Bibliography of the Geology of Leicestershire and Rutland Part 2: 1971-2003

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In 1973, Trevor Ford and colleagues published a detailed bibliography for the geology of Leicestershire up to, and including, the year 1970. This very thorough document has provided researchers in local geology with a valuable starting point, and this follow up paper aims to build on this and provide details of modern references. The opportunity for compiling this bibliography arose through the award of a contract to the British Geological Survey (BGS) by the Minerals Industry Research Organisation using monies from the Aggregates Levy Sustainability Fund provided by the Office of the Deputy Prime Minister. The work focused on geodiversity in Leicestershire and Rutland with education being the primary theme. One of the project deliverables was a website of local geological information, for which this bibliography was compiled. Time and financial constraints meant that the work was not subjected to the rigorous checking that Ford et al. (1973) were able to undertake. We have also had to restrict the bibliography to only papers referring to the two counties. Wherever possible, papers discussing broad topics were checked for references to the counties for inclusion, but inevitably some will have been missed.

We have also found a number of references that did not appear in Ford et al. (1973) and these are listed in Section 1 of this paper. Some of these are relevant to Rutland only and thus did not appear in the original published bibliography. Others, such as the book *The Geology of the East Midlands*, have been split up to include all the component sections in the book as separate entries. All published maps from BGS (and its predecessors) have been added, including all the various editions and reprints. The long list of published County Series, 1:10,560 and 1:10,000 scale geological maps have not been included. Anybody requiring information on these can contact the BGS Enquiries Service or visit the BGS website at www.bgs.ac.uk.

Recent work by BGS in Leicestershire and Rutland, involving remapping of the Loughborough, Melton Mowbray and Leicester 1:50,000 geological sheets has formed the basis for compiling this reference list, drawing on the reference lists compiled for the various publications associated with these maps. These references then formed the basis for checking for other relevant papers. This paper is presented in the same format as the original, with references arranged alphabetically by the year of publication.

As with the first part of this bibliography published in 1973, there will doubtless be some references that have been missed. The authors would be very grateful if readers could bring to their attention any missing items. Please contact Keith Ambrose at British Geological Survey, Keyworth, Nottingham NG12 5GG or e-mail kam@bgs.ac.uk with any omissions.

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Reference

Ford, T.D., King, R.J. & Snowball, G.J. 1973. Bibliography of the Geology of Leicestershire (to 1970). *Mercian Geologist*, **4**, 247-353.

Section 1: added references 1795-1970

Supplemental to Ford et al. (1973)

1795

Crabbe, G. 1795. The natural history of the Vale of Belvoir. in *Nichols J. The history and antiquities of the county of Leicestershire*. (London.)

1815

Conybeare, W.D. & Phillips, W. 1815. *Outlines of the Geology of England and Wales, pt.1* (London.) [Ashby Coalfield 403-406.]

1835

Conybeare, W.D. 1835. On the probable future extension of the Coalfields at present worked in England. *Philosophical Magazine*, **5**, 44.

Daubeny, C. 1835. On Dr Ure's paper in the Philosophical Transactions, on the Moira Brine Spring. *Philosophical Magazine*, **6**, Series 3, 321.

1842

Cowdell, C. 1842. Hinckley Mineral Water Hinckley. 2pp.

1846

Coleman, W.H. 1846. *Sketch of the Geology of Leicestershire*. White's History, Gazetteer, and Directory of the Counties of Leicestershire and the small county of Rutland, together with the adjacent towns of Grantham and Stamford. Sheffield.

1848

Ibbetson, L.L.B. & Morris, J. 1848. Notice of the geology of the neighbourhood of Stamford and Peterborough. *Report of the British Association for the Advancement of Science 1847*, 127-131.

1857

Allen, R. 1857. An illustrated handbook to Charnwood Forest. (Nottingham)

1859

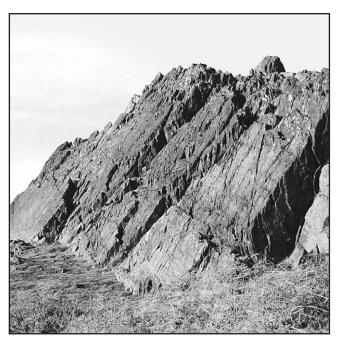
Ramsay, A.C., Bristow, H.W., Bauerman, H. & Geikie, A. 1859. *A Descriptive Catalogue of the Rock Specimens in the Museum of Practical Geology, with explanatory notices* (2nd edition). (London.) (Charnwood Forest 19-21; 3rd edition 1862).

1865

Sorby, H.C. 1865. On the Microscopical Structure of Mount Sorrel Syenite artificially fused and cooled slowly. *Geological Magazine*, **2**, 448-449.

1866

Murchison, R.I. 1866. On the parts of England and Wales in which Coal may and may not be looked for beyond the known Coalfields. *Report of the British Association for the Advancement of Science 1866*, 57-63.



Charnian Supergroup (Precambrian; Neoproterozoic III); volcaniclastic siltstones of the Hallgate Member (Bradgate Formation) c. 5 m above Sliding Stone Slump Breccia. The bedding plane contains numerous frondose and discoid fossil impressions. Near Memorial Crag in Bradgate Park, Charnwood Forest. (Photo: John Carnev, BGS © NERC)

1868

Baden Powell, R. 1868. On the igneous rocks of Charnwood Forest and its neighbourhood. *Geological Magazine*, **5**, Decade I, 111-120.

1869

Anon. 1869. Reports and proceedings. *Geological Magazine*, **6**, Decade I, 377 (Human remains found in gravel pit at Hinckley).

1877

Bonney, T.G. & Hill, E. 1877. The Pre-Carboniferous rocks of Charnwood Forest Part 1. *Quarterly Journal of the Geological Society*, **33**, 754-789.

1879

De Rance, C.E. 1879. Fourth Report of the Committee on the Circulation of the Underground Waters in the New Red Sandstone and Permian Formations of England and the quantity and character of the water supplied to the various towns and districts from the formations: Report on the Jurassic rocks. *Report of the British Association for the Advancement of Science 1878*, 401-419.

1880

Harrison, W.J. 1880. A scheme for the Examination of Glacial Deposits of the Midland Counties of England. *Proceedings of the Dudley and Midland Geographical and Scientific Society and Field Club*, **4**, 46-49.

1881

Anon. 1881. Gleanings. *Midland Naturalist*, **4**, 22. (Gold in a new British locality).

1883

Ramsey, A.C. 1883. MS notes (Reference in M. Browne, Contribution to the history of geology of the Borough of Leicester). *Transactions of the Leicester Literary and Philosophical Society*, **3**, 210.

1885

Bragge, G.S. 1885. The Geology of the South Derbyshire and East Leicestershire Coalfields. *Transactions of the Chesterfield and Derbyshire Institute of Mining, Civil and Mechanical Engineers*, **15**, 198-214, 225-235. (Supplement in 1887 with 2 sheets of sections).

1889

Browne, M. 1889. A Revision of a genus of Fossil Fishes. *Transactions of the Leicester Literary and Philosophical Society*, **2**, 148-149.

1890

Bennett, F.W. 1890. *Geology of Leicestershire*. Leicester School Board.

Hill, E. & Bonney, T.G. 1890. On the Northwest Region of Charnwood Forest, with other Notes. *Quarterly Journal of the Geological Society*, **47**, 101-108.

1891

Woodward, A.S. 1891. Catalogue of Fossil Fishes in the British Museum (Natural History) Part 2. (London.)

189

Mills, M.H. 1892. Discussion on a few notes on the Ironstone Deposits of Leicestershire. *Transactions of the Federation and Institution of Mining Engineers*, **3**, 525.

1893

Gresley, W.S. 1893. A typical section, taken in detail, of the "Main Coal" of the Moira, or Western Division of the Leicestershire and South Derbyshire Coal Field. Reply to Discussion. *Transactions of the Manchester Geological Society*, **22**, 74-85.

1894

Hull, E. 1894. On the Discovery of a concealed ridge of pre-Carboniferous rocks under the Trias of Netherseal, Leicestershire. *Report of the British Association for the Advancement of Science 1893*, 745-746.

Hull, E. 1894. On the Discovery of a concealed ridge of pre-Carboniferous rocks under the Trias of Netherseal, Leicestershire. *Transactions of the Federation of the Institution of Mining Engineers*, **8**, 90-92.

1896

Gresley, W.S. 1896. Geological History of the Rawdon and Boothorpe Faults, in the Leicestershire Coalfield. Discussion to paper in Volume 4, 431-436. *Transaction of the Chesterfield and Derbyshire Institute of Mining, Civil and Mechanical Engineers*, **6**, 402-403.

1897

Binns, G.J. 1897. Notes on borings at Netherseal, Ashbyde-la-Zouch, Leicestershire. *Transactions of the Federation of the Institution of Mining Engineers*, **13**, 595-597.

Thompson, B. 1897. The junction beds of the Upper Lias and Inferior Oolite in Northamptonshire, *Journal of the Northamptonshire Natural History Society*, **9**, 73-80, 131-149, 169-186, 212-213, 245-261.

1899

Roechling, H.A. 1899. Report on an Excursion to Charnwood Forest, July 1898. *Transactions of the Leicester Literary and Philosophical Society*, **5**, 309-313.

1900

Fox-Strangways, C. 1900. Atherstone and Polesworth. *Transactions of the Leicester Literary and Philosophical Society*, **5**, 477-480.

1901

Fox-Strangways, C. & Browne, M. 1901. Excursion to Aylestone and Glen Parva. *Transactions of the Leicester Literary and Philosophical Society*, **6**, 29-38.

1902

Anon. 1902. Leicestershire geological excursions. *The Quarry*, **7**, 371.

Watts, W.W. 1902. Thirteenth Report of the Committee on Photographs of Geological Interest, Etc. *Report of the British Association for the Advancement of Science 1902*, 22 (List of Leicestershire Geology photographs by W.J. Harrison and by P.W.Wright).

1905

Anon. 1905. Annual Report of the Royal Commission on Coal Supplies. (London.) (Leicestershire 3, parts 3 and 9). Strahan, A. 1905. Earth Movements. Report of the British Association for the Advancement of Science 1904, 532-541. Watts, W.W. 1905. Buried landscape of Charnwood Forest. Transactions of the Leicester Literary and Philosophical Society, 9, 20-25.

1907

Bennett, F.W. 1907. The felsic agglomerate of the Charnwood Forest. *Geological Magazine*, **4** Decade V, 470.

Bosworth, T.O. 1907. The origin of the Upper Keuper of Leicestershire. *Geological Magazine*, **4** Decade V, 461-462

Fox-Strangways, C. 1907. Geology: Notes on the Geology of the district around Leicester. 248-303 in Gimson, J.M. et al. (editors). *A Guide to Leicester and District*. (Prepared for the British Association for the advancement of science 1907 meeting.)

Fox-Strangways, C. 1907. The geology of Leicestershire. *Geological Magazine*, **4**, Decade V, 420.

Gimson, J.M. et al. (editors). 1907. A Guide to Leicester and District. *Prepared for the British Association for the advancement of science 1907 meeting*.

Horwood, A.R. 1907. Notes on the palaeontology of Leicestershire. 304-319 in Gimson, J.M. et al. (editors). *A Guide to Leicester and District*. Prepared for the British Association for the advancement of science 1907 meeting.

Horwood, A.R. 1907. On a section of the Transition Bed and Amaltheus spinatus zone at Billesdon Coplow, Leicestershire. *Journal of the Northamptonshire Natural History Society*, **14**, 104-110.

Horwood, A.R. 1907. On a hitherto unnoticed section of the Amaltheus spinatus zone and the Transition Bed in the Middle Lias at Billesdon Coplow, Leics. *Geological Magazine*, **4**, Decade V, 462-463.

Keay, W. & Gimson, M. 1907. The relation of the Keuper Marls to the Precambrian rocks at Bardon Hill. *Geological Magazine*, **4**, Decade V, 461-462.

1908

Fox-Strangways, C. 1908. The Geology of Leicestershire. Report of the British Association for the Advancement of Science 1907, 503.

Horwood, A.R. 1908. A contribution to the palaeontology of the North Derbyshire and Nottinghamshire Coalfield, or the southern part of the North Midland Coalfield. *Report of the British Association for the Advancement of Science* 1907, 514.

Horwood, A.R. 1908. On a section of the Transition Bed and Amaltheus spinatus zone at Billesdon Coplow, Leicestershire. *Report of the British Association for the Advancement of Science*, 1907, 516-517.

Watts, W.W. 1908. The geology of Charnwood Forest. Report of the British Association for the Advancement of Science 1907, 503.

1910

Geological Survey of Great Britain, 1910. 1 inch to 1 mile Geological Sheet 155 Atherstone.

Harmer, F.W. 1910. The Pleistocene period of the eastern counties of England. *Jubilee volume of the Geologists' Association*, 103-123.

Thompson, B. 1910. Geology in the field Northamptonshire and parts of Rutland and Warwickshire. 450-487 in Monckton, H.W. & Herries, R. (editors) *Geology in the Field, Part 4. Jubilee Volume of the Geologists' Association.* (editors), **3.** (London.)

1912

Geological Survey of Great Britain, 1912. 1 inch to 1 mile Geological Sheet 155 Atherstone. Revised.

Horwood, A.R. 1912. On some Rhaetic fossils from Glen Parva, Leicestershire. Report of the British Association for the Advancement of Science 1911, 388.

Phillips, G. 1912. Geology and Soil. 20-34 in Phillips, G. Cambridge County Geographies: (Cambridge Univ. Press.) Phillips, G. 1912. Mines and Quarries. 65-67 in Phillips, G. Cambridge County Geographies: (Cambridge Univ. Press.)

1913

Smith, B. 1913. The Geology of the Nottingham District. *Proceedings of the Geologists' Association*, **24**, 205-240. (Soar Valley and Vale of Belvoir).

1918

Sherlock, R.L. & Smith, B. 1918. Gypsum and anhydrite: Special reports on the mineral resources of Great Britain. *Memoirs of geological Survey of Great Britain*, **3**, 64pp.

1921

Ridsdale, H. 1921. The Geological Relationships of the South Staffordshire, Warwickshire, South Derbyshire and Leicestershire Coalfields. *Colliery Guardian*, **121**, 38-39.

1922

Geological Survey of Great Britain, 1922. 1 inch to 1 mile Geological Sheet 169 Coventry. Drift Edition.

1925

Dewey, H. & Eastwood, T. 1925. Copper ores of the Midlands, Wales, the Lake District and the Isle of Man. Special Report on the Mineral Resources of Great Britain (Memoir of Geological Survey of Great Britain), 30, 87pp.

1926

Geological Survey of Great Britain, 1926. 1 inch to 1 mile Geological Sheet 169 Coventry. Solid Edition.

1929

Swinnerton, H.H. 1929. The physiographic sub-divisions of the East Midlands. *Geography*, **15**, 215-226.

1932

Geological Survey of Great Britain, 1932. 1 inch to 1 mile Geological Sheet 155 Atherstone. Revised.

1933

Bryan, P.W. 1933. Leicester in its regional setting. 3-16 in Bryan, P.W.(editor). A Scientific survey of Leicester and District. *British Association for the advancement of Science 1933*, Prepared for the Leicester meeting.

