
References

- Abbott, G. (1903) Report on excursion to Southwick, Fulwell and Roker. *Proceedings of the Geologists' Association*, 18, 322–4.
- Abbott, G. (1907) Concretions. *South-eastern Naturalist*, 1–7.
- Abbott, G. (1914) Discoid limestones which simulate organic characters. A case of inorganic evolution. *The Pioneer*, 1–8.
- Al-Rekabi, Y. (1982) Petrography, porosity and geochemistry of the Upper Magnesian Limestone of NE England. Unpublished Ph.D. Thesis, University of Dundee.
- Aplin, G. (1985) Diagenesis of the Zechstein main reef complex, NE England. Unpublished Ph.D. Thesis, University of Nottingham.
- Arthurton, R.S. and Hemingway, J.E. (1972) The St Bees Evaporites — a carbonate-evaporite formation of Upper Permian age in West Cumberland, England. *Proceedings of the Yorkshire Geological Society*, 38, 565–92.
- Arthurton, R.S., Burgess, I.C. and Holliday, D.W. (1978) Permian and Triassic, in *The Geology of the Lake District* (ed. F. Moseley), Yorkshire Geological Society, Occasional Publication No. 3, pp. 189–206.
- Aveline, W.T., Dakyns, J.R. and Fox-Strangways, C. (1874) One-inch Geological Sheet 62 (Harrogate). Geological Survey of England and Wales.
- Binney, E.W. (1855) On the Permian beds of the north-west of England. *Proceedings of the Manchester Literary and Philosophical Society (Series 2)*, 12, 209–69.
- Braithwaite, C.J.R. (1988) Calcitization and compaction in the Upper Permian Concretionary Limestone and Seaham formations of north-east England. *Proceedings of the Yorkshire Geological Society*, 47, 33–45.
- Browell, E.J.J. and Kirkby, J.W. (1866) On the chemical composition of various beds of the Magnesian Limestone and associated Permian rocks of Durham. *Transactions of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne*, 1, 204–30.
- Burton, R.C. (1911) On the occurrence of beds of the Yellow Sands and marl in the Magnesian Limestone of Durham. *Geological Magazine*, 8, 299–306.
- Cameron, A.G. (1881) Subsidences over the Permian boundary between Hartlepool and Ripon. *Proceedings of the Yorkshire Geological and Polytechnic Society*, 7, 342–51.
- Card, G.W. (1892) On the flexibility of rocks; with special reference to the Flexible Limestone of Durham. *Geological Magazine*, 9, 117–24.
- Clapham, R.C. (1863) Analyses and description of Magnesian Limestone from the Trow Rocks. *Transactions of the Tyneside Naturalists' Field Club*, 5, 122–4.
- Clark, D.N. (1980) The diagenesis of Zechstein carbonate sediments, in *The Zechstein Basin with Emphasis on Carbonate Sequences* (eds H. Füchtbauer and T.M. Peryt), Elsevier, Amsterdam, pp. 167–203.
- Clark, D.N. (1984) The Zechstein in NW Europe, in *Carbonate Geology* (course notes), Open University, Milton Keynes, pp. 150–71.
- Clarke, R.F.A. (1965) British Permian saccate and monosulcate miospores. *Palaeontology*, 8, 322–54.

- Colter, V.S. and Reed, G.E. (1980) Zechstein 2 Fordon Evaporites of the Atwick No. 1 borehole, surrounding areas of NE England and the adjacent southern North Sea, in *The Zechstein Basin with Emphasis on Carbonate Sequences* (eds H. Füchtbauer and T.M. Peryt). Contributions to Sedimentology, 9, Elsevier, Amsterdam, pp. 115–29.
- Cooper, A.H. (1986) The subsidence hazard and foundering of strata caused by the dissolution of Permian gypsum in the Ripon and Bedale areas, North Yorkshire, in *The English Zechstein and Related Topics* (eds G.M. Harwood and D.B. Smith), Geological Society of London, Special Publication No. 22, pp. 127–39.
- Cooper, A.H. (1987a) *The Permian Rocks of the Thirsk District; Geological Notes and Local Details of 1:50,000 Sheet 52*. British Geological Survey, Keyworth.
- Cooper, A.H. (1987b) *The Permian Rocks of the Harrogate District; Geological Notes and Local Details of 1:50,000 Sheet 62*. British Geological Survey, Keyworth.
- Cooper, A.H. (1988) Subsidence resulting from the dissolution of Permian gypsum in the Ripon area: its relevance to mining and water abstraction, in *Engineering Geology of Underground Movements* (eds F.G. Bell, M.G. Culshaw, J.C. Cripps and M. Lovell). Geological Society Engineering Geology Special Publication No. 5, pp. 387–90.
- Donovan, S.K., Hollingworth, N.T.J. and Veltcamp, C.J. (1986) The British Permian crinoid *Cyathocrinites ramosus* (Schlotheim). *Palaeontology*, 29, 809–25.
- Downie, C. (1967) Conisborough, in *Geological Excursions in the Sheffield Region and the Peak District National Park* (eds R. Neves and C. Downie). University of Sheffield, pp. 145–9.
- Eastwood, T., Dixon, E.E.L., Hollingworth, S.E. and Smith, B. (1931) *The Geology of the Whitehaven and Workington District*. Memoir of the Geological Survey of Great Britain, Sheet 28.
- Ebburn, J. (1981) Geology of the Morecambe Bay gas field, in *Petroleum Geology of the Continental Shelf of North-west Europe* (eds L.V. Ming and G.D. Hobson), Heyden, London, pp. 485–93.
- Eden, R.A., Stevenson, I.P. and Edwards, W. (1957) *Geology of the Country around Sheffield*. Memoir of the Geological Survey of Great Britain, Sheet 100.
- Edwards, W., Wray, D.A. and Mitchell, G.H. (1940) *Geology of the Country around Wakefield*. Memoir of the Geological Survey of Great Britain, Sheet 78.
- Edwards, W., Mitchell, G.H. and Whitehead, T.H. (1950) *Geology of the Country North and East of Leeds*. Memoir of the Geological Survey of Great Britain, Sheet 70.
- Eriksson, K.A. (1977) Tidal flat and subtidal sedimentation in the 2250 MY Malmani Dolomite, Transvaal, South Africa. *Sedimentary Geology*, 18, 223–44.
- Evans, A.L., Fitch, F.J. and Miller, J.A. (1973) Potassium-argon age determinations on some British Tertiary igneous rocks. *Journal of the Geological Society of London*, 129, 419–43.
- Forbes, B.G. (1958) Folded gypsum of Ripon Parks, Yorkshire. *Proceedings of the Yorkshire Geological Society*, 31, 351–8.
- Fowler, A. (1943) On fluorite and other minerals in Lower Permian rocks of south Durham. *Geological Magazine*, 80, 41–51.
- Fowler, A. (1957) Minerals in the Permian and Trias of north-east England. *Proceedings of the Geologists' Association*, 67, 251–65.

