

Sheep have kept the internal fire-breaks in a satisfactory state, but along the boundaries it has been necessary to clear a considerable amount of flax and broom which has gradually encroached during recent years, and has become a possible source of danger from fire.

As labour became more plentiful the staff was slightly increased, and it has been possible to undertake a proportion of the various works which urgently required attention.

Preparations are well in hand for the replanting during next winter of small areas on which the original species planted had proved unsuitable.

The daily average number of men employed was 5.

Summary showing Area of Conical Hills Plantation (3,533½ Acres in Trees).

	How occupied.	Acres.
Pines	...	1,850
Larch	...	913
Spruce and Douglas fir	...	138½
Ash, poplars, &c.	...	126
Miscellaneous mixtures	...	506
Paddocks, fire-breaks, tracks, &c....	...	138½
Total	...	3,672

PUKERAU PLANTATION.

(Area, 628 acres; altitude, 700 ft. to 1,400 ft.; commenced 1915.)

The development of the trees has to some extent been affected by the extremely dry conditions which prevailed during the autumn months, the absence of sufficient moisture causing a cessation of growth toward the latter end of February. All compartments have suffered to practically the same extent, the trees being nowhere large enough to cover the ground, and thus help to prevent the evaporation of soil-moisture.

Pinus radiata, which occupies slightly more than half of the total area under trees, has made an average increase in height of 18 in., while the species occupying the areas next in importance, *Pinus ponderosa* and *Pinus Laricio*, show an average increase of 10 in. While the growth made has been less than the average of previous years it has been fairly uniform, and the health of the different compartments of pines is quite satisfactory. In the smaller compartments, which are more or less of an experimental nature, the species which have made the best headway are Douglas fir and Japanese larch.

It has been necessary to keep a small gang of men almost constantly employed in clearing bracken fern and rank grass from around the smaller trees, the expenditure in maintenance having been comparatively heavy.

During the past winter some difficulty was experienced in procuring labour for this station, and consequently the failures which had occurred in former plantings could not be entirely replaced. Preparations for completing the work during the coming season are well in hand, and, if possible, operations will be extended to the remaining unplanted portion of the reserve.

The daily average number of men employed was 3·1.

Summary showing Area of Pukerau Plantation (573 Acres in Trees).

	How occupied.	Acres.
Pines	...	555
Douglas fir, poplars, &c.	...	18
Paddocks, fire-breaks, &c.	...	55
Total	...	628

DUSKY HILL PLANTATION.

(Area, 845 acres; altitude, 400 ft. to 800 ft.; commenced 1898.)

The variable climatic conditions experienced here have had a noticeable effect upon the development of trees, growth throughout the plantation being comparatively poor. Under the cold wintry conditions prevailing in the spring and early summer, trees were unusually late in showing any movement, and although vigorous growth was generally in evidence toward the end of summer, it was abruptly checked by the extreme dryness of the autumn season. The effects of dry weather were most noticeable in the larch and spruce compartments, both species having made little height-growth, whilst amongst the former premature needle-cast has been very prevalent. In the blocks of *Pinus Laricio* and *Pinus ponderosa* the most satisfactory progress has undoubtedly been made, and although the average growth may be slightly below that of more favourable seasons, the trees have a healthy and thriving appearance. *Pinus radiata* has not done so well as usual, and amongst oak and ash uneven and generally unsatisfactory headway is to be observed.

The only work necessary in connection with fire-protection has been the clearing of bracken and coarse herbage along the boundary-fence, all internal fire-breaks having been kept in a satisfactory condition by the grazing of sheep.

Several small areas on which the original planting has been unsuccessful have been prepared for replanting with *Pinus radiata* during next winter. Deer have been responsible for some slight amount of damage, and the cover of trees now forms such an effective protection that only on rare occasions has any success attended the efforts to destroy them.

No provision for telephonic communication with this station has so far been made, but it is hoped to have this matter attended to during the coming year.

The daily average number of men employed was 1·5.