Bryan, P.W.E. 1933. A Scientific survey of Leicester and District. *British Association for the advancement of Science*, Prepared for the Leicester meeting 1933.

1937

Lees, G.M., And Cox, P T. 1937. The geological basis of the present search for oil in Great Britain. *Quarterly Journal of the Geological Society*, **93**, 156-194.

1941

Wray, D.A. 1941. The ironstones of the Middle Lias in Lincolnshire and Leicestershire. *Unpublished BGS ms*.

1948

Geological Survey of Great Britain, 1948. 1 inch to 1 mile Geological Sheet 169 Coventry. Revised.

1949

Swinnerton, H.H. & Kent, P.E. 1949. *The geology of Lincolnshire* (1st Edition edition). Lincolnshire Natural History Brochure 1. (Lincolnshire Naturalists' Trust.)

1950

Crookall, R. 1950. Fossil plants of the Carboniferous Rocks of Great Britain. Memoirs of the Geological Survey of Great Britain (Palaeontology). (HMSO, London.)

Falcon, N.L. & Tarrant, A.H. 1950. The Gravitational and Magnetic Exploration of Parts of the Mesozoic covered Areas of South Central England. *Quarterly Journal of the Geological Society*, **106**, 141-170.

1951

Geological Survey of Great Britain, 1951. 1 inch to 1 mile Geological Sheet 171 Kettering.

1952

Jackson, W.J. 1952. Catalogue of type and figured specimens in the geological department of the Manchester Museum. *Manchester Museum Publication 6*.

Parasnis, D.S. 1952. A study of rock densities in the English Midlands. *Monthly Notices of the Royal Astronomical Society*, **6**, 252-271.

1953

Geological Survey of Great Britain, 1953. 1 inch to 1 mile Geological Survey Map Atherstone Sheet 155. Revised.

Collinson, P.L. & Elliot, R.E. 1953. The South-western extension of the Nottinghamshire Coalfield. *Transactions of the Institute of Mining Engineers*, **112**, 895-909.

1954

Brand, R.P. 1954. Geology of the Vale of Belvoir. *B.P records UK 1954* (Unpublished).

Geological Survey of Great Britain, 1954. 1 inch to 1 mile Geological Sheet 156 Leicester. Revised.

1956

Geological Survey of Great Britain, 1956. 1 inch to 1 mile Geological Sheet 169 Coventry. Revised.

1957

Geological Survey of Great Britain, 1957. 1 inch to 1 mile Geological Sheet 157 Stamford.

Lapworth, Herbert and Parners (Consulting Engineers). 1957. Report to Loughborough Corporation on the effect of earthquakes on Blackbrook Reservoir.

Lees, G. 1957. The East Midlands earthquake of February 1957. *East Midlands Geographer*, **1**, 52-53.

1958

Anon. 1958. Breedon and Cloud Hill Quarries. *The Quarry Managers' Journal*, 89-94.

Lees, G. 1958. Investigations into the effects of the East Midlands Earthquake of February 11th 1957 on vibration sensitive relays at local power stations. *East Midlands Geographer*, **2**, 41-45.

Well bedded dolostones of the Cloud Wood Member, Cloud Hill Dolostone Formation, with a probable slumped mass of massive mud mound reef dolostone; in Cloud Hill Quarry (Photo: Keith Ambrose, BGS © NERC)



1959

Floyd, P.A. 1959. *The Geology of North-east Charnwood*. Unpublished BSc Thesis, University of Leicester.

Floyd, P.A. 1959. Sedimentary structures in the Charnian of N.E. Charnwood. *Geography and Geology Magazine, University of Leicester*, 11, 9-13.

1962

Duff, P.M.L.D. & Walton, E.K. 1962. Statistical basis for cyclothems: a quantitative study of the sedimentary succession in the East Pennine Coalfield. *Sedimentology*, 1, 235-256.

Summary of Progress for the Geological Survey of Great Britain. 1962. 38. (Report on remapping of Market Harborough sheet).

1963

Summary of Progress for the Geological Survey of Great Britain. 1963. 43. (Report on remapping of Market Harborough and Atherstone sheets).

1964

Geological Survey of Great Britain, 1964. 1 inch to 1 mile Geological Sheet 143. Bourne.

Duff, P.M.L.D. & Walton, E.K. 1964. *Trend surface analysis of sedimentary features of the Modiolaris zone, East Pennine Coalfield, England.* In Van Straaten, L.M.J.U. (editor), Deltaic and shallow marine deposits Developments in sedimentology 1. (Amsterdam: Elsevier.)

Evans, A.M. 1964. Some temporary sections in Charnwood Forest, Leicestershire. *Transactions of the Leicester Literary and Philosophical Society*, **59**, 46-54.

Summary of Progress for the Geological Survey of Great Britain. 1964. 49-50. (Report on remapping Atherstone sheet).

1965

Joysey, K.A. 1965. A possible coalfield east of Loughborough. *Transactions of the Institution of Mining Engineers*, **124**, 581-590.

Spink, K. 1965. A possible coalfield east of Loughborough. *Mining Engineer*, **58**, 581-590.

1966

Institute of Geological Sciences, 1966. Annual report for 1965. 47. (Report on remapping Atherstone sheet).

1967

Calvin, M. 1967. Molecular Paleontology (Bennet Lecture). *Transactions of the Leicester Literary and Philosophical Society*, **62**, 45-69.

Downing, R.A. 1967. The Geochemistry of ground waters in the Carboniferous Limestone in Derbyshire and the East Midlands. *Bulletin Geological G.B.*, **27**, 289-307.

Kent, P.E. 1967. A Terebratula bed at Clipsham. *Transactions Lincolnshire Naturalists' Union*, **16**, 221-222.

Stevenson, P.C. 1967. A glacial channel at Sproxton, Leicestershire. *Mercian Geologist*, **2**, 73-84.

Wheeler, P.T. 1967. Ironstone working between Melton Mowbray and Grantham. *The East Midland Geographer*, **4**, 239-250.

1968

Evans, A.M. 1968. Precambrian rocks, Section A, Charnwood forest. 1-12 in Sylvester-Bradley, P.C. & Ford, T.D. (editors). *The Geology of the East Midlands*. (Leicester University Press.)

Firman, R.J. & Dickson, J.A.D. 1968. The solution of gypsum and limestone by upward flowing water. *Mercian Geologist*, **4**, 401-408.

Ford, T.D. 1968. The Carboniferous Limestone. 59-81 in Sylvester-Bradley, P.C. & Ford, T.D. (editors). *The Geology of the East Midlands*. (Leicester University Press.)

Ford, T.D. 1968. Precambrian rocks: Section B, Precambrian palaeontology of Charnwood Forest. 12-14 in Sylvester-Bradley, P.C. & Ford, T.D. (editors). *The Geology of the East Midlands*. (Leicester University Press.)

Ford, T.D. & King, R.J. 1968. Outliers of possible Tertiary age: Tertiary deep weathering in Leicestershire. 329-331 in Sylvester-Bradley, P.C. & Ford, T.D. (editors). *The Geology of the East Midlands*. (Leicester University Press.)

Francis, E.H., Smart, J.G.O. & Snelling, N.J. 1968. Potassium-argon age determination of an East Midlands alkaline dolerite. *Proceedings of the Yorkshire Geological Society*, **36**, 293-296.

Hallam, A. 1968. Origin of the Limestone-shale rhythm in the Blue Lias of England: a composite theory. *Journal of Geology*, **72**, 157-169.

Hallam, A. 1968. The Lias. 188-210 in Sylvester-Bradley, P C & Ford, T D (editors). *The Geology of the East Midlands* (Leicester University Press.)

Kent, P.E. 1968. The buried floor of Eastern England. 138-147 in Sylvester-Bradley, P.C., & Ford, T.D. (editors). *The Geology of the East Midlands*. (Leicester University Press.)

Kent, P.E. 1968. The Rhaetic beds. 174 - 187 in Sylvester-Bradley, P.C., & Ford, T.D. (editors). *The Geology of the East Midlands*. (Leicester University Press.)

Kent, P.E. 1968. The Lower Carboniferous at Grace Dieu. 80-81 in Sylvester-Bradley, P.C. & Ford, T.D. (editors). *The Geology of the East Midlands*. (Leicester University Press.)

King, R.J. 1968. Mineralization. 112-137 in Sylvester-Bradley, P.C. & Ford, T.D. (editors) *The Geology of the East Midlands*. (Leicester University Press.)

Le Bas, M.J. 1968. Caledonian Igneous rocks. 41-58 In. Sylvester-Bradley, P.C. & Ford, T.D. (editors). *The Geology of the East Midlands*. (Leicester University Press.)

Rice, R.J. 1968. The Quaternary Era. 332-353 in Sylvester-Bradley & Ford, T D (editors). *The Geology of the East Midlands*. (Leicester University Press.)

Spink, K. & Ford, T.D. 1968. The Coal Measures. 95-111 in Sylvester-Bradley, P.C. & Ford, T.D. (editors). *The Geology of the East Midlands*. (Leicester University Press.)

1969

Geological Survey of Great Britain, 1969. 1 inch to 1 mile Geological Sheet 142 Melton Mowbray. Revised.

Downing, R.A. & Howitt, F. 1969. Saline ground-waters in the Carboniferous rocks of the English East Midlands in relation to geology. *Quarterly Journal of Engineering Geology*, **1**, 241-269.

Geological Survey of Great Britain, 1969. 1 inch to 1 mile Geological Sheet 170 Market Harborough.

1970

Ager, D.V. 1970. The Triassic system in Britain and its stratigraphical momenclature. *Quarterly Journal of the Geological Society*, **126**, 3-17.



Cloud Hill Quarry. (Photo: Tim Cullen, BGS © NERC)

Chandler, R.J. 1970. A shallow slab slide in the Lias clay near Uppingham. *Geotechnique*, **20**, 253-260.

Chandler, R.J. 1970. The degradation of Lias clay slopes in an area of the east Midlands. *Quarterly Journal of Engineering Geology*, **2**, 161-181.

Dixon, K., Skipsey, E. & Watts, J.T. 1970. The distribution and composition of inorganic matter in British coals Part 3: The composition of Carbonate minerals in the Coal seams of the East Midlands Coalfield. *Journal of the Institute of Fuel*, **43**, 229-233.

Spalding, A.E. 1970. Geology in East Midland museums. *Mercian Geologist*, **5**, 209-222.

Thorpe, R.S. 1970. *Geochemical studies on PreCambrian rocks from England and Wales*. Unpublished PhD Thesis, University of Birmingham.

Section 2: new references 1971-2003

1971

Baker, J.W. 1971. The Proterozoic history of southern Britain. *Proceedings Geologists' Association*, **82**, 249-266.

Barker, M.J. & Torrens, H.S. 1971. A new Ammonite from the southernmost outcrop of the lower Lincolnshire Limestone (Jurassic). *Transactions of the Leicester Literary and Philosophical Society*, **65**, 49-56.

Bridger, J.F.D. 1971. *The Quaternary evolution of Charnwood Forest, Leicestershire*. Unpublished MSc Thesis, University of Leicester.

Chandler, R.J. 1971. Landsliding on the Jurassic escarpment near Rockingham, Northampton, Slopes: form and process. *I.B.G. Special publication* 3, 111-128.

Institute of Geological Sciences, 1971. 1 inch to 1 mile Geological Sheet 143 Bourne. Revised.

King, R.J. & Dixon, J.A. 1971. A new occurrence of Vanadium minerals in Leicestershire. *Mineralogical Magazine*, **38**, 488-492.

Spink, K. 1971. The Hathern Anhydrite Series, Lower Carboniferous, Leicestershire, England. (discussion and contribution section) Institute of Mining and Metallurgy Transactions, **80**, 47-49.

Strauss, P.G. 1971. Kaolin-rich rocks in the East Midlands coalfields of England. *6th International Congress of Carboniferous Stratigraphy, Sheffield 1967*, 1519-1531.

Wyatt, R.J. 1971. New evidence for drift-filled valleys in north-east Leicestershire and south Lincolnshire. *Bulletin of the Geological Survey of Great Britain*, 37, 29-55.

Wyatt, R.J., Horton, A. & Kenna, R.J. 1971. Drift-filled channels on the Leicester-Lincolnshire border. *Bulletin of the Geological Survey of Great Britain*, **37**, 57-79.

1972

Aljubouri, Z.A. 1972. Geochemistry, origin and diagenesis of some Triassic gypsum deposits and associated sediments in the East Midlands. Unpublished PhD Thesis, University of Nottingham.

Arab, N. 1972. Seismic reflection and gravity investigations of the Widmerpool Gulf in the East Midlands, with a study of linear seismic sources and data processing techniques involving computer graphics. Unpublished PhD Thesis, University of Leicester.

Bell, F.G., Coope, G.R., Rice, R.J. & Riley, T.H. 1972. Mid-Weichselian fossil-bearing deposits at Syston, Leicestershire. *Proceedings of the Geologists' Association*, **83**, 197-211.

Coleman, B.E. & Horton, A. 1972. A stratigraphic and micropalaeontological study of a valley-bulge structure at the Empingham Dam, *Unpublished Report, Institute of Geological Sciences*.

Cummins, W.A. & Potter, H.R. 1972. Rates of erosion in the catchment area of Cropston Reservoir, Charnwood Forest, Leicestershire. *Mercian Geologist*, **4**, 149-157.

Fisher, M.J. 1972. The Triassic Palynofloral succession in England. *Geoscience and Man*, **4**, 101-109.

Ford, T.D. 1972. The Physical background: Geology. 19-58 in Pye, N. (editor). *Leicester and its region*. (Leicester University Press.)

Guion, P.D. 1972. A sedimentological study of the Crawshaw Sandstone in the East Midlands, Coalville area. Unpublished MSc Thesis, University of Keele.

Hawkins, P.J. 1972. *Carboniferous Sandstone oil reservoirs, East Midlands, England*. Unpublished PhD Thesis, Imperial college London.

Horton, A. & Hains, B.A. 1972. Development of Porcellanous rocks and reddening of the Coal Measures in the South Derbyshire, Leicestershire and Warwickshire coalfields. *Bulletin of the Geological Survey of Great Britain*, **42**, 51-77.

Le Bas, M.J. 1972. Caledonian igneous rocks beneath Central and Eastern England. *Proceedings of the Yorkshire Geological Society*, **39**, 71-86.

Mckinley, R.A. 1972. *Economic Structure: The extractive Industries*. 340-362 In Pye, N. (editor). Leicester and its region. (Leicester University Press.)

Pye, N.E. 1972. *Leicester and its region*. (Leicester University Press.)

Rice, R.J. 1972. The Physical background: Geomorphology. 59-83 in Pye, N. (editor). *Leicester and its region*. (Leicester University Press.)

Thorpe, R.S. 1972. The geochemistry and correlation of the Warren House, the Uriconian and the Charnian volcanic rocks from the English Precambrian. *Proceedings of the Geologists' Association*, **83**, 269-286.

