

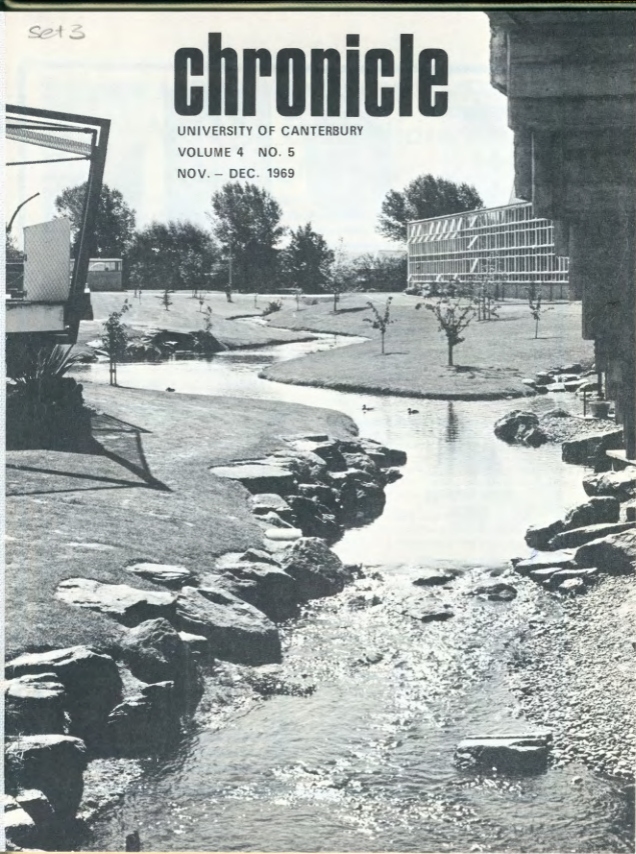
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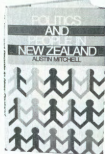
chronicle

UNIVERSITY OF CANTERBURY

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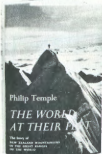
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RESEARCH AND ADVICE

Aims of Educational Unit Outlined

The improvement of teaching and greater institutional self-knowledge are two of the main aims of the new Educational Research and Advisory Unit, which is to be established at the University. The Unit, which has been approved by Council, will be served by a full-time officer with high academic qualifications, but will otherwise be composed of existing members of staff. Among them could be such officers as the Pro-Rector, the Head of the Department of Education, the Liaison Officer and the Research Officer together with particularly well-qualified members of the academic staff.

The unit will report direct to the Professional Board's Committee on Educational Policy and is expected to have many of its assignments defined for it by the committee, though it may undertake particular tasks on its own initiative or at the request of other academic bodies in the University.

Explaining its origins, the Vice-Chancellor (Professor N.C. Phillips) said there was first the example of overseas universities. Units to undertake research into higher education and to advise university departments on some aspects of their work were by no means uncommon in American, British and Australian universities. Secondly, in preparing a paper on student performance for the New Zealand universities conference in May, a small working party at Canterbury, which could form the nucleus of the nucleus of the new unit, had both become more acutely aware of tasks that needed to be done and had developed some of the techniques and

team spirit needed to deal with them. Thirdly the University as a whole was conscious of pressures for the gathering and dissemination of basic facts about its academic activities and there was a need to mobilise and co-ordinate data-gathering activities already going on in the University.

"The research function of the unit will therefore involve the collation and analysis of academic information, largely statistical, with the assistance of the Registry's computer facilities, directed by the Data Processing Officer," Professor Phillips said. "The results will be helpful as a basis for decisions on academic policy. A recent example of the use to which such data might be put was the decision to review the records of students who failed all their subjects in the first year.

"This unit is part of our answer to the old gibe that universities investigate everything but themselves," Professor Phillips commented. The unit would also provide services to the academic departments as required. It could assist them on such matters as methods of examining, formal and informal, including, for example, the design of "objective tests".

Courses On Teaching

"I would also hope that the unit would assume responsibility for organising courses on teaching methods," Professor Phillips said. "In the past the Association of University Teachers has voluntarily organised one-day courses for new members of staff near the beginning of the academic year. These have been most helpful and they recognise the fact that academic staff cannot be assumed to possess innate knowledge

Cover picture: The art of the landscape designer. The Okeover Stream at Ilam makes a pleasing sight as it meanders through its new course between the School of Engineering and the Faculty of Science - a study by David Jones (Geology Department).

of how to teach. Plainly, university teaching is different from school teaching and within the university differences in teaching methods are to be expected among departments and at different levels.

"With increasing numbers of staff and, still more, with increasing sizes of classes, perhaps the time has come to hand over to the new unit the task of arranging courses of instruction," he said. "Naturally the unit will continue to call on the services of academics for this purpose and I should also expect that attendance at such courses will continue to be voluntary. Equally, however, I have little doubt that academic staff will turn out in strength for

NEW CHAIRS APPROVED

Four new chairs have been approved by Council — in Asian Languages and Computer Science, a third chair in English and a second in Mechanical Engineering. The Vice-Chancellor said that Japanese would be the first Asian language to be taught in the new department. He added that the use of computers was already being taught to many students at Canterbury, which had the largest computer installation among the New Zealand universities, but the new Chair would enable this instruction to be deepened and more highly systematised.

Council has also made the following decisions: **Exclusion 1:** From the end of 1970 first-year students who fail to pass any units for which they are enrolled will have their records scrutinised and they will be subject to exclusion. This new regulation supplements the existing provision for the review of the records of students who have not passed at least two units in the preceding two years.

