<u>4th January 1991</u> <u>Bonsor East Shaft</u>

Dave Bridge and Ian Matheson.

Bonsor East Shaft is much older than the Victorian workings which comprise most of the mining remains at Coniston. It was sunk on the Bonsor Vein to a depth of about 60 fathoms around 1760 by Charles Roe of Macclesfield, the first 180 feet passing through the old Elizabethan workings known as the Low Work. It passes through Deep Level, which it pre dates by some 65 years and the rising water pipe which can be seen protruding from the floor at the first intersection rises up this shaft. In 1825 when Deep Level was being driven 270 feet below to intersect the then flooded stopes, a new pump and wheel was erected to drain Charles Roe's old workings. Ten years later a cross cut was driven from the head of Bonsor East Shaft to facilitate the removal of rock from the sinking of the Old Engine Shaft. As far as I know Bonsor East has not been descended since I joined CAT in 1983 and it has the reputation of being unstable and rather dangerous. Its fascinating history and the fact that it is so little known have long made it a must on my list of things to do at Coniston, but finding someone else willing to do it has proved difficult.

The head of the shaft is located in an underground chamber just below the track which goes to the Old Engine Shaft Wheel pit. Outside are the remains of the 19th Century wheel and associated buildings. Inside a plank crosses the stope to the Old Engine Shaft Cross Cut and close by a pair of substantial timbers covered with rocks also bridge the gap. A search revealed two bolts put in by Mike Mitchell years ago, and which were still in good condition. We backed them up with two more, and then spent some time clearing stone and debris from the head of the pitch to make it safe. Now the time had come I was less enthusiastic about the place, but Dave volunteered to go first. He seemed a bit apologetic about going first, but there was no need, I was quite happy about it!

There is no shaft as such, just a cleared way through the stope. The rock is clean and about ten degrees from vertical. About eighty feet down a hanging rebelay was necessary, requiring the placement of another bolt. As soon as this was done I abseiled down to it, whilst Dave continued on. Fifty feet lower another bolt was needed for a deviation on the hanging wall. Below this Dave went out of my view, but we could still talk to each other. About this time we heard the voice of Alistair Lings, who was staying at the BMSC cottage, but we couldn't decide whether he was at the top or the bottom, and he didn't hear our replies. Dave decided that yet another bolt was needed, and so, as I was getting cold I decided to prussick back up. As we were not sure how far down we were, we agreed that I should walk down to Deep Level and try to contact Dave from there. On my arrival we found that he was in fact only about twenty feet above Deep Level. Now it was Dave's turn to walk out to day, whilst I prussicked up to strip out all the gear.

Prussicking is much better than abseiling because you have much more time to look at things, and I had no need to hurry. Just above the point where Dave had placed his last

bolt are some square timbers, part of the original shaft, still in place, showing grooves where the winding rope had rubbed. These probably carried guide wheels for the rope. Numerous neat square stemple hitches show where fittings and floors used to be. Iron spikes to which ladders were attached rise at intervals to the right, occasionally with bits of ladder attached to them. A third of the way up a large area of the footwall is entirely hand picked, and a neat drainage gully has been chiselled across the face. This must surely be part of the old Elizabethan workings, which reached a depth of 180 feet below the surface. Further up the walls are less regular and there are shot holes where presumably Charles Roe and Co widened the old stopes. To the right, beyond the ladderway, the whole height of the stope has been stacked with deads which once were sealed in with stonework. Much of this has slipped away, exposing the impacted rubble, which looks none too stable. Approaching the head of the shaft from below the timbers which bridge it can be seen more clearly. They were arranged in two pairs, one pair three feet above the other, although one of the lower pair is missing. They are in fact the bearing supports for the winding wheel, and are daubed with gobs of grease and show radial grooves where the wheel rubbed. Probably the lower pair gave insufficient ground clearance for the winding rope and the upper pair were put in to raise the wheel and alleviate the problem. Both sets have cut outs on their upper surfaces where the wheel bearings were mounted. A search in the debris in the shaft head chamber revealed some bits of iron, one of which looked like part of the wheel rim. A few days later a guide wheel was discovered in Deep Level at the foot of the Bonsor East Shaft, and this has been removed for safekeeping.

Well pleased with our exploration we finished the day by going through the LMQT dig in the North Cross Cut and traversing the walkway through the flooded stopes to the foot of the New Engine Shaft, in order to make sure that all was well for the CAT meet the following Sunday.

Ian Matheson.