



Cowbridge School

TerraDat

How deep was my valley?

What are we testing?

The Thaw valley is an enigma. The small present-day river flows through a sinuous lowland valley that the town of Cowbridge and its school is located. Deep incised meander bends and tributary valleys, outlined by notably steep cliffs, must have been eroded by a river far larger than the present stream. This raises the question of when and how the valley was formed.



The River Thaw meandering through its very broad valley



A dry tributary valley of the Thaw at Graig Penllyn

What are we testing?

We used geological mapping techniques and geophysical surveying to test two theories about the valley:

1. Glacial meltwater flowing from the Welsh Ice Sheet 14,000 years ago may have diverted through this area.
2. An old buried landscape (over 230,000,000 years old) with a similar origin, and possibly scale, as the Avon and Cheddar Gorges. The infilling sediments are slowly being eroded.