
References

In this reference list the arrangement is alphabetical by author surname for works by sole authors and dual authors. Where there are references that include the first-named author with others, the sole-author works are listed chronologically first, followed by the dual author references (alphabetically) followed by the references with three or more authors listed *chronologically*. Chronological order is used within each group of identical authors.

Agassiz, L. (1839) Fishes of the Upper Silurian Rocks. In *The Silurian System, geological researches in the counties of Salop, Hereford, Radnor, Montgomery, Caermarthen, Brecon, Pembroke, Monmouth, Gloucester, Worcester and Stafford; with descriptions of the coalfields and overlying formations* (R.I. Murchison), John Murray, London, 605–7.

Agassiz, L. (1844–1845) *Monographie des poissons fossiles du Vieux Grès Rouge ou Systeme Dévonien (Old Red Sandstone) des Îles Britanniques et de Russie*. Jent et Grassmann, Neuchatel, xxxvi + 171 pp.

Aldridge, R.J. (1985) Conodonts of the Silurian System from the British Isles. In *A Stratigraphical Index of Conodonts* (eds A.C. Higgins and R.L. Austin), Ellis Horwood, Chichester, pp. 68–92.

Aldridge, R.J. (2000) Gutterford Burn. In *British Silurian Stratigraphy* (R.J. Aldridge, David J. Siveter, Derek J. Siveter, P.D. Lane, D. Palmer and N.H. Woodcock), GCR Series, No. 19, Joint Nature Conservation Committee, Peterborough, 173–76.

Aldridge, R.J. and Smith, M.P. (1985) *Lower Palaeozoic Succession of the Welsh Borderland*. Field Excursion B Guidebook, 4th European Conodont Symposium (ECOS IV), 1985, Nottingham, 39 pp.

Aldridge, R.J., D.E.G. Briggs, Smith, M.P., Clarkson, E.N.K. and N.D.L. Clark. (1993) The anatomy of conodonts. *Philosophical Transactions of the Royal Society of London B*, 340, 405–21.

Aldridge, R.J., Siveter, David J., Siveter, Derek J., Lane, P.D., Palmer, D. and Woodcock N.H. (2000) *British Silurian Stratigraphy*. GCR Series, No. 19, Joint Nature Conservation Committee, Peterborough, 542 pp.

Alexander, D.E. (2002) *Nature's Flyers: Birds, Insects and the Biomechanics of Flight*, Johns Hopkins University Press, Baltimore, 358 pp.

Alexander, F.E.S. (1936) The Aymestry Limestone of the main outcrop. *Quarterly Journal of the Geological Society of London*, 92, 103–14.

Allen, J.R.L. (1974) Sedimentary Geology of the Old Red Sandstone (Siluro-Devonian) in the Clee Hills area, Shropshire, England. *Sedimentary Geology*, 12, 73–167.

Allen, J.R.L. (1985) Marine to fresh water: the sedimentology of the interrupted environmental transition (Ludlow–Sieginian) in the Anglo-Welsh Basin. *Philosophical Transactions of the Royal Society of London*, B 309, 85–104.

Allen, J.R.L. and Tarlo, L.B. (1963) The Downtonian and Dittonian facies of the Welsh Borderland. *Geological Magazine*, 100, 129–55.

Allen, P. (1976) Wealden of the Weald: a new model. *Proceedings of the Geologists' Association*, 86, 390–436.

Allen, P. (1981) Pursuit of Wealden models. *Journal of Geological Society*, London, 138, 375–405.

Allen, P., Wimbledon, W.A. and Radley, J. (in prep.) *Jurassic–Cretaceous Boundary Interval*, GCR Series, JNCC, Peterborough.