The Vice-Chancellor emphasised that students who failed to pass any units in their first year would not be automatically excluded. "What is automatic is that a review of their records will be undertaken at faculty level," he said.

"Faculties may be expected to make no recommendation for exclusion of those students whose circumstances of study adequately explain their failure. If a faculty recommends exclusion to the Professorial Board students who are the subject of the recommendation will be given the opportunity of making representations to the Exclusions Committee of the Board.

courses of proven quality and usefulness. It will be up to the unit to see that the courses are attractive."

The Vice-Chancellor emphasised two points.

"First, the unit will make itself available to departments seeking assistance or advice; it will not force its services upon anyone, though its research activities will call for widespread co-operation. Secondly, this new development is on a modest scale and it can begin to operate with little delay, especially in its data-collecting role. If the experiment succeeds the Unit will grow into a more ambitious enterprise," he said.

If these representations are not successful, the student will have a further right of appeal to the University Council."

Restricted Entry: Restrictions on entry to the first professional year of the engineering degree course will be applied next year. The intake will be limited to about 200, including 20 overseas students. Selection for admission will be on academic grounds.

Expedition to Andes: Permission was granted to a New Zealand mountaineering team to use the name of the University in an expedition to the Andes next year. Three members of the six-man expedition are students at the University and another is a graduate. The team is: Messrs J. Jolly (leader), J. Glasgow, P. Gough, J. Stanton, H. Wilson and A. Buchanan. They plan to climb the three 19,000ft peaks of Pucahirca and also to undertake scientific work.

Promotions

The following staff promotions are effective from February 1, 1970:

ASSISTANT LECTURER TO LECTURER: — Mr J.E. Cousins, (Music); Mr M.H. Smith, (Mathematics).

LECTURER TO SENIOR LECTURER: — Mr D.J. Byers, (Electrical Engineering); Dr D.A.R. Happer, (Chemistry); Dr D.A. House, (Chemistry); Dr R.N. Hughes, (Psychology); Dr P.J. Moss, (Civil Engineering); Dr G.A. Nuthall, (Education); Dr W. Oldershaw, (Geology); Dr P.J. Perry, (Geography); Dr K.E. Richards, (Chemistry); Mr R.M. Taylor, (Mechanical

Engineering); Mr J.C. Thornton, (Philosophy).

SENIOR LECTURERS PROMOTED ACROSS THE BAR: — Dr J.K. Bargh, (Electrical Engineering); Dr J.B. Stott, (Chemical Engineering); Mr W.A. Sutton, (Fine Arts); Dr L.J. Symons, (Geography); Mr A. Willman, (Civil Engineering); Dr H.B. Wisely, (Zoology).

SENIOR LECTURER TO READER: — Dr R.A. Bull, (Mathematics); Dr J.J. Deely, (Mathematics); Dr T. Paulay, (Civil Engineering); Dr J.C. Scrivener, (Civil Engineering).

Tributes Paid To Astronomer

It was a fortunate circumstance that an amateur astronomer so broadly versed in the potentialities and limitations of observational techniques was available during the formative years of the Mount John University Observatory, said the acting chairman of the Flower and Cook Observatory of the University of Pennsylvania, Dr Robert H. Koch, when referring to the retirement at the end of October of Mr Frank M. Bateson as astronomer-in-charge of the observatory.

"The Astronomy faculty will remember for a long time both the tangible and intangible evidence of Mr Bateson's association with it and similar recollections will exist for the maturing generation of astronomers, those graduate students who did their research while Mr Bateson was in residence on the mountain," Dr Koch said.

In a tribute to Mr Bateson at the last meeting of Council, the Chancellor, Mr T.H. McCombs, said that in ten years Mr Bateson had not only discovered the best site in New Zealand for an observatory after prolonged and searching site surveys, but had established and developed an observatory which had already made a name for itself in the Southern Hemisphere. Those who had been to Mount John would know of some of the rigorous astronomers faced on top of the 3377ft mountain and would appreciate the considerable difficulties Mr Bateson overcame in developing the observatory to its present standard. He had worked effectively with the committee governing the policies of the observatory, overseen the construction and development, lent his own equipment, assisted students and somehow found time to carry out his own scientific work.

"But it was in the field of public relations that he made an even greater impact," Mr McCombs said. "His own enthusiasm for astronomy in general and for Mount John in particular, has been transmitted to the people of South Canterbury and the Friends of Mount John Association he established has been of considerable value. Many thousands of visitors have been shown over the observatory, there is a booklet available, press, radio and television have featured it and it had a solid body of support. These are all bonuses beyond the regular dividends Mr Bateson has provided and he leaves the observatory in good heart and good standing. If it is true that the happy man is one who accomplishes what he set out to do then Mr Bateson will leave this exacting post a very happy man," Mr McCombs said.

Mr Bateson's place has been taken by Mr I.L. Thomson, formerly Director of the Carter Observatory, Wellington.

LETTER TO THE EDITOR

Sir, The great value of a really first-class university bookstore became very clear to me during a recent leave of absence to teach at the University of Massachusetts summer session. At Amherst the administration has provided the space for a bookshop able to display over three thousand top quality paperbacks as well as selling the standard texts for all the university courses.

