

charge of any position of executive responsibility. This was clearly recognised by the founders of the course in Forestry for the University of New Zealand. Regulation XV. provides, inter alia, that "the student must, after matriculation and before obtaining his degree, furnish a certificate signed by the Teacher of Forestry in a Recognised School that he has spent at least twelve months in the actual practice of forestry operations in the field"—a provision which ensures that all graduates in forestry from the University of New Zealand shall have had some experience in actual work which will enable them to more readily apply their technical training to the problems which will confront them upon leaving the College and taking up their positions in forestry work.

This experience is gained mainly during the long vacation, from November until March, when the student is expected to enter the employ of the State Forest Service, sawmilling firm, local afforestation body, or other forestry organisation, to gain a knowledge of methods of procedure from actual experience.

Such work is of great benefit to the student in preparing him for his professional career, and also (a consideration of some moment to most students of forestry in New Zealand), it is a source of income which will play no small part in defraying the expenses of the College course.

It is to be expected that most of the foresters produced by the School will enter the State Forest Service, and as that body is fully aware of the value of thorough practical grounding for its future personnel, an understanding has been reached with the Department that it will provide avenues of employment for the majority of students during the summer months. The Forest Service, of course, does not promise employment to every student—but it will attempt, as far as possible, to give all students at least a trial, after which re-engagement for subsequent field seasons will, of course, depend upon the aptitude and ability of the individual student, and his attitude toward the work.

For the summer of 1925-26 all of the students will be working either with the State Forest Service, or on work done for that organisation.

Roche, of course, continues his official duties as a Ranger of the Canterbury-Otago Conservation Region, with headquarters at Christchurch.

Kingan has left for the Westland Region, where he has joined a field party under Ranger E. V. Stewart, engaged on exploratory reconnaissance of the country at the head of the Ahaura River.

Clark is engaged by Mr. Hutchinson as field and draughting assistant on the Canter-

bury Economic Survey project being done by the School of Forestry for the State Forest Service.

Skipworth and Hamilton both leave shortly for Hanmer, where they will be engaged on nursery and plantation work.

Barker will be employed on the preparation of microscopic slides of New Zealand woods for the Engineer in Forest Products, State Forest Service, working at Canterbury College under the supervision of Mr. Foweraker.

SPRING CAMP—1925.

The first field camp of the School of Forestry was held during the three weeks' vacation following the end of the second term, from 22nd August until 12th September, at Moana, Westland. Through the courtesy of A. R. Thompson, Esq., manager at Moana for William Goss, Ltd., sawmillers, a three-roomed whare in the Company's bush camp at Irishman's Landing, Lake Brunner, was placed at the disposal of the party, providing us with a sure roof over our heads, and a large fireplace at which to warm and dry ourselves, two matters of intense importance on "the coast" when spring is at hand.

There were nine of us altogether—five students, two staff, the Cook, and Mr. Stringer, Registrar of the College, who accompanied the party in a purely unofficial capacity to secure a brief respite from the cares of office. Mr. Hutchinson had preceded us by a couple of days to look over the ground, and lay out the programme of work, and was waiting us at Moana when we arrived by the Westland express on Saturday afternoon. We detrained, and loaded our swags of bedding and personal gear, together with a small mountain of stores and equipment, into the launch for the trip to Irishman's, where our camp was duly established. The following day, Sunday, was spent in cutting firewood and making our whare habitable. With nine men in one building space was at a premium, and scientific storage of gear was necessary. It was the first bush experience for some of us, and the evolution of beds, straps, bootlaces, and a thousand other things from the common flax, was an eye-opener indeed. Even Mr. Archbold, with all his factory, could not evolve furniture like ours.

