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OBITUARIES

F. B. A. WELCH (1903-1987)

Francis Brian Awburn Welch was born in Cheltenham on 13th February, 1903. After attending Cheltenham College he entered the University of Bristol in 1920 and graduated with first class honours in geology in 1924. He was awarded his Ph.D. for work on the geology of the central Mendips in 1927.

It is not known when Welch joined the Society, but he was a committee member in 1925/26. He remained a member until his death and was thus a member for at least 62 years. He is known to have descended Stoke Lane Swallet, and Goatchurch where rumour has it that he had an accident, but the extent of his caving activities is unknown. His geological help is acknowledged in several papers in the *Proceedings*, but his only contribution was a brief note recording the discovery of Pleistocene gravels at Kenn in 1956.

Welch was appointed Assistant in the Geology Department at St. Andrews University in 1926 and remained there until 1931, when he joined the Geological Survey. He retired in 1963 and died in Cheltenham on 1st March 1987.

Welch was probably the only person to have geologically mapped parts of the Mendip Hills twice. Arthur Vaughan had set up a series of faunal zones for the Carboniferous Limestone in 1905, and a number of workers mapped these subdivisions in order to reveal geological structure. Welch used this method in his work on the structure of the central Mendips, which he extended to the east and west in subsequent papers. When the Geological Survey came to map the Somerset Coalfield on the six-inch scale for the first time, in 1943, it was decided to map rock types within the Carboniferous Limestone rather than the fossil zones, the latter being thought to be controlled by the sedimentary facies and, therefore, not true indicators of geological time units. So Welch found himself re-mapping parts of his old ground using different criteria.

Welch became District Geologist of the South-Western District, which included the Mendips and the Bristol and Somerset coalfields, in 1955. To him belongs much of the credit for unravelling the complex geological structure of the Mendips and the coalfield to the north. His colleagues on the Survey recognized his outstanding mapping ability which, unusually, combined speed with accuracy and discrimination, while his cartographic skill at every stage of map production became almost legendary both among humble recruits and not so humble older members of the staff.

Welch was ahead of his time in studying the hydrology of the Stoke Lane area (published 1931), examining the relationship between surface valleys and underground drainage, a subject to which the Society did not return until after the war.

D. T. Donovan