The intellectual stimulation for students and staff in being able to examine and appraise a wide variety of books both in your special field of interest and outside it has come to be considered one of the functions of a modern university. The manager of the Amherst store complained of lack of space for many of the books he would like to stock. The bookstore, serving about 14,000 full-time students, was at least ten times the size of the present combined city and Iliam facilities at Canterbury.

The Amherst bookstore is operated as a separate unit of the university and required to "break even" at the end of the year; in the last year it managed to make a five per cent profit while still keeping prices down and giving a student/staff discount. Several universities operate "co-operative" bookstores where members receive an additional rebate on purchases. When the entire university is united at Iliam it will be increasingly important to have a first-class book service since city stores will not be as available.

Robert Stowell

Christmas Party and Golf For University Club

Coming events at the University Club include the annual Christmas Party on Saturday, December 13, and a golf tournament on the afternoon of Wednesday, December 17, at the Tai Tapu Golf Club. Tickets for the Christmas Party, always an extremely popular event, will be on sale shortly in the Club bar.

Messrs D. Ferguson and J. Power are organising the golf tournament, which will begin at 1 p.m. A circular will go to members inviting entries.

Because of lack of patronage the Management Committee decided to close the Club on Saturdays. Diners will thus not be served on Saturday evenings and the bar will not open. It is proposed to review this decision during the Ranfurly Shield season next year and, if there is sufficient demand, to reopen the bar on Saturday afternoon.

The Committee also agreed that the Club should not remain open during the Christmas holidays. In recent years the bar has been open in the afternoons, but figures produced at the meeting indicated that often takings did not cover the cost of wages. The Club will therefore close after lunch on Christmas Eve—there will be no dinner that evening—and reopen with lunch and dinner from January 15, though the bar will reopen on January 13.

Reporting on visits to the Melbourne and Sydney University Clubs, the chairman, Mr V.M. Busby, said he was delighted to learn that the Club was well known to members of the Australian clubs and several members had spoken highly of the reception and service. It was agreed that the Club should seek reciprocal membership arrangements with the two Australian clubs.

The following new members have been elected to the University of Canterbury Association: Mr J.M. Bremner, Mr B.A. Caygill, Mrs M.K. Cookson, Mr P.J. Cordner, Mr C.A. Crothall, Mr R.R.C. Waid, Miss S.R. Dain, Mr and Mrs E.L.L. Groves, Mr R.J. Humard, Mr and Mrs C.T. Irvine, Dr and Mrs N.C. Lambrechtsen, Mr and Mrs H.M. McMillan, Mr D.J. McNaughton, Dr C. Malthus, Miss Daphne J. Moreham, Mr I.J. Munro, Mr K.C. Nicholl, Mr B.S. Palliser, Mr R.S. Peate, Mr R.F.A. Powell, Mr P.W. Rosier, Mr B.

Sullivan, Mr R.J. Unwin, Miss M.J. Whitehead, Mr and Mrs I.G.B. Wilson, Mr J.M. Crook, Professor F. Devonport.

PROGRESS IN BUILDING

"Heartening evidence of the Government's intention to press on with the major task of transferring the whole University to Ilam," was how the Vice-Chancellor described advice from the Minister of Education that a approval had been given for the preparation of working drawings and other tender documents for the construction of the remainder of the Arts Faculty at Ilam.

Professor Phillips said the construction of the city site could be more cheerfully borne as a result of the progress being made.

Work has started on the construction of the three University halls of residence at Ilam. The tender of M.L. Paynter Ltd., of \$1,034,954 was accepted. A third of the cost of the buildings, which are to be completed by the end of 1971, will be met by the Department of External Affairs.

Seven paintings by Edward F. Francis, a senior lecturer in the School of Fine Arts, are being exhibited in the School of Engineering Library at Ilam until the end of the year.

Nominations for the 1970 Unesco Science Prize close at the beginning of December. The first prize, in 1968, went to Professor R.S. Silver, inventor of the multi-stage flash distillation process used in desalinating seawater. Value of the prize is \$3000.

QUINQUENNIAL GRANTS TERMED 'REALISTIC'

It would be churlish to criticise the efforts made by the University Grants Committee and the Government to ensure that the University was realistically financed, said the Vice-Chancellor, Professor N.C. Phillips, when he advised Council that formal advice had been received of the quinquennial grant to operate from April next year.

The grant, Professor Phillips said, was not lavish, but the discipline of economy was not unhealthy. The increase over the period was 53 per cent compared with 49 per cent for the present period.

"It is too early to pass judgment on the new grants because they are accompanied by recommendations involving increased expenditure on maintenance and research," he said. "No provision has been made for any major new development, but there is some prospect of assistance for computer services. These are grants we can live with, and within, if, as I hope, they are increasingly supplemented by support outside the University," he said.

The budget for 1970, which was prepared before notice of the new grants was received, should stand, Professor Phillips said.

The Registrar, Mr G.G. Turbott, said the estimates had been prepared without sure knowledge of the most significant item of income. In the past, the block grant had been increased by an annual increment (payable from 1 April) to provide for the increasing roll numbers, increasing costs, and planned developments in the period. It had been assumed that this procedure would be followed during the course of the new quinquennium but in the absence of exact information, estimates for 1970 had been prepared without taking into account any increase in the amount of the block grant.

On this basis, the estimates showed a projected income of 44,334,611, and if all staffing positions were filled, expenditure would amount to 44,708,596. Present indications suggested that the amount to be spent on salaries would not reach the amount provided in the estimates because of positions remaining unfilled.

