

Captain Carmichael's sojourn in the island was during the last month of 1816 and the first three months of 1817. He and his party appear to be the only persons who have succeeded in reaching the summit of the dome.

What Carmichael has published¹ on the aspects and composition of the vegetation is so well written that we deem it better to extract the more interesting passages than to condense them. They follow here:—

“The face of the mountain, as far up as the base of the dome, is mostly covered with brushwood, intermixed with fern and long grass, which veil its native ruggedness. In many parts, however, it is completely bare, and presents to view the edges of a vast number of strata arranged horizontally, or at slight degrees of inclination. These strata are in general from five to ten feet in thickness, and vary essentially in their internal structure. The greater number are of solid rock, of a bluish-grey colour and extreme hardness, in some instances homogeneous, in others exhibiting crystals of hornblende, felspar, and olivin sparingly scattered, or forming more than a moiety of the compound mass. Between those are frequently interposed beds of scoria cohering from the effect of partial fusion; of tufa studded with crystals of augite; or of ashes condensed by the pressure of the superincumbent mass. The latter, still retaining in a great measure their friable nature, moulder gradually away, and then leave the more compact strata in projecting shelves. Along the north-west side of the island runs a belt of low land about six miles long, varying from a quarter of a mile to a mile in breadth, and presenting to the sea a perpendicular front from fifty to three hundred feet in height. The whole of this plain is a confused assemblage of stony fragments, scoria, and other volcanic products, resting on a bed of lava. . . . The surface, though apparently smooth, and even while clothed with its native herbage, is in fact extremely irregular, being everywhere broken by small ridges of loose stones concealed under a mere scurf of soil. Between those ridges, however, the soil is pretty deep, and consists for the most part of the remains of decayed vegetables, with here and there a substratum of alluvial earth approaching to the nature of clay. . . . This soil has been found admirably adapted for the production of culinary vegetables, but is far too light to support the weight of trees or large shrubs. . . . The northern extremity of the plain is in a great measure cleared of its wood. By setting fire to the grass the trees have been so far scorched as to destroy their vegetation; but they still lie strewn on the ground, and it will cost some labour to remove them. The rest is still in a state of nature, covered with an impenetrable copse.

“The ascent to the peak is practicable in sundry places, but the undertaking is attended with serious difficulties and not free from danger. I went up on the 4th of January, accompanied by Dr Evers, a couple of servants, and a guide, who had been up some days before. We experienced some obstruction at the outset in making our way through the long grass (*Spartina arundinacea*) which grows along the lower part of the mountain in close entangled tufts. As we advanced, our progress was retarded by the extreme steepness of the ascent and the loose incohesive nature of the rocks, which we could hardly venture to touch, lest these fragments should fall upon our heads; nor did we run less risk in availing ourselves of the arboreous *Phyllica* to support our weight, for the greater portion of these being rotten, it was necessary for us to choose with caution, as a mistake

¹ *Transactions of the Linnean Society of London*, xii. (1818) pp. 483–513.