

Up to Scratch

Many of you will have attended services or other events at St Peter's Church in Winterbourne Stoke over the years. Others may have simply wandered round the wonderful seclusion of the churchyard and mused about the building itself. Some of you may have a knowledge of the history of the village and the church and know that prior to 1066, a church with a chaplain stood on Edward the Confessor's Winterbourne Stoke estate - held for him by his queen, Edith, daughter of Godwin, Earl of Wessex.

Look carefully round the outside walls of our church, particularly on the southern and the western sides and you may spot some curious scratch marks and carvings. They are mostly, though not all, between waist and head height and are of various styles. You'd be forgiven for thinking these were acts of simple graffiti, carried out by our ancestors, but that is far from the case. The conventional wisdom is that these are scratch-dials or mass dials; very simple sundials created by boring a hole into a stone block on the south side of a church, or sometimes between two blocks, into which a wooden stick or iron rod could be inserted. The line of shadows cast by the stick, at dawn, noon and dusk would be scratched into the stone, to give a rudimentary clock; hence the name 'scratch-dial'.

It's said that the marks are scratched into the stone rather than simply drawn on the surface because the stonework was originally lime washed white, and the etched lines were easier to find after a new paint job. Mass dials usually have another line etched into the stone at the 9:00 am position, the time when mass usually started.

Both Scratch dials and Mass dials originated in medieval times in England and they went out of fashion in the 16th century. But don't forget, using simple sundials even here in Wiltshire can be dated back to neolithic times. After all, Stonehenge is basically a glorified sundial. The Bible refers to the "dial of Ahaz" mentioned in Isaiah 38:8 and 2 Kings 20:11.

It may not be immediately obvious, but these simple devices tell us something very important about our ancestors and the way they lived. Day length and thus the length of any divisions of the day between dawn and dusk would vary between summer and winter - relative time. It was only in the 11th century that the Moroccan mathematician and astronomer Abu Ali al-Hasan al-Marrakushi first described an equinoctial time system.

When clocks arrived in the 14th century these, together with better scientific understanding of how to build a better sundial cemented the position of the equinoctial time system and we have been slaves to the clock ever since.

As a bit of an aside, when clocks first arrived in England, based on a Milanese clock of 1335, they struck each hour up to 24. Something changed in about 1377 and when the first clock in Salisbury was built shortly after this date, it struck up to 12, twice a day - a much simpler mechanical system to implement. This brought an end to the monastic monopoly of time and the introduction of reckoning time from midnight to mid-day.

Before scratch dials emerged there were earlier versions back in Saxon times known as Tide dials - these divided the day into Tids or Tides - 3 hour periods: morgern, ufern, middaeg and gelontendaeg which still appear today as morningtide, noontide and eventide.

As I say, that's the conventional wisdom and it's probably true, at least for Tide dials. You are said to only ever find one Tide dial on a church, but you often, as in the case of St Peter's, find many scratch dials or mass dials, often with identical designs and frequently close to each other around the southern door to the nave. Why so many? Were masses and sermons so boring back in the day, that parishioners wanted to spend as little time in church as possible and so everyone had their own scratch dial?

And what about the remains of scratch dials and a mass dial on the western end of St Peter's? The conventional wisdom is that stone from an earlier building was re-used and sometimes the scratch dials finished up built into another wall of the church, sometimes upside down and even

on the inside. Some of ours are clearly only partial dials and one on the western end may be a tide dial - this one still has the remains of an iron rod. So perhaps the rebuilding theory is true. So the arch at the western end of the nave must have been the southern door of an earlier stone church, and the blocks must have come from a southern wall. However, the southern arch is much later in design than the two above the southern and northern doors, so was retrofitted under the window with bits of a church that post-dated St Peter's; all very odd. However, that doesn't explain the partial dials on the western quoins rather than the door. It seems the nave must have been rebuilt around 1300 with the west wall and window being replaced in the 16th century? This might suggest that the present church is the second, if not the third, to have been on the same site.

So far, I've counted 9 definite dials on the outside of St Peter's, possibly 10, but none inside - they may be there, but covered with plasterwork - who knows. There are another 3-4 sets of marks that might be badly eroded scratch dials on the southern walls, but that may just be wishful thinking. They've survived for centuries, but are being eroded away by nature. Two of ours have been 'vandalised' by a well-meaning, but uninformed individual, with cement and a trowel - this can and will be fixed! But they won't last indefinitely, so a good reason to record them and look at them while you can.

Back in the mid-1930s, they were also recorded in the churches in Berwick St James, South Newton and Stapleford, but not in Great Wishford - were any missed?

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Southern Wall



Fig 1. Above southern door. Upper half of dial is missing. This is a relatively late version.



Fig 2 & 3. Evidence of two and possibly 3 scratch dials to the left of the southern door. Both have been damaged by overenthusiastic re-pointing of the stonework by an uninformed workman or villager.



Fig 4. Southern transept window



Fig 5. Southern transept window - perhaps one of the most confusing dial at St Peter's as it is circular - so it makes absolutely no sense as a sun dial - there being no sun at night!



Fig 6. A small dial with what appear to be Roman numerals between the two chapter rings. Is this trying to compete with “modern” mechanical clocks?

Western Wall



Fig 7. Another part of a semi-circular dial, with possible Roman numerals between the chapter rings. A different diameter to that in Fig 1.



Fig 8. This may or may not be a scratch dial. It does have the remains of some ironwork in the central hole. It is on the left side of the sealed up west door. This suggests the west door was once a southern door - but from where?



Fig 9. A partial mark on the west wall. It appears to be a very small circular dial, probably re-sited from a southern wall.