The projected deficit of \$373,985 would be reduced by the amount of the increment expected in the block grant from April 1970 and also by the amount of reductions in salary costs arising out of unfilled positions. The projected deficit was considerably larger than it had been in past years, since no account had been taken of any increase in the block grant.

The following figures taken from the estimates, show the more significant items

INCOME (Main items)	1969	1970
Government Grant	3,260,901	3,355,611
Tuition Fees	720,550	773,300
Rental from Endowment Lands	48,000	48,000

EXPENDITURE (Main items)	1969	1970
Salaries	2,637,023	3,092,131
Working Equipment	256,050	325,250
Extension Studies	94,400	104,400
Cleaning & Caretaking	140,000	150,000
Expenses of Staff		
Appointment	72,500	72,500
Upkeep of Grounds	44,930	48,000
Heating & Lighting	145,000	150,000
Library	156,000	186,000
Maintenance	201,435	207,000
Study Leave	50,000	60,000
Telephone, Postages, Tolls	52,500	52,500
Travelling & Staff Conferences	16,000	18,000

"This budget is for the first year of the new quinquennial period," Mr Turbott said. "The student roll in 1969 is well in excess of the higher estimate for Canterbury (last published by the University Grants Committee in 1963), and if the University is to preserve staff-student ratios and meet normal needs of teaching and research, a substantial growth pattern can be predicted for the next five years."

The Students' Union on the city site will be extended during the vacation. The cafeteria will be extended some 600 square feet over the present open terrace at a cost of \$4000, which will be met by the Students' Association. A new terrace will be provided.

Personal

NEW PHILOSOPHY HEAD

Mr Robert H. Stoothoff, who will arrive from Edinburgh to become Head of the Philosophy Department next year, was born in Orange, N.J., and is now a British subject. Since 1961 he has been a lecturer in philosophy at Edinburgh University.

Mr Stoothoff, who is 34, married with two children, was an undergraduate at Wabash College, Indiana, where he graduated B.A. in 1957. Elected a Marshall scholar he studied philosophy for two years at the University of St Andrews and was awarded the degree of B.Phil in 1959. He was a research student at Oxford, first as a member of University College and then as a senior scholar at St Antony's from 1959 to 1961.

At Edinburgh and as visiting lecturer at Dartmouth College, New Hampshire in 1967, Mr Stoothoff's primary teaching responsibilities have been in the fields of logic and the philosophy of science. He has also lectured on the history of philosophy and on topics in metaphysics and theory of knowledge and he also gives a course on mathematical knowledge and the foundations of mathematics in the Mathematics Department at Edinburgh.

An elementary textbook on formal logic written by Mr Stoothoff is to be published by the Oxford University Press early next year.

Dr M.J. Winterbourn, a post-doctoral fellow at the University of British Columbia, has been appointed a lecturer in the Zoology Department. Dr Winterbourn graduated B.A. from the University of Auckland in 1962, took an M.A. with first-class honours in zoology in 1964 and was awarded his Ph.D. by Massey University in 1965. He was an assistant lecturer in zoology at Massey for two years and a lecturer for one year before going to Canada. Dr Winterbourn's research interests include the ecology of thermal waters and community ecology.

particularly the study of energy flow, productivity and related aspects.

Dr M.C. Crawley, who graduated from the University of Durham with an honours degree in zoology in 1962 and who was awarded his Ph.D. in 1965, has been appointed a lecturer in zoology. Dr Crawley, who is married with one child, undertook three years' post-doctoral research on the ecology of the Australian brush-tailed opossum in indigenous forest in New Zealand and from December 1965 to April 1969 he was co-ordinator of research for projects on opossums, feral goats, rats, mice, native and introduced birds and vegetation in the Orongorongo Valley.

Father J.E. Weir, a well-known New Zealand poet, has been appointed a lecturer in English. Father Weir, who was head of the English Department at St Bede's from 1962 to 1967, and at St Patrick's, Silverstream, until this year, graduated B.A. from this University in 1967 and M.A. with first-class honours in English this year. He was awarded the U.G.C. Macmillan Brown prize for original English twice and the University's Macmillan Brown prize for original composition in 1963. His thesis, "Man Without A Mask", was a study of the poetry of James K. Baxter.

Council accepted with regret the resignation of Mrs N.C. Jacobs, Assistant Liaison Officer. Other resignations accepted with regret included those of Dr R.R. Hutton (Physics) and Miss J. Ward (Botany).

Regret at the sudden death of Mr A.N. Prior, a Fellow of Balliol College and formerly Professor of Philosophy at Canterbury, was expressed by Council, which passed a resolution recalling with gratitude Professor Prior's services to the University and its sympathy with Mrs Prior and her family.

It was his hope that the next congress of the International Association for Quaternary Research would be held in Christchurch, said the Vice-Chancellor when he reported to Council that Dr Jane Soons (Geography) had been elected one of the four vice-presidents of the Association and a member of its Executive at its Paris congress.

Mr W.G. Cox, audit manager at a Christchurch firm of chartered accountants, has been appointed a lecturer in the Accountancy Department. Mr Cox, who is 22, matriculated at the University in 1964 and last year graduated M.Com.

Mr Brian Easton, lecturer in economics and social statistics at the University of Sussex, has been appointed a lecturer in the Economics Department. Mr Easton, who graduated B.Sc. (Hons.) in mathematics from this University in 1963, became a research assistant at the New Zealand Institute of Economic Research and worked on macroeconomic modelling, time series analysis and short-term forecasting. He studied part-time at Victoria University of Wellington and graduated B.A. in economics. In 1966 he was awarded a U.G.C. postgraduate scholarship and became an assistant lecturer in economics at Sussex, where in addition to academic responsibilities he has been a member of the university's social policy committee and faculty adviser to the Students' Association.

