

**Summary of “The Making of the Malvern Hills”
by Richard Edwards, Voice of the Malvern Hills Conference 2016**

Richard introduced the lecture by explaining that he would be explaining how the hills formed over a long and complex period of geological history and also seeking the evidence for their age. The rocks which underlie the hills are designated as the Malvern Complex and consist of igneous rocks, mainly diorite and granite, which formed at depth within the Earth's crust. The rocks have been dated at 677 million years.

Two major tectonic events are relevant. At the end of the Carboniferous period (300 – 310 million years BP) a major episode of mountain building in Europe impacted on central Wales and northern England, forming major faults. In the Malvern area the igneous rock of the Malvern area were thrust upwards forming a chain of hills. Later during the Permian and Triassic periods (280 – 210 million years BP) the area became subject to tensional forces creating the Worcester Basin. Subsidence of part of the Malverns Complex took place with burial under more than 2kms of Triassic and and muds. The fine nature of the Upper Triassic (210 – 230 years BP) mudstones suggests that the hills had become very subdued at this time. During the long period of geological time from the late Triassic to late Cretaceous times (210 – 65 million BP) Britain was under water for long periods.

Major volcanic activity associated with the opening up of the Atlantic Ocean coincided with a general uplift of the land mass which would become Britain in early Paleogene times (60 million years BP). There is also evidence from a number of countries bordering the Atlantic that significant periods of uplift took place at 30 and 2.3 million years (Neogene). It is probable the physical landscape of the Malvern Hills as we see them today formed during one of these episodes of uplift.

Thus whilst the rocks of Malverns Complex are amongst the oldest in England , the physical feature of the hills is relatively young