

SIR PETER KENT, FRS.
AN OUTSTANDING EAST MIDLANDS GEOLOGIST:
AN APPRECIATION

by

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Introduction

The purpose of this article in the *Mercian Geologist* is not to compile a complete obituary of Sir Peter Kent, but to highlight the contribution made to the geology of the East Midlands by a world famous geologist.

Personalia

Percy Edward Kent was born in West Bridgford, Nottingham on the 18th March 1913 and received his secondary education at West Bridgford Grammar School. He obtained his University education at the University College, Nottingham from 1931 to 1934, taking a London External Degree in Geology with First Class Honours, a notable achievement. His principal teacher at that time was Professor H.H. Swinnerton who encouraged his interest in the geology of the East Midlands. Kent published his first papers on the Lower Lias of Nottinghamshire and with F.T. Baker on the ammonites of the Lincolnshire Limestone in 1936 and 1937 thus starting a lengthy series of original papers on East Midlands Geology and other topics. In 1960 the University of London awarded Dr. Kent a D.Sc., for his publications on structural and stratigraphical studies of eastern England and elsewhere. There cannot be many International Scientists that retained an active, though at most times a restricted interest, in the area which was important to him at the start of his long career, yet this is what Sir Peter Kent was able to do. Throughout his life he continued to maintain a base in West Bridgford.

In 1934, he was awarded a D.S.I.R. studentship which enabled him to travel to East Africa and which resulted in sufficient original material for his Ph.D. degree, supervised at Nottingham (1935–1936), and awarded as a London External Ph.D. in 1940. The thesis on the Miocene Beds of Kavirondo, Kenya, was published with other articles on E. African geology in 1941, 1942, 1944.

In 1937, he began his long career with BP, starting with the then D'Darcy Exploration Co. Ltd., later incorporated into Anglo-Iranian Oil, and eventually renamed BP, firstly as a Geologist, later as their Chief Geologist and subsequently as their Research Director. Details of these aspects of Sir Peter's career will no doubt appear elsewhere, as well as the long list of Honour's bestowed upon him including Honorary Degrees at the Universities of Leicester, Hull and Birmingham.

He was a Member of the East Midlands Geological Society from its inception in 1964 and become one of the first Trustees. Although invited to join the Council of that Society, his work for other local Scientific Societies had priority, becoming President of the Yorkshire Geological Society, 1964–1966, the Lincolnshire Naturalist's Union 1971 and the London Geological Society, 1974–76. All of these Societies had claimed him as a Member much earlier and from an early age.

Sir Peter's interest in East Midlands Geology was maintained by BP's continued interest in possible East Midlands Oilfields—Eakring, Bothamsall, Langar, Plungar, Gainsborough—and ultimately those of the North Sea. As with all commercial geologists this was not his sole interest. His work resulted, in later years, in lengthy absences away on international assignments, including further visits to East Africa, and management activity in London.

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Fortunately for Geological Societies in this country, apart from technical reports, BP does not publish a geological Journal and therefore information, once confidentiality and secrecy no longer prevailed, could be published elsewhere. The Geological Society of London, the Lincolnshire Naturalists Union, the Yorkshire Geological Society and the Leicester Literary and Philosophical Society were amongst the first to benefit and lately the relatively infant East Midlands Geological Society.

A further aspect of Sir Peter's generosity was his willingness to lead Field Excursions throughout the area for East Midland and Yorkshire Societies and for the London based Geologists' Association, giving amateur geologists as well as professionals the benefit of his industrial and private research. A sentence extracted from his Presidential Address to the Lincolnshire Naturalists Union was to the effect that one of the best activities of amateur geologists was to record all local temporary exposures and shallow boreholes. Many of his publications for that Society illustrated how this should be done.

After his retirement from BP, Sir Peter Kent supported universities in a number of ways, although he declined the Chair of Geology at the University of Durham. This support included his Chairmanship of NERC, 1966 to 1980; the Adrian Fellowship at the University of Leicester, 1967-1970; opening a new laboratory, Department of Geology, University of Keele (1970) and the donation of a large collection of his private papers to the University of Nottingham in 1985. These papers, mainly from 1966 onwards includes documents from the Lincolnshire Naturalists Union, Yorkshire Geological Society, Royal Society and papers from his many committees including NERC, JOIDES, IGCD, BNCG, ITZN, IPOD, London Scottish Marine Oil, North Sea Oil, most of which were (?still are) highly confidential!