Mr William R. Catton jun., a professor of sociology at the University of Washington, has been appointed a reader in the Psychology and Sociology Department. Dr Catton graduated A.B. in history from Oberlin College in 1950.

M.A. in sociology from the University of Washington in 1952 and was awarded his Ph.D. in sociology in 1954. He was assistant professor at the University of North Carolina's Department of Sociology and Anthropology and at the University of Washington and was promoted associate professor in 1962. He was visiting associate professor at Oberlin and at the University of Alberta and was promoted to professor at Washington in 1966. Dr Catton has specific research interests in the organisation and use of New Zealand's national parks, which he has studied intensively in the United States.

Mrs M.E. Austin, who is in charge of biology teaching at Christchurch Girls' High School, has been selected to hold the visiting teaching fellowship in the Zoology Department next year. Mrs Austin graduated B.Sc. from the University in 1953 and has taken a prominent part in developing biology courses at all levels in secondary schools.

Dr Gavin T. Daly, a graduate of Canterbury and Lincoln College, who gained his Ph.D. at McGill, has been named as consulting adviser in plant ecology to the Department of Health on the control of air pollution. Dr Daly is a lecturer in plant ecology at Lincoln.

LAW DEAN'S APPOINTMENT

Professor John L. Ryan, who arrived recently from Northern Ireland as the new Dean of the Faculty of Law, has been appointed a member of the New Zealand Law Revision Commission by Mr Marshall, the Minister of Justice.

Professor Ryan, who was called to the Canadian Bar before going to England holds university degrees from three universities in North America and Britain and will bring to the Law Commission wide knowledge of overseas law and first-hand experience of various legal systems. He has been on the staff of law faculties in five different jurisdictions in which there was in operation systems based both on common law founded on English law and Civil Law derived from the law of France.

Professor Ryan has done considerable research in European law and he has studied in Austria as the holder of a Salzburg Fellowship in Legal Studies. He has visited Nigeria to advise on legal education in that country.

Professor Ryan is well known in international legal circles and took part recently in a Ford Foundation Conference on taxation attended by tax lawyers from a number of countries. Earlier this summer he had the opportunity to observe the Sugar Contract arbitration which is being conducted by the Master of the Rolls, Lord Denning, at Lavoka in Fiji and made a tour of the courts in various parts of the islands.

Among other academic distinctions Professor Ryan has been the recipient of a Canada Council Award and is a former Lord Beaverbrook Overseas Scholar. Apart from his university commitments he has travelled abroad extensively visiting Army bases and Royal Air Force Stations in his capacity as adviser to the Ministry of Defence in London.

Professor Ryan is a member of a well-known New Brunswick legal family where his father held the distinction of having served as a Canadian judge for a longer period than anyone else during the present century.

OBITUARY

Mr N.E.Hewitt

Mr N.E. Hewitt, Senior Lecturer in Mechanical Engineering, who died suddenly at his home on 30 August, was appointed to the staff of the School of Engineering on 20 May 1940, and at the time of his death had given longer service than any other present member.

During his initial years he taught evening classes for apprentices, then conducted at the School, as well as day courses for under-graduates—a very heavy teaching load for all those concerned. His main subjects were Strength of Materials, Thermodynamics and Heat Engines, Drawing and Design and Automotive Engineering. With the trend towards specialisation, he concentrated more and more on Automotive Engineering—his hobby (together with gardening) as well as his work. He continually upheld the potentialities of the steam car, and this is worth remark in view of a recent revival of development work with steam cars aimed at the reduction of atmospheric pollution by exhaust fumes.

In recent years he was afflicted by arthritis, which increased steadily in severity; but he carried on his work with great determination, and cheerfulness which never faltered. Finally, however, he felt compelled to tender his resignation, which was to have taken effect at the end of this academic year. Over the years he had collected a considerable body of historical information about the School of Engineering, and had hoped, after retirement, to collate this for publication.

Nigel Hewitt was a man who never seemed to hurry, even when in full physical health; but he never wasted time, and his great powers of concentration enabled him to get through an astonishing amount of work. He also had the ability to distinguish the wood from the trees; although he would speak quite seldom in debate, what he did say might well be the vital contribution.

He will be remembered by hundreds of engineering graduates for his penetrating mind, his dry humour, and his continuing interest in their progress, both during University years and long afterwards.

He is survived by his wife Esme, whose devoted help made it possible for him to serve the School of Engineering as he did.

DEPARTMENT OF AGRICULTURE

Economics and Accountancy Graduates Required

The Department is now recruit B.Com. or B.A. graduates with some study of economics or accountancy to work in the following groups based in Wellington:—

Primary Industries Section:

This section is engaged in a wide variety of administrative marketing and commercial activities which arise from the Department's association with the Primary Industries.

Economics Division:

The Division is involved in forecasting overseas markets and trade trends and with International Agricultural policy. Preparation of reports for G.A.T.T., E.C.A.F.E., the Colombo Plan and for Government on Meat and Dairy Marketing forms a substantial part of the duties.

Part Time Study:

Opportunity would be given to under-graduate students to complete their studies on a part time basis if necessary—on full pay.

For further information—

Please contact: Mr I.F. Bartos,
Personnel Manager,
Department of Agriculture,
WELLINGTON.

