

1910.
NEW ZEALAND.

CANTERBURY PASTORAL RUNS CLASSIFICATION, 1910

(REPORT OF COMMISSION ON).

Laid on the table of the House of Representatives by leave.

To His Excellency the Right Honourable John Poynder Dickson-Poynder,
Baron Islington, Governor and Commander-in-Chief in and over His
Majesty's Dominion of New Zealand and its Dependencies.

MAY IT PLEASE YOUR EXCELLENCY,—

We, the Commissioners appointed by a Warrant under the hand of the Governor, dated the 16th day of September, 1909, and published in the *New Zealand Gazette* of the 23rd day of September, 1909, No. 77, page 2396, to classify and report upon the rural lands in Canterbury Land District known as Runs Nos. 70, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 89, 93A, 110A, 110B, 111, 112, 113, 114, 116, 117, 118, 119, 178, 179, 233, 237, as provided by section 225 of the Land Act, 1908, respectfully submit for Your Excellency's consideration the following report and accompanying tables, setting forth our proceedings and the result of our investigations, which were arrived at after a most careful personal inspection of the runs, extending over a period of thirty-four days.

INTRODUCTORY.

It is only in the natural order of things that, as the lands of the Dominion are opened up by the construction of railways, and roads, and bridges, and increased facilities are afforded for transport to markets, the productive population should become increased proportionately. The process is obviously one of natural development. Thus it is found that, to repeat a popular expression, "the back country of to-day is the front country of to-morrow." There is and always will be, probably, a difference of opinion as to the limit to which settlement of the high country ought to be forced. There is not, we apprehend, any difference of opinion as to the propriety of subdividing arable land or mixed agricultural and pastoral low-lying safe land, suitable for close settlement, into areas capable of supporting a family. With high country, however, the case is entirely different. To extend the principle of close settlement unreservedly to high pastoral country would be to court failure. For ourselves, we entertain no prejudice on the subject. Our object is to secure the occupation of the back country in moderate-sized holdings on sound and safe lines. To that end we have made a comprehensive examination of the country, its characteristics, climate, features, means of access, and stock-carrying capacity, with the object of arriving at a fair decision as to its suitability not alone for subdivision into smaller pastoral runs, but into close-settlement areas on which residence is compulsory.

SUITABILITY OR OTHERWISE OF THE PASTORAL RUNS FOR CLOSE SETTLEMENT.

However desirable it be to place settlers on comparatively small holdings under permanent tenure in high pastoral country, yet there are obvious risks and responsibilities incurred in doing so, the onus of which the Government must take in case of failure. We take it that a *bona fide* settler has to pay his way, and that, to enable him to do so, the Government takes the responsibility of placing him on land which, from its character, situation, and capabilities, furnishes a reasonable guarantee of a living, season in and season out. This is one aspect of the question. There is, however, another of paramount importance—that is, the cost of the settler to the State. Let us take a case by way of illustration. It is stated that there are areas in the Mackenzie country suitable for small grazing-runs. Granted there are a few; but these areas form the front or safe country of the runs. If the runs are deprived of these frontages, it is inevitable that they will be abandoned, leaving the State minus rent, and with the responsibility of rabbiting the area. In our opinion—formed after mature consideration—it would be unwise for the State to offer any of the land we have inspected on small-grazing-run tenure. The general elevation of the country, and its liability to snow, suggest a foregone conclusion that no tenant save one with moderate capital would succeed over a term of years. In 1895, and again in 1903 and 1908, snowstorms swept the country throughout Canterbury. The losses were so severe in 1895 that Parliament passed an Act conferring relief on the pastoral tenants, by way of reduction of rentals and extensions of leases. Table 1, which accompanies this report, shows the number of sheep that perished on the runs.

SUITABILITY OR OTHERWISE OF THE PASTORAL RUNS FOR SUBDIVISION.

While we deprecate the subdivision of the pastoral runs into small grazing-runs, it is quite practicable, and in our opinion safe, to subdivide twelve of the pastoral runs included in our inspection, nine being in the Mackenzie country, two in the Rakaia country, and one in the Amuri country. We have recommended that course. In subdividing we have observed the following fundamental principle: viz., that each subdivision shall contain an area of winter and summer country fairly proportioned, and sufficient to carry not less than 5,000 sheep, including breeding-ewes. This is a reasonable minimum, and it has been applied in all instances, save where there are qualifying circumstances which justified a lower minimum, as in the cases of Glentanner, Wolds, Sawdon, and Whalesback, all in the Mackenzie country. A run of a carrying-capacity of 5,000 sheep affords an opportunity to shepherds who have saved enough money to start sheep-farming; and, after all is said, a practical hill-country man is the best and most satisfactory tenant for high pasture land the State can secure. A reference to Table 2 will show the subdivision which we recommend for approval.

PASTORAL AREAS INSPECTED.

The country included in our inspection, which occupied a period of thirty-four days, contains a gross area of 1,457,000 acres, occupied and worked as thirty-two pastoral runs, carrying about 300,000 sheep. Out of this area no less an area than 515,000 acres consists of practically barren country, leaving a net area of 942,000 acres carrying sheep-pasturage of very unequal quality, varying from good to very indifferent.

The pastoral runs inspected by us are divided geographically into four groups, as follows:—

The Mackenzie Country Group, of 18 runs, containing a gross area of 835,000 acres, of which 242,000 acres consist of barren and worthless country.

The Upper Ashburton and Rakaia Group, of 10 runs, containing a gross area of 350,500 acres, of which 127,000 acres consist of barren and worthless country.

The Selwyn Group, of 3 runs, containing a gross area of 36,800 acres, of which 13,000 acres consist of barren and worthless country.

The Waipara and Amuri Group, of 2 runs, containing together a gross area of 235,500 acres, of which 133,000 acres consist of birch forest and barren country.

The following brief general description of the country contained in each of the above-mentioned groups will convey a sufficiently reliable impression of its character :—

THE MACKENZIE GROUP.

The area included in what is known as the "Mackenzie country" is nearly the whole of the basin of the Waitaki River north of its confluence with the Ahuriri River, at the back of which are mountain-ranges rising to 10,000 ft. Within this country is an area of 835,000 acres, now held for pastoral purposes, the leases of which will expire in February, 1912; but in this area are included mountain-tops and absolutely bare country amounting to at least 242,000 acres. The major portion of the run-country lies over 3,000 ft. in altitude. The approximate area under 3,000 ft. which will be available for lease is about 300,000 acres. As the Ahuriri River joins the Waitaki River at an altitude of 1,168 ft., and this point lies south of the Mackenzie country, it is evident that no part of the Mackenzie Plains is under 1,200 ft.

From the physical configuration of the country, it is inevitable that it should vary in character: hence the rolling downs, high table-lands, and stony plains, with steep gorges running into the heart of the Alps. The soil is generally poor and light, and, except in a few places, incapable of sustained cultivation. The snowfalls vary from 2 ft. to 6 ft. in depth. As regards shelter, the comparatively low downs and plains are worse off than the higher broken country. The country which consists of many steep spurs with northerly aspect is far safer than the plains and downs that offer little obstruction to the snow-laden winds; for on the former may be found facings comparatively free from snow, while the plains and downs lie under a uniform mantle of snow for weeks occasionally. In this respect country such as that included in the Glentanner Run—steep, gorgy, easterly-running spurs of Ben Ohau Range—is ideal. The rolling Balmoral country, with its easy slopes—which appear an attraction to the summer visitor—and the country wholly on the flat, are death-traps in bad winters. Low-lying country in the Mackenzie Basin is therefore no criterion of safety; nor, considering the quantity of barren land included in the runs, is the area included in a run any criterion of its carrying-capacity.

It is not too much to allege that more has been written and spoken during the last few months concerning the Mackenzie country than probably of any other pastoral area in the Dominion. Local evidence as to the real character of the country is unreliable, for it is contradictory. There are the pessimists and the optimists, the interested and the disinterested, both equally dogmatic in the expression of their views. As a matter of fact, the Mackenzie country is not nearly so dangerous a place, nor nearly so good, as it is represented to be. It is a deceptive country; the snow losses for which it is responsible prove that. The snowstorm which occurred in 1895 was responsible for the loss of 179,000 sheep. This loss was abnormally heavy, owing in a large measure to carelessness. But, again, in 1903, when the runs were worked under more modern methods, several thousands of sheep succumbed to snow. Again, in 1908, further slight losses from snow occurred. All of which goes to prove that the Mackenzie country is essentially pastoral country; unreliable as regards climate; in no sense adapted for subdivision in small areas by men having no capital. Subdivided into small areas, capable of carrying moderate-sized flocks—say, from 5,000 to 9,000 sheep—not only would the percentage of lambs be greater, but the losses would be much reduced, and the country increased in carrying-capacity.

THE UPPER ASHBURTON AND RAKAIA GROUP.