Serious work began on Monday morning, when Mr. Foweraker led us out to study the ways of the bush, and learn to know at sight the various trees of the Westland forest which heretofore had been simply names to some of us. Mr. Foweraker had talked many times in the lecture room of the "taxad rain-forest." We were now to be introduced to it in person. Under a gentle drizzle we started up the tram

through the old workings, studying the plants and shrubs of the clearing, coming in since the removal of the timber, and the introduction of stock. As we reached the cutting operations, and encountered the virgin rimu stands, it was raining steadily, and by the time we reached the silver-pine swamp and the pakihi it was coming down in bucketfuls. The pakihi was full to knee depth, but as we were already drenched to the skin, we plunged enthusiastically into it, and completed a most successful day by finding a small patch of *Dacrydium biforme*, and then returned to a blazing fire to dry out, satisfied that we had seen the worst. Finding that we were undismayed by this spasm of frightfulness, the weather cleared, and we carried on under a warm and kindly sun, finishing the dendrological work by an ascent of Mt. Hohonu, from the top of which a magnificent view was obtained by those ambitious ones who scaled the last stretch above timber line, Mr. Hutchinson identifying the various topographical features disclosed, even to the recognition of the smoke from Omoto brewery.

Cruising work followed after the dendrology. A twenty-acre block of bush was cut out with compass and chain, a topographic map made, and the timber standing on the area was estimated. This work was carried out under actual field-party conditions, using standard methods as developed by the State Forest Service. Mr. Thompson, the manager of Goss's bush operations, has kindly consented to arrange for the measurement of the timber as it is cut off the block, which will serve to give us a check on the accuracy of the methods employed, and of our application of them. To check our judgment as to merchantable length, defect losses and standards of utilisation, we spent a day on the bush operations, watching the whole process of felling, crosscutting and snigging to the loading bank, thence by tram to the lake, and then the towing across the lake to the mill, where another day was spent in watching the progress of the logs through the mill, to emerge as boards ready for shipment to Christchurch, and in going into matters of waste, efficiency, refuse disposal, and the like. This was followed by visits to other mills in the neighbourhood, where different methods were employed, and the relative efficiency of each system gone into.

The surveying crew then got interested

in tramway location, "shooting in" a grade line for a tram which shall bring out the timber from the area which was cruised, and a considerable tract of country beyond. The line was laid out with compass, chain, and hand level, pegged and hubbed, grade lines selected, and cut and fill calculated, this office end of the work being done during spells of bad weather when out-of-door work was impossible.

While the work of the camp proceeded steadily according to programme, there was a lighter side to the camp-life. By adopting daylight saving habits, and getting to work at seven each morning, provision was made for a long afternoon and evening for boating, swimming (though this sport was popular only with the really hardy birds), writing letters—this being a very popular indoor sport, or, if worst came to the worst, and the day's work had not been strenuous enough to create an appetite, there was always the woodpile to replenish. After tea, yarns by the fireside were a great feature on evenings when no lectures were on the board, but late nights were not indulged in, especially toward the latter end of the camp, when we were rising at 3 a.m. and better, each day, in a vain attempt to catch the loco. to Bell Hill; an attempt which ended finally in our showing our contempt for those effete innovations in the bush by walking the ten miles before sunrise. After the initial day, Sundays were, of course, strictly tapu, being reserved for laundering, making necessary repairs to clothing, boating, photography, or just plain loafing in the sun. There was some talk of a walk through to the famous old diggings at Marsden, along the old Irishman's Track, but it did not eventuate. We got too much scrambling through the bush in too much hours to relish such a strenuous holiday, and the trip to the diggings was called off.

The three weeks passed very quickly, and it seemed that we had just shaken down into camp routine when the day came to roll the swags and return to the studious halls of the College, but everyone of us came back greatly refreshed with our outing of good physical exercise, and our Cook's good table—in fact, to put it in technical language, everyone was able to report an increase in D.B.H. (diameter belt high, or middle girth, as Mr. Roche would put it), with consequent volume increment; and with a clearer grasp of practical forestry and the work which lies ahead when the College course is done, and we go forth to our future duties in the paths of forestry.