## Moa Bone Caves in Aorere Valley

Julius Haast

1. Stafford's Cave, named by the miners because a former visitor, Mr. Stafford, broke his leg in it, is the most northern of the three caves. The entrance lies concealed in the undergrowth, but is otherwise wide and open.

A steep conical shaft leads down for a depth of about 80 ft from the floor of the cave; at the bottom, rammed in between the two walls, lies a great block of limestone below which a rivulet streams forth, flowing through the cave, which runs from east; in the cave it is joined by a little tributary.

It leaves the cave, under the name of Doctor's Creek, to discharge into the Aorere. On the northern entrance wall, at the base, thick beds of yellow sandy limestone, very readily friable, can be observed; above, 4-8ft thick, a hard bed of conglomerate (quartz, phyllites, and gneiss pebbles with calcareous cement); the roof of the cave is formed of fine-grained sandy limestone with fossils, but the floor of steeply dipping phyllite beds (fundamental slate) dipping at 45° to the west.

The long pendant stalactites and the vertical fall of the stream, for a height of almost 10 ft, prevented me from investigating the cave to the exit. The water that flows through it has allowed no deposit of loam, and after I had convinced myself that there was nowhere any favourable terrain to set about excavation, I went to the second or middle cave. It is not unlikely that the two caves are connected with each other by side-branches.

But beforehand, I investigated the little creek to see whether there were not any

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peculiar cave inhabitants to be found in it. There was, however, no trace of animal life to be found. Only weakly shining glow-worms occupied the moist ceiling above.

2. Hochstetter's Cave. The entrance to the second and larger cave, which I call Hochstetter's Cave, lies a few hundred yards south of Stafford's Cave and 50-60 ft higher. The limestone here forms a high airy portal, surrounded by luxuriant vegetation, partly overgrown by ferns and mosses, between which hang prettily shaped, dazzling white stalactites.

Here too the visitor has to climb down for about 100 ft over a steeply sloping loamy debris-cone, till the cave itself is reached. Great blocks of rock piled one above the other lie underfoot and only after clambering over these do you reach the smooth floor of the cave.

This consists partly of encrustations of calcareous sinter, sometimes most magnificent and beautiful in form, partly of sand and silt. The cave extends from east to west and has several arms branching off to north and south.

At several points the ceilings rise to considerable heights and forms a cupola of imposing beauty which the light from a dozed candles cannot illuminate clearly. Its breadth varies between 30 and 80 ft; but after about 500 yards it becomes so narrow that it is impossible to go further. Here too I observed cave glow-worms and discovered a second cave-dweller, and insect similar to the weta with very long antennae, which tried to escape capture by long jumps.

I began excavations about 200 yards from the entrance at a place where the partly disturbed soil showed that somebody else had dug before, and where Dr.

Hochstetter himself had found odd fragments of bone. A sublime quiet reigned in the cave, broken only by the fall of occasional drops of water, and it presented a peculiarly awe-inspiring sight, if one withdrew into the dark recesses and saw the shapes of strong men working silently – each one standing up to his chest in a pit lit up by two candles.

It seemed as if each were digging a grave in this quiet place! The cupola, quite a hundred foot above, was scarcely touched by the light which, flickering in ghostly fashion, was reflected from the shining side walls. In clear moonlight we stepped out into the open air, inhaling the fresh evening the fresh evening air with delight.

Some days before, however, I had found a third cave, south-east of Hochstetter's cave, about 200 yards distant and 50 ft higher up the slope, to which I now be took myself to continue my researches.

3. Moa Cave. The access leads down like a shaft and is 3 to 4 ft wide. Projecting rocks make the descent very easy. Also a giant bird could easily get down there. After this a steep slope begins, consisting of soil that has been washed down. On this one enters the cave for a further 15 ft.

It extends from north to south, is 8-15 ft high, 20-40 ft broad and 80 ft long. At the end of the cave, a second opening similar to the entrance leads into stalagmite columns, narrow the interior in many places.

This cave I called Moa Cave on account of the many moa bones we found right at the entrance. In it the scattered and to some extent broken bones which lay round about showed us that others had been here before us; this was the chief

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cave where gold diggers had dug for bones and where the complete skeleton had been found of which we had been told.