The area included in the Upper Ashburton and Rakaia group comprises the high and broken country extending easterly from the head-waters of the Rangitata River to the Rakaia River, and north-westerly to the Southern Alps. Within this country is an approximate area of 350,500 acres, of which about 127,000 acres consist of barren and worthless country—bare rock and shingle faces. By far the greater part of the country is over 4,000 ft. in altitude. It is for the most part composed of the same rocks as those of the back Mackenzie country—viz., tilted sandstones and slates, and, like the Mackenzie, presents physical characteristics modified in scale and nature by local circumstances, and is undergoing similar disintegration. Thus, as in the alpine regions of the Mackenzie country, steep valleys, broken by gorges and shingle slides, open into the comparatively level basins of the Upper Rangitata and Upper Ashburton Plains, including the Lake Heron and Lakes Tripp and Ackland Valleys. Lake Heron, which lies near the centre of the Upper Ashburton pastoral area, between the south branch of the Ashburton River and the Rakaia River, is 2,267 ft. above sea-level. Lakes Tripp and Ackland, which lie between the south branch of the Ashburton River and the Rangitata River, are 2,193 ft. and 2,149 ft. respectively above sea-level. The three lakes mentioned—Heron, Tripp, and Ackland—are respectively 170 ft., 244 ft., and 288 ft. lower than Lake Tekapo, which is the highest lake in the Mackenzie country. Resembling also somewhat in configuration a portion of the Mackenzie country, the Upper Ashburton and Rakaia country is perhaps better grassed, but is, however, difficult of access, and deficient in warm country, with the exception of the areas comprised in Double Hill runs, which extend along the northerly faces of the Rakaia River for a distance of twenty-four miles, and are excellently grassed. The unequal distribution of the winter and summer country, and the great preponderance of the latter over the former throughout the Upper Rangitata, the Potts, and the Upper Ashburton Rivers, constitute practical difficulties in the way of further subdivision of the runs, except in the case of the two Double Hills runs above referred to. These runs can be profitably subdivided.

THE SELWYN GROUP.

The area included in the Selwyn group is 36,000 acres, including 13,000 acres of barren country. This country is comprised in three separate areas, one lying between Lake Coleridge and the Rakaia River, another near the head-waters of the Harper River, and the other near the head-waters of the Selwyn River. The first-mentioned is a small, serviceable, well-grassed run of good aspect, and close to a main road. The other areas consist of high and broken inaccessible fragments of waste lands, valueless except for summer grazing.

THE WAIPARA AND AMURI GROUP.

The area included in the Waipara and Amuri Group occupies the high, partly open, and partly bush-clad country situated on the boundary between the Land Districts of Nelson and Canterbury, falling easterly towards and covering all the country drained by the Nina, Doubtful, Hope, Boyle, and Kakapo Rivers, as far as the Waiau River. This country contains 235,000 acres, of which 133,000 acres consist of forest and shingle tops. The general altitude varies from about 2,000 ft. to 6,000 ft., rough and comparatively inaccessible, yet carrying excellent sheep and cattle pasture. This country has many characteristics which, if turned to account by practical pastoralists, will result in profit to the Crown and to the tenant. The Glynnwye portion of the group is suitable for subdivision.

TERM OF LEASE OF THE RUNS.

After mature consideration, we have determined to recommend that the term of lease of the pastoral runs be fixed at fourteen years. Hitherto the usual term of lease of purely pastoral country has been twenty-one years. Previous to 1907 there was some justification for a twenty-one-years license, seeing

that if, on the expiry of the license, the run was put up to auction, and the outgoing licensee failed to become the purchaser, the amount of valuation for improvements to which he was entitled (excluding a rabbit-proof fence, the value of which he was paid under any circumstances) was three times the amount of the average annual rent paid under his license, or five times such amount in cases where the annual rent did not exceed £50—to be paid by the purchaser of the license. Under the existing law there is no limit assigned to the amount of valuation for improvements for which the outgoing lessee is entitled to be paid by the purchaser of the license; he is entitled to valuation for all improvements, on appraisalment. Licensees are therefore under no disability at all if the term of license be limited to fourteen years, while from a State point of view fourteen years is a reasonable term. It permits of the revision not only of the rental, but affords the opportunity of further subdividing the runs, or dealing with them in such a manner as circumstances may warrant.

CARRYING-CAPACITY AND RENTALS OF THE PASTORAL RUNS.

The number of sheep depasturing on the runs included in our inspection as at December, 1909, was approximately 300,000. Generally speaking, the country is not overstocked; for, compared with the sheep returns of a few years ago, the figures quoted show a diminution. No doubt the falling-in of the leases, which may occasion difficulty in disposing of merinos, should the licensees not succeed in obtaining a new lease of the country, has been an incentive to reducing the flocks. We have fixed the carrying-capacity of the runs very carefully. The grazing-value of each block of summer and winter country on the runs has been assessed separately. In fixing the upset annual rentals of runs containing breeding-country, our figures are, of course, based on the carrying-capacity, due allowance being made for the proportion which breeding-ewes bear to dry sheep. On the whole, the carrying-capacities, and consequently the rentals, have been fixed at reasonably low figures, so as to allow a fair margin for possible losses. We have not been unduly influenced by the present satisfactory position, and possible continued firmness, of the wool-market in fixing the rentals: we recognize, however, that the pastoral, like every other industry, must pay its way; lessees cannot have the taxpayers to draw upon, as in 1895, to make up deficiencies.

FENCING-LINES.

A most important consideration—in fact, an essential—in subdividing high country is the selection of practicable fencing-lines. Fencing on a very large area of country which we have inspected costs from £35 to £60, and as much as £80, per mile. Hence the obvious advisableness of determining on fencing-lines which are not only practicable, but also reasonably direct in route. In the subdivisions which we have recommended, the boundary-lines thereof which are shown on the foundation plan of our scheme of subdivision deposited in the Lands Office, Christchurch, may or may not be on good fencing-lines. They are only approximate indications of the positions of the boundary-lines. Obviously we were unable, in the time at our disposal, to examine every fencing-line. The duty of determining the best fencing-lines will be a duty devolving on an experienced surveyor, who will vary them, no doubt, as the character of the country may render necessary.

FREEHOLDS ON THE RUNS OR ADJACENT THERETO.

The total area of freeholds having frontage to the pastoral runs, and worked in conjunction with the runs, is a little in excess of 38,000 acres. It is the popular belief that the purchase of these lands was a design to “gridiron” the frontages to the Crown lands. An examination into the circumstances under which the lands were acquired does not warrant that assumption. The Canterbury Waste Lands Regulations are responsible for it. These regulations permitted of any person purchasing a section or more of 20 acres in extent

on a pastoral run. It is obvious to what extent a pastoralist could be black-mailed under such a system. A sense of justice prompts us to state that many of the original pastoralists of Canterbury were faced with financial embarrassment by being compelled to purchase at £2 per acre land, in Mackenzie country and Upper Ashburton and Rakaia, a great portion of which is not to-day worth 5s. to 10s. per acre. We have not found any difficulty in respect of the freehold lands in cases where we recommend the subdividing of runs.

While on this subject, we may state that a proposal has been suggested which, if adopted—it is alleged—would enable the two Balmoral runs to be utilized to great advantage. We refer to the purchase of the Braemar freehold of 20,000 acres, which adjoins the Balmorals. Knowing the price at which the owner of Braemar is willing to sell—a figure between £1 15s. and £2 per acre—we have no hesitation in regarding the proposal with disfavour. About two-thirds of Braemar is comparatively safe country, the remainder risky. Say the property could be acquired for £35,000: that would mean a rental of £1,750 per annum, which would not, in our opinion, be obtained from the Crown lands and Braemar combined. We regard the proposal, from a State point of view, as untenable.

IMPROVEMENTS EFFECTED ON THE RUNS.

We have furnished with the report a table (Table 3) showing the nature and value of the improvements existing on the pastoral runs. In the event of the present licensees failing to obtain at public auction renewals of the leases of the runs held by them, or portion of the runs, the incoming tenants must pay the amounts equal to the values of the improvements before they will be allowed possession of the new runs. The total value of the improvements effected on the runs is £33,522. The values vary from £72 to £6,460. In respect of Glynnwye Run an embarrassment arises. We have recommended that this run should be subdivided into three runs. Two of the subdivisions will be loaded with values of improvements exceeding £5,000. (The estimated values of improvements on Glynnwye Run is £6,460.) Now, the incoming tenants will most assuredly be unable or unwilling to pay down such large sums for improvements, and probably the runs will not be disposed of to new lessees, and will again get into possession of the existing lessee or his nominees. As the object of our recommendation is to encourage the occupation of the country in moderately sized blocks by several licensees, we venture to suggest that the value of the improvements on Glynnwye Run be appropriated by Parliament, and that interest thereon be paid by the lessees. Something of this nature must be done if the object in view in subdividing the run is to be achieved.

NUMBER OF PEOPLE RESIDENT ON THE PASTORAL RUNS.

During our inspection we took an informal census of the persons (exclusive of casual hands) usually resident on the pastoral runs, the result of which is shown on Table 3 furnished with this report. The total is 132. Residence is not compulsory under the Land Act on pastoral runs, for obvious reasons. If the Government were to insist on compulsory residence on these runs, educational and other kindred facilities, and monetary assistance for roads and bridges, and compensation for losses sustained which are usually conceded to permanent settlers, would have to be conceded to the pastoral lessees. In our opinion the enforcement of permanent residence at the present stage of the development of the Mackenzie country and Upper Ashburton country would militate against its successful occupation. These localities are not places for women and children during the winter months. During the summer months the lessees of the Mackenzie country do reside, more or less, with their families. The only runs held under separate leases, and on which there are no persons permanently resident are Irishman Creek, Balmoral No. 2, Glenmore, Gray's Hills, Lilybank, and Whalesback; and, with the exception of Lilybank and Whalesback, the lessees of the runs named cannot reasonably be regarded as absentees,

seeing that the homesteads are on the adjoining runs, and in permanent occupation, more or less, as stated above. There are only four deserted homesteads in the Mackenzie country—viz., Irishman Creek, Glenmore, Whalesback, and Lilybank. In the case of Sawdon the lessee resides on the Fairlie side of the range, close to his leasehold.

RABBITING THE RUNS.