1973

Chandler, R.J. & Davis, A.G. 1973. Further work on the engineering properties of Keuper Marl. *Construction Industry Research and Information Association, Report 47.*

Kent, P.E. 1973. The Lias at Old Dalby, Leicestershire. *Transactions of the Leicester Literary and Philosophical Society*, **67**, 39-44.

Khan, M.A. 1973. *Geophysical investigations at Croft Quarry, Leicestershire*. Unpublished Report, Geology Department, University of Leicester.

King, R.J. 1973. *The Mineralogy of Leicestershire*. Unpublished PhD Thesis, University of Leicester.

Maroof, S.L. 1973. *Geophysical investigations of the Carboniferous and Precambrian formations of the East Midlands of England*. Unpublished PhD Thesis, University of Leicester.

Mitchell, G.F., Penny, L.F., Shotton, F.W. & West, R.G. 1973. A correlation of Quaternary deposits in the British Isles. *Geological Society Special Report*, 4.

Monteleone, P.H. 1973. *The Geology of the Carboniferous Limestone of Leicestershire and South Derbyshire*. Unpublished PhD Thesis, University of Leicester.

Wills, L.J. 1973. A Palaeogeological map of the Palaeozoic floor beneath the Permian and Mesozoic formations in England and Wales. *Memoir of the Geological Society, 7.*

1974

Douglas, T.D. 1974. The Pleistocene beds exposed at Cadeby, Leicestershire. *Transactions of the Leicester Literary and Philosophical Society*, **68**, 57-63.

Douglas, T.D. 1974. *The Pleistocene geology and geomorphology of Western Leicestershire*. Unpublished PhD Thesis University of Leicester.

Evans, A.M. 1974. Field meeting in Charnwood Forest. *Mercian Geologist*, **5**, 251-252.

Ford, T.D. 1974. The place of Charnwood Forest in the history of geological science. *Transactions of the Leicester Literary and Philosophical Society*, **68**, 23-31.

Perrin, R.M.S., Davies, H. & Fysh, M.D. 1974. Distribution of the late Plieistocene Aeolian deposits in eastern and southern England. *Nature*, **248**, 320-323.

Sargeant, W.A.S. 1974. A history and bibliography of the study of fossil vertebrate footprints in the British Isles. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **16**, 265-378 (Leicestershire footprints 317-318).

Taylor, F.M. 1974. Excursion to Empingham, Ketton and Holwell. *Mercian Geologist*, **5**, 77-79.

Thorpe, R.S. 1974. Aspects of magmatism and plate tectonics in the Precambrian of England and Wales. *Geological Journal*, **9**, 115-136.

Wyatt, M. 1974. *The Pleistocene deposits along the M69 motorway between Coventry and Leicester*. Unpublished BScThesis, University of Birmingham.

1975

Ambrose, K. 1975. Report on shallow auger holes drilled, Coalville sheet. *Report Institute Geological Sciences* 76/10.

Bate, R.H. & Coleman, B.E. 1975. Upper Lias Ostracoda from and Huntingdonshire. *Bulletin of the Geological Survey of Great Britain*, **55**, 1-42.

Bridger, J.F.D. 1975. The Pleistocene succession in the southern part of Charnwood Forest. *Mercian Geologist*, **5**, 189-203.

Cribb, S.J. 1975. Rubidium-strontium ages and strontium isotope ratios from the igneous rocks of Leicestershire. *Journal of the Geological Society*, **131**, 203-212.

Dunning, F.W. 1975. Precambrian Craton of Central England and the Welsh borders. 83-96. In Harris, A.L., Shackleton, R.M., Watson, J., Downie, C., Harland, W.B. & Moorbath, S. A correlation of the Precambrian rocks of the British Isles, *Special Report Geological Society*, **6**.

Harris, A.L., Shackleton, R.M., Watson, J., Downie, C., Harland, W.B. & Moorbath, S. 1975. A correlation of the Precambrian rocks of the British Isles. *Special Report Geological Society*, **6**.

Institute of Geological Sciences, 1975. 1:50,000 Geological Sheet 156 Leicester

Kent, P.E. 1975. The Grantham Formation in the East Midlands: revision of the Jurassic, Lower Estuarine Beds. *Mercian Geologist*, **5**, 305-327.

Odell, T. 1975. Computer aided stratigraphic analysis in the East Midlands coalfield. Unpublished PhD Thesis University of Cambridge.

1976

Ashton, M. 1976. New evidence for the age of the Lincolnshire Limestone Formation (Bajocian) of eastern England. *Transactions of the Leicester Literary and Philosophical Society*, **70**, 21-54.

Bradshaw, M. 1976. Origin of montmorillonite bands in the Jurassic of Eastern England. *Earth and Planetary Science Letters*, **26**, 254-252. (Ketton Quarry).

Burgess, I.C. 1976. Preliminary report on the volcanic rocks of the Vale of Belvoir coalfield. *Institute of Geological Sciences Report* WA/LE/76/02.

Chandler, R.J. 1976. The history and stability of two Lias clay slopes in the upper Gwash valley, *Philosophical Transactions of the Royal Society Series A*, **283**, 463-491.

Evans, A.M. & Maroof, S.I. 1976. Basement controls on mineralisation in the British Isles. *Mining Magazine*, **134**, 402-411.

George, T.N., Johnson, G.A.L., Mitchell, M., Prentice, J.E., Ramsbottom, W.H.C., Sevastopoulo, G.D. & Wilson, R.B. 1976. A correlation of Dinantian rocks in the British Isles. *Special Report of the Geological Society*, 7.

Horswill, P. & Horton, A. 1976. Cambering and valley bulging in the Gwash valley at Empingham,. *Philosophical Transactions of the Royal Society Series A*, **283**, 427-462.

Institute of Geological Sciences, 1976. 1:50,000 Geological Sheet 142 Melton Mowbray

Institute of Geological Survey 1976. 1:50,000 Geological Sheet 171 Kettering.

Institute of Geological Sciences, 1976. 1:50,000 Geological Sheet 141 Loughborough.

King, R.J. & Wilson, R.N. 1976. An occurrence of Vesigniéite in Leicestershire. *Mineralogical Magazine*, **40**, 533-535.

Macneill, S. 1976. *The Geochemistry and Mineralogy of the Red beds of the East Midlands*. Unpublished PhD University of Birmingham.

Shotton, F.W. 1976. Amplification of the Wolstonian Stage of the British Pleistocene. *Geological Magazine*, **113**, 241-250

Swinnerton, H.H. & Kent, P.E. 1976. *The geology of Lincolnshire from the Humber to the Wash* (2nd Edition). Lincolnshire Natural History Brochure 7. (Lincolnshire Naturalists' Trust.)

1977

Ashton, M. 1977. The stratigraphy and carbonate environments of the Lincolnshire Limestone Formation (Bajocian) in Lincolnshire and parts of Leicestershire. Unpublished PhD Thesis, University of Hull.

Horton, A. & Coleman, B.E. 1977. The lithostratigraphy and micropalaeontology of the Upper Lias at Empingham. *Bulletin Geological Survey of Great Britain*, **62**, 1-12.

Shotton, F.W., Banham, P.H. & Bishop, W.W. 1977. Glacial-interglacial stratigraphy of the Quaternary in Midland and Eastern England. 267-282 in Shotton, F.W. (editor). *British Quaternary studies*. (Oxford: Clarendon)

Wainwright, A.C.J. 1977. Carboniferous geology of the East Midlands Basin. *BP unpublished report*, UK2111.

1978

Aldred, K. & Elliott, R.B. 1978. Excursion to the igneous rocks of Charnwood Forest. *Mercian Geologist*, **6**, 297.

Boynton, H.E. 1978. Fossils from the Precambrian of Charnwood Forest, Leicestershire. *Mercian Geologist*, **6**, 291-296.

Bradshaw, M.J. 1978. *A facies analysis of the Bathonian of eastern England*. Unpublished PhD Thesis, University of Oxford.

Davies, F.D. 1978. North-East Leicestershire Prospect. *The Mining Engineer*, **138**, 27-40.

Guion, P.D. 1978. Sedimentation of interseam strata and some relationships with coal seams in the East Midlands Coalfield. Unpublished PhD Thesis, City of London Polytechnic.

Hall, A.R. 1978. A last Interglacial site in the East Midlands of England. *Quaternary Newsletter*, **24**, 8-9.

Hall, A.R. 1978. Some new palaeobotanical records for the British Ipswichian interglacial. *New Phytologist*, **81**, 805-812.

Hall, J.F.D. 1978. *The exceptional history and geology of the late Pleistocene deposits at Wing*. Unpublished PhD Thesis, University of Cambridge.

Hope, J. 1978. The history of the north-east Leicestershire coalfield. *Paper to South Midlands Branch Association of Mining, Electrical and Mechanical Engineers, October12*.

Institute of Geological Sciences, 1978. 1:50,000 Geological Sheet 157 Stamford.

Jackson, I. 1978. The sand and gravel deposits of parts of South Nottinghamshire, East Leicestershire and North Northamptonshire: a collation of existing information. *Institute of Geological Sciences Report for the Department of the Environment WN/MN/78/1*.

Jeans, C.V. 1978. The origin of the Triassic clay assemblages of Europe with special reference to the Keuper Marl and Raetic of parts of England. *Philosophical Transactions of the Royal Society, Series A*, **289**, 551-636.

Pidgeon, R.T. & Aftalion, M. 1978. Cogenetic and inherited zircon U-Pb systems in granites: Palaeozoic granites of Scotland and England.183-220 in Bowes, D.R, & Leake, B.E. (editors). *Crustal evolution in Northwestern Britain and adjacent regions*. Geological Journal special issue 10. (Mountsorrel Granodiorite).

Ramsbottom, W.H.C., Calver, M.A., Eager, R.M.C., Hodson, F., Holliday, D.W., Stubblefield, C.J. & Wilson, R.B. 1978. A correlation of the Silesian rocks in the British Isles. *Special Report Geological Society,* 10.

Williams, K.G. 1978. Proposed exploitation of the North East Leicestershire (Vale of Belvoir) coalfield. *East Midlands Geographer*, **7**, 83-88.

Wills, L.J. 1978. A palaeogeological map of the Lower Palaeozoic floor below the cover of Upper Devonian, Carboniferous and later formations in England and Wales. *Memoir of the Geological Society, 8*.

1979

Ashton, M. 1979. A re-appraisal of the value of *Acanthothyris crossi* (Walker) in the correlation of the Lincolnshire Limestone Formation (Bajocian, Jurassic). *Transactions of the Leicester Literary and Philosophical Society*, **73**, 65-76.

Ashton, M. 1979. Field meeting on the Lincolnshire Limestone of southern Lincolnshire and Leicestershire. *Proceedings of the Geologists' Association*, **90**, 15-20.

Ashton, M. & Hudson, J.D. 1979. Geologists' Association excursion to the Stamford district 14-16th September 1979. (*Unpublished field guide*).

Boynton, H.E. & Ford, T.D. 1979. Pseudovendia charnwoodensis - a new Precambrian arthropod from Charnwood Forest, Leicestershire. *Mercian Geologist*, 7, 175-177.

Donovan, D.T., Horton, A. & Ivimey-Cook, H.C. 1979. The transgression of the Lower Lias over the northern flank of the London Platform. *Journal of the Geological Society*, **136**, 165-173.

Evans, A.M. 1979. The East Midlands aulacogen of Caledonian age. *Mercian Geologist*, **7**, 31-42.

Ford, T.D. 1979. The history of the study of the Precambrian rocks in Charnwood Forest, England. 65-80 in Kupsch, W.O. & Sarjeant W.A.S. (editors). History of concepts in Precambrian geology. *Geological Association of Canada Special Paper*, 19.

Moseley, J.B. 1979. *The geology of the late Precambrian rocks of Charnwood Forest*. Unpublished PhD Thesis, University of Leicester.

Perrin, R.M.S., Rose, J. & H.D. 1979. The distribution, variation and origin of Pre-Devensian tills in eastern England. *Philosophical Transactions of the Royal Society of London Series B*, **287**, 535-570.

Piper, J.D.A. 1979. Paleomagnetic investigation of the late Precambrian rocks of the Midland Craton of England and Wales. *Physics of Earth & Planetary Interiors*, **19**, 59-72.

Straw, A. 1979. The geomorphological significance of the Wolstonian glaciation in eastern England. *Transactions of Institute of British Geographers*, New Series **4**, 540-549.



Northeast corner of Ketton Quarry showing the Oxford Clay, Kellaways, Cornbrash, Blisworth Clay and Blisworth Limestone formations. A fault downthrowing to the west (left) lies down the corner between the faces. (Photo: Keith Ambrose, BGS © NERC)

Straw, A. & Clayton, K.M. 1979. *Eastern and Central England*. (Methuen.)

Thorpe, R.S. 1979. Late Precambrian igneous activity in Southern Britain. 579-584 in Harris, A.L., Holland, C.H. Leake, B.E. (editors). The Caledonides of the British Isles - reviewed. *Geological Society Special Publication* **8**.

Whitcombe, D.N. 1979. Seismic studies of the upper crust of Central England. Unpublished PhD Thesis, University of Leicester.

1980

Ashton, M. 1980. The stratigraphy of the Lincolnshire Limestone Formation (Bajocian) in Lincolnshire and Leicestershire. *Proceedings of the Geologists' Association*, **91**, 203-224.

Cope, J.C.W., Duff, K.L., Parsons, C.F., Torrens, H.S., Wimbledon, W.A. & Wright, J.K. 1980. A correlation of the Jurassic rocks in the British Isles Part Two: Middle and Upper Jurassic. *Special Report Geological Society,* **15**.

Cope, J.C.W., Getty, T.A., Howarth, M.K., Morteon, N. & Torrens, H.S. 1980. A correlation of the Jurassic rocks in the British Isles Part One: Introduction and Lower Jurassic. *Special Report Geological Society,* **14**.

Leicestershire County Council. 1980. Report on a site investigation for the proposed A47 Billesdon bypass. Leicestershire County Council Report C/2321.

Davies, M.J. 1980. Habitat of hydrocarbons in the East Midlands. *Leicester Literary and Philosophical Society symposium 29th November 1980*.

Davis, B.N.K. 1980. Clipsham quarries: their history and ecology. *Transactions of the Leicester Literary and Philisophical Society*, **72**, 59-68.

Douglas, T.D. 1980. The Quaternary deposits of Western Leicestershire. *Philosophical Transactions of the Royal Society of London Series B*, **288**, 259-286.

Duff, B.A. 1980. Palaeomagnetism of late Precambrian or Cambrian diorites from Leicestershire, UK. *Geological Magazine*, **117**, 479-483.

El-Nikhely, A.H.D. 1980. Seismic reflection, gravity and magnetic studies of the geology of the East Midlands. Unpublished PhD. thesis, University of Leicester.

Ford, T.D. 1980. Life in the Precambrian. *Nature, London*, **285**, 193-1944.

Ford, T.D. 1980. The Ediacarian fossils of Charnwood Forest, Leicestershire. *Proceedings of the Geologists' Association*, **91**, 81-84.

Hall, A.R. 1980. Late Pleistocene deposits at Wing. *Philosophical Transactions of the Royal Society, Series B*, **289**, 135-164.

