

## **Water**

It could be said that the community of Chinnor really only exists because of water: the pure, clean water that seeps out of the chalk aquifer beneath the Chiltern Hills. Chalk is the softest form of limestone and is very porous. Rain that soaked into the hills over hundreds, possibly thousands, of years trickles out of the various springs along the northern scarp slope of the Chilterns. This line is known as the Chiltern Spring Line.

Although excavations have indicated that Iron Age tribes lived along the Chiltern ridge in about the 4<sup>th</sup> Century BC, Ceona is believed to have been a chieftain of an Anglo Saxon tribe that settled along the spring line around 1000 years later in about 400 – 600AD and it was after him that the village was named. Other local Spring Line villages included Bledlow, Wainhill, Crowell and, further to the west, Lewknor and Ewelme.

Many of these springs were, and still are, mere seepages of water from the ground that create boggy patches and small streams. A more impressive set of springs can be found in the Lyde Garden in Bledlow adjacent to Holy Trinity church. Here, several springs issuing from the chalk sides of a sunken area have created lakes that, over the years, have been used as watercress beds and, further downstream, to feed water mills. The Lyde has in recent years been attractively landscaped by its owners, the Carrington Estate, and the area is open to the public and well worth a visit.

Watercress is widely recognised as a plant that grows well in slightly alkaline, but clean water, and our local chalk streams are ideal. Cress beds used to be a significant feature all around this area but cress cultivation has declined sharply in the last 100 years: the beds at Ewelme are a notable survivor.

In earlier years, Chinnor also had several ponds associated with springs and the 6" OS maps of the 1880s show 4 notable ponds within the village square, although all have now been filled in. The last to survive was that where the Conigre children's playground is in Station Road is now, located roughly beneath where the raised area now is. This discharged into a stream that ran along the rears of the houses in Lower Road to a point opposite the entrance to Springfield Gardens where it connected with a stream from a pond at the bottom of the High St, opposite the Red Lion pub. Although this pond is now culverted and is part of a private garden it still acts as a surface water runoff for the High Street. The stream from both ponds is culverted across Lower Road and heads off down Springfield Gardens.

There was a second road-side pond in the High St, roughly opposite Dillamores about half-way up although this has now long been under the front drive of a house. The fourth was in the centre of the village in (now under!!) the vicinity of some of the houses in Rectory Meadow, the estate so named because it was built on part of the glebe land associated with the old Rectory. I don't know whether these last two were

culverted or just covered and filled in. There are other springs around the village that only emerge after wet weather when the water table rises and the water needs to find an escape route.

The largest existing “ponds” in the village are, however, man-made and are the disused quarries on the old cement works site and these are very closely connected to the water table in the hills. The level of water in the quarries rises and falls quite noticeably as the water table moves so these quarries appear to fill and empty over the seasons.

Until the 1960s there were also numerous wells across the village and their depths varied depending upon location and distance from the hills. Again, the OS maps from the 1880s show more than 20 wells across the village and, in reality, there are likely to have been many more; in the 1950’s we had a fairly shallow well (about 3m deep) located behind our house in the High Street that served a terrace of 4 or 5 houses. In common with other wells in the village, this was filled in (for safety purposes!) in around 1960 when piped water was laid on.

Whether any wells still exist in Chinnor I don’t know; they really went out of fashion at the turn of 1960s despite them having been the major source of clean and healthy water for centuries. Some drew the water using a simple bucket on a winch but others used a pump at the bottom of the well with a hand-operated mechanism at ground level. These pumped wells could be difficult to maintain, particularly when they were deep. My uncle, who was a local blacksmith in the earlier part of the last century, told of his second most “unfavourite” job – as the youngest and fittest, he had to climb down into deep, narrow wells to remove and replace the pumps for servicing. (He always said his most unfavourite job was soldering cracks in damaged milk churns – the acrid smoke from burning milk in the cracks was, apparently, vile!)

The whole of Chinnor is now served with piped, treated water, most of which is still taken directly from subterranean wells in the Chiltern chalk. There are, however, still houses in the village that retain their old brick “bottles” that pre-date mains water: these were brick-built tanks that were buried in the back gardens to collect rain water. This water was originally used for drinking and other domestic purposes, and with appropriate treatment, could still be used as such; its principle use is now for watering gardens!

Well-drawn water was used carefully and sparingly because of the effort required to draw it to the surface. The major issue with our water in the 21<sup>st</sup> century is that we now use it in massive quantities and we tend to take its supply for granted. In addition, we need to dispose of it all afterwards. Historically, all waste water ran off into open ditches, some of which used to run down the sides of roads like Station Road, and these ultimately filtered the water back into the ground. These ditches were often unpleasant, very smelly and unhygienic by modern standards, but they did recycle water relatively slowly back into the environment. Housing development

over the years led to concreting of roads, pavements, front drives etc, and permanent, piped drainage became necessary. All waste water, including surface water, was then directed into piped underground sewers.

From Chinnor these sewers run across the fields to the nearest sewage treatment plant at Henton. Sewage plants have always been at risk of being overwhelmed at times of serious rainfall with subsequent flooding of fields, ditches etc with untreated sewage, and in recent years this situation has worsened. Relatively recent changes to planning law have resulted in a requirement to separate waste water into “foul” and “surface” water: foul water is still directed via pipework to the sewage plants for treatment but surface water is allowed to soak back into the ground, thus reducing the load on the sewage treatment plants. This is achieved locally either by using buried soakaways or, on the most recent developments, by construction of landscaped catchment pits that collect and contain surface water long enough for it to soak away naturally.

Maurice Pullen