The keeping in check of rabbits is an all-important consideration. Efforts in this direction should never be relaxed. The reduced carrying-capacity of many of the runs is in a large measure due to the rabbit pest. Just previous to the year 1895 the rabbits had practically taken possession of some of the runs in the Mackenzie country, and, had it not been for the abnormally heavy fall of snow in 1895, which decimated them, the runs would not carry the flocks depasturing on them at present. The lessees are almost invariably maintaining vigilance as regards the rabbits. They destroy them by poison and gun, and these means, aided by stoats and weasels, keep the vermin in check. During our inspection—travelling, as we did, off the beaten track across country in the early morning and after sunset—we saw comparatively few rabbits. This result is very creditable not alone to the lessees, but to the unremitting inspection of officers of the Stock Department. The annual cost to the lessees of rabbiting the runs is £2,083, for details of which reference may be made to Table 3, which accompanies this report.

AGGREGATION OF RUNS.

It is quite true that aggregation of runs has been accomplished in the Mackenzie country, but not in the sense which implies a design on the part of the lessees to secure a monopoly of pastoral land. The aggregation has been effected almost entirely by force of adverse circumstances. Official records prove this. Mortgages are responsible for the aggregation; and in finding solvent transferees, and thus securing themselves against loss, they assisted the State also; for if the runs had remained untenanted the State would have lost not only the rent of the run, but would have been compelled to undertake the cost of rabbiting it. There are only a few instances when runs have changed hands from speculative reasons. The official records relating to the history of the Mackenzie country constitute a record of financial disaster to those engaged there in pastoral pursuits.

REGRASSING THE MACKENZIE PLAINS.

In travelling over the Mackenzie Plains one is impressed with a weary feeling of sadness and regret at the large extent of country which is almost depleted of all vegetation, save sorrel and "scab-weed." The affected area contains about 90,000 acres. The dead and dying condition of the native grasses over such a large area is a matter of grave importance to the Dominion. There is amongst the settlers in the Mackenzie country a difference of opinion as to the cause of the depletion. The oldest settlers allege that it is due primarily to the burning of the native tussock some forty years ago, and that, owing to the ravages of rabbits, frosts, droughts, and high winds characteristic of the climate, it has not been able to become re-established. Others, again, of more recent experience, attribute the depletion to what they describe as a new kind of grub about 2 in. in length, and as thick as a man's finger, and possessing a red head. We made a careful examination of the dead and also the dying tussock on various portions of the plain, but, although assured that the alleged grub was plentiful, we failed to find a single specimen of it. We found, however, numbers of the army-moth larvæ feeding on the tussock-leaves, and larvæ of the leatherjacket, and the common grass-grub. Our investigation leads us to believe that the caterpillars injure the plant by eating off the young shoots, and that very little damage is done by the leatherjacket and grass-grub. We also observed on many parts of the plains and adjacent downs, where there is

a fair depth of soil, healthy and strong tussocks; but wherever this better pasture was intersected by strips of light, stony land, the tussock or grass was either dead or dying. Wherever we travelled on the plains the appearance of the vegetation proved a sure indication of the quality of the land. It is therefore quite evident that no new species of grub is responsible for the depletion of the tussock. It will, no doubt, be a difficult and slow process in any circumstances to regrass the Mackenzie Plains. The light nature of the soil—a few inches, over shingle—and the hard frosts, which loosen the ground, and throw all young or shallow-rooting plants on to the surface, to be dried up during a hot summer, increase the difficulty. It is quite possible that Chewing's or hard fescue grass might give fair results after the sowing in the spring if the sowing was followed by a wet summer to help it to become well established before the winter set in. Irrigation would prove an effective means of improving the Mackenzie Plains; but at this stage of our development the cost would be out of proportion to the benefit derived from it. Probably the least costly and most effective scheme would be the planting of suitable trees, so as to form shelter-belts and breakwinds, and thus prevent the cold winds from sweeping unchecked across the plains. Shelter-belts of trees would undoubtedly modify the climate, and at the same time permit of the preservation of the humus content of the soil. In sheltered spots we found the scab-weed (*Raoulia lutescens*) spreading, and in this weed the native grass tends to establish itself. The growth of this scab-weed is an illustration of Nature at work; and if the growth of this plant is accelerated by shelter, common-sense suggests that shelter-belts of trees are essential to the propagation and growth of artificial pastures.

INDISCRIMINATE BURNING OF TUSOCK COUNTRY.

Probably nothing has contributed more to the wholesale destruction of thousands of acres of pastoral country than the indiscriminate burning of the native tussock. This pernicious practice is not prompted by the desire to destroy Crown property; it is due to either negligence or ignorance of the licensees, which is all the more surprising, seeing that the practical effect of injudicious burning is really to reduce very materially in a few years the carrying-capacity of the property. That a proper amount of burning at the proper season is necessary, and not really injurious to the pasture, but beneficial thereto, will be admitted by those who are acquainted with the practical working of pastoral country. What is to be strongly deprecated, and prohibited, is the summer burning, which is almost invariably due to the musterers, who signal to one another from ranges by means of fires, which are lit for that purpose. These fires are allowed to spread rapidly, unchecked, over a large area of country. When the fire travels over the sunny faces the tussock is practically burnt out, and a very dry summer finishes it. An impetus to disintegration of the mountains is the result of this practice, as is evidenced by the loosening of the rocks, which tear away the mountain-sides in the form of shingle slides. As a rule, pastoral lessees give their irresponsible musterers a free hand as to burning. The new licenses ought to contain a condition prohibiting the burning of native grasses except in the spring-time for the purpose of fire-breaks, which are necessary to prevent the spreading of accidental fires, which occasionally, during a dry summer, sweep large areas of country and do serious damage; or within periods of four years, for the purpose of renewing the tussock. The inspection of pastoral runs should be carried out systematically, to insure that the provisions of the pastoral licenses are complied with. The duty could be undertaken by the various Rabbit Inspectors without much trouble, as these officers are continually on inspection-work in the back country.

SURFACE SOWING.

Although a great portion of the country which we visited in the course of our inspection is not, perhaps, adapted for systematic surface-sowing of English grasses, yet we believe that there are localities on many of the runs

where cocksfoot, and Chewing's and hard fescue, at any rate, would grow. There is a popular and unaccountable prejudice on the part of several pastoralists against surface sowing. Instances were quoted to us during our inspection of attempts that have been made to surface-sow, which were attended by unfavourable results. The failures were probably due to feeding-off the grass before it had time to seed. Surface sowing has been attended with more or less satisfactory results on the following runs: viz., Glenlyon (500 acres, principally swamp land), Richmond (150 acres), and Tekapo (100 acres)—all in the Mackenzie country; Lake Heron (500 acres) and Double Hill (50 acres)—in the Rakaia country; and on Glynnywe (in valleys and on burnt areas). On the last-named run surface sowing has been a complete success, both on the high and the low country. The pastoral licensees have every encouragement under recent legislation to surface-sow on their runs, for section 237 of the Land Act of 1908 provides that surface sowing shall count as an improvement, for which a lessee is entitled to compensation at the termination of his license.

PLANTATIONS.

There are no forests or plantations on the pastoral areas which came under our inspection, with the exception of the native forest (birch) on the Glynnywe Run. They are treeless lands, save for a few trees planted around the various homesteads. That poplar and willows will grow almost anywhere in the high country is proved beyond doubt. There are poplars growing at Haldon Homestead 114 ft. high, and of proportional circumference at the bole. Larch will grow in localities in the Mackenzie country—for instance, in the neighbourhood of Tekapo Lake, Lake Alexandrina, Glenmore, and Simon's Pass. The subject of planting portions of the Mackenzie country is worthy of the serious attention of the Government. Plantations modify the extremes of dry and wet, heat and cold, and contribute towards the safety of the country for stock by creating shelter. Planting is too important an undertaking to be left to desultory attempts of lessees, who may or may not heartily assist the project. We recommend that the Government undertake and control, by means of the Forestry Department, the planting of the Mackenzie country; and that, in order to permit of a wide choice in selecting land for plantation purposes, a condition be inserted in the licenses of the pastoral runs giving the Government the power to resume without payment of compensation, from time to time, during the currency of the license, an aggregate area of 50 acres, in such localities and in such severed areas as may be considered necessary.

RESERVES FOR TRAVELLING STOCK.

It is very desirable that reserves for travelling stock should be provided for in the Mackenzie country. During our inspection we noted on a map, now deposited in the Lands Office, Christchurch, the several places where, for convenience to water and camping facilities, these reserves should be located.

F. W. FLANAGAN,
H. D. M. HASZARD,
JAMES STEVENSON,
Commissioners.

Crown Lands Office, Christchurch, New Zealand, 12th July, 1910.

TABLES AND SCHEDULES.

TABLE 1.—SCHEDULE showing the Loss of Stock in the Mackenzie Country during the Winter of 1895, as declared to for the Purposes of the Inquiry under the Pastoral Tenants' Relief Act, 1895.

Run No.	Name of Station.	Number of Sheep at Beginning of Winter.	Number of Sheep lost during Winter of 1895.
208-9	Ashwick	10,190	7,516
25	Rollesby	14,807	10,684
73	Gray's Hills	18,200	11,463
72	Grampians	16,300	8,182
74	Whalesback	15,980	10,019
75	Sawdon	13,200	11,537
76	Tekapo	9,200	9,147
77	Richmond	19,474	19,458
78	Lilybank	10,961	7,961
79	Glenmore		
81-82	Balmoral	30,118	27,079
80	Mistake	17,700	8,900
83	Mount Cook	6,862	2,458
84	Irishman Creek		
85	Wolds	26,159	17,000
86	Simon's Pass	10,080	4,308
87	Ben Ohau	14,000	8,300
88	Rhoborough Downs	14,250	4,314
89	Glentanner	11,085	4,842
Freehold	Braemar	15,000	6,244
		273,566	179,412

TABLE 2.—SCHEDULE showing the NEW RUNS recommended by the Classification Commissioners: the RENTALS paid under Existing Licenses, and the PROPOSED UPSET RENTALS and TERMS OF LICENSE of the New Runs.

