

yielded by thinnings is unsaleable, so that the early removal of undesirable is uneconomic. In such cases selection of mother trees will not ensure only suitable progeny, but as one at least of the parents is of good type the results should be definitely better than those from indiscriminate collection. (Incidentally, there can be no absolute guarantee that the offspring will be one hundred per cent true to the type of the parent, as in the case of either inherent characteristics may be modified by accident or environment). Where re-establishment is by means of planting some help can be given, apart from careful adherence to sound technique in lifting, transport and actual planting, by a rigorous culling of nursery stock to eliminate specimens displaying obvious defects or undesirable tendencies, although development in the seedling stage is by no means an infallible guide to suitable economic characteristics in the adult.

Vegetative reproduction offers possibilities, although Richens (Forest Tree Breeding and Genetics, reviewed elsewhere in this issue) states that it has proved difficult in *Pinus* species. A certain amount of experimental work with it has been carried out in New Zealand, and it would be interesting to learn what degree of success has been achieved, and particularly how the trees so produced compared in subsequent vigour and other desirable characteristics with those originating from seed.

Yours faithfully

OWEN JONES.

21 Seddon Street, Rotorua.
16th September, 1946.

In 1929 Field struck cuttings of *P. radiata* at Tangimoana and established a plantation of about half an acre there in the following year—see *N.Z. Journal of Forestry*, Vol. 3, No. 4, 1934. These trees have shown no apparent difference in growth or habit from nearby stands originating from seed. Unfortunately they are in a very exposed position and, like their seedling neighbours, have suffered damage from saline gales.—Ed.

To the Editor,
New Zealand Journal of Forestry.

Forestry Education and Training in New Zealand.

Sir,

The appendix bearing the above title in the Annual Report of the Director of Forestry for the year ended 31st March, 1946, calls for critical examination by all those who are interested in this subject. To allow such a report to circulate without comment by those who have the interests of professional education at heart may result in all forestry training drifting into the bondage of the State for generations.

Accepting the minimum number of graduates (eight) required annually, as estimated in the above report, this provides an adequate number of students to justify the re-establishment of a School of

Forestry as part of a University College. The proposal of a four year course in basic sciences, followed by two years of professional training, provides an unduly long course, which will, in some cases, fail to attract an otherwise suitable candidate. The excessive delay in reaching lectures in professional subjects stultifies much of the departmental work of the student during this four year period, and he is generally incapable of making full use of his opportunities. As a side issue, there is the fact that the State would be paying him during this period and would be able to make little use of him in professional work.

The inadequacy of University staff, mentioned in paragraph 8 as a definite drawback, can be easily overcome by a sufficient grant to the University to enable it to provide the required number of lecturers. From the national viewpoint this would be considerably cheaper than providing a full set of lecturers at a State Forest Service School, which would have no assistance from an associated University staff. The report, however, is very assured of the Department's ability to provide lecturers, "with appropriate experience of a high order" in Administration, Policy, Law, Economics, Forest Botany, Silviculture, Utilization, Surveying, Engineering, etc. The pursuit of knowledge, in the atmosphere of a University, with its full cultural advantages, does not appear to have been considered. Considerations of economy appear to have been given scant attention, but there are grandiose schemes for staff and buildings. It should be remembered that forestry must serve our country, and that rash and extravagant enterprises should not be foisted on a gullible public, which is always in favour of "more forestry."

In paragraphs 11, 12 and 13 extravagant claims are made as to the suitability of Rotorua as the site of a forestry school without admitting its several abnormalities. Why the late Sir David Hutchins should be quoted on possible sites is difficult to understand, because those who knew him in 1920 and all those who have investigated his statements will not be impressed by such a citation.

The extensive areas of indigenous forest adjacent to Rotorua are quoted as one reason for the selection of this site, but the Forest Service should remember that the annual cut of native timbers is decreasing, and will continue to do so. As to management of the podocarp forests, why not state the truth to the general public in the terms of an article written in the Journal of Forestry of 1937.*

There is some possibility of applying forest management to the kauri forests (what remains of them) and the beech forests, but let us not talk loosely about the podocarps. Following cutting, they can be closed up and protected, and they may in a century or more provide a further cut, but let us not mislead the New Zealand public and ourselves as well.

*See: *The Use of Exotic Species in Forestry*, New Zealand Journal of Forestry, Vol. 4, No. 2, 1937.

Rotorua certainly possesses extensive exotic forests, but a smaller forest, closer to a centre of population may be able to provide wiser lessons in forestry than all its broad acres. In addition Rotorua is not at all typical of the remainder of New Zealand. Its pumice soil, its freedom from high winds or heavy snows, and its remoteness from a large centre of population all produce a special type of forest peculiar to the region.

Despite references to democratic methods of training, one is forced to comment on the fact that State trainees will not pay fees (and presumably be also paid a salary by the State Forest Service), while "students other than departmental staff will be required to pay prescribed fees."

If the proposed scheme is as sound as the report would have us believe, may we expect the abolition of the Otago School of Mines and the establishment of a State training school at, say, Runanga? After all the Mines Department is becoming the main employer of mining graduates in the Dominion. Or should the Public Works Department take over the Schools of Engineering and transfer them to centres of departmental activity?

If the Forest Service wishes to aid the cause of forestry education in New Zealand it should recommend to the Government the re-establishment of a School of Forestry, attached to a University College. In addition it can provide suitable work for forestry students during vacation periods as well as entrusting the University with certain research projects. The Service itself will benefit by receiving professional recruits whose minds are not already moulded by departmental shibboleths.

Finally, however, one should read a recent speech by the Chancellor of the University of New Zealand—Mr. Justice Smith—wherein he states:—"The University is an institution which not only trains students to carry out inquiry in all fields beyond the boundaries of existing knowledge, but also may require to conduct independent and impartial investigation within the field of action of the State itself. Investigation in that field should not prejudice the attitude of Governments and their administrators in providing for the finances of the University."

M. R. SKIPWORTH.

Dunedin.

20th January, 1947.