- Fox-Strangways, C. (1874) *The Geology of the Country North and East of Harrogate*, Memoir of the Geological Survey of Great Britain, Sheet 62.
- Fox-Strangways, C. (1908) *The Geology of the Country North and East of Harrogate*, 2nd edn, Memoir of the Geological Survey of Great Britain, Sheet 62.
- Fox-Strangways, C., Cameron, A.G. and Barrow, G. (1885) *The Geology of the Country around Northallerton and Thirsk*, Memoir of the Geological Survey of Great Britain, Sheet 52.
- Francis, E.A. (1964) 1:10,560 Geological map sheet NZ 34 NW. Geological Survey of Great Britain, London.
- Füchtbauer, H. (1968) Carbonate sedimentation and subsidence in the Zechstein Basin (northern Germany), in *Recent Developments in Carbonate Sedimentology in Central Europe* (eds G. Muller and G.M. Friedman), Springer-Verlag, Berlin, pp. 196–204.
- Fuzezy, L.M. (1970) Petrology of the Lower Magnesian Limestone in the neighbourhood of Selby, Yorkshire. Unpublished Ph.D. Thesis, University of Cambridge.
- Fuzezy, L.M. (1980) Origin of nodular limestones, calcium sulphates and dolomites in the Lower Magnesian Limestone in the neighbourhood of Selby, Yorkshire, England, in *The Zechstein Basin with Emphasis on Carbonate Sequences* (eds H. Füchtbauer and T.M. Peryt), Contributions to Sedimentology, 9, Elsevier, Amsterdam, pp. 35–44.
- Garwood, E.J. (1891) On the origin and mode of formation of the concretions in the Magnesian Limestone of Durham. *Geological Magazine*, 8, 433–40 + 1 plate.
- Geinitz, H.B. (1861) *Dyas, oder die Zechstein formation and das Rotliegend*, Leipzig, 130 pp.
- Gilligan, A. (1918) The Lower Permian at Ashfield Brick and Tile Works, Conisbrough. *Proceedings of the Yorkshire Geological Society*, 19, 289–97.
- Glennie, K.W. (1984) Early Permian–Rotliegend, in *Introduction to the Petroleum Geology of the North Sea* (ed. K.W. Glennie), Blackwell Scientific Publications, Oxford, pp. 41–61.
- Glennie, K.W. and Buller, A. (1983) The Permian Weisslegend of NW Europe: the partial deformation of aeolian sand caused by the Zechstein transgression. *Sedimentary Geology*, 35, 43–81.
- Goodall, I.G. (1987) Sedimentology and diagenesis of the Edlington Formation (Upper Permian) of Teesside. Unpublished Ph.D. Thesis, University of Reading.
- Goodchild, J.W. (1893) Observations on the New Red Series of Cumberland and Westmorland, with especial reference to classification. *Transactions of the Cumberland and Westmorland Association*, 17, 1–24.
- Harwood, G.M. (1981) Controls of mineralization in the Cadeby Formation (Lower Magnesian Limestone). Unpublished Ph.D. Thesis, Open University, Milton Keynes.
- Harwood, G.M. (1986) The diagenetic history of Cadeby Formation carbonate rocks (EZ1 Ca), Upper Permian, eastern England, in *The English Zechstein and Related Topics* (eds G.M. Harwood and D.B. Smith), Geological Society of London, Special Publication No. 22, PP. 75–86.
- Harwood, G.M. (1989) *Contrasting Nearshore Sedimentation in Zechstein 1 Carbonate Rocks in Yorkshire*. British Sedimentological Research Group, Field Excursions Guide, Leeds, pp. 6.11–6.20.
- Harwood, G.M. and Smith, D.B. (eds) (1986) *The English Zechstein and Related Topics*. Geological Society of London, Special Publication No. 22, 244 pp.