PROFESSOR HOPKINS REPORTS ON STUDY LEAVE

Student power was the extreme wing of the student participation movement and it often formed because it was faced by an extreme wing of Establishment, said Professor H.J. Hopkins in a report to Council on his study leave last year. In Oxford centuries of close contact between dons and under-graduates had set up a regime under which serious confrontation at the College level was unlikely, but it was not so unlikely at the University level, he said.

The reasons for this were that there were many students at Oxford who did not have tutors and that the Proctors, isolated, were responsible for University discipline, backed only by the tradition that their word is law. "These two factors led to confrontation in 1968 on an issue upon which the Proctors capitulated as a last resort. The incident involved no more than 50 students (very few of them undergraduates), but it will probably bring about a reform in the Proctorial system so that University discipline is no longer maintained by two reluctant College dons acting on behalf of, but temporarily isolated from, their Fellows."

Professor Hopkins said that in 1959 he spent five months at Cornell and was pleased to renew acquaintances there. Dean Emeritus Hollister, who had retired in the summer of 1959 after a lifetime in engineering education, was now in private practice. "His judgment on academic matters, which earlier had earned him the Gold Medal of the American Society of Civil Engineers, was still acute, and I was very much richer for the time he gave me. Two of his comments on the American scene are worthy of our consideration. Engineering mathematics is a hot topic everywhere. In the United States, heads of departments of mathematics have a mammoth task in trying to service courses in an ever-widening curriculum. Harassed, they recruit (dragon?) graduate students for the peripheral courses, even students newly arrived from overseas. This situation had led a cynic at Cornell to remark that 'the only requirement for a lecturer in engineering mathematics was the ability to speak fluent broken English'. The other comment, was upon a direct result of

the 'publish or perish' policy. Hollister urged the need for a committee concerned with appointments, promotions and the like to go beyond quantitative assessments such as counting research papers. There was a marked tendency 'to stand at the bottom of the valley and holler, then publish all the echoes!'

Professor Hopkins said the most notable common difference between 1959 and 1968, at all universities lay in the decrease in research funds from government agencies, and the change in emphasis of research supported. Civil works, notably buildings, roads and bridges, enjoyed a high priority in 1959. Support for this area had been substantially reduced, and topics oriented to the space programme or having military significance were more strongly supported. Nevertheless, by our standards, the scale of work was impressive. At each University, the moves made in 1959 towards teaching a solid core of fundamentals had been maintained, specialisation coming in the later years, and particularly in the Master's year.

Expedition To Snares

Mr John Warham (Zoology) is again leading a party from the department to the main island of the Snares during the summer to continue earlier studies of bird life on the island. Four undergraduates, Messrs C.H. Hay, G.J. Wilson, P.E.N. Wright and I.S. Brice, are included in the party. The sixth is Dr B. Kirkwood, of Auckland University, who is deputy leader.

The party planned to leave Bluff on November 18 in the fishing boat President Kennedy. Messrs Warham and Brice will return about December 8 and the rest of the party will be taken off about February 26 by the President Kennedy if they have not already been picked up by HMNZS Endeavour.

Mr Warham plans to complete aspects of his

long-term study of the Snares crested penguin and Mr Wright will initiate a study of the Snares Island snipe, with particular reference to breeding, territoriality and distribution, using, in part, colour-banded birds. Mr Wilson will complete a study of aspects of the egg stage of the breeding cycle of two burrowing petrels, the sooty shearwater and the mottled petrel, which were begun last season, and he will also collect data towards estimating the population densities of the sooty shearwater. Mr Hay will initially classify the vegetational communities and soils according to International Biological Programme criteria. On the arrival on shore of the Buller's mollymawks he will then continue a study of their reoccupation of the colony and events during the pre-egg and egg stage of the breeding cycle, another

Magnetic Tape Units 'Essential' In Research

Although the University's Computer Centre was well equipped by New Zealand standards, current research was severely handicapped by the lack of magnetic tape units, said Dr G.J. Fraser, (Physics) in a report to Council on study leave last year, which he spent mainly at the National Center for Atmospheric Research in Boulder, Colorado.

Dr Fraser spent much of his time at NCAR on computing. He took with him a half-reel of magnetic tape containing the data on 10 cubic feet of paper tape comprising the backlog of data from the high-altitude meteorology experiments at Birdlings Flat. The backlog had arisen from the lack of computing facilities at Canterbury, though the new 360/44 was being installed when he left on leave.

"A number of further processing techniques and various studies of a theoretical nature were also carried out with a view to future application here at Canterbury," he said. "The NCAR computing facilities presented a rare opportunity as one had unlimited over-the-counter access to a very large, very fast machine (a CDC 6600) with a very simple job control system. Programme development was very quick. The high-speed cathode-ray tube plotter

programme which was begun last season. Mr Brice will assist Messrs Warham and Wilson in their work on penguins and petrels.

Dr Kirkwood, a licensed radio operator will improve radio communications on the island and will enable advice to be given from Christchurch to members of the party. He will also coordinate the general activities of the members, maintain the daily log and collect meteorological data, radiating these out daily if the Meteorological Department wishes. He will also undertake some biometrical work on penguins.

Members will also undertake some maintenance work on the field station erected on the island. It is to be painted, a second water tank will be installed and some roofing iron will be replaced.

could also be used as a very high-speed printer and dumping of data for programme checks was not as time- or paper-consuming as a printer. The high-speed batch processing seemed more popular with users than the time-sharing system which was also available, possibly because the latter used a distant computer and presented problems in handling magnetic tape files. The computer was also used for processing library records, held on magnetic tape. The result was prompt monthly accession lists by title and author which made the search for current material very easy."

