

were made into the relative distribution of male and female trees; the cycle of seed production, seed years, and viability of seed; the extent of reproduction present under various conditions of mature forest, logged off areas, grassed and cleared areas, etc.; the range of effective distribution of seed; the silvical conditions affecting seedling growth and development, and the growth and development of rimu stands of various ages. These investigations led to the establishment of a series of permanent sample plots on which growth and development may be studied by means of periodic measurements. Some time must of necessity elapse before any definite conclusions can be drawn in regard to a number of the sections mentioned. However, concrete data was obtained under several of the investigations, and inferential data under others, and the report furnished to the State Forest Service at the conclusion of this summer's work contains ground for considerable optimism in regard to the physical possibility, should it be found economically desirable, of securing a reasonable natural reproduction of rimu stands following logging, within a reasonable time.

As a result of contact gained during the past summer, Mr. Hutchinson has set out in an article appearing in this issue of *Te Kura Ngahere* a hypothesis in regard to the growth and development of Westland rimu stands, which presents theories somewhat at variance with those generally accepted. It is hoped that this article will stimulate interest in this aspect of New Zealand forestry, and serve to provoke discussion and comment upon the views set forth.

III. Investigation into Minute Structure of Wood.

Further work has been done during the past year by Mr. C. S. Barker, for the Forest Service, under supervision of the School of Forestry, in studies of the anatomy of New Zealand woods. For the past year, in addition to minor projects as identification specimen of wood, etc., the principal work done has lain in the preparation and mounting of microscope sections of a great number of New Zealand woods, preparatory to the making of a detailed study and comparative analysis of structure. Most of the softwoods and a considerable number of the hardwoods native to New Zealand have now been treated in this way.

In addition to Mr. Barker's work just mentioned, the students of the regular course in wood technology at the School of Forestry have inaugurated during the past year a detailed comparative structure study of the native woods. A commencement has

been made with the three native members of the genus *Phyllocladus*, a genus not so far exhaustively treated of in any comparative structure studies of wood now available. This study will not be completed until next year, after which time it is planned to extend the work to other native timbers not heretofore thoroughly described.

Club and School Jottings.

FORESTRY CLUB.

The first meeting of the Forestry Club for the session of 1928 was held in the Forestry Laboratory, when the following new members were welcomed to the Club:— Messrs. C. Sando, from Victoria University College; F. J. Billings, from King Edward VI. Memorial College, England; P. G. Whitehead, of Dunedin; and L. Roberts and J. Martin, both of Christchurch.

The officers elected for the year were:— President, M. R. Skipworth; vice-President, D. Kennedy; Secretary-Treasurer, D. Turnbull; additional committee member, G. H. Hocking; editor of *Te Kura Ngahere*, C. T. Sando.

It was decided to change the date of election of officers to the last annual meeting of each year, the officers then elected to serve for the following year, as making for more continuity of policy than the old method.

After the election of officers, Mr. C. H. Reece, Forest Extension Officer in the State Forest Service, gave us an instructive lantern lecture on "Various Forestry Points of Interest in the South Island," showing some very interesting slides of the various plantations, homesteads, pruning operations, etc., with which he has come in contact during the last few years.

The next meeting was held on April 13th, when the President, Mr. Skipworth, gave an account of the afforestation by the Dunedin City Council. He described in some detail the work carried on at the various places under the Council's administration, and particularised on silvicultural practice, and on growth and yield. The different climatic conditions in the suburbs of Dunedin provoked considerable discussion.

On April 27th, Mr. and Mrs. F. E. Hutchinson entertained the Club at their home in Papanui. At this meeting, which took the form of a debate, the subject for discussion was that "the Exotic Plantations will be of more use to New Zealand than the Native Bush." Messrs. McLaren, Kennedy and Turnbull spoke for the motion, which was

opposed by Messrs. Barker, Hocking and Skipworth. After giving a comprehensive summing up, our host who acted as chairman, cast the vote in favour of the opposers. The President then read a letter of appreciation and farewell to Mr. H. Roche, who left the next day on transfer to Palmerston North.

The last meeting of the first term was held on May 11th, when Mr. Kennedy gave a brief outline of the work done by Canterbury College in the investigation of growth and yield in exotic conifer plantations of this province by means of the permanent sample plot system. He mentioned the great difference in altitude, climate and soil in the areas picked for these plots throughout Canterbury. The general low mortality throughout Canterbury was a surprising feature.

The first meeting of the second term was held on June 15th, when a very interesting address on "Vacation Work in Southland" was given by Mr. G. H. Hocking, who was employed by the State Forest Service in that region during the last long vacation. After describing his many occupations, cruising, clearing, nursery and office work, he gave a short discourse on the general conditions prevailing in that region.

Mr. Jas. Deans, of Homebush, addressed us at our next meeting on July 10th on "Some Aspects of European Forestry." He first told us of the general beauty of the woodlands in England, enlarging on the description of the New Forest, which is in all 60,000 acres, of which only 16,000 is actually planted in forest. The Forest of Dean was planted over 400 years ago for shipbuilding, the main tree being oak, with larch and Douglas fir intermixed. The Sherwood Forest, which was mature in the reign of Charles II., is now under protection as a scenic reserve. Illustrating his address with over a hundred photos, Mr. Deans then described forestry practice as he had observed it in actual progress, in his visits to the main forests of England, Scotland, France, Belgium, Germany and Switzerland.

On July 27th, Mr. C. S. Barker delivered an instructive paper on "Some Points in Wood Anatomy." With numerous microslides of his own preparing, Mr. Barker was able to point out some peculiarities in the structure of the timbers with which we are more commonly acquainted.

In the third term, but two meetings were arranged for. On 28th September, Mr. Hutchinson delivered a paper, which appears elsewhere in this journal, dealing with some theories in regard to the silvical nature of the Westland rimu bush, with an outline of

the programme being drawn up for investigation into the growth of these stands.

The final meeting, the annual general meeting of the year, has not yet taken place at time of Te Kura Ngahere going to press. It is planned to make this meeting social in nature, and it is probable that it will be combined with the annual dinner as the last Club function of the year. The officers for the 1929 session will be elected at this meeting.

FORESTRY STUDENTS' LOAN FUND.

In recognition of the value received by reason of their forestry training, and as a mark of appreciation of what the Canterbury College School of Forestry has done for them, the past students of the School have originated the idea of inaugurating a loan fund for forestry students, to enable those of limited means to complete their courses through the assistance of this fund. Such loan funds are, of course, no new thing, but are common at many Universities. The basic points in connection with this suggestion, however, are, first that the fund should be a private one, administered as the past students jointly shall decide, second that it should be available for all students in forestry at Canterbury College, including Ranger as well as Degree course students, and third, and most important of all, that the fund shall be raised and kept going by means of contributions from all past students of the School, in such amounts and at such times as may be possible. It is to be regarded, however, as an obligation binding upon all students, that some time after completion of their course, they shall take their share in helping the scheme forward, for the benefit of those who shall come after them.

The matter was laid before the Forestry Club at its meeting on 28th September, and the view point of the past students explained. The Club approved the suggestion, and on behalf of all present students accepted the challenge to do their share when the time arrives, and to pass on the obligation to all future students upon their joining the Club. The matter being thus definitely accepted in a manner satisfactory to the past students, the fund will be opened shortly, the conditions of its administration being now in process of settlement. In all probability it will be available next year should the necessity arise.

SPRING CAMP, 1928.

According to the now well-established custom, the School of Forestry, at the end of the second term adjourned to the field at Hanmer to put into practice the knowledge absorbed in the lecture rooms and to get experience in such applied forestry as could