

INDIGENOUS FORESTS OF NEW ZEALAND

IT is rather illuminating to realize that some of our English characteristics are just as strong in a Dominion. The 'hands off the New Forest' controversy when the Forestry Commission suggested undertaking certain operations will be remembered. Beauty spots in that region or elsewhere in Great Britain may chiefly depend upon the presence of a clump or block of old trees—very beautiful things. The argument is that it would be desecration to touch them. Since the trees will not stand for ever, this means that our children or grandchildren will never see that particular beauty spot.

In the report for 1944 of the New Zealand State Forest Service (Gov. Printer, Wellington, 1944) the attitude has arisen on a larger scale. New Zealand has still left a considerable area of its old indigenous forests, although exotic conifers have been planted on a very extensive scale. Arising from the admirable soil conservation schemes now under consideration in the Dominion is one aspect which constitutes a serious threat to these national forests. It is the 'hands off' policy once again. "Well meaning but unrealistic enthusiasts," says the report, "advocate a lock-up-use-not policy of forest reservation, under the mistaken impression that such a practice will perpetuate the principal indigenous species—such as rimu, matai, etc. The exact reverse would occur in most forests. Why do so many of our rimu forests consist of virtually only old trees with seedlings and medium-age trees so few as to be insignificant? The initial cause is the fact that, no matter how prolifically the old trees seed, the humus on the floor is so thick that even when the seeds germinate, roots are seldom able to penetrate to the mineral soil beneath, and most seedlings therefore die." The Director of Forestry, continuing, points out that owing to the density of shade such seedlings as do develop gradually die from want of light, while in other parts of the forests inferior species capable of standing more shade are ousting the more valuable ones.

The Director deals with the whole matter clearly, giving a silvicultural exposition with which a forestry student is well acquainted at the end of his first year's study—data so little known in spite of their elementary nature that ignorance thereof is imperilling the future of the Dominion's indigenous forests. Controlled logging and fire protection are advocated as the methods to be introduced. It is the logging, that is, felling any of the trees, which the opponents object to. The answer is a condemned and disappearing forest.

In connexion with this logging in indigenous forest, an almost inevitable discovery has been made, meriting consideration outside New Zealand. New plywood factories were to provide plywood for defence works and a junior technical officer of the Forest Service was stationed at one of these to assist in the solution of current problems in the manufacture of both casein- and resin-bonded plywood for defence works. Marked advances in manufacturing technique have been made, but there is said to be room for improvement. The tentative conclusion has been arrived at that the high moisture content of rimu and other indigenous logs makes it extremely difficult to dry their veneers in standard driers and at the rates, temperatures and humidities usually employed in plywood manufacture. On the subject

of peeler-logs, it has been established that the quality of the local product, if it is to compete successfully with imported plywoods on a quality basis, will have to be improved. Straightness of grain and reasonable freedom from defects are essential to the production of sheets free from twist and warp, etc.

This applies equally to the logs used in the plywood mills in Britain, where most of the material used is imported. It is the forest officer's business to see that only suitable logs are ear-marked for plywood conversion. As to the standard driers, New Zealand might learn something in this direction from India, at the Forest Research Institute, Dehra Dun; for departures from European practice both in pattern of drier, temperatures, humidities and length of time of remaining in the drier are in practice in that country.

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BRITISH ARMY VETERINARY SERVICES IN THE FAR EAST

A PREVIOUS note (*Nature*, Jan. 13, 1945, p. 60) described the great responsibilities and high quality of the work of the Army Veterinary Services in the Near East. In the Far East, says Brigadier E. S. W. Peatt (*Vet. Record*, May 12, 1945, p. 219), even greater responsibilities are being undertaken. The campaign in Burma made necessary a return to animal transport, and this fact, together with the duty of providing fresh meat for the troops, made necessary an organization for the care of a great variety of animals. The result has been that the British and Indian veterinary personnel has increased to ten times its pre-war strength and further increases are likely.

Adequate training in veterinary tropical medicine was an early problem, and in October 1942 the Indian Army Veterinary Corps Training Centre was established. Its Officers' Training School now gives a training lasting two months to fifty officers at a time and its training wing gives to 1,200 men at a time a course lasting five months. Both courses are designed to produce competent soldiers as well as competent veterinary personnel, because the necessity of military as well as veterinary training has often been demonstrated in the fighting in Burma and Arakan. Farriers are trained in the Army Veterinary School; the classes consist of twenty-four students and extend over sixteen weeks, this training being continuous throughout the year. The same School gives continuous instruction in veterinary first-aid, animal management and the care of cattle, sheep and goats purchased for slaughter.

The care of transport animals used for military purposes involves the care of horses, mules and donkeys used in operational areas; the care of bullocks used on peace stations so that horses and mules can be released for operational work; the care of the camels, which are restricted by climatic conditions to the North-West Frontier and the Punjab; and the care of elephants used in the Burmese jungle. But, in addition to all this work, the Army Veterinary Service has the important responsibility of the control of the military dairy farms, and it has been necessary to set up a separate veterinary organization to deal with these. The Military Dairy Farms Department has increased its milch cattle from 10,000 to more than 60,000, and to-day it is probably the biggest