when the terms of the other Ministerial appointees will end.

The New South Wales Parliament this year approved an amendment of the University's Act which changed the membership of Council.

From 1 January six members of the Council are appointed by the Minister for Education and seven are elected by members of Convocation.

Dr Callcott will join the following contingent of Ministerial appointees:

Dr Alec Forsythe, Deputy Chancellor, the Hon Ken Booth, MLA, Mrs Margaret Bowman, Mr Douglas Huxley and Professor Cyril Renwick.

Dr Callcott was Fuel Research Manager at the Central Research Laboratories of the Broken Hill Pty Co Ltd from 1956 to 1982. He has been Principal of Callcott Consulting Pty Ltd of Mayfield since leaving CRL.

Because of the resignation of Convocation member of Council, Mrs Elizabeth Morrison, nominations will be called shortly for the election of two members - a member to fill her position and a member to fill the new seventh Convocation position.

Council has decided to commence the election process next year after the long vacation.

Following representations from Senate, Council agreed to the Finance and Personnel Committee considering the University's financial situation before the commencement of the new Council/Senate Chamber was authorised.

Senate reported that it was concerned at the priorities implicit in Council's decision in October to build a new Council/Senate Chamber involving an expenditure of approximately half-a-million dollars from the Vice-Chancellor's discretionary fund and it requested Council to reconsider the matter at its meeting.

A member of Council expressed his view that provided funds were available, the new chamber should be built so that accommodation difficulties in the McMullin Building could be alleviated.

Several members said that before funding was committed to the project the Finance and Personnel Committee should consider the estimated expenditure and report to the Council.

The Buildings and Grounds Committee reported that the Vice-Chancellor had authorised the appointment of Suters Busteed Corner and Clide Pty Ltd to proceed with the preparation of documentation to allow tenders to be called for the chamber.

Sinclair Knight and Partners had been appointed for structural engineering and Collins and Fleck Pty Ltd for air conditioning and electrical services.

The committee said the consultants' programme called for completion of documentation by mid to late December with tenders not being called till late January because of the Christmas close down of suppliers and most contractors.

Council endorsed a Senate recommendation that the Diploma in Education be renamed the Postgraduate Diploma in Education.

It was informed that the Faculty Board, Faculty of Education, had reviewed the degree and diploma requirements and, in addition, believed that there was room for confusion between the Diploma in Education and other awards issued by the colleges of advanced education.

The subjects History IIF/IIIF and Chemistry IIB will not be offered next year.

Senate recommended this because of staff limitations following recommendations from the Heads of Departments of History and Chemistry.

In approving a new policy on outside earnings of academic staff, the Council noted that outside earnings were among the matters that had been considered by the Commonwealth committee in its review of efficiency and effectiveness and therefore outside earnings would be reconsidered in the future within that general context.

The policy approved by Council is:

Members of the academic staff are full-time employees of the University unless otherwise stated in their terms of appointment. The duties of academic staff include research as well as teaching and administration. Any activity that may impinge significantly upon full-time employment requires the approval of the Vice-Chancellor.

Subject to the following three qualifications, academic staff may earn from higher consultative activities:

(a) The amount of time to be spent in making outside earnings may be limited by the Vice-Chancellor. Members of staff seeking permission to spend time on outside earnings resulting in income beyond $2,500 per annum should approach the Vice-Chancellor for approval.

(b) Members of staff whose outside earnings exceed $2,500 a year are expected to compensate the University for all use made of University staff, materials, equipment and facilities (including overheads), and obtain prior approval for such use. Each member of staff whose outside earnings exceed this specified minimum is required to report to the University all his or her outside earnings and to indicate in full the use made of University resources. (Payments to the University in compensation for resources used will be paid into its general funds.)
Members of staff may be allowed to exceed the twenty-five per cent limit where specific approval is given by the Vice-Chancellor. In considering applications, the Vice-Chancellor will take into account Departmental, Faculty and personal circumstances and the possible contribution of the University to national development. Each case will be considered on its merits.

Earnings in excess of twenty-five per cent of annual salaries or, if the staff member so wishes, any or all outside earnings, may be paid into University accounts to be expended according to ordinary University rules on research, conference or other academic travel or other approved purposes.

The Vice-Chancellor's consent or approval for outside earnings does not imply any acceptance of liability at law for consultancy or other work or, as specified, approval for the use of University staff, materials and facilities.

Professor George attended his last meeting of Council, which recorded its appreciation for the Vice-Chancellor, who has served the University for the last twelve years.

