

*Notes of Inspection by Messrs. Dallas, Kirkpatrick, and Barron on Damage done by Snow in Central Otago.*

LEFT Dunedin on 10th August, 1903, travelling *via* Otago Central Railway to Kokonga. On the way we met Mr. Logan, one of the small-grazing-run lessees, and from him we obtained particulars of how the snow had affected him and his neighbours. Taking them in the following order, we find the position somewhat as follows:—

1. R. Logan: He and Mrs. Logan hold 4,700 sheep, running on approximately 10,000 acres. The whole of his country was covered with snow to a depth varying from 12 in. to 24 in. This meant that all the grass and tussock of every description was covered, and remained in that position for upwards of four weeks. The feed had been covered so long that it became necessary for him to remove his young sheep to another part. This he effected by sending 1,700 by rail to Milton, Government providing free railage. This has had the effect of relieving the little open country he had for the old ewes and stronger sheep. He now thinks that by adopting this arrangement he may not suffer a great loss.

2. R. Glendinning, lessee of small grazing-run adjoining Logan, says that although the snow was heavy he was able after the first few days to bring his sheep to feed, a good deal of which he had stored. Under these circumstances he anticipated but little loss.

3. Kyeburn Station (Scobie Mackenzie's): Mr. Andrews, manager, informed us that he has about 4,000 sheep over the Buster Hill, where it would be impossible for him to reach them. He cannot say much beyond that the chances are against the recovery of many of these. Sheep on the lower faces seem to be lasting out fairly well, while all the younger and ewes (about 7,000) appear to be wintering fairly well. Of the latter all that could be discovered were down on the sunny faces where they will weather the snow and frost. The outlook points to a loss of not more than 20 per cent. of the flock. Although the actual loss may not exceed the above percentage, the lambing is anticipated to prove not only extremely low but also an excessive mortality among the ewes is likely to take place on account of their weak state. A further loss is expected from the poor clip which must ensue after a prolonged starvation.

4. James Howell, the holder of land under various tenures, has had an exceedingly hard time, all his country having been covered throughout. His hill run has 400 sheep, well up on Mount Ida slopes. These he has been unable to see. The bulk of them will no doubt die through cold, snow, and want of food. The lower country was covered to a depth of from 12 in. to 17 in. all over. This continued so long that Mr. Howell had to construct a snow-plough and uncover the turnips and tussock. The former sufficed for one day's feeding only, as the frost hardened them so much that the stock could not touch them. This, and the little straw he had, kept those on the northern side of the river. On the southern side he used all his oaten sheaf until he found the sheep were not thriving, when he saw it was necessary to send to Dunedin for both turnips and hay. Through these means and great exertion and worry he has succeeded in keeping the bulk of them alive, although he anticipates a great death-rate and loss of lambs at the lambing-time. When asked if a 30 per cent. loss all over was anticipated, he could hardly express a definite opinion.

5. John Weir was next visited. He holds all low sections, and by steady feeding he does not anticipate more than an average mortality.

6. Mr. Wilson, the holder of about 1,000 acres along the Taieri River, does not anticipate any loss, as he had ample feed to keep his sheep in good condition. He was in the position of being able to sell feed to Mr. Miller, his neighbour, who was very short of fodder.

7. Puketoi Station: Mr. Charters, the manager, after extraordinary exertion, was able to bring all his sheep from the high country on to the low faces, and by feeding all his best stud and weakest sheep he has succeeded in keeping the bulk of the flock alive, and the result of his work will mean but little loss to the flock as a whole.

8. R. Turnbull, lessee of Run 308, Linburn: His ewe country very soon cleared of snow. The upper country on which the strong sheep—*i.e.*, the two-tooth ewes and wethers, about 14,000 sheep—he has never seen as it is impossible to reach them, the snow averaging 2 ft. in depth. Although Mr. Turnbull is sanguine, appearances point to a considerable mortality among the dry sheep.

9. R. Armour, lessee of small grazing-run along with Miss Armour: These runs were covered to an average depth of 18 in. on the low country and on the tops about 24 in. It lay without a break after the first settlement to an average depth of from 12 in. to 18 in. This meant that all the tussock was covered. The sheep consisted of 4,000 ewes, some of which were old and poor. Mr. Armour had to bring them all down on to the sunny faces and to the vicinity of the homestead. Of this number he fed about 1,200 with oaten sheaves and turnips. The turnips had to be uncovered with snow-plough and the tussock dealt with in the same way, and on these snow-plough tracks he sledged sheaves to the flock. The stronger sheep had to find for themselves. At the present time and ever since the snow the weakly sheep have been dying at the rate of ten per day, while the stronger sheep (unfed) have not been inspected, so that at present the loss is unknown. In any case the mortality can hardly be less than 15 per cent.

10. Peter Law, jun., lessee of small grazing-run: The number of sheep he held at the time of the snowfall was about 600. Immediately he could get at them he removed the greater number, or as many as he could find, and brought them down to his homestead, where he hand-fed them with oaten sheaf. This he continued until he found that the ewes were casting their lambs and dying with too much dry feed. Had it not been for a few turnips he had grown the mortality would have been serious. As it is he anticipates a loss of at least a hundred out of 600.

11. R. Shaw, the holder of one of the small grazing-runs lately taken up on Highfield, had 400 first-class ewes. These he left in the snow for about a fortnight. He then brought them down to his father's place, or, rather, the bulk (350) of them, where they have been supplied ever since