Hampton, C.M. 1980. Pb and Sr isotope geochemistry of feldspars and other minerals from grainte intrusions in S W England, the Lake District and Leicestershire, with application to the problem of the nature and age of the basement underlying Southern Britain. Unpublished MSc Thesis, University of Oxford.

Horton, A., Ivimey-Cook, H.C., Harrison, R.K. & Young, B.R. 1980. Phosphatic ooids in the Upper Lias (Lower Jurassic) of central England. *Journal of the Geological Society*, **137**, 731-740.

Howarth, M.K. 1980. The Toarcian age of the upper part of the Marlstone Rock Bed of England. *Palaeontology*, **23**, 637-656.

King, R.J. 1980. Wulfenite in Leicestershire. *Transactions Leicester Literary and Philosophical Society*, **72**, 51-58. Lewis, J.J. 1980. Progress in the Development of the North East Leicestershire Coalfield. *Colliery Guardian*, **226**, 501-521

Mann, M. 1980. The Vale of Belvoir Coalfield Inquiry Report. (London: HMSO.)

Rollin, K.E. 1980. Interpretation of the Widmerpool Gulf from gravity data. *Institute of Geological Sciences Applied Geophysics Unit Report*, 93.

Seaborne, T.R. 1980. Results from a VLF electromagnetic survey in Bradgate Park, Leicestershire. *Mercian Geologist*, 7, 279-289.

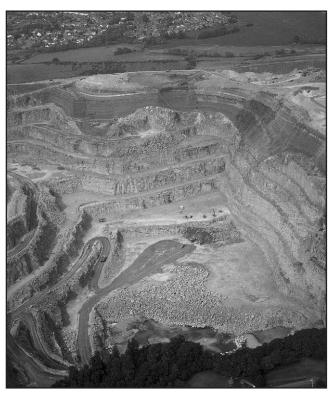
Warrington, G., Audley-Charles, M.G., Elliott, R.E., Evans, W.B., Ivimey-Cook, H.E., Kent, P.E., Robinson, P.L., Shotton, F.W. & Taylor, F.M. 1980. A correlation of Triassic rocks in the British Isles. *Special Report of the Geological Society,* 13.

Whitcombe, D.N. & Maguire, P.K.H. 1980. An analysis of the velocity structure of the Precambrian rocks of Charnwood Forest. *Geophysical Journal of the Royal Astronomical Society*, **63**, 405-416.

1981

Allsop, J.M. & Jones, C.M. 1981. A pre-Permian palaeogeological map of the east Midlands and East Anglia. *Transactions of the Leicester Literary and Philosophical Society*, **75**, 28-33.

Best, J.A., Parker, S. & Prickett, C.M. 1981. *The Lincolnshire Limestone quarries-Weldon and Ketton.* (Nene College, Northampton.)



Aerial view of Croft Quarry showing the pale grey South Leicestershire Diorite that is worked for aggregate, overlain unconformably by darker Triassic mudstones of the Mercia Mudstone Group that are infilling wadis (Photo: Tim Cullen, BGS © NERC)

Bridger, J.F.D. 1981. The problem of discordant drainage in Charnwood forest, Leicestershire. *Mercian Geologist*, **8**, 217-223.

Catt, J.A. 1981. British Pre-Devensian glaciations. 9-19 in Neale, J. & Plenley, J. (editors). *The Quaternary of Britain*. (Pergamon)

Cornwell, J.D. & Allsop, J.M. 1981. Geophysical surveys in the Atherstone district (geological map sheet 155). *Institute of Geological Sciences Applied Geophysics Unit Report 38*.

Douglas, T.D. 1981. *Quaternary research association field handbook - Leicester 1981*. Newcastle on Tyne Polytechnic. 59pp.

Ford, T.D. 1981. The hidden depths of Leicestershire: the concealed geology of the Leicestershire area. *Transactions Leicester Literary and Philosophical Society*, **75**, 20-26.

Jones, P.A. 1981. National Coal Board exploration in Leicestershire. *Transactions of the Leicester Literary and Philosophical Society*, **75**, 34-40.

Kent, P.E. 1981. Appraisal of the papers on the hidden depths of Leicestershire. *Transactions of the Leicester Literary and Philosophical Society*, **75**, 67.

Kirton, S.R. 1981. *Petrogenesis and tectonic relationships of Carboniferous lavas of the English Midlands*. Unpublished PhD Thesis, University of Lancaster.

Le Bas, M.J. 1981. *The Caledonian granites and diorites of England and Wales*. 191-201 in Sutherland, D S. (editor). Igneous rocks of the British Isles. John Wiley and Sons.

Maguire, P.K.H., Bermingham, P.M. & Francis, D.J. 1981. A relative P-wave delay study between Eskdalemuir and Charnwood Forest. *Geophysical Journal of the Royal Astronomical Society*, **65**, 229-235.

Maguire, P.K.H., Whitcombe, D.N. & Francis, D.J. 1981. Seismic studies in the Central Midlands of England 1975-1980. *Transactions of the Leicester Literary and Philosophical Society*, **75**, 58-66.

Rice, R.J. 1981. The Pleistocene deposits of the area around Croft in South Leicestershire. *Philosophical Transactions of the Royal Society Series B*, **293**, 385-418.

Scott, A.C. & King, G.R. 1981. Megaspores and Coal facies: an example from the Westpaqhlian A of Leicestershire. *Review of Palaeobotany and Palynology*, **34**, 107-113.

Whitaker, J.H.M. 1981. Building stones of Leicester - city trail pamphlet. *Leicestershire Museums Service*.

Whitcombe, D.N. & Maguire, P.K.H. 1981. Seismic refraction evidence for a basement ridge between the Derbyshire Dome and the W of Charnwood Forest. *Journal of the Geological Society*, **138**, 653-659.

Whitcombe, D.N. & Maguire, P.K.H. 1981. A seismic refraction investigation of the Charnian basement and granitic intrusions flanking Charnwood Forest. *Journal of the Geological Society*, **138**, 653-659.

1982

Arter, G. 1982. *Geophysical Investigations of the deep geology of the East Midlands*. Unpublished PhD Thesis, University of Leicester.

British Geological Survey, 1982. 1:50,000 Geological Sheet 155 Coalville.

Burgess, I.C. 1982. The stratigraphical distribution of Westphalian volcanic rocks to the east and south of Nottingham. *Proceedings of the Yorkshire Geological Society*, **44**, 29-44.

Chandler, R.J. 1982. Lias clay slope sections and their implications for the prediction of limiting or threshold slope angles. *Earth Science Processes Landforms*, **7**, 427-438.

Leicestershire County Council. 1982. Leicestershire minerals local plan.

Highley, D.E. 1982. Geological distribution, exploitation and utilization of fireclays in the United Kingdom. *Transactions Institution Mining Metallurgy,* **B91**, 11-16.

King, R.J. 1982. The occurrence of Cinnabar in Leicestershire. *Transactions of the Leicester Literary and Philosophical Society*, **76**, 51-53.

Le Bas, M.J. 1982. The igneous basement of southern Britain with particular reference to the geochemistry of the pre-Devonian rocks of Leicestershire. *Transactions of the Leicester Literary and Philosophical Society*, **76**, 41-57.

Le Bas, M.J. 1982. Geological evidence from Leicestershire on the crust of Southern Britain. *Transactions of the Leicester Literary and Philosophical Society*, **76**, 54-67.

Lord, A.R. 1982. Metacopine ostracods in the Lower Jurassic. 268 in Banner, F.T. & Lord, A.R. (editors). *Aspects of Micropalaontology*. (George Allen & Unwin.)

Maguire, P.K.H. et al., 1982. A deep seismic reflection profile over a Caledonian granite intrusion in central England. *Nature*, **297**, 671-673.

Reed, M.D.P. 1982. A study of Tickow Lane Mine, north Leicestershire. Unpublished MSc Thesis, University of Leicester.

Straw, A. 1982. Certain facts concerning the Wolstonian glaciation of eastern England. *Quaternary Newsletter*, **36**, 15-20

Sutherland, D.S.E. 1982. *Igneous rocks of the British Isles*. (John Wiley)

Taylor, S.R. 1982. The Trent, Glen Parva and Blue Anchor Formations (Upper Triassic) of the East Midlands and their sulphate deposits. Unpublished PhD Thesis, University of Leicester.

Thorpe, R.S. 1982. Precambrian igneous rocks. 19-35 in Sutherland, D.S.E. (editor). *Igneous rocks of the British Isles*. (John Wiley)

1983

Allsop, J.M. & Arther, M.J. 1983. A possible concealed extension of the South Leicestershire diorite complex. *Report of the Institute of Geological Sciences*, 83/10, 25-30.

Besly, B.M. 1983. *The sedimentology and stratigraphy of the red beds in the Westphalian A to C of Central England*. Unpublished PhD Thesis, University of Keele.

Boynton, H.E. 1983. Geological interpretation of records and photographs of Hallgates reservoirs. *Transactions of the Leicester Literary Philosophical Society*, **77**, 67-73.

Ford, T.D. 1983. Down to the basement - presidential address delivered on 4th October 1982. *Transactions of the Leicester Literary and Philosophical Society*, **77**, 1-14.

Hampton, C.M. & Taylor, P.N. 1983. The age and nature of the basement of southern Britain: evidence from Sr and Pb isotopes in granites. *Journal of the Geological Society*, **140**, 499-509.

Harrison, R.K., Howarth, M.K., Styles, M.T. & Young, B.R. 1983. Ooids with goyazite-crandellite rims from the top of the Marlstone, Rock Bed (Toarcian, Lower Jurassic) near Harston, Leicestershire. *Report of the Institute of Geological Sciences*, 83/1, 16-23.

Holmes, I., Chambers, A.D., Ixer, R.A., Turner, P. & Vaughan, D.J. 1983. Diagenetic processes and mineralization of the Trias of Central England. *Mineralium Deposita*, **18**, 365-377.

Huxley, J. 1983. *Britain's onshore oil industry*. (Macmillan: London)

King, R.J. 1983. The occurrence of galena in Leicestershire. *Journal of the Russell Society*, **1**, 27-47.

Maguire, P.K.H., Hill, I.A. & Khan, M.A. 1983. CHARM I: a deep seismic reflection profile across Charnwood Forest and the Caledonian Mountsorrel granodiorite intrusions of central England. *First Break*, **1**, 38.

Old, R.A. & Riley, N.J. 1983. A study of the Namurian and Westphalian igneous rocks and associated sediments at Asfordby Mine, Leicestershire. *Keyworth, Institute of Geological Sciences (Commercial in Confidence)*.

Rice, R.J. 1983. The Pleistocene deposits of south Leicestershire / north Warwickshire. *Mercian Geologist*, **9**, 55-58.

Riley, N.J. 1983. Macropalaeontology of the Asfordby Boreholes: Holwell Works, Asfordby Hydro and Asfordby North Shaft. *British Geological Survey Palaeontology Department Report* PDL/83/259 (Confidential).

Riley, N.J. 1983. Palaeontological report on the faunal biostratigraphy of the basal core from NCB Chase Bh (Asfordby) 1 inch Sheet 142 SK7243 2080. *British Geological Survey Palaeontology Department Report* PDL/83/299 (Confidential).

Shotton, F.W. 1983. Observations on the type Wolstonian sequence. *Quaternary Newsletter*, **40**, 28-36.

Straw, A. 1983. Pre-Devensian glaciation of Lincolnshire and adjacent areas. *Quaternary Science Review*, **2**, 239-260.

Sumbler, M.G. 1983. A new look at the type Wolstonian glacial deposits of Central England. *Proceedings of the Geologists' Association*, **94**, 23-31.

Taylor, S.R. 1983. A stable isotope study of the Mercia Mudstones (Keuper Marl) and associated sulphate horizons in the English Midlands. *Sedimentology*, **30**, 11-31.

1984

Boynton, H.E. 1984. Notes on the geology of the Blackbrook area, Charnwood Forest. *Transactions of the Leicester Literary and Philosophical Society*, **78**, 44-45.

Dobson, J. 1984. *Oil source rock characteristics and identification in the Carboniferous rocks of the East Midlands*. Unpubl. PhD Thesis Imperial College London.

Firman, R.J. 1984. A Geological approach to the history of English Alabaster. *Mercian Geologist*, **9**, 161-178.

Holliday, D.W., Allsopp, J.M., Clarke, M.R., Lamb, R.C., G.A., K., Rowley, W.J., Smith, N.J.P. & Swallow, P.W. 1984. Hydrocarbon prospectivity of the Carboniferous rocks of eastern England. For the Petroleum Engineering Division of DoE (including separate volumes with enclosures 1-24). *British Geological Survey Report* 84/4.

Kirton, S.R. 1984. Carboniferous volcanicity in England with special reference to the Westphalian of the E and W Midlands. *Journal of the Geological Society*, **141**, 161-170.

Le Bas, M.J. 1984. Geological evidence from Leicestershire on the crust of Southern Britain. *Transactions of the Leicester Literary and Philosophical Society*, **76**, 54-67.

Neilson, G., Musson, R.M.W. & Burton, P.W. 1984. Macroseismic reports on historical British earthquakes V: Midlands. *British Geological Survey Global Seismology Report* 228b.

Newton, A. 1984. The Hallgates story. *Transactions of the Leicester Literary and Philosophical Society*, **77**, 49-66.

Newton, A. 1984. The Blackbrook Story. *Transactions of the Leicester Literary and Philosophical Society*, **78**, 28-43.

Owen, C. 1984. *The Leicestershire and South Derbyshire Coalfield 1200-1900*. Leicester Museums Publication No. 55. (Ashbourne: Moreland Publishing)

Thorpe, R.S., Beckinsale, R.D., Patchett, P.J., Piper, J.D.A., Davies, G.R. & Evans, J.A. 1984. Crustal growth and late Precambrian-early Palaeozoic plate tectonic evolution of England and Wales. *Journal of the Geological Society*, **141**, 521-536.

1985

Brown, G.C., Francis, E.H., Kennan, P. & Stillman, C.J. 1985. Caledonian Igneous rocks of Britain and Ireland. 1-15 in Harris, A.L. (editor). The nature and timing of Orogenic activity in the Caledonian rocks of the British Isles. *Memoir of the Geological Society* 9.

Crowther, P.R. & Martin, J.G. 1985. The Dinosaur. *Leicester Museums publication 68*, 8pp.

Eardley, H.K. 1985. *The assessment of the use of Landsat MSS and TM lineament mapping in the East Midlands*. Unpublished MSc Thesis, University of Leicester.

Engineering Geology Ltd. 1985. Research programme to assess the potentially workable sand and gravel resources in the Soar valley, Leicestershire. *Report 261/UK/0883/3* (DoE: London).

Engineering Geology Ltd. 1985. Research programme to assess the potentially workable sand and gravel resources in the Wreake valley, Leicestershire. *Report 300/UK/0984* (separate maps and report) (DoE: London).

Engineering Geology Ltd. 1985. Boreholes for geological research into the glacial evolution of the Wreake valley, Leicestershire. *Report* 329/UK/0585 (DoE: London).

Maguire, P.K.H., Francis, D.J. & Whitcombe, D.N. 1985. Determination of the three-dimensional seismic structure of the crust and upper mantle in the central Midlands of England. *Geophysical Journal of the Royal Astronomical Society*, **83**, 347-362.