The Chancellor, Sir Bede Callaghan, said: 'We all need to remind ourselves of the history of education in Newcastle. I went to school in Newcastle when there was only one high school here, namely the one on The Hill. Nowadays, there are many high schools dotted across Newcastle and the suburbs, and we have a fine university. Men and women like Professor George have exerted a great deal of energy so that Newcastle has its university.

Addressing Professor George 'You and your wife are two of the finest people I have ever met. Thank you for what you have both done'. (Applause).

Letter to Editor

Dear Sir,

We wish to register our protest regarding the decision made on 17 October by members of the University Council to sanction the expenditure of nearly half-a-million dollars to build a new Council Chamber. We feel very strongly that to give this project priority over many areas of the University in real need of funds is misdirected and, indeed, highly insensitive in the present climate of economic constraint and consequent low morale among staff.

Although we have a special interest in matters affecting women, we see ourselves as a consciousness-raising group concerned about all members of this institution.

There are a number of areas of need within the University which could legitimately lay claim to extra funding and areas of special concern at this time to which the funds being allocated to the proposed building could be more profitably directed. They include:

- The re-establishment of positions, where the disestablishment has thrown onerous workloads on other members of staff, or courses in demand cannot be offered.
- Installation of chairlifts to facilitate access for the disabled, particularly in the McMullin Building.
- Appointment of a staff development officer.
- Appointment of a full-time female counsellor.
- Heating of lecture and tutorial rooms and replacement of obsolete furniture.
- Funding for child care.
- More secure funding for the University Radio Station, which provides a vital link with the outside community.
- Adequate funding for books and services in the library.
- Additional accommodation for students - living and lecture rooms.
- Student services building.
- Installation of an efficient telephone system.

We are aware that there are competing priorities for funds and, clearly, the amount of money to be spent on the Council Chamber would not cover all these areas, but surely the University should spend whatever money is available where the need is greatest.

Vicki Lloyd
Vice-President
AWEUN.

Obituary

Mr Albert Dykman, who until he retired in August 1986 was Leading Hand Gardener on the main campus of the University, died suddenly on 17 December.

Albert, whose quiet manner and large stature made him a well known figure around the campus, went about his duties with experience and competence. His horticultural training had been obtained in his native land, Holland, and he had transferred from the Newcastle City Council gardening staff to the University in July 1975 where he seemed equally at home among the gum trees and other Australian flora.

He had been Leading Hand since November 1976 and will be sadly missed by his family and friends.

Don Morris
As usual the News publishes photographs of the senior officers of the faculties, the Deans, for the coming year.

Professor Barry Maitland, Architecture.

Professor John Biggs, Education.

Assoc. Professor Clive Croxton, Mathematics.

Professor John Burrows, Arts.

Professor Alan Roberts, Engineering.

Professor John Hamilton, Medicine.

Professor Alan Williams, Economics & Commerce.

Professor Ron MacDonald, Science.
Small firms often more efficient than large firms

Senior Lecturer in Economics, Dr. Winston Dunlop, has found that large enterprises are more technically efficient than small enterprises in most industries. However, when their economic efficiency is compared the large firms are superior in only one third of the industries.

The small firms exceed the efficiency of the large in one-third, while Dr Dunlop has found no significant difference in the remaining third.

A finding of particular significance is that the industries in which the large (or small) firms are the more technically efficient are not necessarily the same industries in which the large (or small) firms are the more profitable.

The study highlights the relationships between technical and economic efficiency and emphasises the need for careful definition of the concept 'efficiency' when making comparisons of performance among enterprises.

Dr Dunlop made the findings in his PhD thesis on the relative efficiency of large and small enterprises in Australia. He examined the validity of the proposition that small scale enterprise is necessarily less efficient than large in any given industry.

The task undertaken was to develop and apply a methodology which will enable the efficiency of the larger enterprises within an industry (those employing 100 or more persons) to be compared with that of their smaller counterparts.

The major contributions of Dr Dunlop's study are the pinning down and defining of the elusive concept 'efficiency' for this purpose, the formulation of the measures and statistical techniques required to make efficiency comparisons, and the presentation of comprehensive data concerning the performance of small firms covering all Australian ASIC 4-digit manufacturing industries.

The two concepts of efficiency that Dr Dunlop defines and measures are 'technical efficiency' and 'economic efficiency'.

The technical efficiency of each firm is expressed in relation to the performance of the 'best practice' firm(s) in the industry. Stochastic frontier production functions were estimated for each Australian manufacturing industry (1980 to 1981) in order to assess the 'best practice' performances.

