

the large areas of Crown and Native lands, which I consider suitable for conservation for forest purposes proper, it comes down to a net area of 1,411,000 acres, which, it is anticipated, will carry 1,800,000 sheep. I have, in order to be on the safe side, reduced the number of sheep in the estimate to 1,500,000. I went carefully into Mr. Lowe's figures before doing so. That, of course, takes no account of the number of cows and cattle which may be carried in connection with the dairying industry, or for the production of beef. I hope to be able to lay before the Committee an estimate of the area which may be classed as dairying land.

MONDAY, 3RD OCTOBER, 1900.

Mr. J. W. A. MARCHANT, Chief Surveyor, further examined.

1. *The Chairman.*] When you were last examined you said you would be able to furnish the Committee with a further description of the timber-country; also what is suitable for dairying—close settlement. Are you prepared with information on those subjects?—Before I deal with that may I refer to some of the evidence I gave when I last appeared before the Committee? I wish, with your permission, to make a correction, or, rather, to explain an error I was inadvertently led into. In speaking of the Rangiwaea Block I said it was chiefly valuable on account of the excellent timber growing upon it. I was misled by the small scale-plan in making that statement, because the railway-line through the Rangiwaea Block passes through what is commonly called birch forest. But in the south-western portion of the Rangiwaea Block there is a very extensive area of first-class milling bush. In continuation of my evidence upon the forests within the twenty-five-miles limit, I now furnish the Committee with a schedule showing the localities and the areas of the milling timber upon Crown, Native, and alienated lands. This schedule has been carefully prepared by Mr. H. J. Lowe, and shows that the area of the Crown forests, omitting some minor blocks, is 72,700 acres; the forests on Native lands amount to 54,500 acres; and those upon the alienated lands, 24,000 acres: total, 151,200 acres.

2. *Mr. Field.*] I suppose you include Crown tenants' land?—I include lands leased from the Crown. I presume you would like this subject dealt with in detail. Beginning at the south end in the Awarua Block, there are 18,000 acres suitable for milling. The fuller details are as follow: Motukawa, 5,000 acres; Rangiwaea, 6,000 acres; Rangitaua, 17,341 acres; Raetihi, 15,388 acres; Waimarino, 61,000; Raketepaura, 5,000 acres; Te Hautu, 5,000 acres; Kakaramaea and Pihanga, 10,000 acres. The two last areas are in the vicinity of Takaunui. In the Otaranui, the north part of Ohotu, there are about 4,000 acres. Those are the chief areas referred to in the schedule.

3. *Mr. Lethbridge.*] Have you any estimate of the quantity of timber there?—I have already stated that I had in last year's return given the probable quantity of the milling timber per acre at 7,000 superficial feet.

4. How many acres?—Taking the Native and alienated lands, 151,000 acres. On that basis the total output from the whole area of 151,200 acres would be 1,058,400,000 ft. It might be interesting to the Committee if this estimate were compared with other estimates which are accessible to me. In the Appendix to the Journals of 1880, H.—3, Mr. A. Lecoy, in reporting to the Government, estimated the quantity of timber per acre on forest land at 15,000 superficial feet, and stated that about 40,000 acres of forest were annually used up in the colony.

5. *Mr. Hogg.*] In what year did Mr. Lecoy report?—It was in 1880. Mr. Duncan McArthur, in reporting upon the Southland sawmills, estimated that an average of fifteen men were employed by the twenty mills in the district, making a total of three hundred men in all. The annual wages amounted to £36,000, and the gross output of the mills was estimated at 12,000,000 superficial feet per annum. The estimated value of the timber he gives at £50,000. The average area cut over by each mill was 100 acres. Captain Campbell-Walker, who, I believe, was specially invited to this colony to report upon our forests, reported in 1877 that 12,000 superficial feet was the average output per acre of a forest at Okain's Bay, Canterbury; and in further estimates he stated that 15,000 superficial feet per acre might be taken as the average output in New Zealand forests. In estimating the output per acre of the forests along the North Island Main Trunk line at 7,000 superficial feet I have taken into consideration the fact that only the best class of timber would probably be utilised in the first instance, such as totara, matai, and rimu. There can be no question but that when the more accessible forests have been cut out the millers will be forced to utilise timbers which they now pass over. In the back country it might be profitable later on to utilise kahikatea, and the *Fagus* or so-called birch, which is really a beech. There is also a considerable quantity of maire, which is a very heavy and hard timber, but it has not yet been brought into general use. There is a very considerable quantity of the tree called, I believe, kaiwaka, which has the appearance of cedar. Its value is not yet sufficiently recognised, and it will, I think, be extensively used later on. I referred in my evidence on Wednesday to the vast amount of labour that would find employment if it were found practicable to mill the forests along the North Island Trunk route. I ventured to say that the cost in labour per 100 superficial feet would be something like 3s. 6d. This estimate is submitted with great deference, as I have had no practical experience in sawmilling. As I before stated, it has been considered reasonable by practical men. I will now, with your permission, make some remarks upon the milling industry and the variety of trees contained in the forests contiguous to the proposed railway. These are based chiefly on information supplied by Mr. H. J. Lowe. From Mangaonoho northwards for many miles the country is already occupied. There is a mill at Mangaonoho, and another near Ohingaiti; there is one at Mangaweka, and it is proposed to start one in the Kawatau Valley. The mill-proprietors are Messrs. Bailey and Cornfoot; the sites are at Clayton's and Deighton's.

6. That is four mills?—Yes. There is also an old sawmill on a village lot in Mangaweka, but I am not aware that it is working at the present time. There is a mill at Waikari's, beyond Utiku,