- Harwood, G.M. and Smith, F.W. (1986) Mineralization in Upper Permian carbonates at outcrop in eastern England, in *The English Zechstein and Related Topics* (eds G.M. Harwood and D.B. Smith), Geological Society of London, Special Publication No. 22, pp. 103–11.
- Hickling, G. (1906) On footprints from the Permian of Mansfield. *Quarterly Journal of the Geological Society of London*, 62, 125–31.
- Hickling, G. and Holmes, A. (1931) The brecciation of the Permian rocks, in *Contributions to the Geology of Northumberland and Durham, Proceedings of the Geologists' Association*, 42, 252–5.
- Hirst, D.M. and Smith, F.W. (1974) Controls of barite mineralization in the Lower Magnesian Limestone of the Ferryhill area, County Durham. *Transactions of the Institution of Mining and Metallurgy, Section B*, 83, 49–55.
- Holliday, D.W. (1993) Geophysical log signatures in the Eden Shales (Permo-Triassic) of Cumbria and their regional significance. *Proceedings of the Yorkshire Geological Society*, 49, 345–54.
- Hollingworth, N.T.J. (1987) Palaeoecology of the Upper Permian Zechstein Cycle 1 reef of NE England. Unpublished Ph.D. Thesis, University of Durham.
- Hollingworth, N.T.J. and Barker, M.J. (1991) Gastropods from the Upper Permian Zechstein (Cycle 1) reef of north-east England. *Proceedings of the Yorkshire Geological Society*, 48, 347–65.
- Hollingworth, N.T.J. and Pettigrew, T.H. (1988) *Zechstein Reef Fossils and their Palaeoecology*. Palaeontological Association Field Guide to Fossils No. 3, University Printing House, Oxford, 75 pp.
- Hollingworth, N.T.J. and Tucker, M.E. (1987) The Upper Permian (Zechstein) Tunstall Reef of north-east England: palaeoecology and early diagenesis, in *The Zechstein Facies in Europe* (ed. T.M. Peryt), Springer-Verlag, Berlin, pp. 25–51.
- Hollingworth, S.E. (1942) Correlation of gypsum–anhydrite deposits and the associated strata in the north of England. *Proceedings of the Geologists' Association*, 53, 141–51.
- Holmes, A. (1931) Concretionary and oolitic structures of the Permian rocks, in *Contributions to the Geology of Northumberland and Durham, Proceedings of the Geologists' Association*, 42, 255–8.
- Holtedahl, O. (1921) On the occurrence of structures like Walcott's Algonkian algae in the Permian of England. *American Journal of Science*, 5, 195–206.
- Howse, R. (1848) A catalogue of the fossils of the Permian System of the counties of Northumberland and Durham. *Transactions of the Tyneside Naturalists' Field Club*, 1, 219–64.
- Howse, R. (1858) Notes on the Permian System of the counties of Northumberland and Durham. *Annals and Magazine of Natural History*, 19, 304–12.
- Howse, R. (1864) On the glaciation of the counties of Durham and Northumberland. *Transactions of the North of England Institute of Mining and Mechanical Engineers*, 13, 169–85.
- Howse, R. (1891) Note on the discovery in 1836–7 of a fossil fish (*Acrolepis kirkbyi* n. sp.) in the Upper Division of the Magnesian Limestone of Marsden. *Transactions of the Natural History Society of Northumberland and Durham*, 12, 171–2.
- Howse, R. and Kirkby, J.W. (1863) *A Synopsis of the Geology of Durham and Part of Northumberland*, Tyneside Naturalists' Field Club, Newcastle upon Tyne, 33 pp.

