

In addition to the work prescribed above a candidate in his third professional year will be occupied in the more intensive study of one of the following subjects, which will be chosen by the student in consultation with those who direct his studies:—(a) Logging Engineering, (b) Silviculture, (c) Forest Management, (d) Chemistry of a Forest Product, (e) Forest Entomology, (f) Forest Botany, Ecology, Dendrology, Mycology, (g) Forest Economics, (h) Other forestry work as may be arranged under supervision. The time which must be devoted to this special study must be not less than twelve hours per week throughout the session, and a special examination will be held in the subject chosen by the candidate.

Candidates must perform twelve months' approved field work and must produce a St. John's Ambulance Association Certificate.

The course is eminently a practical one and the standard is lower than that required for the Degree. It is suitable for students who have allowed some time to elapse since matriculating and who cannot, for various reasons, spend the minimum of four years required for the Degree course. It will qualify men to hold executive positions in the field, but is not of high enough standard to turn out men fully equipped for research in the higher branches of forestry; for such higher work the Degree course is intended as a training. The staff of the School wish to make it clear that only in special cases will students be advised to proceed to the Associateship.

EXAMINATION RESULTS

Following is the class list for the 1927 College Examinations in regard to the Associate and Ranger Courses. Results of the University Examinations for the Degree Course are not yet to hand at time of publication.

I.—ASSOCIATESHIP—(Final)

Logging Engineering, History of Forestry, Physical Geology, Elements of Chemistry, Drawing, Strengths of Materials (Elementary):—A. F. Clark.

II.—RANGER'S CERTIFICATE

Forest Mensuration:

- Class 1.—D. Kennedy.
- Class 3.—W. S. Tannock.

Forest Utilisation:

- Class 2.—D. Kennedy.
W. S. Tannock.
- Class 3.—R. J. McLaren.
H. Roche.
D. Turnbull

Logging Engineering:

- Class 3.—H. Roche.

Elements of Forestry:

- Class 1.—D. Kennedy.
- Class 2.—D. Turnbull.

Forest Botany:

- Class 1.—D. Kennedy.
- Class 3.—D. Turnbull.

Silviculture (Elementary):

- Class 1.—D. Kennedy.
- Class 3.—D. Turnbull.

Silviculture (Advanced):

- Class 1.—W. S. Tannock.
- Class 2.—R. J. McLaren.

Dendrology:

- Class 2.—R. J. McLaren.
W. S. Tannock.

Forest Entomology:

- Class 2.—R. J. McLaren.
W. S. Tannock.

THE NEW PROSPECTUS

Simultaneously with this issue of *Te Kura Ngahere*, the Canterbury College School of Forestry is issuing a new prospectus—the second since the School was established. The first edition was issued in December, 1924, and contained information concerning the courses of study provided by the School and concerning its general organisation and facilities for work.

During the past three years great changes and greater progress have occurred. The Degree and the Associateship Courses have been re-arranged, broadened, raised in standard, and altogether made more efficient. The Ranger Course has been correspondingly widened; the scope of laboratory and field work has been extended; research projects have been undertaken and altogether the general activities of the School have embraced a much larger field.

To meet this progress a new prospectus was deemed essential by the authorities and the edition of December, 1927, is in the form of a booklet of 28 printed pages and eight full page illustrations. This prospectus sets forth the history and organisation of the School, its aims and work, its numerous facilities for laboratory and field work, and its research projects. The regulations for the Degree of Bachelor of Forestry Science and for the Canterbury College School of Forestry Associateship are given in full. The Ranger Course is explained and information is given concerning

such matters as vacation employment for students, hostels, University scholarships, College societies and athletics, etc., etc. The full page, well chosen illustrations are reproduced from photographs taken of the School's range of activities such as laboratory and field classes at work and typical forest areas where practical forestry work is carried on.

On the whole the prospectus forms a very efficient handbook for the forestry student and for those interested in forestry education, and it should do much to bring the general public into touch with what is being done at Canterbury College in providing a University course in forestry.

RESEARCH 1927

Following is the record of work achieved during the past year by the School of Forestry, in the nature of original investigations into forestry problems.

I. Canterbury Economic Survey:—

This project was again the principal effort of the year, the whole of the 1926-1927 long vacation having been devoted to this project by Mr. Hutchinson, assisted by A. W. Russell. This was the second and final section of the survey and comprised a forest policy for Canterbury, based on the situation in regard to forest economics revealed by the survey of the previous year. The sections of the policy concerned themselves with the mountain protection forests, the forests of the plains, and the matter of improved forest utilisation. The first dealt with the control of flooding in the large rivers, the efficacy of forests in controlling run-off and erosion, the adequacy of the present forests, and advisable extensions of the forest area, together with a full discussion of matters pertaining to the management of such forests, including the problem of establishing cheaply a forest cover on hillsides now bare, the question of grazing control, and the menace of the deer to the well-being of the forest.

The second section dealt with the artificial forests of the plains, the systems of exotic plantations now in existence as a result of private, local body, and State enterprise; their present value, their utility, and their future possibilities in the way of waste land utilisation close to the consuming centres of the province. The third section had for its field the matter of forest utilisation in the province. The present methods of production, consumption and distribution, but primarily the latter, were analysed, avenues of wastage and inefficiency indicated, and possible ways

and means of improving the present state of affairs were put forward and discussed.

The report was furnished to the State Forest Service in April of this year, and that Department has now asked that an abridged edition, suitable for publication, be prepared, with a view to its issuance as a bulletin some time during the coming year.

II. Investigations into Growth and Yield of Exotic Plantations in Canterbury:—

The past year saw a considerable increase in the scope of this project, the number of plots being considerably increased, so that not only will the data gathered be enlarged, but the new plots will considerably enhance the value of the results from those already under observation. Activities commenced during the Easter vacation when a new plot was established in a Douglas fir stand at "Springbank," the estate of H. B. S. Johnstone, Esq., of Otaio. Douglas fir, among other species, is being used here in the planting up of steep terrace faces to prevent their inundation with gorse and other noxious weeds. This is the first of the plots to be established so far south, but it is hoped to extend the range of observation plots in this district in time to come. The Burke's Pass plots were remeasured also at this time, and good growth recorded, the average increase in height being two to three feet, the former figure representing the *P. ponderosa*, and the latter the larch, with *P. laricio* in between. For all three species, mortality for the sixteen months elapsed was nil.

The eight plots established in 1925 in various young stands of the Selwyn Plantation Board were next remeasured, and increases of over three feet in height were recorded for *P. radiata* in the open. On the whole the growing year was good throughout Canterbury, and losses were slight in all species. Four new plots were established in the Selwyn system, all being plots which were needed to correlate site or other factors under observation on the eight original plots. For instance, one plot was installed at Kirwee in a stand of diseased eucalypts underplanted by pines, where the effect of the shading was to be observed. The new plot being established close by in a large opening in the gum overstand gives a comparative study which will enable the effect of the shading to be recorded on the basis of a similar site quality. The other three plots in a similar way are designed to furnish comparative data between different species on the same site or different sites for the same purpose.

The result of the three years' work to date on this project has now been compiled, and a typed copy is available for study in the School of Forestry Library. This will be enlarged each year with the current season's data.