

EVALUATION OF VARIOUS HYPOTHESES RELATING TO THE LOCATION OF THE FALL AND THE SUBSEQUENT HISTORY OF A LARGE METEORITE LATELY RECOVERED IN WILTSHIRE, UK

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Introduction: A large, 60kg, weathered meteorite was reported to have been in the UK for at least 60 years when it was taken to the Natural History Museum, London, twenty years ago. Previous to 1991, eye witness and photographic evidence demonstrate that it rested for many years near to the front door of an imposing country house in Wiltshire. It was reputed to have been either brought to the UK or otherwise collected locally by Lt Col Frederick George Glyn Bailey in the early twentieth century. The descendants of FGG Bailey have made the specimen available and encouraged a study to ascertain more information about the meteorite before arranging for it to be on permanent local public display. The meteorite is described in an accompanying abstract.

The presence of a meteorite of unknown terrestrial provenance offers a considerable challenge. Whilst a scientific examination [1] can offer some information, much depends on an exhaustive examination of contemporary documents. Some while ago we were able to piece together a detailed account of the circumstances surrounding the fall of the Wold Cottage meteorite to show it should not be considered as just any old ordinary chondrite [2].

Results: The life and times of Lt Col FGG Bailey have been researched thoroughly in order to highlight any possible links he may have had to a meteorite find either in the UK or the rest of the World. The meteorite is inextricably linked to the house where it was located for so many years: Lake House. Thus the history of the Lake House Estate, the house, its previous occupants and their associates, including their interests and scientific aptitude, have also been studied in an attempt to establish the earthly provenance of the specimen.

Several hypotheses have been considered to account for the presence of the meteorite in Wiltshire. Necessarily these hypotheses revolve round the people who could conceivably have had an involvement in the meteorite's history on Earth. Questions regarding whether they might have had the motivation, opportunity and capability to recognize a meteorite have been considered. Even if they did, they would have needed the resources to move such a large stone and have the desire to collect and display it.

A document trail has been initiated which provides new and verifiable information about the terrestrial provenance of the meteorite associated with Lake House. The latest findings will be presented together with an up-to-date probability/possibility assessment of the place of first collection and hence the site of the fall. The work reported here may offer some pointers to others searching archive material for reports connected to meteorite related events.

References: [1] C.T. Pillinger et al., this volume. [2] C.T. Pillinger and J.M. Pillinger Meteoritics and Planetary Science 31, 589-605 (1996)