Moseley, J.B. & Ford, T.D. 1985. A stratigraphic revision of the Late Precambrian rocks of the Charnwood Forest, Leicestershire. *Mercian Geologist*, **10**, 1-18.

Whittaker, A.E. 1985. Atlas of onshore sedimentary basins in England and Wales: Post-Carboniferous tectonics and stratigraphy. (Blackie.)

1986

Anon. 1986. Leicestershire minerals Local Plan (June). *Leicestershire County Council*.

Blake, D.M. 1986. A new Lower Lias exposure at Billesdon, Leicestershire. *Transactions of the Leicester Literary and Philosophical Society*, **80**, 47-57.

Broadhurst, F.M. & France, A.A. 1986. Time represented by Coal seams in the Coal Measures of England. *International Journal of Coal Geology*, **6**, 43-54.

Crowther, P.R. & Martin, J.G. 1986. Not the Dinosaur: Plesiosaurus and others. *Leicester Museums Publ* 71, 8pp.

Martin, J.G., Frey, E. & Riess, J. 1986. Soft tissue preservation in Ichthyosaurs and a stratigraphical review of the Lower Hettangian of Barrow-upon-Soar, Leicestershire. *Transactions of the Leicester Literary and Philosophical Society*, **80**, 58-72.

Rice, R.J. 1986. A new interglacial site at Brooksby Leicestershire. *Quaternary newsletter*, **50**, 30.

Shepherd, P. 1986. *A geochemical study of some Leicestershire coals*. Unpublished MSc Thesis, University of Leicester.

Whateley, M.K.G. 1986. A computer based study of the geology and depositional setting of the Leicestershire coalfield. BSRG Research Meeting, Controls on Upper Carboniferous Sedimentation in NW Europe, University of Keele 12-13 April.

1987

Allsop, J.M. 1987. Patterns of late Caledonian intrusive activity in eastern and northern England from geophysics, radiometric dating and basement geology. *Proceedings of the Yorkshire Geological Society*, **46**, 335-353.

Blake, D.M. 1987. The Middle Lias silts and clays and Amalteid ammonites from Tilton railway cutting, Leicestershire. *Transactions of the Leicester Literary and Philosophical Society*, **81**, 29-34.

Boulter, C.A. & Yates, M.G. 1987. Confirmation of the pre-cleavage emplacement of both the northern and southern diorites into the Charnian Supergroup. *Mercian Geologist*, **10**, 281-286.

Downing, R.A., Edmunds, W.M. & Gale, I.N. 1987. Regional Groundwater flow in sedimentary basins in the UK. 105-125 in Goff, J.C. & Williams, B.P.J. (editors). Fluid flow in sedimentary Basins and Aquifers. (Geological Society Special Publication 134.)

Drewery, S., Cliff, R.A. & Leeder, M.R. 1987. Provenance of Carboniferous sandstones from U-Pb dating of detrital zircons. *Nature, London*, **325**, 53-55.

Emberton, J.R., Mcgahan, D.J. & Worrallo, S.N. 1987. Biological and chemical characterization of landfills (VI) Enderby Warren Landfill, Leicestershire. United Kingdom Atomic Energy Authority, Environmental and Medical Sciences Division: Harwell.

Evans, C.J. & Allsop, J.M. 1987. Some geophysical aspects of the deep geology of Eastern Britain. *Proceedings of the Yorkshire Geological Society*, **46**, 321-333.

Gou X., Fowler, M.G., Comet, P.A., Manning, D.A.C., Douglas, A.G., Mcevoy, J. & Giger, W. 1987. Investigation of Three Natural Bitumens From Central England By Hydrous Pyrolysis And Gas Chromatography - Mass Spectrometry. *Chemical Geology*, **64**, 181-195.

Kirby, G.A., Smith, K., Smith, N.J.P. & Swallow, P.W. 1987. Oil and Gas generation in Eastern England. 171-180 In Brooks, J, & Glennie, K (editors). *Petroleum Geology of North West Europe*. (London: Graham & Trotman.)

Maguire, P.K.H. 1987. CHARM II - a deep reflection profile within the central England microcraton. *Journal of the Geological Society*, **144**, 661-670.

Cross bedded and trough cross bedded glaciofluvial outwash gravels in Shawell Gravel Pit. (Photo: Keith Ambrose, BGS © NERC)



Mathers, S.J. & Colleran, J.P. 1987. An assessment of the potential aggregate-bearing drift deposits of Leicestershire. British Geological Survey Report, for Leicestershire County Council.

Pharaoh, T.C. & Evans, C.J. 1987. Morley Quarry No.1 Borehole: Geological Well Completion Report. *Investigation of the Geothermal Potential of the UK, British Geological Survey Report 43*, 43pp.

Pharaoh, T.C., Merriman, R.J., Webb, P.C. & Beckinsale, R.D. 1987. The concealed Caledonides of eastern England: preliminary results of a multidisciplinary study. *Proceedings Yorkshire Geological Society*, **46**, 355-369.

Pharaoh, T.C., Webb, P.C., Thorpe, R.S. & Beckinsale, R.D. 1987. *Geochemical evidence for the tectonic setting of late Proterozoic volcanic suites in central England*. 541-552 in Pharaoh, T.C, Beckinsale, R.D. & Rickard, D. (eds). Geochemistry and Mineralization of Proterozoic Volcanic Suites. (Geological Society Special Publication, 33.)

Rose, J. 1987. Status of the Wolstonian glaciation in Britain. *Quaternary Newsletter*, **53**, 1-9.

Smith, N.J.P. 1987. The deep geology of central England: the prospectivity of the Palaeozoic rocks. 217-224 in Brooks, J, & Glennie, K (editors). *Petroleum Geology of North West Europe*. (London: Graham & Trotman.)

Strank, A.E. 1987. The stratigraphy and structure of Dinantian strata in the East Midlands, UK. 157-175 in Miller, J., Adams, A. E. & Wright, V.P. (editors). *British Dinantian Environments*. (Chichester: John Wiley)

Sutherland, D.S., Boynton, H.E., Ford, T.D., Le Bas, M.J., Moseley, J.P., K. & Whateley, M.K. 1987. A guide to the geology of the Precambrian rocks of Bradgate Park, Leicestershire. *Transactions of the Leicester Literary and Philosophical Society*, **81**, 47-83.

Wardell, A. 1987. Preliminary Mining and Geological Report, on the past limestone mining situation around Barrow on Soar and Sileby. Report NPT/LD/3829/3, Dept. Planning and Transportation, Leicestershire City Council.

1988

Allsop, J.M. & Evans, C.J. 1988. Some geophysical aspects of the deep geology of eastern England. *Journal Open University Geological Society*, **9**(2), 27-33.

Besly, B.M. 1988. Palaeogeographical implications of Westphalian to early Permian red beds, Central England. 200-221 in Besly, B.M., & Kelling, G. (editors). Sedimentation in a synorogenic basin complex: the Upper Carboniferous of Northwest Europe. (Glasgow: Blackie.)

Besly, B.M. 1988. Late Carboniferous sedimentation in Northwest Europe: an introduction. 1-7 in Besly, B. M. & Kelling, G. (editors). *Sedimentation in a synorogenic basin complex: the Upper Carboniferous of Northwest Europe*. (Glasgow: Blackie.)

Blake, D.M. & Clements, R.G. 1988. The Lower Lias at Catthorpe, South Leicestershire. *Transactions of the Leicester Literary and Philosophical Society*, **82**, 21-25.

Collinson, J.D. 1988. Controls on Namurian sedimentation in the Central Province basins of northern England. 85-101 in Besly, B.M. & Kelling, G. (editors). Sedimentation in a synorogenic basin complex: the upper Carboniferous of Northwest Europe. (Glasgow: Blackie).

Emery, D., Hudson, J.D., Marshall, J.D. & Dickson, J.A.D. 1988. The origin of late spar cements in the Lincolnshire Limestone, Jurassic of central England. *Journal of the Geological Society*, **145**, 621-633.

Faithfull, J.W. & Hubbard, N. 1988. Coffinite in the Gipsy Lane Brickpit, Leicester. *Journal Russell Society*, **2**, 25-28.

Firman, R.J. & Lovell, M.A. 1988. The geology of the Nottingham region: A review of some engineering and environmental aspects. *Geological Society Engineering Geology Special Publication* 5, 33-51.

Fulton, I.M. & Williams, H. 1988. Paleeogeographical change and controls on Namurian and Westphalian A/B sedimentation at the southern margin of the Pennine Basin, central England. 178-199 in Besly, B.M. & Kelling, G. (editors). Sedimentation in a Synorogenic Basin Complex: the Upper Carboniferous of Northwest Europe. (Blackie.)

Harwood, D. 1988. Was there a Glacial Lake Harrison in the South Midlands. *Mercian Geologist*, **11**, 145-153.

Haszeldine, R.S. 1988. Crustal lineations in the British Isles: their relationship to Carboniferous basins. 53-68 in Besley, B.M., and Kelling, G. (editors). *Sedimentation in a synorogenic basin complex: the Upper Carboniferous of Northwest Europe*. (Blackie.)

Lee, A.G., 1988. Carboniferous basin configuration of Central England, modelled using gravity data. 69-84 in Besley, B M & Kelling, G. (editors). Sedimentation in a synorogenic basin complex: the Upper Carboniferous of Northwest Europe. (Blackie.) (Widmerpool Gulf).

Quirk, D.G. 1988. Structure and genesis of the South Pennine orefield. Unpublished PhD Thesis, University of Leicester.

Thomas, R.H. 1988. A depositional model for the Westphalian A of the Leicestershire and South Derbyshire coalfields. Unpublished MSc Thesis, University of Leicester.

Worssam, B.C. & Old, R.A. 1988. Geology of the country around Coalville. *Memoir of the British Geological Survey, Sheet 155 (England and Wales)*.

1989

Allsop, J.M. & Taylor, M.P. 1989. Investigation of the Aeromagnetic anomaly at Countesthorpe, Leicestershire [abstract]. *Geophysical Journal*, **96**, 579.

Blake, D.M. 1989. The Lower Lias at Saddington, Leicestershire. *Transactions of the Leicester Literary and Philosophical Society*, **83**, 32-34.

Clements, R.G. 1989. Tailor-made geology 4: Brown's Hill Quarry, Holwell, Leicestershire. *Geology Today*, **5**, 28-30.

Cornwell, J.D. & Walker, A.D. 1989. Regional Geophysics. 25-51 in Plant, J.A, & Jones, D.G (editors). *Metallogenic models and exploration criteria for buried carbonate-hosted ore deposits - a multidisciplinary study in eastern England*. (British Geological Survey, and The Institution of Mining and Metallurgy.)

Croxall, M.A., Harris, D.I. & Hills, R.L. 1989. Cliffe Hill Quarry: a geotechnical study. 177-190 in 6th Extractive Industry Geology Conference. (Birmingham.)



Ooidal grainstones of the Upper Lincolnshire Limestone, in Clipsham Quarry. (Photo: Keith Ambrose, BGS © NERC)

Green, P.F. 1989. Thermal and tectonic history of the East Midlands Shelf (onshore UK) and surrounding regions assessed by fission track analysis. *Journal of the Geological Society*, **146**, 755-773.

Jones, D.G. & Plant, J.A. 1989. Geochemistry of shales. 65-95 in Plant, J.A, & Jones, D.G (editors). *Metallogenic models and exploration criteria for buried carbonate-hosted ore deposits - a multidisciplinary study in eastern England*. (British Geological Survey, and The Institution of Mining and Metallurgy.)

Kirk, W.J. 1989. Seismic and potential field studies over the East Midlands. Unpublished. PhD thesis, University of Leicester.

Lewis, S.G. 1989. Huncote, Leicestershire.111-114 in Keen, D H. (editor). *West Midlands, Field Guide*, Quaternary Research Association, Cambridge.

Lewis, S.G. 1989. Leicester Road, Melton Mowbray, Leicestershire. 115 in Keen, D H. (editor). *West Midlands, Field Guide*, Quaternary Research Association, Cambridge.

Moseley, J.B. & Ford, T.D. 1989. The Sedimentology of the Charnian Supergroup. *Mercian Geologist*, **11**, 251-274.

Piper, J.D.A. & Strange, T.M. 1989. A Palaeomagnetic study of the Charnian, Caldecote and Uriconian Volcanics and Plutons, Central England. *Geological Journal*, **24**, 331-357.

Plant, J.A. & Jones, D.G.E. 1989. *Metallogenic models and exploration criteria for buried carbonate-hosted ore deposits-a multidisciplinary study in eastern England*. British Geological Survey, and The Institution of Mining and Metallurgy.

Rose, J. 1989. Tracing the Baginton-Lillington Sands and Gravels from the West Midlands to East Anglia. 102-110 in Keen, D H (editor). *West Midlands*, Field Guide, Quaternary Research Association, Cambridge.

Rowan, S. 1989. The application of an integrated Geophysics - Landsat approach to crustal tectonic investigation of the East Midlands. Unpublished MSc Thesis, University of Leicester.

Sims, M.J. & Ruffell, A.H. 1989. Synchroneity of climatic change and extinction in the Late Triassic. *Geology*, **17**, 265-268. (Breedon Inliers).

Smith, K. & Smith, N.J.P. 1989. Geology of the East Midlands. 5-11 in Plant, J A, & Jones, (editors). *Metallogenic models and exploration criteria for buried carbonate-hosted ore deposits - a multidisciplinary study in eastern England.* (British Geological Survey, and The Institution of Mining and Metallurgy)

Taylor, M.A. & Cruickshank, A.R.I. 1989. The Barrow Kipper 'Plesiosaurus' megacephalus (Plesiosauria: Reptilia) from the Lower Lias (Lower Jurassic) of Barrow-upon-Soar, Leicestershire. *Transactions of the Leicestershire Literary and Philosophical Society*, **83**, 20-24.

Thompson, T.W. 1989. *Review of minerals policies*. Key issues report, Leicestershire County Council.

Tonks, E.S. 1989. *The Ironstone quarries of the Midlands: history, operations and railways. Part 7.* (Cheltenahm: Runpast)

Webb, P.C. & Brown, G.C. 1989. Geochemistry of pre-Mesozoic igneous rocks. 95-121 in Plant, J A, & Jones, D G (editors). *Metallogenic models and exploration criteria for buried carbonate-hosted ore deposits - a multidisciplinary study in eastern England*. (British Geological Survey, Institution of Mining and Metallurgy).

Wignall, P.B., Clements, R.G. & Simms, M.J. 1989. The Triassic-Jurassic boundary beds of the city of Leicester. *Transactions of the Leicester Literary and Philosophical Society*, **83**, 25-31.

1990

Brandon, A., Sumbler, M.G. & Ivimey-Cook, H.C. 1990. A revised lithostratigraphy for the Lower and Middle Lias (Lower Jurassic) east of Nottingham, England. *Proceedings of the Yorkshire Geological Society*, **48**, 121-141.

Ebdon, C.C., Fraser, A.J., Higgins, A.C., Mitchener, B.C. & Strank, A.R.E. 1990. The Dinantian stratigraphy of the East Midlands: a seismotectonic approach. *Journal of the Geological Society*, **147**, 519-537.

