

its own extensive housing programme the Forest Service is using kiln-dried insignis pine for weatherboarding and flooring. Care is taken in the design of foundations to secure adequate sub-floor ventilation, and weatherboarding is always kept well painted; where these precautions are observed, kiln-dried but otherwise untreated insignis pine is confidently expected to give satisfactory service. However, even in the absence of these conditions insignis pine can be used with complete confidence for flooring and weatherboarding, provided it is treated by chemical processes approved by the New Zealand Standards Institute. For sub-floor timbers, insignis pine definitely requires such preservative treatment if a long life is to be secured.

Steady progress was made throughout the year in the substitution of insignis pine for rimu for furniture, interior joinery, and cabinetmaking. Of special interest was the production of insignis-pine bedroom suites, paint-finished in pastel shades. A rapidly increasing use of the timber for interior joinery is expected to follow the introduction of factory grades.

The Building Controller co-operated through the year in limiting the use of indigenous timber when approving the issue of building permits for purposes other than the erection or alterations of houses. The use of rimu, matai, and totara was generally forbidden in the erection of commercial buildings, factories, schools, &c., for structural parts in which imported Douglas fir (or Oregon pine) could be substituted. This policy was very effective in assuring the requisite supply of indigenous wood for home-building. It was left to builders' discretion, however, to substitute New Zealand grown exotic timbers for Douglas fir, and a number availed themselves of this dispensation. Both treated and untreated insignis pine were used, and as this timber, adequately treated with wood preservatives, costs less than half the current price of Douglas fir, the extended use of insignis pine in this field can be expected.

The preceding paragraphs, which show what can be done with the exotic species at the present time despite their obvious limitations, leave little doubt as to their future possibilities. The exotic forests are in the ascendancy, and within the foreseeable future the indigenous forests will be relegated to a completely minor role quantitatively in the national timber economy. The potential yield of the exotic forests is very considerable; in the short-rotation species alone the sustained yield has been assessed at just over 100,000,000 cubic feet annually, which is equivalent to an annual cut of approximately 600,000,000 board feet; in addition, there are considerable areas of the slower-maturing species which from 1965 onwards will add materially to the above figure. For the economic utilization of this very substantial forest yield, conversion activities must be on a scale and to a standard far above anything previously attempted in this Dominion, and the solution can be found only in the integration of the principal forest industries. Fortunately the location of the bulk of both the State and private holdings in a relatively circumscribed area in the Taupo - Bay of Plenty district renders them highly amenable to development along these lines, and the establishment of the first major projects within the next five years will give a more balanced utilization than was ever possible in the case of the indigenous forests, and with the assurance that the exotic forests can be managed on this basis in perpetuity.

The changing incidence of timber production is clearly illustrated by the accompanying graph (No. 2), which is both historic and prophetic. Production has been projected to 1965, by which time the output of exotic timbers will completely overshadow the indigenous species and, in addition to dominating the domestic market, will figure prominently in the Dominion's export trade.