Run No.	Name of Station.	County.	Area.	Rental at present Paid.	Proposed Upset Rental.	Proposed Term of License.
			Acres.	£	£	Years.
93A	Glenlyon	Mackenzie	124,000	120	250	14
89	Glentanner	"	39,600		200	14
89A	Glentanner No. 2	"	10,400	175	50	7
86	Simon's Pass	"	14,900		325	14
86A	Simon's Pass No. 2	"	16,700	500	325	14
85	Wolds	"	12,300		220	14
85A	Wolds No. 2	"	17,600		280	14
85B	Wolds No. 3	"	14,500	387	300	14
84	Irishman Creek	"	23,500	226	250	14
81	Balmoral	"	29,000	190	200	14
82	Balmoral No. 2	"	40,000	248	290	14
79	Glenmore	"	35,400		180	14
79A	Glenmore No. 2	"	17,600	345	170	14
80	Mistake	"	62,000	236	300	14
78	Lilybank	"	70,000	89	130	14
77	Richmond	"	35,900		250	14
77A	Richmond No. 2	"	51,000	250	250	14
76	Tekapo	"	27,900	150	300	14
75	Sawdon	"	12,800		200	14
75A	Sawdon No. 2	"	14,300	150	200	14
74	Whalesback	"	14,700		280	14
74A	Whalesback No. 2	"	17,800	553	320	14
72	Grampians	"	14,600		320	14
72A	Grampians No. 2	"	15,200	900	350	14
72B	Grampians No. 3	"	15,200		330	14
73	Gray's Hills	"	26,000	148	240	14
70	Haldon	"	18,500		390	14
70A	Haldon No. 2	"	18,700	400	360	14
83	Mount Cook	"	25,000	150	150	14
110A	Mesopotamia	Ashburton	58,000	60	70	14
110B				10		
111	Stronchrubie	"	35,500	60		
112				74	175	14

TABLE 2.—SCHEDULE showing the NEW RUNS recommended by the Classification Commissioners; the RENTALS paid under Existing Licenses, and the PROPOSED UPSET RENTALS and TERMS OF LICENSE of the New Runs—continued.

Run No.	Name of Station.	County.	Area.	Rental at present Paid.	Proposed Upset Rental.	Proposed Term of License.
			Acres.	£	£	Years.
113	Hakatere ..	Ashburton ..	54,700	450	525	14
114	Hakatere No. 2 ..	" ..	26,500	200	230	14
116	Dunbar's ..	" ..	25,000	134	250	14
117	Lake Heron ..	" ..	37,500	270	500	14
118	Double Hill ..	" ..	25,000	1,060	690	14
118A	Double Hill No. 2 ..	" ..	39,800		660	14
119	Double Hill No. 3 ..	" ..	27,500		480	14
119A	Double Hill No. 4 ..	" ..	21,000		420	14
178	Acheron ..	Selwyn ..	12,200	243	250	14
179	Lake Coleridge ..	" ..	18,000	32	40	14
169	Snowdon ..	" ..	16,600	75	100	14
237	Upper Hurunui ..	Waipara ..	45,500	Unlet ¹	50	7 from 1/3/11
233	Glynnwyne ..	Amuri ..	24,700	550	390	14
233A	Glynnwyne No. 2 ..	" ..	113,000		330	14
233B	Glynnwyne No. 3 ..	" ..	51,900		380	14
			1,457,500	9,085	12,950	

TABLE 3.—SCHEDULE OF PASTORAL RUNS as now occupied, showing the NUMBER OF SOULS residing on each Run, the COST OF RABBITING per Annum, and the Estimated VALUE OF IMPROVEMENTS.

Run No.	Name of Station.	Number of Souls residing.	Cost of Rabbiting per Annum.	Estimated Value of Improvements.			
				Buildings.	Fencing.	Other Improvements.	Total.
			£	£	£	£	£
93A	Glenlyon ..	5	100	730	1,470	280	2,480
89	Glentanner ..	7	170	98	739	120	957
86	Simon's Pass ..	6	140	..	720	..	720
85	Wolds ..	16	200	..	1,688	446	2,134
84	Irishman Creek ..						
81	Balmoral ..	12	200	..	755	..	755
82	Balmoral No. 2 ..			140	484	..	624
79	Glenmore ..			55	242	..	297
80	Mistake ..	5	50	40	1,046	65	1,151
78	Lilybank ..	1	3	100	550	100	750
77	Richmond ..	5	5	250	1,673	100	2,025
76	Tekapo ..	6	30	30	960	316	1,306
75	Sawdon ..	5	15	10	1,300	20	1,330
74	Whalesback ..	1	Not ascertained	25	987	10	1,022
72	Grampians ..	7	250	250	1,470	50	1,770
73	Gray's Hills ..	6	50	..	428	..	428
70	Haldon ..	8	150	30	1,592	20	1,642
83	Mount Cook ..	5	Done by licensee	55	335	174	564
110A	Mesopotamia ..	..	50	..	..	..	..
110B	" ..	..	20	..	..	..	..
111	" ..	..	40	..	..	..	..
112	Stronchrubie ..	..	30	..	..	..	..
113	Hakatere ..	4	..	90	1,055	100	1,245
114	Hakatere No. 2 ..	2	100	120	750	100	970
116	Dunbar's ..	..	30	..	300	..	300
117	Lake Heron ..	6	50	100	795	518	1,413
118	Double Hill ..	13	50	100	2,700	..	2,800
119	" ..						
178	Acheron ..	..	..	..	307	..	307
179	Lake Coleridge ..	..	..	..	..	..	..
169	Snowdon ..	..	..	..	72	..	72
237	Upper Hurunui ..	..	..	..	..	..	..
233	Glynnwyne ..	12	350	80	4,397	1,983	6,460
		132	2,083	2,303	26,817	4,402	33,522

PASTORAL LANDS, being Lands suitable exclusively for Pasturage, and not capable of being used with Profit in Areas of a Carrying-capacity of less than 5,000 Sheep.

Run No.	Name of Station.	County.	Area in Acres.	Acres.	Crown Land or National Endowment.
93A	Glenlyon	Mackenzie ..	124,000	835,100	Crown lands.
89	Glentanner	" ..	39,600		"
89A	Glentanner No. 2	" ..	10,400		"
86	Simon's Pass	" ..	14,900		"
86A	Simon's Pass No. 2	" ..	16,700		"
85	Wolds	" ..	12,300		"
85A	Wolds No. 2	" ..	17,600		"
85B	Wolds No. 3	" ..	14,500		"
84	Irishman Creek	" ..	23,500		"
81	Balmoral	" ..	29,000		"
82	"	" ..	40,000		"
79	Glenmore	" ..	35,400		"
79A	Glenmore No. 2	" ..	17,600		"
80	Mistake	" ..	62,000		"
78	Lilybank	" ..	70,000		"
77	Richmond	" ..	35,900		"
77A	Richmond No. 2	" ..	51,000		"
76	Tekapo	" ..	27,900		National endowment.
75	Sawdon	" ..	12,800		"
75A	Sawdon No. 2	" ..	14,300		"
74	Whalesback	" ..	14,700		"
74A	Whalesback No. 2	" ..	17,800		"
72	Grampians	" ..	14,600		"
72A	Grampians No. 2	" ..	15,200		"
72B	Grampians No. 3	" ..	15,200		"
73	Gray's Hills	" ..	26,000		"
70	Haldon	" ..	18,500		"
70A	Haldon No. 2	" ..	18,700		"
83	Mount Cook	" ..	25,000		Crown lands.
110A	Mesopotamia	Ashburton ..	58,000	350,500	"
110B	"	" ..	"		"
111	Stronchrubie	" ..	35,500		"
112	"	" ..	"		"
113	Hakatere	" ..	54,700		"
114	Hakatere No. 2	" ..	26,500		"
116	Dunbar's	" ..	25,000		"
117	Lake Heron	" ..	37,500		"
118	Double Hill	" ..	25,000		"
118A	Double Hill No. 2	" ..	39,800		"
119	Double Hill No. 3	" ..	27,500		National endowment.
119A	Double Hill No. 4	" ..	21,000		"
178	Acheron	Selwyn ..	12,200	36,800	"
179	Lake Coleridge	" ..	18,000		Crown lands.
169	Snowdon	" ..	6,600		National endowment.
237	Upper Hurunui	Waipara ..	45,500	45,500	Crown lands.
233	Glynnwyne	Amuri ..	24,700		National endowment.
233A	Glynnwyne No. 2	" ..	113,000	189,600	"
233B	Glynnwyne No. 3	" ..	51,900		"
Grand total			..	1,457,500	

Total area of Crown lands	Acres.	979,900
Total area of national endowments		477,600
Grand total		<u>1,457,500</u>

LOCALITY AND DESCRIPTION OF RUNS INSPECTED, AND RECOMMENDATIONS OF THE COMMISSIONERS.

I. MACKENZIE COUNTRY.

GLENLYON: RUN No. 93A.

