

The expenditure for the year amounts to £23,900 10s. 5d., the estimated value of plantations being omitted this year on the grounds that any such estimate is purely problematical, owing to data relating to the actual value of artificially raised forests in this colony being unavailable. In the statement of accounts appended to the report on each nursery will be seen the financial position of same, including the actual expenditure to date in comparison with the stock in hand and sent out, as well as general improvements by way of buildings, formation, &c. In the statement the values of improvements have been computed on actual cost of same, whilst the stocks of trees are valued according to the schedules attached, at prices averaging one-fifth of ruling trade rates.

The disastrous fire which occurred at Dusky Hill Plantation on the 27th October points to the necessity of enacting legislation for the adequate protection of forests generally, both artificial and natural. In the case under notice the plantation is bounded on two sides by the Pomahaka River, which forms an effective fire-break as well as a natural stock-proof boundary. A chain reserve, however, runs along the river-side, as well as a road-line of similar width. The road and reserve in question are largely used by anglers and sportsmen, as well as being a resort for picnic parties, who visit the locality in large numbers during the summer.

Both for the protection of the adjoining forest and for the convenience of visitors the Department prepared convenient camping-places, with fireplaces built of stone, a supply of dry firewood, and a cleared space to prevent the possible spread of fire therefrom. Notwithstanding these provisions the camps are seldom used, and very often parties take no care to extinguish their fires, leaving such work to the employees, who are on duty until dusk every day in the year.

The fire which resulted in the destruction of about two-fifths of the forest area, and valued at £8,536 16s. 10d., was due to the almost criminal negligence of an angler who elected to boil his billy, during a fierce north-west gale, at a spot where ordinary common-sense would have suggested extreme danger. Fanned by the furious wind, the flames spread with alarming rapidity across some two miles of young forest, which was more or less destroyed except amongst deciduous trees such as oak, ash, and sycamore, which were immediately pruned down to the ground-level and have subsequently made splendid growth. Proceedings were instituted against the person responsible for this enormous loss, with the result that a fine of £5 was inflicted. Had the information been laid under section 310 of the Criminal Code, the decision would probably have in some degree acted as a warning to careless sportsmen and others. The section above mentioned is as follows: "Every one who wilfully sets fire to any wood, coppice, or plantation, or to any indigenous tussock, grass, heath, gorse, furze, or fern, is liable to fourteen years' imprisonment, with hard labour." And by section 73, "All persons aiding and abetting in the commission of the crime are liable to the same penalty." If the convicted offenders are too young for imprisonment they may be detained in an industrial school as youthful criminals, and their parents, in that case, have to pay for their maintenance.

There is further provision in the State Forests Act in regard to persons lighting fires and intentionally or negligently allowing the same to spread, for which the penalty is by way of fine not exceeding £50, in addition to recovery of the amount of any damage done. It may be pointed out, however, that the class of persons likely to start fires are not usually in a position to pay any such fine, far less pay for the damage done—in the case under notice amounting to £8,500.

In regard to trespass on any State forest, the penalty is by fine not exceeding £50, but, as in fire-lighting, there is no alternative by way of imprisonment.

The inadequacy of our fire-breaks have been severely criticised by enthusiastic anglers, who, no doubt, fear their probable exclusion from this favourite fishing-ground in future. I am, however, assured by the plantation employees that if the present fire-breaks had been 20 chains in width instead of 1 chain they would have been none the more effective, as the immense body of flame carried live embers across gullies fully 20 chains distant, igniting the plantation on the opposite ridge, whilst the gullies were left unharmed. Although there were many willing hands ready to assist in subduing the fire, it was quite impossible to render effectual service, owing to the intense heat, and more especially as fresh outbreaks were occurring many chains in advance of the main body.

In reality fire-breaks are only effective in stopping a fire unaccompanied by wind, or in the case of a fire burning back against the wind. On Dusky Hill Plantation there are about six miles of fire-breaks, averaging 1 chain in width and occupying an area of 45 acres out of the total acreage planted—viz., 800 acres. Owing to the configuration of the land it is quite impossible to further extend these fire-breaks on ploughable lines unless hand-labour is resorted to for keeping down growth—a proposal quite out of the question on the score of expense. It has been suggested that the Department should burn the grass and other herbage which appears on the fire-breaks between each annual ploughing. Such a course, however, is almost impossible, as, in addition to the difficulty of burning growth only a few months old, there is the enormous risk of fire getting beyond the control of the workmen, more especially as this work would be an annual one extending over a period of from sixty to eighty years.

Ploughing seems to be not only the cheapest but the most effective method of keeping growth in check, but even by this means the work is a very expensive and annually increasing one, as for every 100 acres planted in forest there are approximately 5 acres laid out in fire-breaks.

Computed by the present annual output of trees—viz., five million, covering roughly 1,800 acres—there are 90 acres of fire-breaks added yearly, which must be maintained, either by plough, or, where this is impracticable, by manual labour.

CONTROL OF STATE FORESTS.

At present no officer of this branch has any legal status regarding the protection of State forests, plantations, or nurseries, and, although nominally under the control of the Chief Forester, all such areas are under the jurisdiction of the Conservator of State Forests for the several land districts. The difficulty is at present got over by appointing officers of the State Forests Branch as Crown Land Rangers, who can then act under the direct instructions of the Conservators of Forests.