- Hudson, R.G.S., Edwards, W., Tonks, L. and Versey, H.C. (1938) Summer field meeting to the Harrogate district, July 1938. *Proceedings of the Geologists' Association*, 49, 353–72.
- Jackson, D.I. and Mulholland, P. (1993) Tectonic and stratigraphic aspects of the East Irish Sea Basin and adjacent areas: contrasts in their post-Carboniferous structural styles, in *Petroleum Geology of North West Europe: Proceedings of the 4th Conference* (ed. J.R. Parker). Geological Society, London, Vol. 2, pp. 791–808.
- Jackson, D.I., Mulholland, P., Jones, S.M. and Warrington, G. (1987) The geological framework of the East Irish Sea Basin, in *Petroleum Geology of North West Europe* (eds J. Brooks and K.W. Glennie), Graham and Trotman, London, pp. 191–203.
- James, A.N., Cooper, A.H. and Holliday, D.W. (1981) Solution of the gypsum cliff (Permian, Middle Marl) by the River Ure at Ripon Parks, North Yorkshire. *Proceedings of the Yorkshire Geological Society*, 43, 433–50.
- Jones, K. (1969) Mineralogy and geochemistry of the Lower and Middle Magnesian Limestone of County Durham. Unpublished Ph.D. Thesis, University of Durham.
- Jones, K. and Hirst, D.M. (1972) The distribution of barium, lead and zinc in the Lower and Middle Magnesian Limestone of County Durham, Great Britain. *Chemical Geology*, 10, 223–36.
- Kaldi, J. (1980) Aspects of the sedimentology of the Lower Magnesian Limestone (Permian) of eastern England. Unpublished Ph.D. Thesis, University of Cambridge.
- Kaldi, J. (1986a) Sedimentology of sandwaves in an oolite shoal complex in the Cadeby Formation (Upper Permian) of eastern England, in *The English Zechstein and Related Topics* (eds G.M. Harwood and D.B. Smith), Geological Society of London, Special Publication No. 22, pp. 62–74.
- Kaldi, J. (1986b) Diagenesis of nearshore carbonate rocks in the Sprotbrough Member of the Cadeby (Magnesian Limestone) Formation (Upper Permian) of eastern England, in *The English Zechstein and Related Topics* (eds G.M. Harwood and D.B. Smith), Geological Society of London, Special Publication No. 22, pp. 87–102.
- Kendall, P.F. and Wroot, H.E. (1924) *Geology of Yorkshire*, Vol. 1, Vienna, 660pp.
- King, W. (1848) *A Catalogue of the Organic Remains of the Permian Rocks of Northumberland and Durham*, Newcastle upon Tyne.
- King, W. (1850) *A Monograph of the Permian Fossils of England*, Palaeontographical Society, London, 258 pp.
- Kirkby, J.W. (1857) On some Permian fossils from Durham. *Quarterly Journal of the Geological Society of London*, 8, 213–8 and plate 7.
- Kirkby, J.W. (1858) On Permian Entomostraca from the Shell-Limestone of Durham. *Transactions of the Tyneside Naturalists' Field Club*, 4, 122–71.
- Kirkby, J.W. (1859) On the Permian Chitonidae. *Quarterly Journal of the Geological Society of London*, 15, 607–26.
- Kirkby, J.W. (1860) On the occurrence of 'sand-pipes' in the Magnesian Limestone of Durham. *The Geologist*, 3, 293–8, 329–36.
- Kirkby, J.W. (1861) On the Permian rocks of South Yorkshire; and on their palaeontological relations. *Quarterly Journal of the Geological Society of London*, 7, 287–325.
- Kirkby, J.W. (1863) Fossil fish in Magnesian Limestone at Fulwell Hill. *Transactions of the Tyneside Naturalists' Field Club*, 5, 248.

- Kirkby, J.W. (1864) On some remains of fish and plants from the 'Upper Limestone' of the Permian series of Durham. *Quarterly Journal of the Geological Society of London*, 20, 345–58 (reprinted 1867 in the *Transactions of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne*, 1, 64–83).
- Kirkby, J.W. (1867) On the fossils of the Marl Slate and Lower Magnesian Limestone. *Transactions of the Natural History Society of Northumbria*, 1, 184–200.
- Kirkby, J.W. (1870) Notes on the 'Geology' of Messrs Baker and Tate's New Flora of Northumberland and Durham. *Transactions of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne*, 3, 357–60.
- Kitson, D.C. (1982) Stratigraphical relationships, morphology and diagenesis of the Hesleden Dene algal biostrome. Unpublished M.Sc. Thesis, University of Reading.
- Land, D.H. and Smith, D.B. (1981) 1:10,560 Geological Map Sheet NZ 36 NE. Geological Survey of Great Britain, London.
- Lebour, G.A. (1884) On the breccia-gashes of the Durham coast and some recent earth-shakes at Sunderland. *Transactions of the North of England Institute of Mining and Mechanical Engineers*, 33, 165–77.
- Lebour, G.A. (1902) The Marl Slate and Yellow Sands of Northumberland and Durham. *Transactions of the Institution of Mining Engineers*, 24, 370–91.
- Lee, M.R. (1990) The sedimentology and diagenesis of the Raisby Formation (EZ1 carbonate), northern England. Unpublished Ph.D. Thesis, University of Newcastle upon Tyne.
- Lee, M.R. (1993) Formation and diagenesis of slope limestones within the Upper Permian (Zechstein) Raisby Formation, north-east England. *Proceedings of the Yorkshire Geological Society*, 49, 215–27.
- Lee, M.R. and Harwood, G.M. (1989) Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), north-east England. *Sedimentary Geology*, 65, 285–305.
- Logan, A. (1962) A revision of the palaeontology of the Permian limestones of County Durham. Unpublished Ph.D. Thesis, University of Newcastle upon Tyne.
- Logan, A. (1967) *The Permian Bivalvia of Northern England*. Monograph of the Palaeontographical Society, London, 72 pp + 12 plates.
- Macchi, L. (1990) A Field Guide to the Continental Permo-Triassic Rocks of Cumbria and North-west Cheshire, Liverpool Geological Society, 88 pp. Northumberland. *Journal of the Geological Society of London*, 131, 397–414.
- Magraw, D., Clarke, A.M. and Smith, D.B. (1963) The stratigraphy and structure of the south-east Durham coalfield. *Proceedings of the Yorkshire Geological Society*, 34, 153–208 + 2 plates.
- Marley, J. (1892) On the Cleveland and south Durham salt industry. *Transactions of the Northern England Institute of Mining Engineers*, 39, 91–125.
- Meyer, H.O.A. (1965) Revision of the stratigraphy of the Permian evaporites and associated strata in north-western England. *Proceedings of the Yorkshire Geological Society*, 35, 71–89.
- Mitchell, G.H. (1932a) Notes on the Permian rocks of the Doncaster district. *Proceedings of the Yorkshire Geological Society*, 22, 133–41.
- Mitchell, G.H. (1932b) 1:10,560 Geological Map Sheet Yorkshire 284 SE. Geological Survey of Great Britain, London.

