GENERAL PROPOSALS FOR FORESTRY EDUCATION
AT THE UNIVERSITY OF CANTERBURY, 1966

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In 1921, in accordance with the terms of a special bequest, a Lectureship in Forestry was instituted at the Canterbury University College. That year, Charles E. Foweraker was appointed Lecturer in Botany and Forestry. Four years later, the University of New Zealand recognized Canterbury as a School of Forestry.

The School of Forestry, under the direction of Mr Foweraker, continued until 1935 when it was forced to close, consequent upon the withdrawal of the Government grant. The Canterbury University College, however, remained keenly interested in the re-establishment of the School at a future date. Thus, in the mid-forties, J. H. E. Schroder, a sometime Chairman of the University College Council, and A. E. Flower, the then Chairman, put the case to the Minister of Forests for re-establishment at Canterbury. This view was not supported by the then Director of the State Forest Service who favoured a Forestry School at Rotorua which would co-operate with the University of New Zealand, although it would be outside the University system.

So far as I understand it, the two conflicting proposals were placed before the Senate of the University of New Zealand. This culminated in a survey and report to Senate by Professor Wadham, of Melbourne. Senate dismissed the Rotorua proposal and resolved in favour of a School at Auckland University College. There the matter lay without any further positive developments until the early 1950s. Canterbury Agricultural College and Canterbury University College, however, continued to keep the matter under active review. In all of this Dr M. M. Burns, the Principal of Lincoln College, and Mr Schroder were lively protagonists for the re-establishment of the School at Canterbury.

In 1961, discussions were held by the University of Canterbury and Lincoln College with the Director-General of Forests about the possible introduction of forestry courses and the location on the Ilam campus or at Lincoln of the Forest and Range Experimental Station. This is in accord with the general policy of the Council of the University of Canterbury encouraging “the establishment at Ilam of non-university research institutions of academic worth”. During 1962, Government agreed in principle to the Forest Research Institute for the South Island being located at Ilam. At the same time, the University of Canterbury was drafting its Quinquennial Submissions to the University Grants Committee for the period 1965-9. Included in these was its case for the re-establishment of the School of Forestry at Ilam to open in 1968 or 1969.

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In 1963, several discussions took place involving the University Grants Committee, Lincoln College, the Forest Service, and the University of Canterbury. All of these activities over the years culminated on 10 September 1964, when the Hon. the Minister of Forests, R. G. Gerard, announced that the siting of the School had been closely studied and the final choice by the University Grants Committee was unanimous. "As a centre for the teaching of forestry and related subjects, Canterbury would have few parallels, if any, throughout the world," he is reported as saying.

In June 1965, the University of Canterbury asked the University Grants Committee to provide finance to enable the Professor of Forestry to take up his appointment in August, 1966, in order to study overseas and in New Zealand for up to two years in universities and in the forest industry at industrial and government levels. Approval for this was granted by the Minister of Education and the University received the telegram to this effect on its last working day in December, 1965. The "Conditions of Appointment for the Foundation Chair of Forestry" were printed and despatched between Christmas and the New Year and arrangements made for advertising internationally with applications closing on 15 March 1966. In its quinquennial case to the University Grants Committee, the University of Canterbury called for the re-establishment of course and research work at Canterbury leading to the Degrees of Bachelor of Forestry, Bachelor of Forestry (Honours), Master of Forestry, and Doctor of Philosophy. This course and research work is envisaged as part of an integrated academic development concerned with studying timber production and utilization.