EMWPA. 1990. Report of the 1989 Aggregates monitoring survey. East Midlands Working Party on Aggregates: National Stone Centre.

Fraser, A.J. & Gawthorpe, R.L. 1990. Tectono-stratigraphic development and hydrocarbon habitat of the Carboniferous in northern England. 49-86 in Hardman, R.F.P. and Brooks, J. (eds). *Tectonic Events Responsible for Britain's Oil and Gas Reserves*. Geological Society Special Publication 155.

Fraser, A.J., Nash, D.F., Steele, R.P. & Ebdon, C.C. 1990. A regional assessment of the intra-Carboniferous play of Northern England. 417-440 in *Classic Petroleum Provinces*. Geological Society Special Publication 50.

Geotechnics, A. 1990. Review of mining instability in Great Britain Case study report: Barrow-on-Soar Hydraulic Limestone Mines (Leicestershire), 3.

King, R.J. 1990. Lead mining in Leicestershire. *Leicestershire and Heritage*, **9**, 39-41.

Lee, M.K., Pharaoh, T.C. & Soper, N.J. 1990. Structural trends in central Britain from images of gravity and aeromagnetic fields. *Journal of the Geological Society*, **147**, 241-258. (Midland microcraton).

Ochieng, J.O. 1990. *The depositional environment and quality of the Yard Coal seam Westphalian A in the Leicestershire coalfield.* Unpublished MSc Thesis, University of Leicester.

Prior, S. 1990. *The depositional environment and quality of the Yard seam (Westphalian A) in the Leicestershire coalfield.* Unpublished MSc Thesis, University of Leicester. Simms, M.J. 1990. Triassic Palaeokarst in Britain. *Cave Science*, **17**, 93-101.

Simms, M.J. & Ruffell, A.H. 1990. Climatic and biotic change in the Late Triassic. *Journal of the Geological Society*, **147**, 321-327.

1991

Ali, J.W. & Hill, I.A. 1991. Reflection seismics for shallow geological investigations: a case study from central England. *Journal of the Geological Society*, **148**, 219-222.

Allen, P. 1991. Deformation structures in British Pleistocene sediments. in 455-469 in Ehlers, J., Gibbard, P. L. & Rose J. (editors). *Glacial deposits in Britain and Ireland*. (Rotterdam: Balkema.)

Blake, D.M. 1991. The Lower Lias at Catthorpe, South Leicestershire-revisited. *Transactions of the Leicester Literary and Philosophical Society*, **85**, 13-15.

Ehlers, J.G. & Gibbard, P.L. 1991. Anglian glacial deposits in Britain and adjoining offshore areas. 17-24 in Ehlers, J., Gibbard, P. L. & Rose J. (editors). *Glacial deposits in Britain and Ireland*. (Rotterdam: Balkema.)

EMWPA. 1991. Report of the 1990 Aggregates Information exercise. National Stone Centre.

Ford, C.V. 1991. *Geotechnical assessment 5th Bench, Mount Sorrel Quarry*. Unpublished MSc dissertation, University of Leicester.

King, R.J. 1991. Lead-Molybdenum mineralization in an ancient cave in north Leicestershire. *Journal of the Russell Society*, **4**, 9-12.

Lee, M.K., Pharaoh, T.C. & Green, C.A. 1991. Structural trends in the concealed basement of eastern England from images of regional potential field data. *Annales de la Societe Geologique de Belgique*, **T. 114** (fasc. 1), 45-62.

Molyneux, S.G. 1991. The contribution of Paleontological data to an understanding of the early Paleozoic framework of eastern England. *Annales de la Societe Geologique de Belgique*, **T. 114** (fasc. 1), 93-105.

Njonjo, H.W. 1991. *Electric and electromagnetic investigation of a concealed granitic body in Quorn park Leicestershire*. MSc Thesis, University of Leicester.

Pharaoh, T.C., Merriman, R.J., Evans, T.S., Brewer, T.S., Webb, P.C. & Smith, N.J.P. 1991. Early Palaeozoic Arc related volcanism in the concealed Caledonides of Southern Britain. *Annales de la Societe Geologique de Belgique*, **T. 114** (fascicule), 63-91.

Rice, R.J. 1991. Distribution and provenance of the Baginton Sand and Gravel in the Wreake Valley, northern Leicestershire, England: implications for inter-regional correlation. *Journal of Quaternary Science*, **6**, 39-54.

Rice, R.J. & Douglas, T.D. 1991. Wolstonian glacial deposits and glaciation in Britain. 25-35 in Ehlers, J., Gibbard, P. L. & Rose J. (editors). *Glacial deposits in Britain and Ireland*. (Rotterdam: Balkema.)

Sofologi, C. 1991. The environmental impact of Quarrying, Case study New Cliffe Hill Quarry Leicestershire. Unpublished MSc Thesis, University of Leicester.

Straw, A. 1991. Glacial deposits of Lincolnshire and adjoining areas. 213-221 in Ehlers, J., Gibbard, P. L. & Rose J. (editors). *Glacial deposits in Britain and Ireland*. (Rotterdam: Balkema.)

Tucker, R.D. & Pharaoh, T.C. 1991. U-Pb zircon ages for Late Precambrian igneous rocks in southern Britain. *Journal of the Geological Society*, **148**, 435-443.

Whateley, M.K.G. 1991. Geostatistical determination of contour accuracy in evaluating coal seam parameters: an example form the Leicestershire coalfield England. *Bulletin de la Société Géologique de France*, **162**, 353-362.

Woodcock, N.H. 1991. The Welsh, Anglian and Belgian Caledonides compared. *Annales de la Societe Geologique de Belgique*, **T. 114** (fasc. 1), 5-17.

1992

Barrett, W.L. 1992. A case history of pre extraction site investigation and quarry design, Cliffe Hill Quarry, Leicestershire. 69-76 in Annels, A.E. (editor). Case Histories and methods in mineral resource evaluation. Geological Society Special Publication ,63.

Bridge, D.M., Carney, J.N., Horton, A., Lawley, R.S. & Sumbler, M.G. 1992. The geology of the Pleistocene deposits between Coventry, Rugby and Hinckley, English East Midlands: a field guide for the Royal Geographical Society excursion held on May 10 1992. *British Geological Survey Technical Report* WA/92/40.

Edwards, R.A. 1992. A depositional and economic study of the Yard Coal seam, northwest Leicestershire. Unpublished undergraduate dissertation, University of Leicester.

EMWPA. 1992. East Midlands Regional Commentary. A technical assessment of Aggregates provision. National Stone Centre.

Ewbank, G. 1992. *The origin of Hydrocarbons associated with mineralisation in the South Pennine Oilfields*. Unpublished PhD Thesis, University of Newcastle.

Faithfull, J.W. & Ince, F. 1992. An unusual occurrence of Mottramite from Peldar Tor, Leicestershire. *Journal of the Russell Society*, **4**, 59-62.

Howarth, M.K. 1992. The Ammonite family Hildoceratidae in the Lower Jurassic of Britain. *Monograph of the Palaeontographical Society 586*, 1-106.

Logan, G. 1992. The application of D.C. resistivity and transient electromagnetics to a landfill site, Sonning way, Glen Parva. Unpublished MSc Thesis, University of Leicester.

Riley, N.J. 1992. Faunal Biostratigraphy of Plungar 8A Bh. Interval 3280-4615 feet. *British Geological Survey Technical Report*, WH92/199C.

Sutherland, D.S. 1992. Radon in some East Midlands sedimentary rocks. *Transactions of the Leicester Literary and Philosophical Society*, **86**, 15-19.

Tonks, E.S. 1992. *The Ironstone quarries of the Midlands: history, operations and railways. Part 9 Leicestershire.* (Cheltenahm: Runpast)

Warrington, G. & Ivimey-Cook, H.C. 1992. Triassic. 97-106 in Cope, J.C.W., Ingham, J.K. & Rawson, P.F. (editors). *Atlas of palaeogeography and lithofacies*. Memoir of the Geological Society, 13.

1993

Busby, J.P., Kimbell, G.S. & Pharaoh, T.C. 1993. Integrated geophysical/geological modelling of the Caledonian and Precambrian basement of southern Britain. *Geological Magazine*, **130**, 593-604.

Entwhistle, D.C. 1993. Density, porosity and sonic velocity determinations on twelve rock samples from 1202-1203 m of the Rempstone Borehole, near Rempstone, Loughborough, Leicestershire. *British Geological Survey Engineering Geology and Geophysics Group Laboratory Report*, 95/10.

Ivimey-Cook, H.C. 1993. The early Lias and Penarth Group beds in the Welby Church Borehole. *British Geological Survey Technical Report* WH/93/52C.

Jewell, T.K. 1993. The law and practice of mineral extraction: with special reference to aggregates in the East Midlands 1981-1991. Unpublished M.Phil Thesis, University of Leicester.

King, R.J. 1993. The occurrence of sphalerite in Leicestershire, England. *Journal Russell Society*, **5**, 15-21.

Le Bas, M.J. 1993. The hidden mountains of Leicestershire. *Transactions of the Leicester Literary and Philosophical Society*, **87**, 33-35.

Noble, S.R., Tucker, R.D. & Pharaoh, T.C. 1993. Lower Palaeozoic and Precambrian igneous rocks from eastern England, and their bearing on late Ordovician closure of the Tornquist Sea: constraints from U-Pb and Nd isotopes. *Geological Magazine*, **130**, 835-846.

Pharaoh, T.C., Brewer, T.S. & P.C.W. 1993. Subduction related magmatism of late Ordovician age in Eastern England. *Geological Magazine*, **130**, 647-656.

Sumbler, M.G. 1993. The Lias succession between Fulbeck and the Vale of Belvoir. *Mercian Geologist*, **13**, 87-94.

Whateley, M.K.G. 1993. Computer modelling of the depositional setting of Coal deposits: an example from the Leicestershire coalfield, England. *Proceedings European Coal Conference*, Leicester.

Whateley, M.K.G. & Eardley, H.K. 1993. The use of satellite data for improved structural interpretation in the Leicestershire coalfield area. *Mercian Geologist*, **13**, 69-78.

1994

Anon. 1994. Minerals Planning Guidance: Guidelines for Aggregates provision in England. MPG6: DoE.

Bland, B.H. 1994. Trace fossils in the Swithland Slates. *Transactions of the Leicester Literary and Philosophical Society*, **88**, 27.

Boucher, K. 1994. Mineral Resources. 22-32 in *Loughborough and its Region*. (Loughborough: Quorn Selective Repro)

Boynton, H.E. 1994. The Precambrian Frondose organisms of Charnwood Forest. *Transactions of the Leicester Literary and Philosophical Society*, **88**, 26.

Brandon, A. 1994. Geological notes and local details for 1:10 000 Sheet SK 52 SW (Normanton on Soar). *British Geological Survey Technical Report* WA 94/60.

Brasier, M.D. & Mcilroy, D. 1994. Latest Precambrian-Early Cambrian events and mass extinctions: the intra-Charnian hiatus. *Transactions of the Leicester Literary and Philosophical Society*, **88**, 28.

British Geological Survey, 1994. 1:50,000 Geological Sheet 169 Coventry. Solid and Drift editions.

Brown, A.G., Keough, M.K. & Rice, R.J. 1994. Floodplain evolution in the East Midlands, United Kingdom: the Lateglacial and Flandrian alluvial record from the Soar and Nene valleys. *Philosophical Transactions of the Royal Society, A.*, **348**, 261-293.

Carney. 1994. Geology. 3-21 in Boucher, K. (editor). *Loughborough and its region*. (Loughborough: Quorn Selective Repro.)

Carney, J.N. 1994. Geology of the Thringstone, Shepshed and Loughborough areas (SK41NW, SK41NE and SK51NW). *British Geological Survey Technical Report* WA/94/08.

Church, K.D. & Gawthorpe, R.L. 1994. High resolution sequence stratigraphy of the late Namurian in the Widmerpool Gulf (East Midlands, UK): *Marine and Petroleum Geology*, **11**, 528-544.

Crofts, R.G. 1994. A42 construction and M1 widening: measured sections. *British Geological Survey Technical Report*, WA/94/82.

Cruickshank, A.R.I. 1994. Cranial anatomy of the Lower Jurassic pliosaur Rhomaleosaurus megacephalus (Stutchbury) (Reptilia; Plesiosauria). *Philosophical Transactions of the Royal Society, B*, **343**, 247-260.

Ford, T.D. 1994. Charnia revisited: a summary. Transactions of the Leicester Literary and Philosophical Society, 88, 25-28. Ford, T.D. 1994. Museums: New geology gallery at Leicester. *Geology Today*, **10**, 170-171.

Ford, T.D. 1994. The Precambrian discoid fossils of Charnwood Forest. *Transactions of the Leicester Literary and Philosophical Society*, **88**, 26.

Fraser, N.C. 1994. Assemblages of small tetrapods from British Late Triassic fissure deposits. 214-229 in Fraser, N.C. & Sues, H.D. (editors). *In the shadow of the dinosaurs: Early Mesozoic Tetrapods*. (Cambridge University Press.) (Breedon on the Hill).

Jones, N.S. 1994. Sedimentology of Westphalian A and B strata from the Leicestershire and South Derbyshire Coalfields. *British Geological Survey Technical Report* WH/94/286R.

Martin, J.G. 1994. Report: Earth sciences at Leicestershire Museum and Art gallery. *Mercian Geologist*, **13**, 145-146.

Merriman, R.J. 1994. Petrography of white mica and microfabrics in Charnian and Uriconian metasedimentary rocks. *British Geological Survey Technical Report* MSPR/94/35.

Musson, R.M.W. 1994. A catalogue of British earthquakes. *British Geological Survey Global Seismology Report* WL/94/04.

Peat, C.J. 1994. The unsuccessful search for microfossils in Charnian rocks. *Transactions of the Leicester Literary and Philosophical Society*, **88**, 27.

Rose, J. 1994. Major river systems of central and southern Britain during the Early and Middle Pleistocene. *Terra*, **6**, 435-443.

Whateley, M.K.G. 1994. *Basin evolution and tectonics of the Leicestershire coalfield*. Unpublished PhD Thesis, University of Leicester.

Wilby, R.L. 1994. Catchment hydrology. 41-51 in Boucher, K. (editor). *Loughborough and its Region*. (Loughborough: Quorn Selective Repro)

1995

Alexander, J.S. 1995. Building stone from the East Midlands Quarries: source, transportation and usage. *Journal Society for Medieval Archaeology*, **39**, 107-135.

Bland, B.H. & Goldring, R. 1995. Teichichnus Seilacher 1955 and other trace fossils (Cambrian) from the Charnian of Central England. *Neues Jahrbuch fuer Geologie und Palaontogie (Seilacher Festschrift)*, **195**, 5-23.

Boynton, H.E. & Ford, T.D. 1995. Ediacaran fossils from the Precambrian (Charnian Supergroup) of Charnwood Forest, Leicestershire. *Mercian Geologist*, **13**, 165-183.

British Geological Survey. 1995. Radon potential based on solid geology: East Midlands Sheet 52N 02W, 1:250,000.