The 'economic efficiency' of the firms is measured by their price-cost margins which serve as proxies for profitability. The relative efficiency of the large and small firms is expressed by Dr Dunlop in terms of the differences in the mean performances of the two size sub-groups.

Dr Dunlop has been engaged in research into the economics of the small firm sector in Australia for the past thirteen years.

He presented a paper based on his doctoral research at the Australian Small Business and Entrepreneurship Research Conference last September. His paper is to be published in the conference proceedings. It is anticipated that his work will also be reported in international journals.

Membership of board

The appointment of internal members of the Board of Environmental Studies approved by Senate in February 1983 will expire on 28 February 1987. Following the change in the constitution of the Board approved by Council in late 1983, members of staff wishing to be members of the Board now have to arrange for a nomination to be forwarded by their Head of Department or, in the case of the Faculty of Medicine, the Dean.

New members are most welcome.

If you wish to join the Board of Environmental Studies, arrange for a nomination to be sent to Ms J. Kim, Secretary's Division, before Monday 12 January 1987.

NEWCASTLE GRADUATE APPOINTED TO TOP CAE POSITION

Dr Leslie Eastcott, who obtained his BA degree and DipEd from this University, is to be the new Deputy Principal of Newcastle College of Advanced Education.

Dr Eastcott, aged 41, is currently Deputy Principal of the Murray Campus of the Riverina-Murray Institute of Higher Education at Albury. He also holds the position of Dean of the School of Management, Technology and the Arts.

Dr Eastcott's appointment follows the retirement in August of Mr Raymond Hodgins after nineteen years with the Newcastle College. The new Deputy Principal will take up his position on 2 February next year.

Dr Eastcott gained his Doctorate from the University of Alberta and his Master in Education from the University of Sydney.

He has been Deputy Principal and Dean of the Murray Campus for the past two-and-a-half years and was Head of the Division of External Studies at Riverina-Murray, the largest Division in New South Wales. Other positions have been Director of the former Goulburn Campus of the Institute, a Member of the Institute Council and a Member of the Academic Board.

He won the Renwick Prize for Education in Newcastle in 1966, was a Rotary Group Study Exchange Fellow in 1970, gained a NSW Board of Teacher Education Research Grant in 1978 and became a Post Doctoral Fellow of the University of Texas in 1979.
Lake Macquarie in small portraits

Around the time when Governor John Darling arrived in New South Wales in 1825, the first land grant in Lake Macquarie was made to the London Missionary Society. Rev L.E. Threlkeld chose Belmont as the site of the LMS's mission because of the number of aborigines who gathered there and because of the abundance of food for them.

But the mission failed and the land reverted to the Crown in 1829, according to Lake Macquarie: Past and Present, which has been published by Lake Macquarie City Council and sells at branches of the council's library and some newsagents for $4.50.

Laurie Nilsen, Information Services Librarian, Lake Macquarie City Library, edited the book. Susan Leis and Rodney Noble were the researchers and the project was carried out under the Community Employment Programme.

Mrs Nilsen and Ms Leis are BA graduates of this University.

Lake Macquarie: Past and Present is essentially a collection of historical portraits of the towns of Lake Macquarie, offering short informative texts and some black and white photographs.

The book will meet a long standing demand for an overall reference to various early land grants, subdivisions, settlers, town names, Aboriginal campsites, industries, and first schools, post offices and transport services.

The sketch presented of Belmont's development typifies the approach used in covering sixty-two villages and campsites, industries, and first schools, post offices and transport services.

The site is thought to have been near what is now Victoria St or Ada St, Belmont, or possibly at Lewers Estate at the north end of Belmont Bay. The mission moved to Toronto in 1829. Maurice Marks (from Bristol in England) and Matthew Cobbin (from Elm in Cambridgeshire, England) settled in the district with their families in the early 1860s.

Early Industries: Many acres of forest covered the hilly land near Belmont, and by 1871 a timber industry had developed.

Between 1862 and 1870 three different companies began coal mining, operations to the north of Belmont Bay near Cardiff Point. Belmont Colliery opened in 1925 and was bought by R.W. Miller in the 1960s. Robert's & Fletcher's Shaggy mine was on the waterfront east of Cardiff Point. It opened circa 1906 and coal was transported by water using ships Shaggy, Shaggy which opened circa 1906 and coal was transported by water using ships Shaggy and was closed after 1955. It was known as the Golden Egg for years as it kept working during the lockout of 1929 because it supplied the hospitals.

John Darling Colliery, owned by BHP began operations in 1925.

Early Transport: In 1875 Belmont was the ferry terminus for people travelling from Cooranbong to Newcastle. In that year a daily passenger service operated from Belmont to Newcastle. By 1937 there was a government bus service.