In setting up the Faculty of Forestry, it will be the responsibility of the Professor of Forestry to plan the course structure and related prescriptions. Only a very tentative course structure has been considered so far. The actual course structure and related prescriptions as decided by the professor will have to have the approval of the Professorial Board and the Council of the University of Canterbury, and the Curriculum Committee of the University Grants Committee. (The members of the Curriculum Committee comprise the Chairman of the University Grants Committee, the Vice-Chancellors of the six universities, the Principal of Lincoln College, the Director-General of Education, and four members appointed by the University Grants Committee who comprise at present one professor from each of the metropolitan universities.) It will also be the professor’s responsibility to develop the case for staffing, accommodation, and finance needed by the Faculty for submission through the University Council to the University Grants Committee. In all these matters — courses, prescriptions, staffing, accommodation and finance — the University Council will be looking to the new professor for leadership, advice and recommendations. By requiring him to spend an extended period studying forestry education outside New Zealand, and the forest industry in all of its aspects within New Zealand, the University Council expects the Professor of Forestry to have opportunities and time to receive and consider impressions, opinions and advice from all possible sources. The University Council expects the Professor of Forestry, therefore, to meet as soon
as possible and to work with, as far as is practical, workers in all branches of the forest industry in New Zealand.

If the appointee comes to the post from within New Zealand, the University envisages him planning his initial study leave in such a way as to enable him to become conversant with the best of advanced forestry education overseas and with those branches of forest production in New Zealand with which he is least familiar. If he comes from overseas, the University envisages him spending more time in New Zealand on study leave than a local appointee. In all of this, it is the clear intention of the University Council that this new specialist professor should be exposed as soon as possible, and before planning for the Faculty is too far advanced, to the opinions of the professional workers in the New Zealand field. This requires much more than the mere examination of written opinions. It requires the Professor of Forestry to meet, talk, and work for extended periods with people in the industry, in their government offices, in their managerial offices and board rooms, and in their factories, mills and forests. Ideally he must get to know the views of the profession in all of its aspects; and this cannot be done satisfactorily other than by his getting alongside of and getting to know the individuals themselves. In turn, the non-academics must get to know him. This is an essential part of the whole scheme. The Professor of Forestry must come to know and be known to the professional workers in short order; and more than that, he must gain the respect and wholehearted support of all in the forest industry. This can only be done by his getting out into the field.

It is to the Professor of Forestry, therefore, that opinions on forestry education should be directed and preferably to him in person, face to face, not merely in professional assembly, but individually and in small numbers. If the Institute has collective opinions, they should, by all means, be recorded for him to see. But, in due course, members must meet him and talk things over with him personally.

The University Council, in turn, is trying to do all it can to enable the profession to get to know the new professor and for him to become aware of the special and the unique features of the forest industry in New Zealand from his own first-hand experience, for no matter from where he comes in New Zealand he will not be equally conversant with every aspect of the industry, or as thoroughly conversant as the University wishes him to be.

I have stressed this aspect of personal contact at the outset because the University believes this to be of vital importance to the whole scheme. My Council is well aware that in making this appointment it has a grave responsibility to the forest industry as a whole, to the University of Canterbury, and, even more important, to the future wellbeing of the people of New Zealand, since this is the only Faculty of Forestry being planned in the foreseeable future for this Dominion. Unless the University can appoint a first-class man, no appointment will be made. No risks can be taken with this appointment.

The Professor of Forestry will be appointed by an ad hoc committee specially set up by the University Council for this
purpose. This is the procedure that has been followed by the University of Canterbury for many years now. The forestry appointment will be treated no differently from similar appointments in other disciplines. Why should it be? The ad hoc committee comprises the members of the Executive Committee of the University Council together with four professors of the University. There will be no representatives on that committee of any professionally interested body. The enabling Act of Parliament lays the full responsibility on the University Council to govern the University and in so doing to institute the office of professor, and to appoint and remove all professors.

There is one further observation which relates to the salary the University can offer since this must, to some extent, limit the field of possible applicants. The present range of professorial salaries in non-clinical departments in New Zealand universities is £3,250 to £4,000. Nothing above this can be paid. The University Grants Committee has made a special recurrent grant to the University of Canterbury from April this year to enable it to pay the salary of the Professor of Forestry and to meet the costs of his immediate study leave. No other commitments have been entered into by the University Grants Committee other than financing this one appointment. Everything else relating to the establishment has still to be argued — by the professor himself following his appointment.