Dr Fraser said magnetic tape units were essential for the handling of the very large amounts of data characteristic of most geophysical research. "Some of this data is produced by our own equipment and much more is available on magnetic tape from numerous organisations round the world, including the New Zealand Meteorological Service, world data centres and a variety of university and government institutions in the United States," he said. "Other services such as library accession lists and some abstract services are now also available on magnetic tape.

"In comparing the general facilities at Canterbury with what I saw in North America it is apparent that we have a high standard of accommodation in the new buildings at Ilam. Although the level and amount of teaching here are quite reasonable, academic staff here are required to spend more time on minor

administrative and technical matters which in North America are handled by a larger proportion of supporting staff within the respective departments. However, the lower level of support for research in New Zealand is partly compensated by the high quality of technicians, in spite of the fact that many have had no formal training. It is not encouraging to note that Australian universities have begun to advertise in New Zealand newspapers for technical staff. A drain of good technical staff similar to that already taking place in local industry can only accelerate the loss of academic staff," Dr Fraser said.

There were good prospects of filling staff vacancies in atmospheric physics although the North American and Australian universities and research institutions would always be a powerful counter-attraction, he said.

Natural Advantages

Dr H. van Loon, at NCAR, specialised in large-scale meteorological events over the Southern Hemisphere. It was apparent that New Zealand had very considerable natural advantages arising from both its own geographic position and the spread of scientific observing sites from Scott Base in Antarctica to various island and mainland sites northwards to the tropics. New Zealand research makes a useful contribution to the meteorological and geophysical knowledge of the region and hopefully increased support in the future would result in a more adequate study of the environment. New Zealand's latitude was high enough for observation of the outer limits of the high-altitude, high-latitude wind systems which rotate around the Antarctic. The only other southern land mass so favoured was southern Chile and Argentina. Another fortunate geographic accident was the small amount of land in the southern hemisphere, resulting in less disturbance to the large-scale atmospheric flow patterns.

"The large northern land masses seem to influence the circulation patterns even at heights of 80-100 km so that we may be observing a 'purer' form of circulation pattern than our northern colleagues," Dr Fraser said. "On the other hand the lack of land masses results in a lack of observations, but this problem is being overcome with meteorological satellites. Much of the stratospheric data provided by the Tiros and Nimbus series has supported our interpretation of Canterbury measurements on the high-altitude circulation changes in the late winter and early spring."

\$18,000 Grant For Research In Estuary

A series of grants totalling \$18,000 over four years has been made to the Zoology Department by the Christchurch Drainage Board. The grants follow the submission of a report by Professor G.A. Knox on behalf of the department on biological research in the Heathcote-Avon estuary. The implications of the research were very wide and concerned not only the biological state of the estuary, but its use for sport and recreation and as a nursery for fish, especially flounders, the Vice-Chancellor said when telling Council about the grants.

Two additional grants have been made by the National Roads Board to the Department of Civil Engineering—\$1200 for high pressure triaxial equipment and \$500 for curing cradles for soil stabilisation specimens.

The Tussock Grasslands and Mountain Lands Institute has made a grant of \$524 to the Geography Department to assist in projects being undertaken by Messrs D.E. Greenland and B. Butterfield.

The Christchurch Harmonic Society has made a donation of \$50 to the University in recognition of the playing of senior students under the direction of the New Prague Quartet at recent concerts of the society.

The New Zealand Refining Company Ltd., has given process control equipment, valued originally at \$2000, to the Department of Chemical Engineering.

The Canterbury Savings Bank has made a further grant of \$200. These grants will be used to fund research into an economics problem relevant to Canterbury or New Zealand.

Mrs H.D. Broadhead had given a collection of antiquities formerly belonging to Dr H.D. Broadhead to the Logan Collection in the Classics Department. They have been described and catalogued by Professor A.D. Trendall.

Fletcher Holdings is to continue its Post-graduate Scholarship in Chemical Engineering for a further five years and the annual value is to be increased from \$700 to \$800.

PASS RATE

Student Performance 'Better Than Supposed'

"The academic performance of our university students is distinctly better than has commonly been supposed," said the chairman of the University Grants Committee, Mr A.J. Danks, in a statement last month. "This is the main conclusion I would draw from up-to-date information supplied at the request of the University Grants Committee by two of the biggest universities, Canterbury and Otago. The figures refer to the whole body of last year's undergraduates, and they show that 84 per cent of those who were full-time students either completed degrees or diplomas or passed two or more degree units (or the equivalent).

"This finding is revealed by a new statistical return which all the universities will make for their undergraduates of 1969 and of the years that follow, but which Canterbury and Otago were able to supply for their 1968 undergraduates - 8,556 in all, of whom 6,202 (72 per cent) were full-time, and 2,354 (28 per cent) were part-time. Students from overseas have been omitted from these totals, though the returns show that their performance differs very little indeed from that of our own undergraduates.

"Of the 6,202 full-time students:

"116 per cent completed a degree or diploma. These were all fully successful students.

"56 per cent successfully completed all the work of a full-time course. Typically, this means that they secured at least three degree units. It means also that they progressed during 1968 at the rate required to gain a degree or diploma in the minimum possible time, for example, three years for the ordinary B.A. or B.Sc. degree. These also were fully successful students.