- Mitchell, G.H., Stephens, J.V., Bromehead, C.E.N. and Wray, D.A. (1947) *Geology of the Country around Barnsley*, Memoir of the Geological Survey of Great Britain, Sheet 87.
- Monty, Cl.L.V. (1973) Precambrian background and Phanerozoic history of stromatolitic communities; an overview. *Annales de la Société Géologique de Belgique*, 96, 584–624.
- Moss, M. (1986) The geochemistry and environmental evolution of the Hampole Beds at the type area of the Cadeby Formation (Lower Magnesian Limestone). *Mercian Geologist*, 10, 115–25.
- Murchison, R.I. and Harkness, R. (1864) On the Permian rocks of the north-west of England, and their extension into Scotland. *Quarterly Journal of the Geological Society of London*, 20, 144–65.
- Mussett, A.E., Dagley, P. and Skelhorn, R.R. (1988) Time and duration of activity in the British Tertiary Igneous Province, in *Early Tertiary Volcanism and the Opening of the NE Atlantic* (eds A.C. Morton and L.M. Parson), Geological Society of London, Special Publication, No. 39, 337–48.
- Paulson, J. (1969) Some Permian foraminifera from north-western England. *Geological Magazine*, 106, 197–205.
- Pattison, J. (1970) A review of the marine fossils from the Upper Permian rocks of Northern Ireland and north-west England. *Bulletin of the Geological Survey of Great Britain*, No. 32, 123–65.
- Pattison, J. (1974) (Summary of Upper Permian faunas), in *A Correlation of the Permian Rocks in the British Isles* (D.B. Smith, R.G.W. Brunstrom, P.I. Manning, S. Simpson and F.W. Shotton), Geological Society of London, Special Report No. 5, pp. 11–12.
- Pattison, J. (1977) Catalogue of the type, figured and cited specimens in the King Collection of Permian fossils. *Bulletin of the Geological Survey of Great Britain*, No. 62, 33–44.
- Pattison, J. (1978) Permian communities, in *Ecology of Fossils* (ed. W.S. McKerrow), Duckworth, London, pp. 187–93.
- Pattison, J. (1981) Permian, in *Stratigraphical Atlas of Fossil Foraminifera*, 2nd edn (eds D.G. Jenkins and J.W. Murray), Ellis Harwood, Chichester, pp. 70–7.
- Pattison, J., Smith, D.B. and Warrington, G. (1973) A review of late Permian and early Triassic biostratigraphy in the British Isles, in *The Permian and Triassic Systems and their Mutual Boundary* (eds A. Logan and L.V. Hills), Canadian Society of Petroleum Geologists, Memoir No. 2, Calgary, pp. 220–60.
- Peryt, T.M. and Peryt, D. (1975) Association of sessile tubular foraminifera and cyanophytic algae. *Geological Magazine*, 112, 612–14.
- Peryt, T.M. and Piatkowski, T.S. (1976) Osady caliche w wapieniu cechsztyńskim zachodniej części syneklizny perybaltycznej. *Kwartalnik Geologiczny*, 20, 525–37.
- Pettigrew, T.H. (1980) Geology, in *The Magnesian Limestone of Durham County* (ed. T.C. Dunn), Durham County Conservation Trust, pp. 4–26.
- Pettigrew, T.H., Athersuch, J., Keen, M. and Wilkinson, I. (eds) (in press) *Biostratigraphical Atlas of British Ostracods*, Chapman and Hall, London.
- Powell, J.H., Cooper, A.H. and Benfield, A.C. (1992) *Geology of the Country around Thirsk*, Memoir of the British Geological Survey, Sheet 52.
- Pryor, W.A. (1971) Petrology of the Permian Yellow Sands of north-eastern England and their North Sea Basin equivalents. *Sedimentary Geology*, 6, 221–54.

