

12. *Mr. Adams.*] What about fires?—In America, where fires were very frequent, since they have gone in for practical forestry and put their bushes under competent Rangers fires have been reduced to a minimum.

13. *The Chairman.*] Have you been in the Waipoua Forest?—No.

14. Are you aware that there are not sufficient saplings in that bush to keep regeneration going?—I cannot say; but I understand that certain portions contain a fair quantity of young bush.

15. What is about the quickest-growing native tree?—Taraire is about the fastest, and you can get fair-sized trees of it in twenty-one years.

16. *Dr. Cockayne.*] Would you advocate settling the thousands of acres of available open land before dealing with the forest land?—Exactly. Conserve the forests under every condition possible. Five hundred million feet per annum will be required in future for various services.

17. How are you going to get it?—Conserve all you can, and plant if you are going to continue exporting.

18. Would you still advocate planting if every £100 worth of timber were going to cost £200 to produce?—Under those conditions, certainly not. It must be produced under proper commercial conditions.

WILLIAM JOHNS SWORN and examined. (No. 61.)

1. *The Chairman.*] You are a member of the Crown Lands Board of Auckland?—Yes, and a farmer.

2. Are there any special points in connection with our inquiry you wish to speak about?—Bearing generally on your order of reference I think I could give you some useful information, as my experience extends over half a century in New Zealand. After I arrived here in 1863 I worked in the bush on Coromandel Peninsula. After the lapse of fifty years I visited that locality, and I found one-third of the creeks dry because the land has been denuded of its forest covering. Those creeks that are not dry are simply turgid streams in wet weather, and comparatively dry at ordinary times. From a climatic point of view the denudation of our forests is extremely injurious to the Dominion. The way we are wasting our timber is a matter of deep regret to myself, and I am glad we are beginning to appreciate the value of the forests. A great deal of our timber which is of high economic value is thought very lightly of. As to the Waipoua Forest, the Land Board recently visited it, and in my opinion it would be a national calamity if that forest were allowed to be destroyed wholesale at present. It is about the only remaining big kauri bush, and should be preserved if possible, although I do not say that the timber should be altogether kept from our own people.

3. *Mr. Murdoch.*] There is a bush at Whangape?—Yes; there are three altogether. The timber people look at the matter only from the £ s. d. point of view, and so I strongly support the reservation of the remaining kauri forests as long as possible to prevent their wholesale slaughter. So far we have only played with the question of afforestation, and should be more alive to the necessities of the immediate future. I do not think the remedy lies in reafforesting with native timbers, as they are of extremely slow growth. It would be better to start with a few of the exotic timbers. I suggest the *Sequoia sempervirens*, or red-cedar, of California. It is the best timber-tree you could introduce here, being of rapid growth. Then the larch and *Pinus insignis* are not to be despised. I planted a clump of the latter, and the trees grew to the height of a ship's mast; and the timber is useful for boxmaking, lining, and many other purposes. This pine is a splendid timber-tree which we cannot have too many of. It should be planted in large areas to be of any commercial value. One-fourth of the Auckland Province is unsuited for anything but fruitgrowing and afforestation with *Pinus insignis*. I had one tree of the latter twenty-four years old, 127 ft. high, with a diameter of from 3 ft. 6 in. to 4 ft. It was grown in Waikato. A great deal of injury is done to our climate by cutting down belts of timber that should be preserved, when we have a vast area of good, open country that should first be settled before wooded lands are thrown open. Many a settler cuts down every tree on his holding, and looks on trees as enemies. It is advisable to conserve our little remaining bush, cutting what is actually needed under strict supervision. Titoki is a good timber for bark for tanning purposes, but it does not attain a large size, and would not be worth planting. Puriri will not grow where there is frost. The kākikatea should be conserved as much as possible, as it is our best timber for butter-boxes. I have grown it on good land in a moist situation, and the trees have made 5 ft. a year. I do not profess to be much of an authority on gums, but I do not think it would be wise to plant the *Eucalyptus globulus*, as it has no value as a hardwood. Ironbark, jarrah, red-gum, and stringy-bark would prove payable timbers, but I do not think the common gum should be planted. Some years ago I went through the West Australian jarrah country, but they are doing what we are—cutting the timber, sending it away, and wasting it. The Australian hardwood is really invaluable, but is probably too slow to grow here.

4. *Dr. Cockayne.*] Would north of Mangonui be a good place for them?—Ironbark grows to a great height. I had several 50 ft. high by 1 ft. through, and they seemed to thrive. In Western Australia, at Harvey, eighty miles from Perth, there is an experimental farm where many young forest-trees have been planted. Twenty-eight acres of *Pinus insignis* have been planted, and at seven years eight months old they were from 20 ft. to 30 ft. high. The manager considered they were his best. In South Australia the director called our attention to a splendid patch which had been sold at £100 an acre. The trees were twenty-five years old, and had been sold for boxmaking—nearly 60 acres. We cannot go wrong in planting our poor gum lands with *Pinus insignis*.

5. *Mr. Adams.*] Have you taken into consideration the fact that the *Sequoia sempervirens* loses its leader in New Zealand?—I grew twenty of them in my experimental ground in Waikato, and when I left they were over 70 ft. high. Planted on a large scale they would not be likely to lose their leaders. The *macrocarpa* also is of value as a timber. Sir George Grey recommended the red-cedar, and sent me a few trees, which I am trying in my orchard now.