

Buckinghamshire Coprolites: A Palaeoscatological Geology

This is a story of science, mining, farming, and toponymy in Victorian England. Let's start with the picture shown below. It is what geologists call a *coprolite*, and it truly is what it actually looks like - a piece of dung - though it is not dung as we usually know it, for it is an ancient animal dropping deposited by some now extinct creature that roamed the earth millions of years ago in a distant geological era, and it has, by complex geochemical processes, become petrified and turned to stone. It is, in short, fossilised poo.



Now you may feel that this is an unsavoury subject not suitable for inclusion in the refined pages of the BAS Newsletter, where more elevated matters should surely be discussed, but you should understand that palaeoscatology, the study of fossilised faeces, is an established and legitimate area of study in geological science.

Furthermore, coprolites were greatly valued as an important resource that was mined in the nineteenth century, winning fortunes and briefly transforming the landscape of a group of villages of Buckinghamshire south of Leighton Buzzard.

Coprolites, like fresh animal dung, can be used as manure. In the nineteenth century a method was developed of producing phosphate fertiliser from coprolites, and soon enterprising individuals were investing in land and hiring labour to dig extractive open pits into the coprolite bearing cretaceous beds known as Gault Clay and Upper Greensand. There was a ready market for the crushed and processed nodules; indeed, there was gold to be got from the petrified poo: soon, after the first pit opened in Cambridgeshire in 1842, there was a coprolite rush contemporary with the wild Gold Rush in California. Scores of open pits were dug into the landscape employing great numbers of labourers who flooded into the quiet villages of Cambs, Beds, and Bucks, men and women - and even children, with pick and shovel and bulky wooden barrows

toiled in muddy pits like the one shown below - an early photograph from the County Museum Collection at Aylesbury



Coprolite mining at Brickhill

The zone of coprolite mining extended initially from Cambridgeshire into Bedfordshire, and then into our county of Bucks. It was not until 1869 that Mr Henry Wilkerson made the investment of digging a new pit at Slapton just south of Leighton Buzzard. Soon, more workings were dug at Cheddington, Puttenham, Ivinhoe Aston and Brickhill.

The coprolite pits are now long gone – cheaper phosphates from North America meant that by the end of the nineteenth century, mining coprolites in Britain ceased to be worthwhile, and the coprolite boom had ended as quickly as it began.

The Bucks coprolite pits had been confined to a fairly small area south of Leighton Buzzard and Linslade; however, the biggest pit was in a parish in the neighbouring county of Bedfordshire. And here lies a tale. This village is named as *Sethlingdone* in Domesday Book. By the fourteenth century this was variously rendered as *Shutlyngdene*, or *Shetelyngton* and then, well before the development there of coprolite mining four centuries later, regularly in documents, clerks would studiously write out the name as – *Shitlington*. Yes, Shitlington - you are not mistaken - that was the correct spelling, with that first syllable seemingly so appropriate for a village whose major source of employment came to be shovelling - erm - dung. Albeit, fossilised dung.

The village continued to be so aptly named in the census records and other documents through most of the nineteenth century. Then strangely, in the 1881 census, suddenly the village is recorded as Shillington – and so it remains inoffensively to this day. Precisely how it came to be changed is uncertain, but no doubt the villagers themselves felt an understandable embarrassment to be known as Shitlingtonians, and it is said, that census officials felt that so coarse a name could not be put before Queen Victoria's shocked and sensitive eyes were she to make interested enquiries about the rural economy of Beds and

Bucks. Whatever the case, the village now bears an inoffensive name suggestive of a now defunct duodecimal coin of the realm, rather than poo.

Now it is a pity to spoil a good story. However, the fact is that the coprolites mined in Shillington and in Bucks, are now known to be not true coprolites. The evidence is that these faecal-like nodules are not the fossilised droppings of cretaceous animal life. Rather, they are have been formed from remains of marine animal bones and shells that accumulated on the seabed, where they were gently agitated back and forth by moving water, while chemical processes bound the fragments together to form nodular concretions of phosphatic material of value ot farmers as fertiliser.

An account of coprolite mining can be found in Records of Bucks, volume 32, 1990, by Bernard O'Connor. On Shillington Bedfordshire, visit www.shillington.org.uk. You will also find more about rocks, minerals and fossils in Bucks from the Bucks Geology Group website at www.bucksgeology.org.uk – see below.

Michael Ghirelli