- Richter-Bernburg, G. (1952) Excursion zu den Dolomitkalk und Gipsvorkommen des Sudwesttharzes. *Sonderdruck aus der Zeitschrift der Deutschen Geologischen Gesellschaft*, 103, 428–30.
- Richter-Bernburg, G. (1982) Stratogenese des Zechsteinkalkes am Westtharz. *Zeitschrift der Deutschen Geologischen Gesellschaft*, 133, 381–401.
- Robinson, J.E. (1978) Permian, in *A Stratigraphical Index of British Ostracoda* (eds R.H. Bate and J.E. Robinson), Seel House Press, Liverpool, pp. 47–96.
- Schweitzer, H.J. (1986) The land flora of the English and German Zechstein sequences, in *The English Zechstein and Related Topics* (eds G.M. Harwood and D.B. Smith), Geological Society of London, Special Publication No. 22, pp. 31–54.
- Sedgwick, A. (1829) On the geological relations and internal structure of the Magnesian Limestone, and the lower portions of the New Red Sandstone in their range through Nottinghamshire, Derbyshire, Yorkshire and Durham, to the southern extremity of Northumberland. *Transactions of the Geological Society of London*, 3, 37–124.
- Sedgwick, A. (1836) On the New Red Sandstone Series in the basin of the Eden, and north-western coasts of Cumberland and Lancashire. *Transactions of the Geological Society of London*, 4, 383–407.
- Shearman, D.J. (1971) Discussion on paper by F.W. Beales and E.P. Onasick. *Transactions of the Institution of Mining and Metallurgy*, 80, B50–2.
- Smith, B. (1924) On the west Cumberland Brockram and its associated rocks. *Geological Magazine*, 61, 289–308.
- Smith, D.B. (1958) Some observations on the Magnesian Limestone reefs of north-eastern Durham. *Bulletin of the Geological Survey of Great Britain*, No. 15, 71–84.
- Smith, D.B. (1962) 1:10,560 Geological Map Sheet NZ 44 NW. Institute of Geological Sciences.
- Smith, D.B. (1964) 1:10,560 Geological Map Sheet NZ 43 NE. Institute of Geological Sciences.
- Smith, D.B. (1968) The Hampole Beds — a significant marker in the Lower Magnesian Limestone of Yorkshire, Derbyshire and Nottinghamshire. *Proceedings of the Yorkshire Geological Society*, 36, 463–77.
- Smith, D.B. (1969a) 1:10,560 Geological Map Sheet NZ 35 NE. Institute of Geological Sciences.
- Smith, D.B. (1969b) Report on excursion to the Upper Permian rocks of Yorkshire. *Proceedings of the Yorkshire Geological Society*, 37, 175–8.
- Smith, D.B. (1970a) Permian and Trias, in *The Geology of Durham County* (compiler G.A.L. Johnson), *Transactions of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne*, 41, 66–91.
- Smith, D.B. (1970b) The palaeogeography of the British Zechstein, in *Third Symposium on Salt* (eds J.L. Rau and L.F. Dellwig), Northern Ohio Geological Society, Cleveland, pp. 20–3.
- Smith, D.B. (1970c) Submarine slumping and sliding in the Lower Magnesian Limestone of Northumberland and Durham. *Proceedings of the Yorkshire Geological Society*, 38, 1–36.
- Smith, D.B. (1971a) *The Stratigraphy of the Upper Magnesian Limestone: a revision based on the Institute's Seaham Borehole*, Report 71/3, Institute of Geological Sciences, 12 pp.
- Smith, D.B. (1971b) 1:10,560 Geological Map Sheet NZ 35 SE. Institute of Geological Sciences.
- Smith, D.B. (1972) Foundered strata, collapse-breccias and subsidence features of the English Zechstein, in *Geology of Saline Deposits* (ed. G. Richter-Bernburg), UNESCO (Earth Sciences 7), pp. 255–69.

