

opening out wide, grassy, and sunny, with streams wandering through groups of shady trees, &c., is in reality a large swamp, the peat and moss many feet deep, with rocky knobs projecting here and there, covered with stunted birch. In many places even the main valleys are filled up to a considerable extent with huge rocks which have fallen from the mountain-sides. These are now covered with moss, and the bush has grown over them. There is scarcely any land fit for cultivation. The timber consists for the most part of silver-birch, with the usual undergrowth of fern and scrub. Here and there patches of black- and white-birch take the place of the silver-birch, and occasional trees of black-, red-, and white-pine, totara, and kamai are met with. The whole of it is ill-grown, and quite worthless for milling purposes. I found no rare ferns; in fact, excepting the usual rough fern and the crape fern (*Todea superba*), the fern family is not well represented. Tree-ferns only occur here and there. Above bush-level the alpine plants flourish in large variety. At the head of the Seaforth I found three varieties of the mountain-lily, besides *Celmesias*, *Ranunculi*, *Edelweiss*, and others in abundance. In this country the absence of animal and bird life is particularly noticeable. One may travel miles through the bush and not hear or see a bird except a robin. But, still, there must be some ground-birds about, for at night we could hear the kakapo, and on various occasions our dog caught specimens of these birds, as well as wekas and large grey kiwis. We only saw one small kiwi, however. The rivers are poorly stocked with duck, excepting the lower reaches of the Seaforth, where teal, grey, and paradise ducks are fairly plentiful. I saw scarcely any kakas or pigeons. Of course, we all kept a keen look out for the takahe (*Notornis mantelli*), but saw no signs of that rare bird. I do not know what to attribute the scarcity of small birds to, for, though the number of each variety was few, a great many varieties were represented, such as crows, saddlebacks, thrushes, tuis, canaries, wrens, riflebeaks, fantails, and many others. English blackbirds were numerous in places, especially up the Grebe River. As a rule, too, in the bush, rats are very troublesome, but we saw very few, and were not troubled by them. Traces of rabbits were to be seen on almost all the hill-tops, even west of the Seaforth, but the rabbits are very few. Our dog caught two or three in the Spey Valley. Ferrets or weasels are evidently scattered about, and one of my men says that a ferret paid him a visit in his tent one night. Insect life is chiefly represented by the sand-fly and the blow-fly, which are everywhere in myriads, making the daylight hours spent in camp a misery. Fortunately there were no mosquitos. I noticed particularly, too, the absence of grasshoppers, having seen only one all through the trip; whilst on the rocky tops, where on a sunny day they are generally disporting themselves, there were no lizards.

The geological formation of the country varies but little. The rock is chiefly gneiss, syenite, or granite, with here and there a hard mica-schist, and on the very tops of the peaks now and again, as at Mount Gladstone, small patches of hard sandstone. In the bed of a creek running from Wilmot's Pass into the Lyvia River I found a small boulder of white marble, but did not see any *in situ*. I prospected the wash in the valleys in several places, but got no trace of gold; nor did I see any indication of any other minerals; but the country is so heavily bushed in the valleys, and the tops so broken, that such indications might very easily be missed.

I was a little disappointed in the scenery. Doubtless a stranger would think it far grander than I would, who have been so much among similar scenery. When in the valleys one can see very little on account of the bush, whilst from the tops there is too much to be seen. The peaks in every direction are crowded and crushed together, till, looking over the scene, one appears to be viewing a petrified ocean, and a feeling of isolation comes over one. But here and there are some fine contrasts. For instance, standing on the saddle between Lyvia and Seaforth Rivers, on the one side one looks down a grassy slope, starred with daisies and lilies, on to the grassy valley of the Seaforth, with "its groups of shady trees and pretty waterfalls trickling over granite faces from sparkling lakelets nestling in sunny nooks in the mountains" (as I have said, the grassy flat is a peat swamp; *mais, n'importe*, the picture is the same); on the other side is a sheer precipice of hundreds of feet, which rises to the summit of Mount Gladstone. From the foot the Lyvia River runs away through a dark narrow valley, between vast cliffs, huge mountains 5,000 ft. high towering on each side, whilst yet, to deepen the gloom, in the darkest part of the valley a sparkling lake is set. These lakes are quite a feature of this part of the country. They are scattered everywhere—some low in the bush, others right on the tops, but mostly near the heads of the streams, a little above bush-level. They vary from small tarns to lakes over half a mile long. There are some fine waterfalls, too, notably one about four miles up the Spey River from Lake Manapouri, discovered by Mr. Mackenzie, and another on the Seaforth River, about four miles from its source. Here two falls come down side by side, and I have christened them the Twins Falls. As to the principal results of the exploration, they may be thus summarised:—

1. That the Seaforth River runs into Supper Cove, Dusky Sound, and is the same as the river explored by Mr. Mackenzie, and named, after himself, the Mackenzie River. (The latter name, together with the name Lake Ada, and the names given to a number of mountains, will therefore disappear from the maps.) That the passes or saddles between the Spey and Seaforth Valleys—viz., Pillan's Pass, Murrel's Pass, and the Mackenzie Pass—are unsuitable for through-road routes, their altitudes (from 3,200 ft. to 3,500 ft.) being too great; and the valleys leading up to them, being crossed by steep benches, and very narrow, render it impossible to get grades without immense expense in rock-cutting. Moreover, from the appearance and altitude of these passes, they will be covered in snow during several months of the year. It is, however, possible to make a foot-track by either Pillan's or Mackenzie Pass, and the former is the better, being a little lower, and the route more direct.

2. That no other practicable passes exist from Lake Manapouri to any of the sounds between Dusky Sound and Smith Sound. At the head of the Dashwood or Takahe Stream I discovered a good pass to the latter sound. The altitude is below 2,100 ft. above sea-level; bush grows on it; it lies well to the sun and north-west wind, and apparently the snow does not lie there long at any time. Easy grades can be obtained to it from each side without much rock-cutting, and the dis-