While the University is allowed to pay up to £4,000 to any one professor, the overall grant made to the University for professorial salaries is calculated on an average salary of £3,500 per year. In the instance of the Chair of Forestry, the University Council itself is prepared to find from its professorial salary account the additional £500 for it to be able to offer up to £4,000, if that be necessary. The extra £500, therefore, would be found at the expense of other professors in the University whose salaries as a result would be less than the £3,500 average. But even £4,000 — the maximum amount the University can lawfully offer — is £410 below the average professorial salary paid in the United Kingdom and £200 below the basic salary of professors in Australia.

It may well be that the Foundation Chair of Forestry at Canterbury will attract applicants of high international calibre for reasons other than salary, such as the opportunity to play a major role in the advanced education of forest industrialists, or the undoubted attractions of the New Zealand way of life. But for such limitations that may be placed on the field of applicants because of the non-competitive salary level, the Institute of Foresters is implicated for I have heard no murmur against the low level of university salaries in New Zealand. We New Zealanders cannot expect to get, in general, any more than we are prepared to spend; but this general rule of life does not seem to stop us from expecting more than a fair return on our money. It is to be hoped that in this particular case there will be a number of highly-qualified candidates; but the University cannot be blamed for not attracting first-class men for second-class international salaries.

There are only three things firmly decided so far by the University and by Government relating to the re-establishment of forestry education in a New Zealand university; first, that the Forest and
Range Experiment Station will be established at Ilam; second, that a Faculty of Forestry will be opened in 1968 or 1969 at Ilam; and third, that the foundation professor should take up his Chair as soon as possible after his appointment. All other matters pertaining to the Faculty remain until the Professor of Forestry can guide us on course work, prescriptions, staffing, finance and accommodation. While the University of Canterbury has views on these matters, it will look, as it has always done in the past, to the foundation professor for leadership, advice and specific recommendations.

The general views of the University were set out in the document printed for the guidance of possible applicants, and its existence has been advertised in the metropolitan newspapers. In the section headed “Faculty of Forestry” it states quite flatly:

“The Council of the University will look to the Foundation Professor to advise it on the detailed planning of courses, staffing, and accommodation at Ilam.”

It then goes on to say:

“It is envisaged that there will be a course leading to the degree of Bachelor of Forestry comprising two years of basic science followed by two years of forestry studies, and that a further year of post-graduate forestry studies will lead to a Bachelor of Forestry (Honours). It is further envisaged that students could proceed to a masterate degree in Forestry for a further year’s work on a thesis or a degree of Doctor of Philosophy following the completion of a Bachelor of Forestry (Honours).”

The careful use of the word “envisage”, that is, “to set before the mind’s eye”, “to contemplate”, throughout this brochure is wholly intentional. The document is intended to give potential candidates as clear a picture as possible of the overall thinking of the University Council at this moment in time about forestry education. We have been led to believe by forestry educators of the highest international standing, and notably by Dr N. A. Osara, that our general thinking on this matter is in accord with that of some of the most advanced forestry teaching overseas. The specific subjects and units to be included in the various forestry degrees at Canterbury will be decided only when Council has received from the Professorial Board the recommendations of the foundation professor. But it has seemed reasonable to contemplate two years of basic science followed by a further two, three, or five years of specialist professional study. This is the present pattern of Canterbury science degrees. There is also ample precedent for this sort of degree structure in some of the best university systems overseas. This is as far as I can take this aspect of the forestry degrees, for their specific structure is as yet unplanned. It is to the professor who “professes” this discipline that the University will turn for specific recommendations in due course.