- Smith, D.B. (1973a) The Permian in north-east Durham, in *The Durham Area* (compiler G.A.L. Johnson), Geologists' Association Guide No. 15, pp. 15–21.
- Smith, D.B. (1973b) Discussion on paper by V.C. Kelley entitled 'Geometry and correlation along Permian Capitan Escarpment, New Mexico and Texas'. *Bulletin of the American Association of Petroleum Geologists*, 57, 940–3.
- Smith, D.B. (1974a) The stratigraphy and sedimentology of Permian rocks at outcrop in North Yorkshire. *Journal of Earth Sciences* (Leeds), 8, 365–86.
- Smith, D.B. (1974b) Permian, in *The Geology and Mineral Resources of Yorkshire* (eds D.H. Rayner and J.E. Hemingway), Yorkshire Geological Society, Occasional Publication No. 2, Leeds, pp. 115–44.
- Smith, D.B. (1975a) 1:10,560 Geological Map Sheet NZ 46 SW. Institute of Geological Sciences.
- Smith, D.B. (1975b) 1:10,560 Geological Map Sheet NZ 36 SE. Institute of Geological Sciences.
- Smith, D.B. (1976) The Permian sabkha sequence at Quarry Moor, Ripon, Yorkshire. *Proceedings of the Yorkshire Geological Society*, 40, 639–52.
- Smith, D.B. (1979) Rapid marine transgressions of the Upper Permian Zechstein Sea. *Journal of the Geological Society of London*, 136, 155–6.
- Smith, D.B. (1980a) The evolution of the English Zechstein Basin, in *The Zechstein Basin with Emphasis on Carbonate Sequences* (eds H. Filchtbauer and T.M. Peryt). Contributions to Sedimentology, 9, Elsevier, Amsterdam, pp. 7–34.
- Smith, D.B. (1980b) Permian and Triassic rocks, in *The Geology of North-east England* (ed. D.A. Robson), Special Publication of the Natural History Society of Northumbria, pp. 36–48.
- Smith, D.B. (1980c) The shelf-edge reef of the Middle Magnesian Limestone (English Zechstein Cycle 1) of north-east England — summary, in *The Zechstein Basin with Emphasis on Carbonate Sequences* (eds H. Füchtbauer and T.M. Peryt), Contributions to Sedimentology, 9, Elsevier, Amsterdam, pp. 3–5.
- Smith, D.B. (1981a) The Magnesian Limestone (Upper Permian) reef complex of north-eastern England, in *European Fossil Reef Models* (ed. D.F. Toomey), Special Publication No. 30, Society of Economic Palaeontologists and Mineralogists, pp. 161–86.
- Smith, D.B. (1981b) bryozoan–algal patch-reefs in the Upper Permian Lower Magnesian Limestone of Yorkshire, north-east England, in *European Fossil Reef Models* (ed. D.F. Toomey), Special Publication No. 30, Society of Economic Palaeontologists and Mineralogists, pp. 187–202.
- Smith, D.B. (1981c) The Quaternary geology of the Sunderland district, in *The Quaternary in Britain* (eds J.W. Neale and J. Flenley), Pergamon Press, Oxford, pp. 146–67.
- Smith, D.B. (1981d) Account of field excursion to the Permian of Tyne and Wear. *Proceedings of the Yorkshire Geological Society*, 43, 467–70.
- Smith, D.B. (1984, January) Blackhall Rocks: a personal view. *Bulletin of the Durham County Conservation Trust*, 21–6.
- Smith, D.B. (1985a) Gravitational movements in Zechstein carbonate rocks in north-east England, in *The Role of Evaporites in Hydrocarbon Exploration* (compiler J.C.M. Taylor), JAPEC course notes No. 39, London, FI -F12 .
- Smith, D.B. (1985b) Zechstein reefs and associated facies, in *The Role of Evaporites in Hydrocarbon Exploration* (compiler J.C.M. Taylor), JAPEC course notes No. 39, London, EI-E23.

- Smith, D.B. (1986) The Trow Point Bed — a deposit of Upper Permian marine oncoids, peloids and columnar stromatolites in the Zechstein of NE England, in *The English Zechstein and Related Topics* (eds G.M. Harwood and D.B. Smith), Geological Society of London, Special Publication No. 22, pp. 113–25.
- Smith, D.B. (1989) The late Permian palaeogeography of north-east England. *Proceedings of the Yorkshire Geological Society*, 47, 285–312.
- Smith, D.B. (1992) Permian, in *Geology of England and Wales* (eds P.McL.D. Duff and A.J. Smith), The Geological Society, London, pp. 275–305.
- Smith, D.B. (1994) *The Geology of the Sunderland District*, Memoir of the British Geological Survey, Sheet 21.
- Smith, D.B. (in press) Discussion on Paper by Dr D.W. Holliday entitled 'Geophysical log signatures in the Eden Shales (Permo-Triassic) of Cumbria and their regional significance'. *Proceedings of the Yorkshire Geological Society*, 50.
- Smith, D.B. and Francis, E.A. (1967) *The Geology of the Country between Durham and West Hartlepool*, Memoir of the Geological Survey of Great Britain, Sheet 27.
- Smith, D.B., Brunstrom, R.G.W., Manning, P.I., Simpson, S. and Shotton, F.W. (1974) *A Correlation of the Permian Rocks in the British Isles*. Geological Society of London, Special Report No. 5, 45 pp.
- Smith, D.B., Harwood, G.M., Pattison, J. and Pettigrew, T.H. (1986) A revised nomenclature for Upper Permian strata in eastern England, in *The English Zechstein and Related Topics* (eds G.M. Harwood and D.B. Smith), Geological Society of London, Special Publication No. 22, pp. 9–17.
- Smith, D.B. and Taylor, J.C.M. (1989) A 'north-west passage' to the southern Zechstein Basin of the UK North Sea. *Proceedings of the Yorkshire Geological Society* 47, 313–20.
- Smith, D.B. and Taylor, J.C.M. (1992) Permian, in *Atlas of Palaeogeography and Lithofacies* (eds J.C.W. Cope, J.K. Ingham and P.F. Rawson), Geological Society Memoir 13, London, pp. 87–96.
- Southwood, D.A. (1985) The taxonomy and palaeoecology of bryozoa from the Upper Permian Zechstein reef of NE England. Unpublished Ph.D. Thesis, University of Durham.
- Stoneley, H.M.M. (1958) *The Upper Permian Flora of England*, Bulletin of the British Museum (Natural History), Geology 3, 295–337.
- Swift, A. (1986) The conodont *Merrillina divergens* (Bender and Stoppel) from the Upper Permian of England, in *The English Zechstein and Related Topics* (eds G.M. Harwood and D.B. Smith), Geological Society of London. Special Publication No. 22, pp. 55–62.
- Swift, A. and Aldridge, R.J. (1982) Conodonts from Upper Permian strata of Nottinghamshire and North Yorkshire. *Palaeontology*, 25, 845–56.
- Tarr, W.A. (1933) Origin of the concretionary structures of the Magnesian Limestone at Sunderland, England. *Journal of Geology*, 41, 268–87.
- Taylor, B.J. (1961) The stratigraphy of exploratory boreholes in the west Cumberland coalfield. *Bulletin of the Geological Survey of Great Britain*, No. 17, 1–74.
- Taylor, J.C.M. (1984) Late Permian–Zechstein, in *Introduction to the Petroleum Geology of the North Sea* (ed K.W. Glennie), Blackwell Scientific Publications, Oxford, pp. 61–83 (2nd edn, 1986, 87–111; 3rd edn 1990, 153–90).
- Taylor, J.C.M. and Fong, G. (1969) Correlation of Upper Permian strata in east Yorkshire and Durham. *Nature, Physical Science*, 224, 173–5.