- Allender, R.C.H., Holland, C.H., Lawson, J.D., Walmsley, V.G. and Whitaker, J.H.McD (1960) Summer field meeting at Ludlow. *Proceedings of the Geologists' Association*, 71, 209–32.
- Almond, J.E. (1985) A vermiform problem-aticum from the Dinantian of Foulden, Berwickshire, Scotland. *Transactions of the Royal Society of Edinburgh, Earth Sciences*, 76, 41–7.
- Almond, J.E. (1985) The Silurian–Devonian fossil record of the Myriapoda. *Philosophical Transactions of the Royal Society of London*, B309, 227–37.
- Almond, J.E. (1986) *Studies on Palaeozoic Arthropoda*. Unpublished PhD thesis, University of Cambridge.
- Ambrose, T. and Romano, M. (1972) New Upper Carboniferous Chelicerata (Arthropoda) from Somerset, England. *Palaeontology*, 15, 569–78.
- Anderson, L.I. (1994) Xiphosurans from the Westphalian D of the Radstock Basin, Somerset Coalfield, the South Wales Coalfield and Mazon Creek, Illinois. *Proceedings of the Geologists' Association* 105, 265–75.
- Anderson, L.I. (1995) Taphonomy and taxonomy of Palaeozoic Xiphosura. PhD thesis, University of Manchester.
- Anderson, L.I. (1999 [for 1998]) A new specimen of the Silurian synziphosurine arthropod *Cyamocephalus*. *Proceedings of the Geologists' Association*, 110, 211–16.
- Anderson L.I. (2003) Rediscovery of the Gutterford Burn 'Eurypterid Bed' (in the) Pentland Hills, Midlothian, Scotland. *Abstract Booklet for the Palaeontological Association Annual Meeting, 2003, University of Leicester*, p. 12.
- Anderson, L.I. and Moore, R.A. (2004) *Bembiscona* re-examined: a xiphosuran from the Silurian of the North Esk Inlier, Pentland Hills, Scotland. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 94 (for 2003), 199–206.
- Anderson, L. I. and Selden, P. A. (1997) Opisthosomal fusion and phylogeny of Palaeozoic Xiphosura. *Lethaia*, 30, 19–31.
- Anderson, L.I. and Trewin, N.H. (2003) An Early Devonian arthropod fauna from the Windyfield cherts, Aberdeenshire, Scotland. *Palaeontology*, 46, 467–509.
- Anderson, L.I., Poschmann, M. and Brauckman, C. (1998) On the Emsian (Lower Devonian) arthropods of the Rhenish Slate Mountains: 2. The synziphosurine *Willwerathia*. *Paläontologische Zeitschrift*, 72, 325–36.
- Anderson, L.I., Dunlop, J.A. and Trewin, N.H. (2000) A Middle Devonian chasmataspid arthropod from Achanarras Quarry, Caithness, Scotland. *Scottish Journal of Geology*, 36, 151–8.
- Anderson, L.I., Crighton, W.R.B. and Hass, H. (2004) A new univalve crustacean from the Early Devonian Rhynie chert hot-spring complex. *Transactions of the Royal Society of Edinburgh: Earth Sciences* 94, 355–69.
- Anderson, L.I., Clarkson, E.N.K., Stewart, S.E. and Mitchell, D. (2007) An Upper Llandovery Konservat-Lagerstaette in a depositional context: the Pentland Hills Eurypterid Bed, Midlothian. *Scottish Journal of Geology* 43, 41–50.
- Andrews, W.R. and Jukes-Brown, A.J. (1894) On the Purbeck Beds of the Vale of Wardour. *Quarterly Journal of the Geological Society of London*, 50, 44–71.
- Anon. (1927) The late Thomas Middlemiss Ovens, geologist, Foulden, Berwickshire. *Border Mag.* 32(382), 145–147.
- Ansorge, J. (2003) Upper Liassic Amphiesmenopterans (Trichoptera + Lepidoptera) from Germany. *Acta zoologica cracoviensis*, 46 (supplement — Fossil Insects), 285–90.
- Ansorge, J.R. and Kremski, W. (1994) Oligophrynidae, a Lower Jurassic dipteran family (Diptera, Brachycera). *Acta Zoologica Cracoviensis*, 37, 115–19.