"13 per cent passed two units of a course or the equivalent. Though not fully successful, these students nevertheless achieved a degree of success that is recognised by the Department of Education as sufficient to justify the continuation of a bursary or its reinstatement after suspension.

"8 per cent passed one unit or the equivalent. This is obviously an unsatisfactory record for a full-time student though it is not one of complete failure.

"8 per cent passed no units or, in a few cases, half a unit only (e.g. a reading knowledge of a foreign language). These students failed completely or very nearly so.

"Thus 84 per cent of these full-time students completed degrees or diplomas, or passed two or more units or the equivalent; and for every student who passed only two units there were more than four who passed at least three," said Mr Danks.

"The figures I have given in this statement include all students who were enrolled on 1 April, 1968, not merely those who actually sat the final examinations. As everyone knows, some students drop out for reasons - severe illness, for example - that have nothing to do with their ability or conscientiousness. If these had been excluded from the compilation, the proportions of both full-time and part-time students with successful records would have been somewhat higher.

Part-time Students

"There were 2,354 part-time students. Of these:

"10 per cent completed a degree or diploma;

"18 per cent passed two or, rarely, three units or the equivalent;

"37 per cent passed one unit or the equivalent;

"35 per cent had no passes to their credit, or, occasionally, a half unit only.

"In the case of part-time students, a pass in one unit can usually be regarded as evidence of a successful year's work. Indeed, nearly three-quarters of those who passed one unit did not attempt more than one. On this criterion, a

total of 65 per cent of part-time students had satisfactory records.

"I give these figures in some detail so that readers may draw their own conclusions. It will be widely agreed, I think, that the situation as a whole is a better one than has often been assumed, and that this will be true even if it turns out, as it well may, that the figures for the university system as a whole are not quite as favourable as those for Canterbury and Otago alone. It has, indeed, been easy to gain mistaken impressions. For example, it has not always been realised that failure rates among first-year students, which are frequently cited, are much higher than those for students beyond their first year. The Canterbury and Otago returns for 1968 show that whereas 13 per cent of first-year full-time students failed completely, the figure was only 6 per cent for full-time undergraduates in later years. The corresponding figures for part-time students were 51 per cent and 29 per cent. After a poor start in their first year, many students either find their feet and do satisfactory work or drop out of the university altogether.

"If the proportion of students with successful records is a good deal higher than many people have assumed, it does not follow, of course, that the situation is completely satisfactory. For my own part, I readily agree that a problem of failure still exists and calls for continuing attention. The universities are, in fact, seeking to improve the general level of student performance still further both by positive measures designed to help the student to make the best of his abilities and also, in some cases, by a rather more stringent application of the provision for excluding students who, after a fair trial, show little aptitude for university work. Looking at the picture as a whole, however, I consider that the returns from these two universities gave cause for a considerable measure of satisfaction. Particularly is this so if, as I believe, the standards of achievement required for passes are in general higher today than ever before," Mr Danks said.

The City Council has been informed that it is not the policy of the University to restrict enrolment of students according to their geographical location. The City Council had suggested that if entry to the Engineering School must be restricted, preference should be given to applicants from the South Island and particularly Canterbury.

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SEARCH FOR FOSSILS

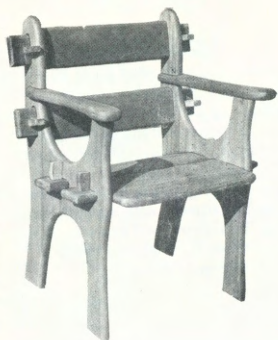
A search for fossils of four reptiles which roamed the southern seas 80 to 90 million years ago is being made in North Canterbury by Dr Samuel P. Welles, of the Museum of Palaeontology at the University of California, Berkeley. Dr Welles was awarded a Fulbright grant to come to New Zealand and his visit is sponsored by the Geology Department with support from the Zoology Department and assistance from the Canterbury Museum and the New Zealand Geological Survey.

Dr Welles is a world authority on plesiosaurs, sea reptiles which first appear in the fossil records about 200 million years ago and evolved into forty-foot sea serpents with huge paddles. They became extinct with the dinosaurs. Hundreds of specimens of fossilised bones have been found in the Waipara, Amuri Bluffs and Cheviot districts during the last 100 years and Dr Welles hopes to identify and classify the specimens to build up a picture of the reptiles and possibly to put together a composite skeleton of each.

Plesiosaur fossils were first discovered in North Canterbury in 1859 by J.H. Cockburn Hood, who sent them to Sir Richard Owen, of the British Museum. Other geologists also collected specimens and in 1968 a shipment was loaded aboard the sailing vessel Mataoka, which also had a cargo of flax for Britain. Somewhere in the Indian Ocean the flax caught fire by spontaneous combustion and the fossils went down with the ship. The collection included the only complete skull ever found.

Since then many specimens have been found by, among others, Sir Julius von Haast, founder of the Canterbury Museum and the first professor of geology at the University, Captain F.W. Hutton, the second professor of geology, and Sir James Hector, who published the first paper in New Zealand on the New Zealand plesiosaurs. Dr Welles hopes to build from these collections and from what he discovers while working in North Canterbury.

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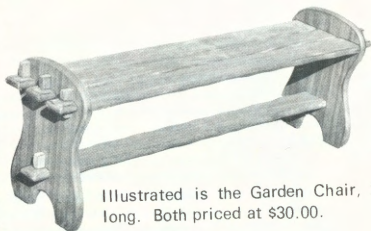


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