The pamphlet goes on to say:

“The new Faculty of Forestry aims at establishing course and research work in Forestry at the University of Canterbury as part of an integrated academic development concerned with the study
Council envisages the study of timber from its beginnings as a seed in the soil through to its use in the building, furniture, pulp and paper, and associated wood product industries in New Zealand. It envisages forestry courses being taught and related research work being conducted not merely by the staff of the Department of Forestry, but also by specialists from some fifteen other departments and associated research facilities at the University of Canterbury and Lincoln College. The use of specialist teachers and special research facilities in this way from a number of inter-related fields of study is being encouraged strongly by the Councils of the University of Canterbury and Lincoln College in several academic fields. The following institutes and departments (or teaching sections within departments) would be closely associated with the Faculty of Forestry at the University of Canterbury: The South Island Forest Research Institute of the New Zealand Forest Service to be built at Ilam contiguous to or as part of the new Faculty building; The Department of Botany at Ilam; The Department of Soil Science (Forest Soils and Soil Conservation) at Lincoln College of the University of Canterbury; The Departments of Zoology (Entomology and Wild Life Management) at Ilam and (Animal Ecology and Entomology) at Lincoln College; The Department of Agricultural Economics (Forest Economics) at Lincoln College; The Department of Law (Forest Law) at Ilam; The Department of Civil Engineering (Building Technology) at Ilam; The Department of Chemical Engineering (use of Synthetics plus post-graduate Paper and Pulp Technology) at Ilam; The Department of Civil Engineering (Photogrammetric Studies) at Ilam; The School of Fine Arts (a new Furniture Design course) at Ilam; The Department of Geography (Climatology and Biogeography) at Ilam; The Departments of Mechanical and Civil Engineering (Strength of Materials) at Ilam; The D.S.I.R. Botany Division (Forest Ecology and Cytology) at Lincoln; The Tussock Grasslands and Mountain Lands Research Institute at Lincoln; and a possible new Faculty of Architecture at Ilam.

In some aspects, the key to the final section in the brochure relating to the “Faculty of Forestry” proper is contained in the sentence: “The use of specialist teachers and special research facilities in this way from a number of inter-related fields of study is being encouraged strongly by the Councils of the University of Canterbury and Lincoln College in several academic fields.” I am told that concern has been expressed by some professional foresters at the suggestion that teachers from other disciplines might be better qualified to teach certain subjects or parts of subjects in some forestry degree courses. Similar concern has been shown in the past by some university teachers in certain disciplines. Yet these teachers have been driven to admit that reality is not itself divided up into compartments or clearly-defined fields of study that are set off by clear boundaries from other academic disciplines.

Today in the University of Canterbury university teachers move a lot more freely for part of their teaching duties from one department to another. In the case of the present two-year undergraduate course in American Studies and in the postgraduate course on Business Administration, teachers in related fields share
all of the course work. There is no one lecturer appointed solely in American Studies or Business Administration, for no departments for these disciplines exist.

In the present case, all that is envisaged is that the same sort of inter-related teaching and research occurs with forestry studies as is now occurring with several other disciplines. In many of the other professions, including medicine, dentistry, engineering and veterinary science, the basic course—and sometimes the basic, non-professional degrees themselves—are taught by specialists from other disciplines. I think we are likely to see more and more of this sort of development occurring in other professions and within the professions mentioned. And since the responsibility for planning the degree structures and the contents of and prescriptions for the specific courses themselves rests with the deans or heads of departments concerned, there can be no question of developments such as these being forced upon a faculty or teaching department against its wishes. It would be impossible, in my opinion, to force a faculty against its wishes to plan a certain type of degree, or to include a certain course or subject, for the faculty itself is the body that initiates recommendations affecting its own degrees. Nothing but added strength can come to the Faculty of Forestry by its heads of departments in due course looking to the heads of other university departments, and to specialists outside of the university proper, to undertake some or all of the basic courses and to share such parts of the advanced courses as the forestry teachers desire them to undertake. It would be pretentious if specialist teachers in any professional department were to claim for themselves superior knowledge in every branch of every discipline impinging on their own speciality. Who is to teach what must be decided in the first instance by the specialist teachers themselves. They will have to seek the help of their colleagues in other departments as they think fit; and their colleagues in turn will have to make their decision about helping in the light of their own interests, responsibilities and teaching and research loads.