- Antia, D.D.J. (1979) Bone Beds: a review of their classification, occurrence, genesis, diagenesis, geochemistry, palaeoecology, weathering and microbios. *Mercian Geologist*, 7, 93–134.
- Antia, D.D.J. (1980) Sedimentology of the type section of the Upper Silurian Ludlow–Downton Series boundary at Ludlow, Salop, England. *Mercian Geologist*, 7, 291–321.
- Antia, D.D.J. (1981) The Temeside Bone-Bed and associated sediments from Wales and the Welsh Borderland. *Mercian Geologist*, 8, 163–216.
- Antia, D.D.J. (1983) The Temeside Bone-Bed and associated sediments from Wales and the Welsh Borderland. (Reply, to letters received in the *Mercian Geologist*, 8, 311–15). *Mercian Geologist*, 9, 59–64.
- Armstrong, M. and Paterson, I.B. (1970) The Lower Old Red Sandstone of the Strathmore region. *Institute of Geological Sciences*, Report 70/12, 1–23.
- Armstrong, M., Donovan, R.N. and Paterson, I.B. (1978) Angus and Kincardine. In *A field guide to selected outcrop areas of the Devonian of Scotland, the Welsh Borderland and South Wales: International Symposium on the Devonian System (PA.D.S. 78)* (eds P.F. Friend and B.P.J. Williams), The Palaeontological Association, London, pp. 13–22.
- Armstrong, M., Craig, P.M., Davies, A., Dean, J.M., Floyd, J.D., Forsyth, I.H., Gallagher, M.J., Halley, D.N., McAdam, A.D., McMillan, A.A., MacPherson, K.A.T., Monro, S.K. and Paterson, I.B. (1995) Geological map, 1: 50, 000 Series, sheet 23W, Hamilton. British Geological Survey, Nottingham.
- Ash, S. (2001) Plant–Animal Interactions: Herbivory. In Briggs and Crowther, *Palaeobiology II*, p. 424–6.
- Austen, J.H. (1852) *A Guide to the Geology of the Isle of Purbeck and the South Coast of Hampshire*. Blandford, London, 20 pp.
- Austen, P.A., Agar, R. and Jarzembowski, E.A. (2003) Field Meeting — Wealden Brickworks. *Magazine of the Geologists' Association*, 2, 11.
- Ayala, F.J. (1999) Molecular clock mirages. *BioEssays*, 21, 71–5.
- Ayala, F.J. and Rzhetsky, A. (1998) Origin of the metazoan phyla: Molecular clocks confirm paleontological estimates. *Proceedings of the National Academy of Sciences, USA*, 95, 602–12.
- Baird, G.C., Shabica, C.W., Anderson, J.L. and Richardson, E.S. Jr. (1985) Biota of a Pennsylvanian muddy coast: habitats within the Mazonian Delta Complex, northeast Illinois, *Journal of Paleontology*, 59, 253–81.
- Banks, R.W. (1856) On the Tilestones or Downton Sandstones, in the neighbourhood of Kington, and their contents. *Quarterly Journal of the Geological Society of London*, 12, 93–101.
- Banks, R.W. (1893) Reminiscences of the Downton Sandstone. *Transactions of the Woolhope Naturalists' Field Club*, 390–404.
- Barclay, W.J., Browne, M.A.E., McMillan, A.A., Pickett, E.A., Stone, P. and Wilby, P.R. (2005) *The Old Red Sandstone of Great Britain*. Geological Conservation Review Series, No. 31, Joint Nature Conservation Committee, Peterborough, 393 pp.
- Barrett, P.M. and Willis, K.J. (2001) Did dinosaurs invent the flowers? Dinosaur–angiosperm coevolution revisited. *Biological Reviews*, 76, 411–47.
- Barton, D.I. (1978) A Purbeck insect bed discovered at Poxwell in fauna sedimentology, and palaeoenvironment. Unpublished BSc dissertation, University of Southampton, 76pp.

