

Copper Mines and Donkey Dung

THE 10th Century BC was the heyday of the kingdom of Israel. This was the time of its most famous kings, David and Solomon – as we saw in the previous article.

David increased the nation's power and territory through war and conquest, and his son Solomon whose reign was characterised by unprecedented peace, security and wealth embarked on a programme of trading and building. Most famously he built the temple of God in Jerusalem.

Bronze in Abundance

The Bible's First Book of Kings chapters 6 and 7 describe the building of the temple. It was a magnificent building, and Solomon furnished it with all kinds of precious materials. The record says he didn't bother to keep a tally of the amount of bronze he used, there was so much.

Solomon did not weigh all the articles, because there were so many; the weight of the bronze was not determined (1 Kings 7:47).

The Bible does not say where all this bronze came from. There are rich copper deposits and remains of ancient copper mines in the region known as the Arabah Valley south of the Dead Sea, and the suggestion

was made that these were the source of Solomon's bronze (bronze is an alloy which consists mainly of copper with the addition of other metals).

However, many were sceptical, pointing out that the mines were deep in the territory of the kingdom of Edom, which was an enemy of Israel; and that the mines were thought to have pre-dated the Israelite kingdom by hundreds of years. So, the source of Solomon's bronze was unknown, and many doubted that the account of it was true.



Ancient Edomite smelting site

Edom was located in what is now southwestern Jordan, between the Dead Sea and the Gulf of Aqaba.

The location is actually not a problem: the Bible records that David subjugated the Edomites:



The Arabah Valley

He also put garrisons in Edom; throughout all Edom he put garrisons, and all the Edomites became David's servants. And the LORD preserved David wherever he went (2 Samuel 8:14).

This means that Solomon would have enjoyed easy access to the mines.

More Digging

Recently a number of archaeological digs at various sites in the Arabah Valley have unearthed evidence that the copper mines were much more extensive and complex than was previously thought, and furthermore the peak of their productivity appears to have been in the 10th Century BC – exactly the time of King Solomon!

In 2013 archaeologists from Tel Aviv University commenced a dig on 'Slaves' Hill', 30 km north of the Gulf of Aqaba.

They uncovered the remains of a fortified mining and smelting settlement, and among these remains there were many fragments of textiles and other organic materials which had been well preserved in the arid desert climate, and which indicated an origin on the Mediterranean coast.

Among the remains on Slaves' Hill was a pile of animal excrement, perfectly preserved and containing undecayed plant matter. Laboratory analysis concluded that it was the dung of a donkey, dating from the 10th Century BC, and the food the donkey had eaten came from the Judean hills.

Piece by piece, and little by little, the archaeological record verifies the Bible.

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