Railway: The railway was extended from Redhead to Belmont in 1916. The last passenger train to Belmont ran on 22 March 1971.

The village of Belmont developed steadily during the mid-1870s. The main part of Williamson's estate was auctioned in 1909 and became the central business district.

Early Settlers: The first settlers were Rev L.E. Threlkeld, his servants and family. In 1825 Threlkeld established the Buhiabah mission station. Its site is thought to have been near what is now Victoria St or Ada St, Belmont, or possibly at Lewers Estate at the north end of Belmont Bay. The mission moved to Toronto in 1829.

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FEE-PAYING DEGREE COURSES

Following a call from the Federal Government to tertiary institutions, the University of Western Australia has made courses available to full fee-paying students.

Two degree courses will be introduced for full fee-paying students in 1987, UNINEWS, the University's news sheet, reports.

'Following the earlier decision to offer a full-cost BSc in Computer Science and Mathematics, the Senate has now agreed to a proposal that twenty such places be made available in a Bachelor of Commerce. Following advice on resource needs from the appropriate committees, a proposal that the intake rise to 100 in 1988 will be given further consideration.

Next year's students under the scheme will each pay an annual fee of $9,500 to take a Bachelor of Commerce course.

'Full fee-paying students will be required to meet the same entry standards as their local counterparts.'
Holiday arrangements for the UN break

Overall
The University will close on Wednesday, 24 December for the Christmas to New Year holiday recess and re-open on Friday 2 January.

University News
With this edition, University News goes into recess and will not reappear until, 16 February as No.1 issue of the New Year 1987.

Squash Pavilion and Auchmuty Sports Centre
These facilities will close on 23 December and reopen on 5 January (Sports Centre). The Squash Pavilion will close on 24 December and will reopen on 3 January.

Credit Union
The Staff Credit Union in the Union will be open on 24 December (between 9am and 4pm). It will be closed for the holiday recess and will reopen on 5 January.

Auchmuty Library
During the long vacation ending on 23 February (the first day of First Term), the Library will open from 8.30am until 5pm on Mondays, Wednesdays and Fridays and from 8.30 am until 7pm on Tuesdays and Thursdays. It is closed at weekends. The Library will be closed between Christmas and New Year, reopening on Monday 5 January.

Arrivals and departures

Appointments
Mr Michael M. Cvetanovski, Technical Officer in Physics.
Mr Scott R. Harris, Gardener Tradesman in Property Division.
Mr Lindsay N. Johnston, Senior Lecturer in Architecture.
Mr Shane Keys, Professional Officer in Mechanical Engineering.
Dr Sally A. McFadden, Lecturer in Psychology.
Ms Karen M. McLellan, Laboratory Assistant in Mechanical Engineering.
Mr David J. Murray, Laboratory Assistant in Electrical and Computer Engineering.
Dr Dianne M. Osland, Lecturer in English.
Dr Claire D.F. Parsons, Senior Lecturer in Sociology.
Mrs Dorothy J. Sunshull, Stenographer in Biological Sciences.
Mrs Sandra L. Storck, Library Technician in the Auchmuty Library.
Mrs Diane L. Turner, Clerk in the Bursar’s Division.
Dr Patricia M. Vilkinas, Lecturer in Management.
Mr Maurice W. Ward, Laboratory Craftsman in Biological Sciences.

Resignations
Mrs Patricia L. Burn, Stenographer in Careers & Student Employment.
Mr Robert G. Hamon, Professional Officer in Civil Engineering & Surveying.
Dr Dheera Phong-Anant, Research Fellow in Chemical & Materials Engineering.
Mrs Lynden Sabhlok, Stenographer in Biological Sciences.

Classified Advertisements

For Sale
Boy’s 16” BMX Bike in good condition, $50 or near offer. Telephone John at Ext 730 or 51 1313. Auto-phone, secondhand (gives message only). Asking price: $40 or near offer, Please telephone 57 5874.

Clown
Entertains at parties, stores, shops, etc. Christmas entertainment a special. Please telephone 69 6679.

For Tender
The following surplus University equipment is offered for sale by tender:
Two only Sony 1810 U-matic video cassette recorders; one only Sony VPl210 U-matic video player; one only Sony Trinitron video monitor; one only Philips tape recorder; one only IBM Selectric typewriter (purchased 1973); one only Imperial ‘66 manual typewriter and two only Olivetti ‘82 manual typewriters.
Enquiries to Peter Myors at Ext 372.
Written tenders should be submitted to the Purchasing Section by 9 January, 1987.