A BLOCK of "out-back" country, practically isolated, difficult of access, and dangerous. The area of this run is 124,000 acres, 76,500 acres of which may be classed as barren and useless, being mountain-tops reaching an elevation of 8,500 ft., and deep gorges. The run includes the whole of the eastern watershed of the Dobson River, covering twenty-eight miles in length, and also the Neumann Range, lying between the Dobson and the Hopkins Rivers. The only country suitable and comparatively safe for wintering sheep is a small tract at the southern end of the run. We estimate the carrying-capacity of the run at about 8,000 sheep during the summer, and about 6,000 during the winter months; and about 600 head of cattle. The average percentage of lambing for a period covering the past five years is about 45 per cent., the death-rate about 17 per cent. The cattle-grazing area consists principally of swamps on the flats along the Dobson River. These swamps are capable of great development. There are already evidences of the success which has attended surface sowing (500 acres have been sown) on the drier portions of this run. This is not a run suitable for subdivision: its distance from the rail-head at Fairlie (105 miles), the expense of cartage, the delay in transport due to crossing dangerous rivers, and the small area of winter country are supreme obstacles.

We recommend that Glenlyon be offered as one pastoral run, at a rental of £250 per annum.

GLENTANNER: RUN No. 89.

This run is situated immediately to the north of Lake Pukaki, on the eastern slopes of the Ben Ohau Range, which divides the Hopkins River from the Tasman River. It has a frontage of seventeen miles to the Tasman River. The total area comprised in the run is 50,000 acres, of which about 23,000 acres consists of grass, principally on steep, narrow faces, and on a few flats; about 3,000 acres of rather deep swamp; and about 24,000 acres of barren, broken country, rough, mountainous, and inaccessible. This country has a northerly aspect, and is probably the safest wintering run in the Mackenzie country. The carrying-capacity is estimated at between 8,000 and 9,000 sheep, including breeding-ewes. The average lambing percentage for a period of the past five years is 65 per cent., and the death-rate about 8 per cent. Half-breds can be grown on this run. This run is capable of successful subdivision.

We recommend that it be subdivided into two pastoral runs, one run with a carrying-capacity of 7,000 sheep, and the other run with a carrying-capacity of 2,000 sheep, at upset rentals of £200 and £50 respectively per annum. We propose further that the smaller run be offered for a term of seven years, so that the lease will expire on the same date as that of Pastoral Run No. 215, containing 14,000 acres, now under lease for twenty-one years; so that the smaller of the Glentanner subdivisions and Run No. 215 may be grouped and reoffered as one pastoral run. As a matter of fact, the Run No. 215 referred to was not originally designed for a pastoral run; it is too small. If our recommendation be approved, the combination of the two areas will make a good payable pastoral run, profitable alike to the Crown and the lessee. Glentanner is distant eighty-four miles from Fairlie.

SIMON'S PASS: RUN No. 86.

Simon's Pass Run is situated in the Forks of the Tekapo and Pukaki Rivers, fifty miles from Fairlie by main road. It comprises 31,500 acres. Of this area about 23,500 acres consists of excellent grazing-country, the remainder—about 8,000 acres—being poor, almost barren, stony plain extending back from the forks of the Tekapo and Pukaki Rivers, from which the native tussock has almost disappeared. There is no high country on this run, and it enjoys almost an immunity from snow losses. The carrying-capacity is estimated at 10,500 sheep, including between 4,000 and 5,000 breeding-ewes. As a breeding-run for half-breeds, Simon's Pass Run has a good reputation; in fact, good merino and surplus stock to the number of 3,000 have been sold off the run in one year. The percentage of lambing is 70 per cent., and the average death-rate for a period of the past five years is 6 per cent. We believe Simon's Pass Run is capable of subdivision. The winter country, which we estimate at 19,000 acres, is suitably distributed, situated as it is at Simon's Hill and vicinity, near the eastern boundary of the run, and also on the slopes and downs lying into Lake Pukaki at the western boundary of the run.

We recommend that Simon's Pass Run be divided into two runs, one run having a carrying-capacity of 5,300 sheep, and the other run a carrying-capacity of 5,200 sheep, the upset rentals of each run to be fixed at £325 per annum.

WOLDS: RUN No. 85.

This run is situated between Lake Pukaki and the Tekapo River, about forty-odd miles from Fairlie by the main road from Fairlie to Mount Cook Hermitage. It contains 42,300 acres of country, classified as follows: 32,300 acres of good, sound, pastoral country, some of it ploughable; and about 10,000 acres of poor flats (stony land, part of Mackenzie Plain), extending back from the Tekapo River towards Irishman Creek. The winter country on this run may be regarded

as safe country. We estimated it at 31,000 acres. The only really dangerous country is on the Tekapo Flat. Mary's Range (the highest knob of which is only 1,680 ft. above the level of Lake Pukaki) intersects the Wolds Run, and is excellent safe winter country on the lake side, while the same may be said with a lesser degree of confidence of its eastern slopes. The carrying-capacity of the Wolds we estimated at about 15,500 sheep. The run carries about 12,000 breeding-ewes; but in this connection it is proper to state that the present lessee of the Wolds (who is also the lessee of the Irishman Creek Run, adjoining the Wolds) uses the run for breeding purposes, utilizing the Irishman Creek Run for dry sheep. The average percentage of lambing on the Wolds Run for a period of the past five years is 70 per cent., and the death-rate is, according to the lessee's assurances, usually, under normal conditions, say, about 7 per cent., which appears to us rather a high estimate.

After careful consideration, we recommend that the Wolds Run be subdivided into three runs, of carrying-capacities of 4,300, 5,400, and 5,800 sheep respectively, and that the respective upset rentals be fixed at £220, £280, and £300 per annum.

IRISHMAN CREEK: RUN No. 84.

This run has a frontage of about five miles to Lake Pukaki, and extends easterly therefrom to the Tekapo River. It contains an area of 23,500 acres, and may be classified as consisting of about 6,500 acres of winter country, being the slopes and downs lying into Lake Pukaki; 11,400 acres of rather inferior winter country, with bad aspect, situated between Mary Burn and Irishman Creek, and about three miles and a half to the west of the former; and about 5,600 acres of summer country, being downs, ploughable in parts, but cold aspect, and liable to heavy snowfalls in winter, lying between Irishman Creek and the Tekapo River. We estimate the carrying-capacity of this run at 7,000 sheep. Irishman Creek Run is worked in conjunction with the Wolds Run (both runs being held by the same lessee), and is used practically for dry sheep. We do not think this run is capable of subdivision.

We recommend that it be reoffered as one run, at the upset rental of £250.

BALMORAL: RUN No. 81.

Situated thirty miles from Fairlie. This run lies between Lake Tekapo and Lake Pukaki, along the right bank of Forks Stream, and bounded on the west by the Braemar freehold of 20,000 acres. The area of this run is 29,000 acres, consisting of 13,900 acres of grassed downs, lying from the sun, and which may justly be designated inferior winter country; about 1,600 acres of inferior downs, lying between the main road to Lake Tekapo (which passes through the run) and the Old Man Range; about 4,900 acres of fair winter country, lying to the north of Round Hill; about 3,400 acres of good winter country, including the Old Man Range; and about 5,200 acres of inferior country, lying to the south and west of Balmoral Homestead. The carrying-capacity of this run is difficult to estimate with accuracy—probably 7,000 sheep is a fair estimate. It is worked in conjunction with Balmoral No. 2 Run and Glenmore Run (both Crown pastoral leaseholds), and a freehold of 20,000 acres known as Braemar. The average percentage of lambs on this run for a period of five years was 55 per cent., and the normal death-rate 8 to 10 per cent. There were heavy snow losses in 1903 and 1907. Taking abnormal snow losses into account, the flock could not have been maintained without the purchase of stock. This run is not suitable for subdivision, the proportion of winter country to summer country being entirely inadequate.

We recommend that it be reoffered as one pastoral run at the upset rental of £200 per annum.

BALMORAL No. 2: RUN No. 82.

Situated about thirty-six miles from rail-head at Fairlie. This run adjoins Balmoral Run above described, extending northerly therefrom to the Jollie River at Mount Cook Run, and westerly to the Braemar freehold of 20,000 acres. It is worked in conjunction with Balmoral Run and Glenmore Run (both Crown pastoral leaseholds), and the Braemar freehold before referred to. The run contains a total area of 40,000 acres, consisting for the greater part of high table-lands and mountain-ranges, the latter reaching 7,000 ft. The aspect of this country is chiefly southerly. We classify the land in this run as follows: About 5,500 acres of safe winter country, extending along the Jollie River faces for about five miles; 27,000 acres of good summer country; and 7,500 acres of barren and useless country. The lambing and death-rate percentages are the same as Balmoral Run No. 81, before described. This run is not suitable for subdivision. It contains only a small proportion of winter country, and what there is of it is situated at the north end of the run.

We recommend that Balmoral No. 2 be reoffered as one pastoral run at the upset rental (annual) of £290.

GLENMORE: RUN No. 79.

Situated about thirty miles from Fairlie by good road. This run consists of a narrow block of country wedged in between Forks Stream, Lake Tekapo, and the Cass River, the distance from its northern to its southern limits being nearly thirty miles. Glenmore is undoubtedly a well-grassed run, with safe winter country, well proportioned and distributed throughout. The total area of the run is 53,000 acres, classified as follows: 4,900 acres of good summer faces; 8,000 acres of rather poor summer country; 13,500 acres of winter country, extending along the Cass River, and including Mount Joseph Downs; 5,600 acres of winter country, situated between Forks Stream and Lake Alexandrina; 9,400 acres of winter country lying to the south and east of Lake Alexandrina, including Mount St. John; 1,400 acres of downs, situated between Lakes

Alexandrina and Tekapo; 1,200 acres of poor flat near the mouth of the Cass River; and 9,000 acres of barren country. The carrying-capacity of Glenmore is estimated at 13,000 sheep. This run can easily be subdivided to advantage.

