

# WILTSHIRE CHANDELIERS

Sue Cowdry

The glorious autumn of 2003 saw work progressing on a new by-pass for Semington, near Trowbridge, the county town. The roadwork involved diverting a stream, and putting the canal in an aqueduct to pass over the road. The northern end of the by-pass was being dug through blue clay, and soon, local people using the footpaths which cross the sites, were picking up fossils and crystals by the dozen. A few Russell Society members, who also lived nearby, spent many happy evenings, and weekends, over a period of three months, digging in the clay to rescue the gypsum crystals from destruction or reburial. Each day we were keen to see what new area had been excavated, until the nights drew in and we had to leave after the glow of incredible sunsets across the flat clay land.

Huge septarian nodules (containing meagre calcite), large belemnites, ammonites up to a metre across, small fragments of bone and much fossilised wood were common at the site. The type of ammonites confirmed the clay to be from the Kellaways beds, the Callovian, i.e. the lowest part of the Upper Jurassic.

The main band of the largest gypsum crystals stretched full width east to west, across the road just south of the aqueduct, and was about 12 feet (3.6 metres) wide from north to south. The band was very obvious initially, with a surface yellowish colour, and was particularly yellow at each end, where the crystals were stained brown or yellow, probably from iron minerals, and possibly jarosite. Otherwise, the crystals were generally clear or with some clay inclusions. They were predominantly diamond shaped or typical thick monoclinic forms, many with interpenetrations. The largest found was 6.5 inches (16.5cm) long. Long slim crystals were less common and generally very small, but a rare large specimen collected was 9.5 inches (24 cm) long. A few crystals contained grey phantom crystal inclusions, and the long, large crystals had dendritic clay inclusions.

At the sides of the gypsum band, where it graded into the yellowish clay, there were many small, very clear crystals, and also a pocket of crystals in clusters, in toffee brown and honey shades.

Further masses of small crystals occurred in the clay just under the aqueduct. Both diamond shapes and small long forms were collected by the bag-full by local children and workmen at the site; the latter called them crystal chandeliers.

Other crystals of moderate size and good clarity were found in a small area immediately north-west of the aqueduct. Some crystals displayed warped or curved surfaces. Two areas of interest were just north-east and south east of the aqueduct, nearer the original ground level, in yellowish clay which sparkled with hundreds of minute

crystals. Attractive stellate and interpenetration forms occurred, one type being called Thor's Hammer by the finder. Belemnites up to 4 inches (10 cm) long were found entirely replaced by masses of clustered gypsum crystals, which had also replaced bivalves in delicate groups. Even twigs or plant stems occurred, replaced by gypsum. Another remarkable find was that a diamond shaped crystal of gypsum pierced by a gypsum replaced belemnite.

Gradually, as more clay was moved and the roadwork progressed, the bonanza of gypsum diminished, until the end came when the stone foundations were laid.

No doubt most mantelpieces in Semington village are decorated with mementos of the roadworks and I certainly have a large variety of gypsum crystals to remind me of an autumn's happy digging.

I would like to thank Semington's John Willmouth for first taking me to the site, and also Alan Bentley of Charlcombe, who kindly identified our ammonites and confirmed the age of the clay. *Please refer to the list on page 7.*



***A fossil is an extinct animal.  
The older it is, the more extinct it is.***

*Thanks to Allan Comer for the cartoon.*