Entwhistle, D.C. 1995. The density and porosity of Charnian (Precambrian) rocks from the Blackbrook area, SW of Shepehed, near Loughborough, Leicestershire. *British Geological Survey Engineering Geology and Geophysics Group Laboratory Report*, 96/1.

Evans A.M.E. 1995. *An Introduction to Mineral Exploration*. (Oxford: Blackwell Science)

Flint, S., Aitken, J. & Hampson, G. 1995. Application of sequence stratigraphy to Coal-bearing coastal plain successions: implications for the UK Coal Measures. 1-16 in Whateley, M.K.G. & Spears, D.A. (editors). *European Coal Geology*. Geological Society Special Publication 82.

Ford, T.D. 1995. The Precambrian fossils of Charnwood Forest and their evolutionary significance. *Journal of the Open University Geological Society*, **15**, 1-5.

Fraser, A.J. 1995. *The Tectono-stratigraphic development and Hydrocarbon habitat of the Carboniferous in Northern England*. Unpublished PhD Thesis, University of Glasgow.

Gang, T. 1995. *Post stack inversion of seismic inversion data from the Belvoir coalfield*. Unpublished PhD Thesis, University of Durham.

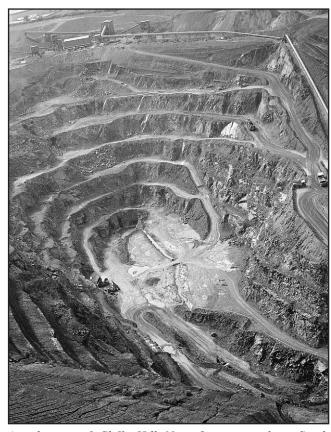
Guion, P.D., Fulton, I.M. & Jones, N.S. 1995. Sedimentary facies of the Coal-bearing Westphalian A and B north of the Wales-Brabant High. 45-78 in Whateley, M.K.G. and Spears, D.A. (editors). *European Coal Geology*. Geological Society Special Publication 82. (Asfordby mine).

Jones, N.S., Guion, P.D. & Fulton, I.M. 1995. Sedimentology and its applications within the UK opencast Coal mining industry. 115-136 in Whateley, M.K.G. and Spears, D.A. (eds). *European Coal Geology*. Geological Society Special Publication 82.

Kemp, S.J. & Merriman, R.J. 1995. White mica (illite) crystallinity of Charnian rocks form the Loughborough district 1:50 000 geological sheet 141. *British Geological Survey Technical Report* WG/95/7.

Meju, M.A. 1995. Geophysics and computer models in the evaluation of a landfill site in Blaby, Leicester. 549-561. In Sarsby, R.W. (editor). *Waste Disposal by Landfill - GREEN'93*. (Rotterdam: Balkema)

Strong, G.E. & Lott, G.K. 1995. Petrography of Carboniferous Limestone specimens from the Breedon Hill area, Leicestershire. *British Geological Survey Technical Report* WG/95/12.



Aerial view of Cliffe Hill New Quarry, working South Leicestershire Diorite. (Photo: Tim Cullen, BGS © NERC)

Whateley, M.K.G. & Barrett, W.L. 1995. Cliffe Hill Quarry, Leicestershire-development of aggregate reserves. 223-233 in Evans A.M. (editor). *An Introduction to Mineral Exploration*. (Blackwell Scientific.)

1996

Boynton, H.E. & Ford, T.D. 1996. Ediacaran fossils from the Precambrian of Charnwood Forest-corrigendum. *Mercian Geologist*, **14**, 2-3.

Brandon, A. 1996. Geology of the lower Derwent valley: 1:10,000 sheets SK33SE, 43SW and 43SE. *British Geological Survey Technical Report* WA/96/07.

Carney, J.N. 1996. Geology of the Swadlincote and Church Gresley districts: 1:10,000 sheets SK 31NW and SK21NE. *British Geological Survey Technical Report* WA/96/11.

Carney, J.N. 1996. Geology of the Ashby de la Zouch area: 1:10,000 Sheet SK 31 NE. *British Geological Survey Technical Report* WA/96/02.

Carney, J.N. 1996. Geology of the Long Whatton district: 1:10 000 Sheet SK 42 SE. *British Geological Survey Technical Report* WA/96/100.

Corfield, S.M., Gawthorpe, R.L., Gage, M., Fraser, A.J. & Besly, B.M. 1996. Inversion tectonics of the Variscan foreland of the British Isles. *Journal of the Geological Society*, **153**, 17-32.

Cruickshank, A.R.I. 1996. A Pistosaurus-like Sauropterygian from the Rhaeto-Hettangian of England. *Mercian Geologist*, **14**, 12-13.

Goodchild, R. 1996. *Correlations between Geomechanical and downhole Geophysical properties of Coal Measure rocks*. Unpublished PhD Thesis, University of Leeds.

Knox, R.W.O. 1996. Heavy mineral analysis of borehole sections in the Sherwood Sandstone Group of the Loughborough Sheet. *British Geological Survey Technical Report* WH/96/69R.

Le Bas, M.J. 1996. Mount Bardon volcanism. *Transactions Leicester Literary and Philosophical Society*, **90**, 26-34.



Triassic palaeovalley fill of Mercia Mudstone Group, in sharp contact with the Charnian basement, which shows crumbly weathering ('sanding') within c.1 m of the unconformity; south face of Bardon Hill Quarry, Charnwood Forest. (Photo: John Carney, BGS © NERC)

Smith, J.A. & Collis, J.J. 1996. Groundwater rebound in the Leicestershire Coalfield. *Journal of the Chartered Institution of Water and Environmental Management*, **10**, 280-289.

Turner, N. 1996. Dinantian palynology of the north face of Cloud Quarry, Cloud Hill, Leicestershire. *British Geological Survey Technical Report, Stratigraphy Series*, WH/96/189R.

Turner, N. 1996. Silesian palynology of outcrop west of Cloud Quarry, Cloud Hill, Leicestershire. *British Geological Survey Technical Report, Stratigraphy Series*, WH/96/188R.

Warrington, G. 1996. Palynology report: Mercia Mudstone Group (Triassic), Cloud Hill Quarry, Leicestershire (Sheet 141: Loughborough). *British Geological Survey Technical Report, Stratigraphy Series*, WH/96/111R.

Warrington, G. 1996. Palynology report: Mercia Mudstone Group (Triassic), Cloud Hill Quarry, Leicestershire (Sheet 141: Loughborough). *British Geological Survey Technical Report, Stratigraphy Series* WH/96/111R.

Wilkinson, I.P. & Wilkinson, A.P. 1996. Geological controls governing Anglo-Saxon settlement in Framland Wapentake, north-eastern Leicestershire. 53-82 in Bourne, J. (editor). *Anglo-Saxon landscapes in the East Midlands*. (Leicestershire Museums Arts Records Service.)

1997

Ambrose, K. 1997. Geology of the Castle Donington area (SK42NW). *British Geological Survey Technical Report* WA/96/41.

Ambrose, K. & Carney, J.N. 1997. The geology of the Breedon on the Hill area (SK42SW). *British Geological Survey Technical Report* WA/97/42.

Ambrose, K. & Carney, J.N. 1997. Geology of the Calke Abbey area. *British Geological Survey Technical Report* WA/97/17.

Berridge, N.G., Pattison, J., Samuel, M.D.A., Brandon, A., Howard, A.S., Pharaoh, T.C. & Riley, N.J. 1997. Geology of the Grantham district. *Memoir of the British Geological Survey sheet 127 (England & Wales)*. British Geological Survey, Keyworth.

Brandon, A. & Carney, J.N. 1997. Geology of the Kegworth area: 1:10,000 Sheet SK42NE. *British Geological Survey Technical Report* WA/97/04.

Carney, J.N. & Cooper, A.H. 1997. Geology of the West Leake area: 1:10,000 Sheet SK 52 NW. *British Geological Survey Technical Report* WA/97/46.

Church, K.D. & Gawthorpe, R.L. 1997. Sediment supply as a control on variability of sequences: an example from the late Namurian of northern England. *Journal of the Geological Society*, **154**, 55-60.

Colman, T. 1997. Mineral investigations on the Loughborough Sheet 141. *British Geological Survey Report, Minerals Group*.

Donnelly, L.J., Shedlock, S.L. & Pearce, D.R. 1997. Crosshole seismic Tomography at Morley Quarry, Leicestershire. *British Geological Survey Technical Report* WN/97/5.

Gang, T. & Goulty, N.R. 1997. Seismic inversion for Coalseam thickness - trials from the Belvoir coalfield. *Geophysical Prospecting*, **45**, 535-549.

Joyce, S. 1997. Changing times in Barrow upon Soar, Quorndon, Sileby and Mountsorrel North End in the 18th Century (Reprint edition). (Loughborough.)

Leake, R.C., Cameron, D.G., Bland, D.J., Styles, M.T. & Fortey, N.J. 1997. The potential for gold mineralization in the British Permian and Triassic red beds and their contact with underlying rocks. *British Geological Survey Mineral Reconnaissance Programme Report* 144.

Merriman, R.J. & Kemp, S.J. 1997. Metamorphism of the Charnian Supergroup in the Loughborough District 1:50,000 Sheet 141. *British Geological Survey Technical Report* WG/97/7.

Pearson, K. & Jeffrey, C.A. 1997. Low-temperature Mineralization of the sub-Triassic Unconformity Surface and Alteration of the Underlying Intrusions of Southern Leicestershire, England. *Exploration and Mining Geology*, **6**, 139-152.

Riley, N.J. 1997. Foraminiferal biostratigraphy of the Carboniferous interval in Fina Long Eaton 1 Bh. *British Geological Survey Technical Report* WA/97/46C.

Warrington, G. 1997. Palynological report: the Sherwood Sandstone Group and Mercia Mudstone Group succession (Permian and Triassic), Asfordby Hydrogeological Borehole (sheet 142: Melton Mowbray). *British Geological Survey Technical Report* WH/97/146R.

Wilkinson, I.P. 1997. Stratigraphical data from a number of sites on the Melton Mowbray (142) and Leicester (156) 1:50K sheets held by Leicester Museum. *British Geological Survey Technical Report* WH/97/101R.

1998

Ambrose, K. 1998. Geology of the Old Dalby area (SK62SE). *British Geological Survey Technical Report* WA/98/16.

Ambrose, K. & Horton, H. 1998. Excursion to Breedon on the Hill Quarry. *Mercian Geologist*, **14**, 145-147.

Bridge, D.M., Carney, J.N., Lawley, R.S. & Rushton, A.W.A. 1998. Geology of the Country around Coventry and Nuneaton. *Memoir of the British Geological Survey, Sheet 169 (England and Wales)*.

Bryan-Jones, A. 1998. Evaluation of rock mass behaviour using Borehole microseismic monitoring: an application to Longwall Coal mining. Unpublished PhD Thesis, University of Liverpool. (Asfordby colliery).

Cornwell, J.D. & Royles, C.P. 1998. Geophysical investigations in the Loughborough District. *British Geological Survey Technical Report* WK/98/05.

Cox, B.M. 1998. Fossil localities on 1:10 000 Sheet SK 62 SE. *British Geological Survey Technical Report*, WH/98/075R.

Hobbs, P.R.N. 1998. Engineering geological assessment of Loughborough 1:50 000 Sheet 141. *British Geological Survey Technical Report* WN/98/7.

Horton, A. 1998. The Marlstone Formation of north-east Leicestershire. *Mercian Geologist*, **14**, 147-149.

Horton, A. & Dawn, A. 1998. Jurassic limestones in the Ketton-Wansford- King's Cliffe area. *Mercian Geologist*, **14**, 144-145.

Jones, L.D. & Hobbs, P.R.N. 1998. The shrinkage and swelling behaviour of UK soils: Mercia Mudstone. *British Geological Survey Coastal and Engineering Geology Group Technical Report* 98/14.

King, R.J. 1998. The occurrence of the "Copper Ore" Chalcopyrite (CuFeS2) in Leicestershire. *Transactions of the Leicester Literary and Philosophical Society*, **92**, 30-34.

Mcilroy, D., Brasier, M.D. & Moseley, J.M. 1998. The Proterozoic-Cambrian transition within the 'Charnian Supergroup' of central England and the antiquity of the Ediacara fauna. *Journal Geological Society*, **155**, 401-413.

Riley, N.J. 1998. Stratigraphy of BGS Worthington Bh. *British Geological Survey Technical Report* WH/98/65R.

Royles, C.P. 1998. A presentation of the regional geophysical data for the Melton Mowbray District. *British Geological Survey Report, (Regional Geophysics Project Note)*, PN/98/7.

Wilkinson, I.P. 1998. Early Jurassic microfaunas from a suite of samples from the Melton Mowbray sheet. *British Geological Survey Technical Report* WH/98/81R.

1999

Ambrose, K. 1999. Geology of the Ab Kettleby area (SK72SW). *British Geological Survey Technical Report* WA/99/20.

Ambrose, K. 1999. Excursion to Ticknall and Ibstock Brick Pit. *Mercian Geologist*, **14**, 209-211.

Ambrose, K. & Filmer, A. 1999. Excursion to Cloud Hill Quarry. *Mercian Geologist*, **14**, 203-206.

Ambrose, K. & Horton, A. 1999. Excursion to Ticknall and Ibstock Brick Pit. *Mercian Geologist*, **14**, 209-211.

Ambrose, K. & Lott, G.K. 1999. The Lower Jurassic 'Ironstone Formation' in the South Lincolnshire and North-East Leicestershire area as a source of building stone. *British Geological Survey Technical Report* WH/99/110R.

Bowen, D.Q.E. 1999. A revised correlation of the Quaternary Deposits in the British Isles. *Geological Society Special Report* 23.

Boynton, H.E. 1999. New fossils in the Precambrian of Charnwood Forest, Leicestershire, England. *Mercian Geologist*, **14**, 197-200.

Boynton, H.E. & Moseley, J. 1999. The geology of the Brand, Charnwood Forest, Leicestershire. *Transactions of the Leicester Literary Philosophical Society*, **93**, 32-38.

Brandon, A. 1999. The geology of the Wreake Valley. 1:10,000 Sheets SK61NE, 71NW and 71NE. *British Geological Survey Technical Report* WA99/17.

Branney, M. 1999. Interpreting ancient Volcanoes: Lessons from modern volcanic arcs [abstract]. *Transactions of the Leicester Literary and Philosophical Society*, **93**, 43-44.

Carney, J.N. 1999. Geology of the East Leake and Rempstone areas: 1: 10,000 sheets SK52SE and SK52NE. *British Geological Survey Technical Report*, WA/99/55.

Carney, J.N. 1999. Revisiting the Charnian Supergroup: new advances in understanding old rocks. *Geology Today*, **15**, 221-229.

Carney, J.N. 1999. The Bardon and Whitwick complexes in north-west Charnwood Forest-a tale of two Precambrian volcanoes [abstract]. *Transactions of the Leicester Literary and Philosophical Society*, **93**, 44-45.

Clayton, K.M. 1999. The geomorphology of the area around Nottingham and Derby. *East Midlands Geographer*, **22**, 73-77.