Geological work in the East Midlands

A review of Sir Peter's publication list, appended hereafter, shows that his interest in East Midlands Geology spanned much of the stratigraphical column of the area starting with the concealed Carboniferous and older rocks and continuing into the Cretaceous. A high percentage of his papers are concerned with the Rhaetic (Penarth Group) and with the Jurassic.

Most subject areas are covered although the emphasis, as one might expect, is on structure, sedimentology and palaeogeography. I am sure that Sir Peter would not mind me saying that he preferred to leave detailed palaeontology and mineralogy to others. Even so, he was well aware of the importance of these subjects in particular in finding rare ammonites in the unlikely facies of the East Midlands ironstones and oolites. I well remember a field excursion in 1962, (Kent, 1963) when an ammonite was found in the Frodingham Ironstone and of his insistence that it should be sent to the proper authorities. There is an early record of his collaboration with T.C. Baker (1937) on ammonites and much later with R. Casey (1963) and F.C. Dille (1968).

His first paper (1936), on the formation of the Hydraulic Limestones of the Lower Lias, was concerned with the primary or secondary origin of the regular alternation of argillaceous limestones and calcareous mudstones. The subject was resurrected in 1957 after the opposite view point had been expressed by Hallam (1957, revised 1964). This sedimentological interest, encouraged by his professional interest, is seen in many of his papers including those on the Lincolnshire Limestone (1940, 1966 and with Swinnerton, 1949, 1976) and on the overall results of oil exploration in the East Midlands (with Falcon, 1960).

The latter work also gives detailed accounts of hidden structures in the East Midlands but one must not disregard the early work on the Melton Mowbray anticline (1937) and later on the Market Weighton Structure (1956). The present situation on the structures in this area are summarised in his Presidential Address to the Yorkshire Geological Society in 1980.

Being an oil man, familiar with hidden structure, prompted the use of palaeogeography as a means of summarising the geology of the time, which led him to publish a major contribution on the buried pre-Permian rocks of England and Wales in 1949. This followed observations on the river systems of south Lincolnshire (1939). The Sand Pockets of Derbyshire were coupled with a 1000 ft surface (1957) in an attempt to determine the age of the sand and, in 1966, a contour-structure map of the East Midlands and Yorkshire sub-Carboniferous surface was published.

Important stratigraphical innovations are included in many of the above papers. Sir Peter Kent is credited with the local stratigraphical terminology of many Lincolnshire and Yorkshire Jurassic rocks including the subdivision of the Lincolnshire Limestone and for his proposals for the Grantham Formation published in this journal in 1975.

With so much interest in the search for oil in this country, since just before the start of the Second World War, concentrated in the East Midlands and with Sir Peter's early connection with the industry it is not surprising that major and minor publications appear on this subject. His main contribution here is on the geology of the deposits and on the origin of the oil. A paper on the occurrences of oil in the Carboniferous rocks of England (1954) was followed by the early accounts of the North Sea deposits (1967, 1970, 1974).

His detailed knowledge of the East Midlands invited contributions to many general publications, particularly on Lincolnshire (1971, with Swinnerton 1949, 1976) and for the British Geological Survey (1980); on Jurassic stratigraphical nomenclature (*Lexique Stratigraphique*, 1963) and on the Rhaetic of the East Midlands (1968). As Chairman of the Triassic Working Group his contribution might appear to be mainly managerial but there are important contributions again to the Penarth Group in publications in 1970 and 1980.

In later years, Sir Peter Kent reviewed the broad aspects of his subjects acting as Chairman and organising in whole or in part major symposia for the Royal Society and Geological Society of London. A recent combined meeting of the Yorkshire Geological Society and the East Midlands Geological Society on the Deep Geology of the East Midlands was to have been chaired by Sir Peter but sadly this could not be so. He would not have been surprised, although greatly gratified that the meeting in Nottingham attracted a programme of 10 papers and an audience of well over 200. The commemoration of the proceedings of this meeting to Sir Peter Kent would be a lasting tribute to his long interest and geological work in the area. From the private papers (University of Nottingham) it is clear that his father was not too keen on higher education but his mother encouraged him at the start and during his years at the University. Geology would have been the loser if the paternal influence had prevailed.

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