- Taylor, J.C.M. and Colter, V.S. (1975) Zechstein of the English sector of the Southern North Sea Basin, in *Petroleum and the Continental Shelf of North-west Europe. Volume 1, Geology* (ed. A.W. Woodland), Applied Science Publishers Ltd, Barking: Institute of Petroleum, Great Britain, pp. 249–63.
- Taylor, P.D. (1980) *Stomatopora voightiana* (King, 1850): a cyclostome bryozoan from the Permian of County Durham. *Proceedings of the Yorkshire Geological Society*, 42, 621–6.
- Trechmann, C.T. (1913) On a mass of anhydrite in the Magnesian Limestone at Hartlepool, and on the Permian of south-eastern Durham. *Quarterly Journal of the Geological Society of London*, 69, 184–218.
- Trechmann, C.T. (1914) On the lithology and composition of Durham Magnesian Limestones. *Quarterly Journal of the Geological Society of London*, 70, 232–65 + 2 plates.
- Trechmann, C.T. (1925) The Permian formation in Durham. *Proceedings of the Geologists' Association*, 36, 135–45.
- Trechmann, C.T. (1931) The Permian, in *Contributions to the Geology of Northumberland and Durham. Proceedings of the Geologists' Association*, 42, 246–52.
- Trechmann, C.T. (1945) On some new Permian fossils from the Magnesian Limestone near Sunderland. *Quarterly Journal of the Geological Society of London*, 100, 333–54 + 1 plate.
- Trechmann, C.T. (1954) Thrusting and other movements in the Durham Permian. *Geological Magazine*, 91, 193–208.
- Tucker, M.E. and Hollingworth, N.T.J. (1986) The Upper Permian Reef Complex (EZ1) of North East England: Diagenesis in a marine to estuarine setting, in *Reef Diagenesis* (eds J.H. Schroeder and B.H. Purser), Springer-Verlag, Berlin, Heidelberg, pp. 270–90.
- Tute, J.S. (1868a) The geology of the country near Ripon. *Proceedings of the Yorkshire Geological and Polytechnic Society*, 4, 555–65.
- Tute, J.S. (1868b) On certain natural pits in the neighbourhood of Ripon. *Geological Magazine*, 5, 178–9.
- Tute, J.S. (1870) On certain natural pits in the neighbourhood of Ripon. *Proceedings of the Yorkshire Geological and Polytechnic Society*, 5, 2–7.
- Tute, J.S. (1884) On the sequence of Permian rocks near Ripon. *Proceedings of the Yorkshire Geological and Polytechnic Society*, 12, 218–20 + 1 plate.
- Versey, H.C. (1925) The beds underlying the Magnesian Limestone in Yorkshire. *Proceedings of the Yorkshire Geological Society*, 20, 200–14.
- Winch, N.J. (1817) Observations on the geology of Northumberland and Durham. *Transactions of the Geological Society of London*, 4, 1–101.
- Woolacott, D. (1897) *Geology of north-east Durham*, Hills and Co., Sunderland, 31 pp.
- Woolacott, D. (1900a) On the boulder clay, raised beaches and associated phenomena in the east of Durham. *Proceedings of the University of Durham Philosophical Society*, 1, 247–58.
- Woolacott, D. (1900b) On a portion of a raised beach on the Fulwell Hills, near Sunderland. *Transactions of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne*, 8, 165–71.
- Woolacott, D. (1903) Explanation of the Claxheugh section. *Transactions of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne*, 14, 211–21.

Woolacott, D. (1905) The landslip at Claxheugh, County Durham, September 1905. *Transactions of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne*, 1, 434–6 + 2 plates.

Woolacott, D. (1909) A case of thrust and crush-brecciation in the Magnesian Limestone of County Durham. *Proceedings of the University of Durham Philosophical Society, Memoir No. 1*, 16 pp. + 2 plates.

Woolacott, D. (1912) The stratigraphy and tectonics of the Permian of Durham (northern area). *Proceedings of the University of Durham Philosophical Society*, 4, 241–331.

Woolacott, D. (1918) On sections in the Lower Permian rocks at Claxheugh and Down Hill, County Durham. *Transactions of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne*, 5, 155–62 + 3 plates.

Woolacott, D. (1919a) The Magnesian Limestone of Durham. *Geological Magazine*, 6, 452–65, 485–98.

Woolacott, D. (1919b) Borings at Cotefield Close and Sheraton, Durham. *Geological Magazine*, 6, 163–70.

[References](#)