There is another facet that bears upon this matter of course structure and staffing. This is the size of a faculty or specialist teaching department relative to the general staffing pattern throughout New Zealand universities.

In the University of Canterbury today there is about one full-time university teacher for every fourteen equivalent full-time students. It is no consolation for us to be reminded that opposed to the 1:14 in the University of Canterbury is the United Kingdom average of about 1:7 or 1:8. However, we have to do the best we can with the money that Government gives us to run the University, and Government can distribute only as much as you and I are prepared to give it as taxpayers. The ratio of staff to students varies from faculty to faculty within the University of Canterbury and from department to department within a faculty. By and large, however, the specialist, professional faculties, such as Engineering, require a more favourable staff/student ratio than the non-professional. The same holds true for Medicine, Dentistry and Veterinary Science, amongst others, I would imagine. I would also envisage that the staff/student ratio in the Faculty of Forestry will be more favourable than for the University of Canterbury as
a whole. The question is only—how much more favourable? Should it approximate to, be less favourable, or more favourable than for engineering students, considering, too, that theirs is a large and well-established School which might or might not need proportionately as many staff to students? I, personally, cannot answer such specific questions.

In making its general proposal to the University Grants Committee, the University Council suggested a staff of four academic teachers at the outset, but this can be nothing more than a guess. Only the new professor can advise on the precise number of staff needed after he has first planned his courses. Only when he has planned these and arrived at his theoretical staff requirements will he, or anyone else, be in a real position to make valid recommendations about the staff/student situation for the new faculty. It is a waste of time to try to reach a practical and useful conclusion by any other route. Evidence of what pertains in other parts of the world may be useful at the right time to help persuade the University Grants Committee, and later Government, of the special staffing needs of a given department or faculty, but such evidence has no intrinsic value unless it is related to specific plans for a specific situation in the context of New Zealand. This we know in the universities to our sorrow with respect to university salaries, and to our staff/student ratios, among other things. The specific case for specific staffing will be argued when the foundation professor has decided on the necessary courses and has estimated student numbers.

As I have already indicated, the University Council will look to the foundation professor to prepare the case to be presented to the University Grants Committee for the necessary accommodation for the Faculty of Forestry. The University envisages that such accommodation should be provided in either a separate building, or as part of a new complex in which would be incorporated the staff of the South Island Forest and Range Experiment Station and possibly the new School of Architecture.

That brings me back full circle to the initial concept that is held by the University Council of Forestry Studies being a part of a whole complex of inter-related disciplines comprising engineering (with pulp and paper technology, photogrammetry, building science, and strength of materials), architecture, fine arts (for industrial design and furniture design), science and forestry. As the Council of the University of Canterbury stated in its earlier submissions to the University Grants Committee on this subject:

"It is now well accepted and widely appreciated by Government that New Zealand will have to expand its output of timber and of wood products for export markets and for national consumption if it is to prosper in the years that lie ahead. Norway, Sweden and Finland have made a reputation for themselves by their imaginative and scientific use of their forests for house, commercial and industrial construction, and for paper pulp, matches and furniture. The pattern is one that could profitably be followed by New Zealand."

It is no exaggeration to state that there are many well-informed New Zealanders who see in the development of forestry and forest
industries in this Dominion, the partial economic salvation of our nation. The Council of the University of Canterbury is only too well aware of its vitally important role in all of this, as the university in New Zealand selected by Government to provide advanced professional forestry education. In discharging this role, I have every expectation that the University of Canterbury will graduate Bachelors, Masters and Doctors in Forestry Science who will be comparable in standard with the graduates from its other faculties — and the best of these graduates, Canterbury may claim with justice, are equal to the best of any university in the world.