- Basinger, J.F., Greenwood, D.R. and Sweda, T (1994) Early Tertiary vegetation of Arctic Canada and its relevance to palaeoclimatic interpretation. In *Cenozoic Plants and Climates of the Arctic* (eds M.G. Boulter and H.C. Fisher), Springer, Berlin (NATO ASI Series, Volume 127), pp. 175–98.
- Bassett, M.G., Cocks, L.R.M., Holland, C.H. *et al.* (1979) *Field Meeting Great Britain, March 30th–April — 11th, 1979*. Subcommission on Silurian stratigraphy, Ordovician–Silurian working group, International Union of Geological Sciences, National Museum of Wales, Cardiff, 48 pp.
- Bassett, M.G., Lawson J.D. and White, D.E. (1982) The Downton Series as the fourth Series of the Silurian System. *Lethaia*, 15, 1–24.
- Bassett, M.G., Bluck, B.J., Cave, R., Holland, C.H. and Lawson, J.D. (1992) Silurian. In *Atlas of Palaeogeography and Lithofacies* (eds J.C.W. Cope, J.K. Ingham and P.F. Rawson), *Memoir of the Geological Society, London*, 13, pp. 37–56.
- Batten, D.J. (1998) Palaeoenvironmental implications of plant, insect and other organic-walled microfossils in the Weald Clay Formation (Lower Cretaceous) of south east England. *Cretaceous Research*, 19, 279–315.
- Beall, B.S. (1991) The Writhlington phalangiotarbid: their palaeobiological significance. *Proceedings of the Geologists' Association*, 102, 161–8.
- Bechly, G., Nel, A., Martínez-Delclós, X. *et al.* (2001) A revision and phylogenetic study of Mesozoic Aeshnoptera, with description of numerous new taxa (Insecta: Odonata: Anisoptera). *Neue Paläontologische Abhandlungen*, 4, 1–219.
- Bell, W. A. (1922) A new genus of Characeae and new Merostomata from the Coal Measures of Nova Scotia. *Transactions of the Royal Society, Canada (IV)* 16, 159–67.
- Benton, M.J. and Spencer, P.S. (1995) *Fossil Reptiles of Great Britain*. GCR Series No. 10. Chapman and Hall, London, 386 pp.
- Benton, M.T, Cook, E. and Hooker, J.J. (2005) *Mesozoic and Tertiary Fossil Mammals and Birds of Great Britain*. GCR Series No. 32. Joint Nature Conservation Committee, Peterborough, 215 pp.
- Bergstrom, J. (1975) Functional morphology and evolution of xiphosurids. *Fossils and Strata*, 4, 291–305.
- Birkelund, T, Thusu, B. and Vigran, J. (1978) Jurassic–Cretaceous biostratigraphy of Norway, with comments on the British *Rosenia cymodoce* Zone. *Palaeontology*, 21, 31–63.
- Bluck, B.J. (2000) Old Red Sandstone basins and alluvial systems of Midland Scotland. In *New perspectives on the Old Red Sandstone* (eds P.J. Friend and B.P.J. Williams), *Geological Society Special Publication*, 180, Geological Society, London, pp. 417–37.
- Bluck, B.J. (2001) Caledonian and related events in Scotland. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 91, 375–404.
- Bluck, B.J. (2002) The Midland valley terrane. In *The Geology of Scotland* (ed. N.H. Trewin), Fourth edition. The Geological Society of London, pp. 149–66.
- Boardman, R.S., Cheetham, A.H. and Rowell, A. J. (1987) *Fossil Invertebrates*, Blackwell Scientific Publications, Palo Alto, 713 pp.
- Bolton, H. (1921–22) *A Monograph of the Fossil Insects of the British Coal Measures*, Palaeontographical Society (Monograph), ix+156 pp.
- Bone, D.A., (1978) New horizons in the London Clay of Bognor Regis, Sussex. *Tertiary Research*, 2, 9–16.