We recommend that Glenmore Run be subdivided into two pastoral runs, one to be known as Glenmore Run, and the other as Glenmore Run No. 2, the carrying-capacities being respectively 6,800 sheep and 6,200 sheep. The upset annual rental of Glenmore Run to be fixed at £180, and Glenmore Run No. 2 at £170.

MISTAKE: RUN No. 80.

Thirty-nine miles from the rail-head at Fairlie. Area, 62,000 acres, of which 32,000 acres consists of grass, the remainder—30,000 acres—being barren country, rising to 7,900 ft. We estimate the carrying-capacity at about 10,000 sheep. This run forms a long, narrow, wedge-shaped area between the Godley River and the Cass River, extending from the Glasston Glacier to Lake Tekapo—a distance of about twenty-four miles. The country is high and broken, about four-fifths of it being summer country. The winter country—what there is of it—is good, but it is situated at the southern extremity of the run, on the Godley River faces, and along Lake Tekapo. We estimate the carrying-capacity of Mistake Run at about 10,000 sheep, as stated above. This run is not suitable for subdivision, owing to its configuration.

We recommend that it be reoffered as one run, at a rental of £300 per annum.

LILYBANK: RUN No. 78.

This run is situated fifty-four miles from Fairlie, in the forks of the Godley and Macaulay Rivers, extending as far north as the Macaulay Glacier in the Southern Alps. It comprises an area of 70,000 acres, of which 50,000 acres consists of barren, high, rough, inaccessible country. By far the greater portion of this run reaches an elevation of nearly 8,000 ft. The only winter country on the run is along the Godley River faces for about seven miles, and along the Macaulay River faces, between the Godley River and Stony Creek. The carrying-capacity is estimated at about 7,000 sheep. The percentage of lambs averages about 50 per cent.; the death-rate, by good management, is about 10 per cent. This is not a safe breeding-run, and there is a dearth of winter country, consequently it is unsuitable for subdivision.

We recommend that Lilybank Run be reoffered as one pastoral run, at the upset rental of £130 per annum.

RICHMOND: RUN No. 77.

Richmond Run contains 87,000 acres, classified as follows: 34,000 acres of ewe and winter country; 23,000 acres of purely summer country; and about 30,000 acres of mountainous barren country. We estimate the carrying-capacity at about 16,000 sheep. This run commences about midway up the eastern shore of Lake Tekapo, and includes the downs, and slopes, and ridges extending easterly between Tekapo and the Richmond Range, and Two Thumb Range, where the elevation reaches 7,000 ft., and also the country northward to the Macaulay River. There are about 17,000 acres of ewe and winter country to the north of Coal Creek and on the steep faces falling into the Macaulay River, and about 17,000 acres of comparatively flat downs, extending from the vicinity of Coal Creek southwards. This is a summer grazing-run to all intents and purposes. It has acquired an evil reputation for losses of stock, occasioned by winter snowstorms. From its configuration and southerly aspect, there is great difficulty in clearing snow; hence a serious mortality amongst stock. It must, however, be remembered that this run carries 6,000 breeding-ewes, and the lambing percentage over a period of five years past has maintained an average of 60 per cent. After careful consideration, we are inclined to the conviction that it is capable of subdivision. The winter and summer country is fairly evenly distributed, and, the access to the rail-head at Fairlie (forty miles) being along a good road, the lessees can remove a portion of the stock down country during the winter months. This is the practice of the present lessee, and it works in a most satisfactory manner.

We recommend that the Richmond Run be divided into two pastoral runs, one run having a carrying-capacity of about 7,800 sheep, and the other a carrying-capacity of about 8,000 sheep, the upset rentals in each case to be fixed at £250 per annum.

TEKAPO: RUN No. 76.

This run is twenty-seven miles from Fairlie by main road. It has a frontage of about nine miles to the south-eastern shore of Lake Tekapo, and extends easterly for an average distance of about two miles and a half to the Ashwick Run. The total area is about 27,900 acres, of which 17,500 acres consist of downs, ploughable in parts (nominally winter country, but dangerous); about 1,050 acres of ploughable flats; and about 9,500 acres of good summer country at the northern end of the run, towards Two Thumb Range. We estimate the fair carrying-capacity of this run at about 7,000 sheep. It will probably carry more than that number, but not with safety. It does not under present management carry a sufficient number of breeding-ewes to maintain the flock. The lessee finds it essential to winter his ewes on a freehold of 1,480 acres which he owns at Braemar, near Lake Pukaki. Considering the severity of the snowstorms in this portion of the Mackenzie country, and the fact that this run has not been capable of maintaining its own flock under varied circumstances (taking an average for several years), we do not recommend that it be subdivided. It is a poor run—below the average.

We recommend that the Tekapo Run be reoffered as one pastoral run, at an upset rental of £300 per annum.

SAWDON: RUN No. 75.

This run is admittedly dangerous country. It is situated in the neighbourhood of Burke's Pass, the latter being the key to the entrance to the Mackenzie country, and subject to heavy snowfalls. The distance from Burke's Pass to the rail-head at Fairlie is fourteen miles. The main road to Mount Cook Hermitage intersects the run. A small portion of Sawdon Run lies towards Fairlie; the remainder flanks the Mackenzie Basin, about 13,000 acres being actually on the Mackenzie Plain. The total area of the Sawdon Run is 27,100 acres, which is classified as follows: 10,400 acres of very good grazing-country; about 7,500 acres of good flat; about 2,600 acres of dangerous country; and about 6,600 acres of poor flat. We estimate the fair carrying-capacity of this run is at about 8,000 sheep, including breeding-ewes. Except when subjected to a disastrous snowstorm, this run maintains its flock. The average percentage of lambs for the last five-year period (exclusive of the snow losses in 1908, which amounted to 2,100 sheep out of a flock of 7,200) was 61 per cent., and the death-rate 10 per cent. Taking into consideration the proximity of this run to Fairlie—an advantage which admits of the removal of stock to the low country during an exceptionally heavy snowstorm, and the general distribution of the winter country, it is considered advisable to subdivide it.

We recommend that Sawdon Run be subdivided into two pastoral runs, to be known as Sawdon Run and Sawdon No. 2, the former having a carrying-capacity of 4,000 sheep, and the latter having a carrying-capacity of 4,000 sheep; the upset rental for each run to be fixed at £200 per annum.

WHALESBACK: RUN No. 74.

Whalesback Run includes both watersheds of the Dalgety Range, and also the country lying between that range and Burke's Pass Road. The greater portion of the run is outside of the Mackenzie country. The run contains 32,500 acres of well-grassed and comparatively safe country. It is classified as follows: 3,800 acres of well-grassed spurs, extending westerly from Dalgety Range (good ewe country); about 5,000 acres of the Dalgety Range (sunny faces), rising from the Mackenzie Pass; about 14,400 acres (being the central and southern portions of Dalgety Range) of principally summer country; and about 9,300 acres of poor, cold flat. The Hakataramea Pass, which is at the south-western boundary of the run, is about thirteen miles from Albury Railway-station. We estimate the carrying-capacity of Whalesback at about 8,400 sheep. There is no doubt that this run can be profitably subdivided. The Hakataramea Pass, at the southern end of the run, and the Mackenzie Pass, at the northern end of the run, liberate the country from isolation, and facilitates subdivision.

We recommend that Whalesback Run be subdivided into two runs, one of them to be known as Whalesback Run, and the other as Whalesback No. 2 Run. The carrying-capacity of Whalesback is about 3,700 sheep, and of Whalesback No. 2, 4,700 sheep. The annual rental of the former to be fixed at £280, and the latter at £320.

GRAMPIANS: RUN No. 72.

About thirty-one miles from Fairlie by main road. The Grampians Run is reputed to be the best run in the Mackenzie country, and the quality of the pasturage and lay of the country go far towards establishing the correctness of that opinion. More than three-fourths of the run lies between the main Grampians Range and the Mackenzie Plains, with, for the most part, a northerly aspect. Although at times, but rarely, subject to very severe snowstorms, the Grampians is a safe breeding-country. The run carries merinos and half-breds. The total area of the Grampians Run is 45,000 acres, of which about 26,000 acres consists of sound winter and ewe country, the remaining 19,000 acres being summer country, well grassed up to a high altitude. The winter and summer country are well proportioned throughout the run. The Grampians Run carries about 16,600 sheep, including 5,800 breeding-ewes. The average percentage of lambs for a period of the past five years is 70 per cent., the normal death-rate being about 7 per cent. There is no doubt that this run is capable of subdivision.

We recommend that it be divided into three pastoral runs, to be known as Grampians, Grampians No. 2, and Grampians No. 3, the carrying-capacities respectively being 5,300 sheep, 5,800 sheep, and 5,700 sheep, and the upset annual rentals respectively £320, £350, and £330.

GRAY'S HILLS: RUN No. 73.

Purely a summer run. Situated on the left bank of the Tekapo River (part of Mackenzie Plain), the distance from Fairlie being thirty-eight miles. The area of this run is 26,000 acres, consisting of flat, stony land almost destitute of grass, the native tussock having disappeared except from the margins of swamps. Sorrel, a native fescue, constitutes the principal sheep-feed. The carrying-capacity is difficult to ascertain. The lessee works this run with the adjoining Education endowment of 29,862 acres, using the former as summer grazing only; probably it would summer 8,000 sheep. It is not suitable for subdivision.

We recommend that this run be reoffered as one pastoral run, at the upset rental of £240 per annum.

HALDON: RUN No. 70.

