

ERUPTION OF MOUNT RUAPEHU.

The following report was submitted by Mr. C. Risberg, late Chief Guide at the Chateau :—

“ Probably the most interesting happening concerning Tongariro National Park during the last twelve months is the eruption of Mount Ruapehu, which took place during the month of May this year.

“ It appears that for forty-one years the great crater has kept its activities within its own border, but there are tales of a magnificent eruption which occurred in 1895. As the mountain evidently was not climbed immediately afterwards it is impossible to say if any solid matter was ejected and to what extent. From the description of the late Mr. Josiah Martin, who claimed to be an eye-witness of the eruption from the Ross Terrace Hotel, Taupo, we draw the conclusion that volcanic matter was freely distributed at the time.

“ In December, 1934, when Mount Ngauruhoe gave its majestic volcanic display, simultaneously Mount Ruapehu sent a column of steam over 2,000 ft. into the air. During the months following this occurrence I often witnessed the lake steaming so heavily that at times the water was entirely obscured.

“ During the last year the activity in the lake (for such is really the big crater of Mount Ruapehu) has appeared to be at a standstill. Imagine my surprise when on the morning of the 11th May, 1936, I ascended to the lake accompanied by Messrs. C. Tucker and G. Burns of Auckland, and found the beautiful white snow-fields of the crater basin transformed into fields of mud. The colour of the lake had changed from a muddy green to almost clear water, and the slopes towards the lake had a coating of the smoothest and most treacherous ice, evidently caused by the freezing of the water ejected. There was clear evidence of where the water had found its way back to the lake leaving the edges of the lake smoothly rounded off. The condition was so treacherous that close approach to the lake was out of the question. No doubt this eruption and consequent changes were the prime cause of the sad fate of the late Mr. Gordon, of Taumarunui, who fell into the lake after a skid of several hundred yards.

“ Later we made our way round to the Cathedral Rocks, and here we found a tremendous field covered with mud. The strong southerly winds which had prevailed during the three previous days were no doubt responsible for the mud spreading over such a wide area. An indication of the violence of the eruption is the fact that the Cathedral Rocks, which are situated just about half a mile from the lake, were black with mud. The intervening field was a study in black, and closer to the lake there appeared to be a wall of solid mud, which, on subsequent examination, was found to consist of an ice ridge covered with a layer over 3 in. thick. The distance from the edge of the lake to the rim of the crater is approximately 400 ft., so this alone presents a great obstacle in the ejection of the contents of the lake. The mud ejected was blue-black in colour, of a smooth, watery consistency, and very evenly distributed.

“ Two days later I again ascended with two companions armed with crampons and equipment to enable further investigations. Our efforts were hampered by a snowfall of about 6 in. that had occurred since our previous visit, but I was able to estimate that the quantity of solid matter (apart from water) ejected was between 2,000 and 3,000 tons. On this latter visit the colour of the lake had again changed to a dark muddy colour, with traces of sulphur scum on the surface, and there appeared to be a fair amount of rotation of the water. In two places the water seemed to have a movement as that of an artesian well or a pot just on the boil, but there was very little steam coming off the surface. These movements no doubt indicate two main vents under the surface of the water, one of which is situated almost in the centre of the lake and the other north-west thereof.

“ On the occasion when we recovered the body of the late Mr. Gordon I was the last one to be hoisted up from the crater, and while I was waiting on the beach I noticed that the level of the lake rose fully 3 in. and then receded again.

“ The supposed flooding of the lake as reported by Mr. Henry Hill in 1889, who drew his conclusions from the water-marks in the snow round the lake, was no doubt caused by the outlet being blocked by a cave-in of the ice. During the warm summer of 1934–35 the ice melted in such a way that the existence of an outlet or overflow from the lake was definitely established by people who ventured down to its shores. The outlet is on the southern side.

“ The most probable date on which this year's eruption occurred was 9th May, 1936, although there is no eye-witness to this. The mountain had been covered with heavy clouds for a few days so it is quite possible that the eruption would have gone quite unnoticed even had it happened in broad daylight.”

WARDEN'S REPORT.

Mr. J. Cullen, I.S.O., Warden of the Park, in his annual report remarks as follows :—

“ The Park area has been fairly free from tussock and scrub fires during the year, the only fire that occurred was one that started on Maori land east of the Wanganui River and spread within the Park boundary and burned the tussock on the northern slopes of Tongariro Mountain as far as Ketetahi Hot Springs. Deer are still fairly plentiful in the bush areas, and will continue so as long as large herds exist in the Kaimanawa Ranges on the east and in the Kakaramea and Pihanga Ranges on the north of the Park. Bird-life is still on the decrease and will continue to decline till such time as wild cats and weasels have been exterminated. The number of the former is increasing rapidly.

“ A team of eight working-bullocks which has been allowed to run at large and feed on the shrubs and plants in the bush has done considerable damage to the undergrowth by feeding on the soft-wooded shrubs, as well as breaking down young trees. The owner of the bullocks has been warned to keep his animals away from the Park in future.