

Statement of Work for the above Period.—Harvesting and threshing California tree-lupin seed from 17th January, 1924, to 14th February, 1924, 181 sacks; threshed seed produced from 181 sacks, 7 cwt. 1 qr. 19 lb. Sown on dunes in the vicinity where harvested: the refuse of the 181 sacks of threshed seed. Lupin branches carrying seed-pods sown in the vicinity where harvested, 50 sacks. Threshed lupin-seed sown in the vicinity of the following sand drifts—Corcoran's, Gleeson's, Kauri Flat, and the Karaka—1 cwt. 1 qr. 9 lb. Threshed lupin-seed sold to, and to be sown by, lessees of grazing-runs: J. M. Reid, 1 cwt.; Mrs. D. M. Tyman, 2 cwt.; F. Puckey, 2 cwt.: total weight of lupin-seed sold and sown, 6 cwt. 1 qr. 9 lb.

California tree-lupin and tea-tree fascines laid and name of locality.—Waipapakauri "turn in" and vicinity lupin fascines laid, 175 chains; Kauri Flat, 74 chains; Waiharara, 61 chains; Corcoran's, 107 chains; Gleeson's, 30 chains: total, 447 chains. Waipapakauri "turn in" and vicinity tea-tree fascines laid, 60 chains; Kauri Flat, 39 chains; Corcoran's, 6 chains: total, 105 chains.

Progress of Work and a General Description of the Growth of Plantations.—California tree-lupin: The operations of the work carried out on the Great Northern is distributed over a wide area both on the coastal-dune areas and inland to where the sand had drifted in to swamps, hills, and valleys. South of the Waipapakauri "turn in" California tree-lupin are established in suitable sheltered places both on the coastal dune areas and as far inland as the sand has drifted—distance (approximate) four miles. North of the Waipapakauri "turn in" the California tree-lupin plantations are established on coastal dune areas and on the limits of the sand-drift inland through the Opoe Survey District, and some four miles into the Hohoura Survey District—distance (approximate) fifteen miles. Where shelter was provided the intervening ridges have been sown with lupin-seed, and flourishing lupin plantations in most cases where the seed was sown are met with.

The following are the local names of the principal plantations established: Coastal sand-dune areas—Hune Hune Creek, Ahipara "turn in," Waipapakauri "turn in," Kauri Flat "turn in," Karaka, Toheroa Camp, Little Waihi, Waihi, Waiharara "turn in," and Huketere. Inland drift limits—In the vicinity of Lakes Rotorua and Waiparara, sand drift near Hilton-Jones's land, Gleeson's and Wright's sand-drift, Corcoran's sand-drift, sand-drift behind Lake Waiparara and extending more or less to Selwyn's Swamp "turn in" and Stony Crossing.

The established lupin plantations growing on the inland drift limits have done remarkably well, and generally speaking far outclassed the lupin plantations on the coastal dune areas, which are, of course, subject to the prevailing westerly gales. In the more exposed places on the coastal dune areas the growth of the lupins is stunted, and in many places, like the tea-tree and mingimingi, growing prostrate. However, reviewing the whole of the growth of the California tree-lupin on the Great Northern sand-dune areas, it can be said that progress has been most satisfactory considering the lupin-seed, or most of it, was sown from May to July, 1922, and the harvesting of the lupin-seed and the reclamation work carried out this year is the production from the seed sown at this date.

Marram-grass plantations: From the 103 sacks of marram-grass plants shipped from Orewa, May, 1922, two marram plantations were established, one in the vicinity of the Waipapakauri "turn in," and the other (six miles north of the last-mentioned place) at Waihi. The plantations have an area (approximate) of $2\frac{1}{2}$ acres, and both plantations have made excellent progress. As flax-plants (*Phormium tenax*) are growing in the vicinity of the sites of the marram plantations, protecting lines of flax-plants were planted. Fully two-thirds of the flax-plants are growing, which are subject to a fierce sand-drift. This conclusively proves that many places on this sand-dune area could be transplanted with the abundance of flax-plants that are growing on the coastal dune areas.

General Remarks.—An inspection was carried out at the Great Northern sand-dune areas, on the coastal dunes as far north as Huketere (J. M. Reid's), and on the inland drift limits from Hilton-Jones's and drift near the Waipapakauri "turn in" to the sand-drift at Selwyn's Swamp (near the Big Flat), and thence north to Stony Crossing; and through the sand-drift from the Karaka coast to Gleeson's and Wright's sand-drift inland, and from Little Waihi coast to the sand-drift behind Lake Waiparara and Selwyn's Swamp. The characteristic configuration of the sand-dune areas between the coastal dune areas and to the limits of the inland sand-drift (inspected as referred to above) is that, generally speaking, sand ranges are being formed, and are at present from 50 ft. to 150 ft. in height, about midway, but not continuous in any direction. From these forming sand ranges, in an easterly direction generally, the sand areas become undulating and flat; in area, from a few acres to 400 acres. These latter sand areas show positive signs that, if left alone and free from stock-grazing, in a few years by native growth such as pingao, (*Scirpus frondosus*), silvery sand-grass (*Spinifer hirsutus*), tauhinu-korokio, and toetoe-grass, they would reclaim and become stable. Following, flax-plants, which are a characteristic growth on these sand-dune areas, would make their appearance. In from two to three years sufficient covering would be grown to sow California tree-lupin seed.

If the State is taking up the reclamation of the sand-dune areas as a serious proposition with a view to reclaiming the sand areas to a point for profitable investment, stock of all kinds will have to be removed. It would be sound business for the State to give their earnest consideration to fencing the portion they intend first to reclaim—say, for instance, the sand areas within the limits of the Opoe Survey District.

If continuous reclamation work was carried on free from stock-grazing, as well as firing off the growth on the sand areas within a period of ten years, especially if part of the reclamation work was to transplant flax, the flax would have recovered growth enough for the State to lease the cutting-rights. And if the proposition already in view—that is, to cut up the suitable portions of the coastal dune areas and to lease for camping-sites were given effect to—the proceeds from these two investments would help to bear the cost of reclamation and fencing. And, furthermore, portions of