Haldon Run is distant about forty-four miles from Fairlie. It is situated at the extreme southern limit of the Mackenzie country. It comprises a total area of 37,200 acres, and is worked by the present lessee in conjunction with an Education endowment of Canterbury College containing 19,025 acres, and a freehold of 19,000 acres (the whole area being worked as one concern). Haldon Run is a remarkably good, safe run. The country has a good aspect, being on the east side of the Mackenzie Plain, is safe country regarded from a snow point of view.

liable perhaps to drought in a very dry summer; but, taken altogether, is excellent breeding-country. The winter and summer country on this run are equally distributed—in fact, the whole area, with the exception of about 8,500 acres, may be regarded as ewe country. We estimate the carrying-capacity of Haldon Run at about 11,500 sheep. The average lambing for the past five years is 73 per cent.; the percentage of deaths very slight. The run is no doubt capable of subdivision.

We recommend that it be subdivided into two runs, to be known as Haldon Run and Haldon Run No. 2, of carrying-capacities of 6,000 sheep and 5,500 sheep respectively; the upset rentals to be fixed at £390 and £360 respectively.

MOUNT COOK: RUN No. 83.

Mount Cook Run is situated on the left bank of the Tasman River, close to and under the shadow of Mount Cook. It contains a total of 25,000 acres, 15,000 acres consisting of bush and exceptionally rough, broken, and barren country. About one-fourth of the grass portion of this run faces the north, and consists of, generally speaking, steep and warm faces. The carrying-capacity is estimated at 6,000 sheep. There are about 1,700 breeding-ewes (merino) on the run. Mount Cook is not suitable for subdivision: it is small enough already. It has attained a good reputation as a safe run, mainly owing to the skilful management of the present lessee and his father. In less experienced hands, probably, it would have reverted to the Crown.

We recommend that Mount Cook Run be reoffered as one pastoral run, at the upset rental of £150 per annum.

II. UPPER ASHBURTON AND RAKAIA.

MESOPOTAMIA: RUNS NOS. 110A AND 110B.

From thirty-five to fifty miles from Mount Somers. These runs contain respectively 44,000 acres and 14,000 acres, the character of the country being high, mountainous, and inaccessible, reaching an elevation of over 8,000 ft. on Two Thumb Range. The runs are situated between Two Thumb Range and an Education endowment of Lincoln Agricultural College, containing 37,900 acres. This endowment absorbs all the low-country frontages to the Rangitata River, thus rendering the Crown runs absolutely valueless to any person other than the lessee of the endowment. Run 110A consists of 20,000 acres of grass, and 24,000 acres of barren country. Run 110B consists of 1,200 acres of grass, and 12,800 acres of barren country, reaching the glacier region. Both runs are suitable for summer grazing only. The probable carrying-capacity of these two runs is about 3,600 sheep.

We recommend that the runs be grouped and reoffered as one run, to be known as Mesopotamia Run 110A, the upset annual rental to be fixed at £70.

RUN No. 111.

Situated in the fork of the Clyde and Havelock Rivers (the head-waters of the Rangitata River), forty miles from Mount Somers. This run contains 18,500 acres. Of this area only 6,500 carry grass, the remaining 12,000 acres being barren country. This run may be described as precipitous and rocky, attaining an elevation of nearly 8,000 ft. on Peak Range. Belts of snow-grass and tussock grow here and there along the margin of the Havelock and Clyde Rivers. The carrying-capacity of this run is difficult to estimate; probably it will carry about 3,500 sheep throughout the year. It has wintered 4,000 wethers. There is no ewe-country on the run. Run No. 111 is worked in conjunction with Runs No. 110A and No. 110B (both Crown pastoral leaseholds) and the Lincoln Agricultural College endowment of 37,900 acres. It would undoubtedly prove advantageous from every point of view if this run were grouped with Stronchrubie Run and the two offered as one run.

We recommend that this proposal be approved; that the new run be known as Stronchrubie Run, and that the upset annual rental of the combined runs be fixed at £175.

STRONCHRUBIE: RUN No. 112.

Situated about thirty-five miles from Mount Somers. The area of this run is 17,000 acres, consisting of about 10,000 acres of grass and 7,000 acres of barren country. The country is high—bare rocks and shingle run up to an altitude of 5,000 ft. On the lower slopes, falling into the Clyde and Lawrence Rivers, there is vegetation, consisting of snow-grass and tussock. There is hardly any safe winter country on this run, save the Jumped-up Downs at the lower end of the run. The carrying-capacity of Stronchrubie is about 3,500 sheep-wethers. The country will not winter ewes; wethers can, however, be successfully wintered.

We recommend that this run be grouped with Run No. 111 (see our remarks on Run No. 111), and offered as one pastoral run, at an upset rental of £175 per annum.

HAKATERE: RUN No. 113.

Situated between the south branch of the Ashburton River and Potts River, and adjoining the Mount Possession Run (Canterbury College endowment of 29,500 acres) on the south; distant from Mount Somers about fifteen miles. This run contains 54,700 acres, which may be fairly described in general terms as high, broken, cold, dangerous country, interspersed with snow-grass table-lands. The elevation of a portion of this run exceeds 7,000 ft. The grass portion of the run contains about 37,000 acres: the purely barren and worthless portion about 17,700

acres. The only winter country lies between Rog Range and the Ashburton River, say, about 5,600 acres, and from Dog Hill southward to the Ashburton River, say, about 4,000 acres. The carrying-capacity of Hakatere Run is approximately 10,000 sheep. It is purely a summer run, worked as a "dry" run in conjunction with the College endowment before referred to, the latter being the breeding-run for the combined leaseholds. It would be very unwise to subdivide this run. The average death-rate during the past five years is 14 per cent.

We recommend that it be reoffered as one run, at the upset annual rental of £525.

HAKATERE No. 2: RUN No. 114.

This run lies between the Potts River and the Rangitata River, at the confluence of the former with the latter, and adjoins Hakatere Run, above described, on the west. Its elevation ranges from 1,800 ft. to 7,000 ft. The area of the run is 26,500 acres, of which 15,600 acres consist of snow-grass and tussock downs, and patches of tussock-grass growing along the margin of the Rangitata and Potts Rivers, the remaining 10,900 acres being bare rock and shingle range. The estimated carrying-capacity of this run is 6,000 sheep. There is a little safe country along the Potts River suitable for breeding-ewes. The average death-rate for the past five years is 14 per cent.; during severe winters it has reached as high as 25 per cent. Obviously this run is not suitable for subdivision.

We recommend that it be reoffered as one pastoral run, at the upset annual rental of £230.

DUNBAR'S: RUN No. 116.

Twenty-eight miles from Mount Somers Railway-station. Situated between the south branch of the Ashburton River and Lake Heron. Area, 25,000 acres. There are good winter faces on the Cameron River. The carrying-capacity of this run is about 7,000 sheep. It will carry breeding-ewes. The average percentage of lambs, taking the latest five-year period, is 66 per cent. to 70 per cent.; the death-rate 15 per cent. This run is small enough already. It is worked in conjunction with Clent Hills Run of 52,600 acres.

We recommend that it be reoffered as one pastoral run, at the upset rental of £250 per annum.

LAKE HERON: RUN No. 117.

Thirty-two miles from Mount Somers Railway-station. This run embraces a long, narrow block of country, extending northward from Lake Heron to the Rakaia River. Its area is 37,500 acres, consisting of 23,700 acres grass, and 13,800 acres of steep, rocky, barren country, extending back to the glacier region. The winter country on this run lies along the faces of the Rakaia River, say, 5,000 acres; and also Sugarloaf Hill and vicinity, on the eastern shore of Lake Heron, capable of wintering 1,000 sheep in an emergency. There is good pasturage of snow-grass and tussock on the slopes of the Cameron River. A good swamp of about 1,500 acres, extending along either bank of Lake Stream, affords good cattle-feed. This swamp carries ninety head, and it could be improved by surface sowing. The carrying-capacity of Lake Heron Run is about 11,000 sheep, including breeding-ewes. The percentage of lambs is about 56 per cent., and the normal death-rate 10 per cent. There have been lost, however, in a severe winter more than 2,000 sheep. This is not a safe run. It has been subjected to heavy losses from causes inseparable from sheep-farming in the country of the high altitude and configuration of Lake Heron country. This run cannot be subdivided profitably, owing to the unequal distribution of the winter country.

We recommend that it be reoffered as one pastoral run, at the upset rental of £500.

DOUBLE HILL: RUN No. 118. DOUBLE HILL No. 2: RUN No. 119.

Forty-nine miles from Coalgate Railway-station, *via* Wilberforce and Rakaia Rivers. The total area of these two runs is 113,500 acres, inclusive of 29,500 acres of barren and useless country, the latter reaching an elevation averaging 6,400 ft. The Double Hill runs are worked as one station property. It is not too much to say that Double Hill country contains the best and soundest sheep country we visited during our tour of inspection. It comprises downs, and also steep and undulating, consistently well-grassed front country, of northerly aspect, stretching along the Rakaia River for a distance of twenty-five miles. The back or summer country is no doubt somewhat broken, rough, and in places dangerous; but the excellence of the winter country, and its equable distribution throughout the runs more than compensates for that disadvantage. The carrying-capacity of the two runs is estimated at 35,000 sheep. The runs carry 12,000 ewes. The average percentage of lambs for the period of five years is 62 per cent., and the normal death-rate 10 per cent. There is no doubt about the suitability of these runs for subdivision.