Cox, B.M., Sumbler, M.G. & Ivimey-Cook, H.C. 1999. A formational framework for the Lower Jurassic of England and Wales (onshore area). *British Geological Survey Research Report*, RR/99/01.

Cruickshank, A.R.I. 1999. 101 things to do with a dead Plesiosaur. *Transactions of the Leicester Literary and Philosophical Society*, **93**, 39-41.

Ford, T.D. 1999. The Precambrian fossils of Charnwood Forest. *Geology Today*, **15**, 230-234.

Henney, P.J. 1999. The differentiated sills of Warwickshire: tectonic setting and evolution of the Midlands minor intrusive suite and comparison with south Leicestershire diorites [abstract]. *Transactions of the Leicester Literary Philosophical Society*, **93**, 47.

Jones, D.K.C. 1999. Landsliding in the Midlands: a critical evaluation of the contribution of the National Landslide Survey. *The East Midlands Geographer*, **22**, 106-124.

Keen, D.H. 1999. The chronology of Middle Pleistocene ("Wolstonian") events in the English Midlands. 159-168 in Andrews, P & Banham, P.H. (editors). *Late Cenozoic environments and Hominid evolution: a tribute to Bill Bishop*. (Geological Society: London)

Kemp, S.J. 1999. The Clay mineralogy and maturity of the Mercia Mudstone Group from the Asfordby Borehole, Leicestershire. *British Geological Survey Technical Report* WG/99/7

King, C.A.M. 1999. The Trent Trench. *The East Midland Geographer*, **22**, 94-95.

Lees, G. 1999. The East Midland Earthquake. *The East Midland Geographer*, **22**, 94-95.

Maddy, D. 1999. Middle Pleistocene reconstruction of the Baginton River basin: implications for the Thames drainage system. 169-182 in Andrews, P & Banham, P.H. (editors). *Late Cenozoic environments and Hominid evolution: a tribute to Bill Bishop.* (Geological Society: London)

Maddy, D. 1999. The Midlands. 28-44 in Bowen, D.Q. (editor). A revised correlation of the Quaternary Deposits in the British Isles. Geological Society Special Report, 23.

Maguire, P.K.H. 1999. Images of Igneous intrusions beneath the East Midlands. *Transactions of the Leicester Literary and Philosophical Society*, **93**, 46.

Pharoah, T.C. 1999. Precambrian intrusions in Leicestershire and Warwickshire [abstract]. *Transactions of the Leicester Literary and Philosophical Society*, **93**, 45.

Sutherland, D.S. 1999. The south Leicestershire diorites. *Transactions of the Leicester Literary and Philosophical Society*, **93**, 45-46.

Sutherland, D.S. 1999. Volcanic eruption and igneous intrusion-Leicestershire's fiery past-and Warwickshire's part in it. *Transactions of the Leicester Literary and Philosophical Society*, **93**, 42-43.

2000

Ambrose, K. 2000. Geology of the Scalford area (SK72SE). *British Geological Survey Technical Report* WA/00/06.

Ambrose, K. 2000. Geology of the Eastwell area, SK72NE. *British Geological Survey Technical Report* WA/00/07.

Brandon, A. & Carney, J.N. 2000. Geology of the Long Clawson, Langar, Stathern and Knipton area: 1:10,000 Sheets SK72NW, SK73SW, SK73SE and SK 83SW. British Geological Survey Technical Report WA/00/36.

Brandon, A. & Carney, J.N. 2000. Geology of the Vale of Belvoir: 1:10,000 sheets SK72NW, 73SW, 73SE & 83SW (western part). *British Geological Survey Technical Report* WA/00/36.

Brasier, M.D. 2000. The Charnia fauna and global chaos in the late Precambrian [abstract]. *Transactions of the Leicester Literary and Philosophical Society*, **94**, 27.

Carney, J.N. 2000. Geology of the Barrow-upon-Soar and Seagrave areas: 1:10,000 sheets SK51NE and SK61NW. *British Geological Survey Technical Report*, WA/00/21.

Carney, J.N. 2000. The geology of Bardon Hill and Whitwick quarries in Charnwood Forest, north-west Leicestershire. *British Geological Survey Technical Report* WA/00/62.

Carney, J.N. 2000. Igneous processes within late Precambrian volcanic centres near Whitwick, northwestern Charnwood Forest. *Mercian Geologist*, **15**, 7-28.

Carney, J.N. 2000. Morley Quarry, Charnwood Forest. *Mercian Geologist*, **15**, 52-53.

Carney, J.N. & Boynton, H.E. 2000. Field excursion guide to: Mount St Bernard, Charnwood Lodge, Warren Hills, Beacon Hill and Bradgate Park. *British Geological Survey Technical Report* WA/00/57.

Carney, J.N. & Pharaoh, T.C. 2000. Aspects of Charnian geology: an evening field excursion to Calvary Rock, Ratchet Hill, Mount Saint Bernard and Beacon Hill. *British Geological Survey Technical Report* WA/00/52.

Carney, J.N. & Pharoah, T.C. 2000. Charnwood Forest. 19-52 in Carney, J N, Horak, J M, Pharaoh, T C, Gibbons, W, Wilson, D, Barclay, W J & Bevins, R E. (editors). *Precambrian rocks in England and Wales Geological Conservation Review Series*. 20. (Peterborough: Joint Nature Conservation Committee.)

Carney, J.N. & Sumbler, M.G. 2000. Geology of the Croxton Kerrial and Waltham areas: 1:10,000 sheets SK 82 NW and SK 82 SW. *British Geological Survey Technical Report*, WA/00/22.

Forrest, R. 2000. A large Rhomaleosaurid Pliosaur from the Upper Lias of Rutland. *Mercian Geologist*, **15**, 37-40.

Hallsworth, C. 2000. Interplay of northern and southern sources in the Melton area of the Widmerpool Gulf during the Namurian. *British Geological Survey Technical Report*, WH/00/41R.

Hylton, M.D. 2000. *The microfaunal investigaton of the EarlyToarcian (Lower Jurassic) extinction event in N W Europe*. Unpublished PhD Thesis, University of Plymouth.

Hylton, M.D. & Hart, M.B. 2000. Benthonic foraminiferal response to Pleinsbachian-Toarcian (L Jurassic) sea-level change in NW Eurpoe. *GeoResearch Forum*, **6**, 455-462.

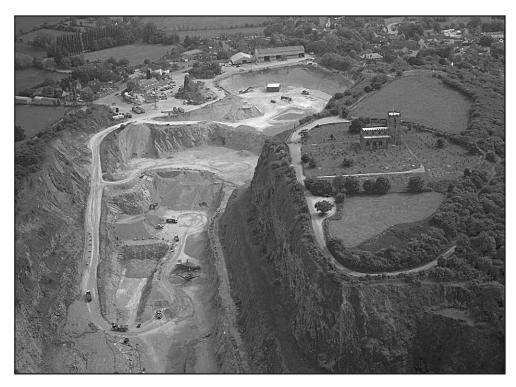
2001

Ambrose, K. 2001. The Lithostratigraphy of the Blue Lias Formation (Late Rhaetian-Early Sinemurian in the southern part of the English Midlands. *Proceedings Geologists' Association*, **112**, 97-110.

Ambrose, K. 2001. Geology of the Somerby area; 1:10 000 sheet SK71SE. *British Geological Survey Technical Report* WA/01/09.

Bloodworth, A.J., Cowley, J.F., Highley, D.E. & Bowler, G.K. 2001. Brick clay: issues for planning. *British Geological Survey Technical Report* WF/00/1R, 140pp.

Aerial view of Breedon Hill Quarry. (Photo: Tim Cullen, BGS © NERC)



Boynton, H.E. 2001. A very large Bradgatia fossil. *Mercian Geologist*, **15**, 130-131.

British Geological Survey, 2001. 1:50 000 Geological Sheet 141 Loughborough.

Carney, J.N., Ambrose, K. & Brandon, A. 2001. Geology of the Melton Mowbray Sheet - A brief explanation of the geological map. *Sheet explanation of the British Geological Survey*, 1:50,000 sheet 142 Melton Mowbray.

Carney, J.N., Ambrose, K., Brandon, A., Royles, C.P., Cornwell, J.D. & Lewis, M.A. 2001. Geology of the country between Loughborough, Burton and Derby. *Sheet Description of the British Geological Survey 1:50 000 Series Sheet 141 Loughborough*.

Donnelly, L.J. 2001. Fault reactivation induced by mining in the East Midlands (Ground water rebound at Swannington). *Mercian Geologist*, **15**, 29-36.

Green, P.F., Thomson, K. & Hudson, J.D. 2001. Recognition of tectonic events in undeformed regions: contrasting results from the Midland Platform and East Midlands Shelf. *Journal Geological Society*, **158**, 59-73.

Lott, G. 2001. Geology and building stones in the East Midlands. *Mercian Geologist*, **15**, 97-122.

Mckervey, J.A., S.J. 2001. Mineralogical analysis of cuttings from the Scalford Borehole. *British Geological Survey Technical Report* IR/01/042.

Paddock, E.A. 2001. A plant microfossil assemblage associated with paleochannels of the River Trent, Hemington fields Leicestershire, England. Unpublished MPhil Thesis, University of Birmingham.

Riding, J.B. 2001. The palynology of the Upper Pliensbachian and Lower Toarcian strata at Tilton railway cutting, Leicestershire. *British Geological Survey Internal Report* IR/01/138.

Wilkinson, I.P. 2001. Biostratigraphy of the Lias section at Tilton Railway Cutting, Leicestershire. *British Geological Survey Palaeontology Internal Report*, IR/01/072.

2002

British Geological Survey. 2002. 1:50,000 Geological Sheet 142 Melton Mowbray.

Carney, J.N., Ambrose, K. & Brandon, A. 2002. *Geology of the Loughborough district. A brief explanation of the geological map Sheet 141 Loughborough*. Sheet Explanation of the British Geological Survey.

Carney, J.N., Ambrose, K., Brandon, A., Royles, C.P. & Sheppard, T.H. 2002. Geology of the country around Melton Mowbray. *Sheet Description of the British Geological Survey 1:50 000 series sheet 142*.

Compston, W., Wright, A.E. & Toghill, P. 2002. Dating the Late Precambrian Volcanicity of England and Wales. *Journal of the Geological Society*, **159**, 323-339.

Harrison, D.J., Henney, P.J., Cameron, D.G., Spencer, N.A., Evans, D.J., Lott, G.K., Linley, K.A. & Highley, D.E. 2002. Mineral Resource Information in support of National, Regional and Local Planning: Leicestershire and Rutland. *British Geological Survey Commissioned Report* CR/02/24/N.

Hawthorne, F.C., Cooper, M.A., Grice, A.C., Roberts, A.C. & Hubbard, N. 2002. Description and crystal structure of Bobkingite, Cu₅Cl₂(OH)₈(H₂O)₂ a new mineral from New Cliffe Hill Quarry, Stanton-under-Bardon, Leicestershire, UK. *Mineralogical Magazine*, **66**, 301-311.

Jefferson, I., Rosenbaum, M. & Smalley, I. 2002. Mercia mudstone as a Triassic aeolian desert sediment. *Mercian Geologist*, **15**, 157-162.

Keen, D.H. 2002. Glaciations in the Midlands: some revisions of traditional views (lecture summary). *Mercian Geologist*, **15**, 242-243.

Riding, J.B. 2002. A palynological investigation of the Upper Pliensbachian and Lower Toarcian strata at Brown's Hill Quarry, Holwell, Leicestershire. *British Geological Survey Internal Report* IR/02/168.

Swift, G.M. & Reddish, D.J. 2002. Stability problems associated with an abandoned ironstone mine. *Bulletin of Engineering Geology and the Environment*, **61**, 227-239.

Upchurch, P. & Martin, J. 2002. The Cetiosauras: The Anatomy and Relationships of a Jurassic British Sauropod Dinosaur. *Palaeontology*, **45**, 1049-1074.

2003

Atkinson, J.H., Fookes, F.G., Miglio, B.F. & Pettier, G.S. 2003. Destruction and disintegration of Mercia Mudstone during full-face tunnelling. *Journal of Engineering Geology and Hydrogeology*, **30**, 293-303.

Bagshaw, C. 2003. Part 2: The Carboniferous geological history of the East Midlands. *Geologists' Association Guide* 63, 24-28.

Boynton, H.E. & Carney, J.N. 2003. Field excursion to the Precambrian fossil localities at Ives Head and Bradgate Park, Charnwood Forest. *British Geological Survey Occasional Publication*, 3.

Brandon, A. 2003. Excursion 10. Liassic of the Vale of Belvoir. *Geologists' Association Guide*. 63, 92-102.

Carney, J.N. 2003. Excursion 3: Precambrian geology and scenery of northwest Charnwood. *Geologists' Association Guide* 63, 18-23.

Cox, B.M. & Sumbler, M.G. 2003. *British Jurassic Stratigraphy*. Geological Conservation Review Series 21. (Peterborough: Joint Nature Conservation Committee.)

Dawn, A. 2003. Excursion 11: Middle Jurassic of South Lincolnshire, Leicestershire and Northamptonshire. *Geologists' Association Guide* 63, 103-117.

Ford, T.D. 2003. Part 1: The Precambrian geology and geological history of the East Midlands. *Geologists' Association Guide* 63, 1-5.

Ford, T.D. 2003. Excursion 1: The Late Precambrian rocks of Bradgate Park, Charnwood Forest, Leicestershire. *Geologists' Association Guide* 63, 6-12.

Ford, T.D. 2003. Excursion 2: The late Precambrian rocks of North Charnwood. *Geologists' Association Guide* 63, 13-17.

Hart, M.B., Hylton, M.D., Oxford, M.J., Price, G.D., Hudson, W. & Smart, C.W. 2003. The search for the origin of the planktic Foraminifera. *Journal of the Geological Society*, **160**, 341-343.

Horton, A. & Gutteridge, P.C. 2003. The Geology of the East Midlands. *Geologists' Association Guide*, 63.

Howard, A.S. 2003. The Permian to Middle Jurassic geology of the East Midlands. *Geologists' Association Guide*, 63, 67-71.

Sheppard, T.H. 2003. Facies, architecture and Stratigraphy of the Upper Langsettian (Westphalian A), Vale of Belvoir Coalfield, Leicestershire, UK. Unpublished PhD Thesis, University of Oxford Brookes.

In Press

Ambrose, K., In Press. Geology of the Whissendine area: 1:10,000 Sheet SK81SW. *British geological Survey Internal Report* IR/04/116.

Bouch, J.E., Milodowski, A.E. & Ambrose, K., In Press. Contrasting patterns of pore system modification due to dolomitisation and fracturing in Dinantian, basin margin carbonates from the UK. *Geological Society Special Publication*.

In Preparation

Howard, A.S., Warrington, G., Young, S.R., Ambrose, K., Carney, J.N. & Pharoah, T.C. In Prep. The geology of the country around Nottingham. *Memoir of the British Geological Survey*, Sheet 126 (England and Wales).

Pringle, M.S., Carney, J.N., Pharaoh, T.C., Merriman, R.J. & Kemp, S.J. In Prep. 40Ar/39Ar isotope evidence for the deformation history of latest Precambrian and Lower Cambrian rocks in central and western England. *Journal of the Geological Society*.

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