We recommend that they be subdivided into four runs, to be known as Double Hill, Double Hill No. 2, Double Hill No. 3, and Double Hill No. 4; of carrying-capacities respectively of 10,000 sheep, 9,400 sheep, 8,700 sheep, and 7,000 sheep; the upset annual rentals to be fixed at respectively £690, £666, £480, and £420.

III. SELWYN.

ACHERON: RUN No. 178.

Distance from Coalgate Railway-station, thirty miles. Situated between Lake Coleridge and the Wilberforce River. This is good, sound, safe country, well grassed, winter and summer country being well proportioned. The area is 12,200 acres; the carrying-capacity is about 4,500 sheep, including breeding-ewes. It is inadvisable to subdivide this run. It is small enough.

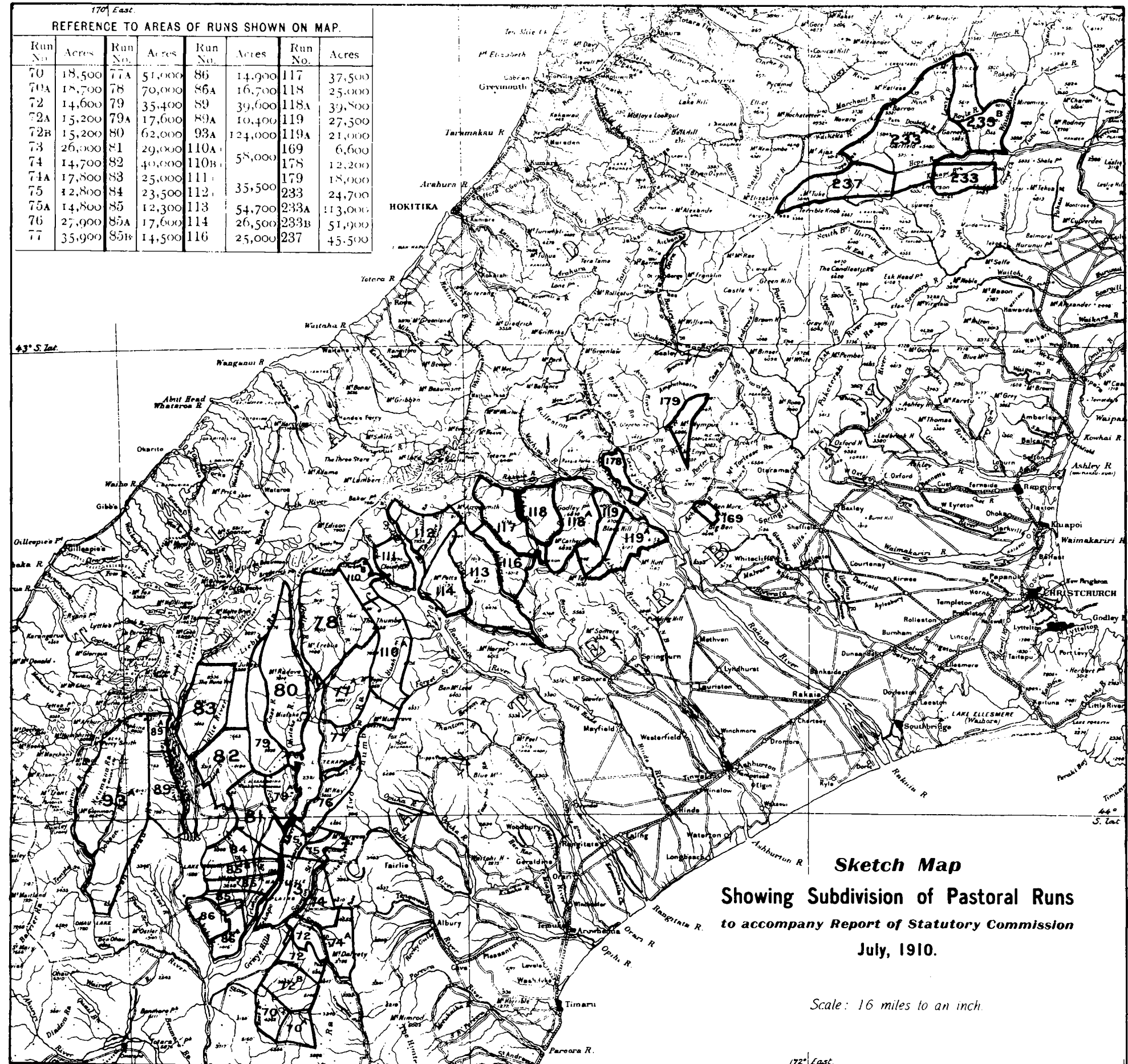
We recommend that it be reoffered as a pastoral run, at the upset annual rental of £250.

170° East

REFERENCE TO AREAS OF RUNS SHOWN ON MAP.

Run No.	Acres	Run No.	Acres	Run No.	Acres	Run No.	Acres
70	18,500	77A	51,000	86	14,900	117	37,500
70A	18,700	78	70,000	86A	16,700	118	25,000
72	14,600	79	35,400	89	39,600	118A	39,800
72A	15,200	79A	17,600	89A	10,400	119	27,500
72B	15,200	80	62,000	93A	124,000	119A	21,000
73	26,000	81	29,000	110A		169	6,600
74	14,700	82	40,000	110B	58,000	178	12,200
74A	17,800	83	25,000	111		179	18,000
75	12,800	84	23,500	112	35,500	233	24,700
75A	14,800	85	12,300	113	54,700	233A	113,000
76	27,900	85A	17,600	114	26,500	233B	51,900
77	35,900	85B	14,500	116	25,000	237	45,500

43° S. Lat.



172° East

LAKE COLERIDGE: RUN No. 179.

About forty miles from Coalgate. Area, 18,000 acres, of which only 5,000 acres is grass-growing, along the Harper River. This run is a fragment of mountainous country (the Craigieburn Range), which reaches an elevation of 6,800 ft. There is no front country in the area. This run is worked with the Lake Coleridge Canterbury College endowment of 35,500 acres, which it adjoins. The boundary of the endowment land is an impracticable fencing-line; hence the desire of the lessee to hold the Crown land, and thus obviate the expense of fencing. This run has little or no value as a grazing-area.

We recommend that it be reoffered at the upset rental of £40.

SNOWDON: RUN No. 169.

Area, 6,600 acres, consisting of portion of Big Ben Range (4,600 ft.), which separates the head-waters of the Selwyn and Waimakariri Rivers. This is wholly summer grazing-country—isolated—held on temporary license. The carrying-capacity is about 1,400 sheep during summer months.

We recommend that this area be offered as a pastoral run, at the upset annual rental of £100.

IV. WAIPARA AND AMURI.

UPPER HURUNUI: RUN No. 237.

Forty-five miles from Hawarden. Area, 45,500 acres of mountainous country, situated at the head-waters of the Hurunui River. This is a summer run, the vegetation consisting of grassed "tops," available for sheep during the summer months. This run is untenanted. It was offered in 1904, and there was no bid for it.

We recommend that it be reoffered as a pastoral run, at the upset annual rental of £50, for a term to expire on the same date as the license of the Lakes Run, eight years hence. It can then be grouped with the Lakes Run.

GLYNNWYE: RUN No. 233.

About forty miles from Culverden. Situated in North Canterbury, on the boundary between the Land Districts of Nelson and Canterbury. Glynnwye Run covers the whole of the country intersected by the Lewis, Nina, Doubtful, and Hope Rivers, thus extending from the summit of the main range easterly for about eighteen miles to the Waiau River. The total area of this run is nearly 190,000 acres. It is carrying 20,000 sheep, and carries also 1,000 head of cattle during the summer. Glynnwye Run is popularly pictured as a somewhat rough, outlandish place, difficult of access, with no possibilities of development. It is admittedly rough country, excepting the portion lying to the south of the Hope River (the Kakapo area), which is excellent sheep-country. As regards access, it is more easily accessible than a great portion of the Upper Ashburton County which we have visited. It is forty miles from Culverden, by a good road for about thirty-four miles of that distance. We have acquired a personal knowledge of Glynnwye Run quite sufficient to enable us to form an estimate of the various classes of country comprised therein. We spent the greater part of a week there, quite long enough to gain the necessary information, inspecting the lay of the country and its quality. We have classified the country with great care. It consists of about 68,000 acres of grazing-land, much of it really excellent, including river-flats, some dry and marshy, which carry excellent cattle-pasture; 18,000 acres of grass "tops" above the bush-line, on which sheep can be depastured during the months of February, March, and April; 69,000 acres of birch forest; and 23,500 acres of barren and worthless country. The grass land and the winter and summer country are so fairly distributed geographically over Glynnwye, and this advantage, together with the comparatively satisfactory percentage of lambs, and the moderate normal death-rate amongst the flock, supplemented by the evidences there are in various portions of the run of the success which has attended surface sowing on rural areas and river-flats, leave no doubt in our minds that the run is capable of subdivision.

We recommend that Glynnwye be subdivided into three runs, one run a purely pastoral run, and two runs sheep and cattle runs combined; the runs to be known as Glynnwye, and having a carrying-capacity of 6,000 sheep, the upset annual rental to be fixed at £390; Glynnwye No. 2, having a carrying-capacity of 6,000 sheep and 400 head of cattle, upset rental to be fixed at £330 per annum; and Glynnwye No. 3, having a carrying-capacity of 5,000 sheep and 500 head of cattle, upset rental to be fixed at £380 per annum. Embarrassment which arises in connection with this proposal is the crushing load which new lessees will have to carry in the nature of valuation for improvements effected by the present lessee, amounting to some £6,000. A new tenant cannot afford to pay for improvements. We submit a suggestion on the subject in another part of the report, under the heading of "Improvements on the Runs."

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