- Bone, Q. (2003) Edmond Martin Venables (1901–1990), amateur geologist and natural historian. *Proceedings of the Geologists' Association*, 114, 139–50.
- Boneham, B.F.W. and Wyatt, R.J. (1993) The stratigraphical position of the Middle Jurassic (Bathonian) Stonesfield Slate of Stonesfield, Oxfordshire, UK. *Proceedings of the Geologists' Association*, 104, 123–36.
- Bosma, A.A. (1974) Rodent biostratigraphy of the Eocene–Oligocene transitional strata of the Isle of Wight. *Utrecht Micropalaeontological Bulletins, Special Paper*, 1, 1–128.
- Boucot, A.J. (1990) *Evolutionary Paleobiology of Behavior and Coevolution*, Elsevier Science Publishers, 725 pp.
- Braddy, S.J. (2000) Eurypterids from the Early Devonian of the Midland Valley of Scotland. *Scottish Journal of Geology*, 36, 115–22.
- Braddy, S.J. (2001) Trackways — Arthropod Locomotion. In *Palaeobiology H* (eds D.E.G. Briggs and P.R. Crowther, Blackwell Science, Oxford, 583 pp.
- Briggs, D.E.G. and Clarkson, E.N.K. (1983) The Lower Carboniferous Granton 'Shrimp-Bed', Edinburgh. In *Trilobites and other Early Arthropods: papers in honour of Professor H.B. Whittington, F.R.S.* (ed. D.E. Briggs, D.E.G. and P.D. Lane, *Special Papers in Palaeontology* 30, 161–77.
- Briggs, D.E.G. and Clarkson, E.N.K. (1985) Malacostracan Crustacea from the Dinantian of Foulden, Berwickshire, Scotland. *Transactions of the Royal Society of Edinburgh, Earth Sciences*, 76, 35–40.
- Briggs, D.E.G. and Clarkson, E.N.K. (1987a). The first tomopterid, a polychaete from the Carboniferous of Scotland. *Lethaia*, 20, 257–62.
- Briggs, D.E.G. and Clarkson, E.N.K. (1987b) An enigmatic chordate from the Lower Carboniferous Granton Shrimp Bed of the Edinburgh district. *Lethaia*, 20, 107–15.
- Briggs, D.E.G. and Clarkson, E.N.K. (1989) Environmental controls on the taphonomy and distribution of Carboniferous malacostracan crustaceans. *Transactions of the Royal Society of Edinburgh, Earth Sciences*, 76, 173–201.
- Briggs, D.E.G. and Clarkson, E.N.K. (1990) The late Palaeozoic radiation of malacostracan crustaceans. In *Major evolutionary radiations* (ed. P. D. Taylor and G. P. Larwood). *Systematics Association Special Volume*, 42, Clarendon Press, Oxford, pp. 165–86.
- Briggs, D.E.G., Rolfe, W.D.I. and Brannan, J. (1979) A giant myriapod trail from the Namurian of Arran, Scotland. *Palaeontology*, 22, 273–91.
- Briggs, D.E.G., Clarkson, E.N.K. and Aldridge, R.J. (1983) The conodont animal. *Lethaia*, 16, 1–14.
- Briggs, D.E.G., Clark, N.D.L. and Clarkson, E.N.K. (1991). The Granton shrimp-bed, Edinburgh — a Lower Carboniferous Konservat-Lagerstätte. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 82, 65–86.
- Bristow, H.W. and Fisher, O. (1857) Comparative vertical sections of the Purbeck strata of Dorsetshire. *Geological Survey of the United Kingdom, Vertical Sections*, 22.
- Britton, E.B. (1960) Beetles from the London Clay of Bognor Regis, Sussex. *Tertiary Research*, 2 (1), 9–16.
- Broadhurst, F.M. and France, A.A. (1986) Time represented by coal seams in the Coal Measures of England. *International Journal of Coal Geology*, 6, 43–54.
- Broadhurst, E.M., Simpson, I.M. and Hardy, P.G. (1980) Seasonal sedimentation in the Upper Carboniferous of England. *Journal of Geology*, 88, 639–51.

- Brodie, P.B. (1845a) *A History of the Fossil Insects in the Secondary Rocks of England*, J. Van Voorst, London, xviii+ 130 pp.
- Brodie, P.B. (1845b) On the insect beds of the Purbeck formation in Wiltshire and Dorsetshire. *Quarterly Journal of the Geological Society of London*, 10, 475–82.
- Brodie, P.B. (1869) On the occurrence of remains of *Eurypterus* and *Pterygotus* in the Upper Silurian rocks of Herefordshire. *Quarterly Journal of the Geological Society of London*, 25, 235–7.
- Brodie, P.B. (1871) On the "Passage-beds" in the neighbourhood of Woolhope, Herefordshire, and on the discovery of a new species of *Eurypterus*, and some new land-plants in them. *Proceedings of the Geological Society, London*, 27, 256–61.
- Brodie, P.B. (1878). On the discovery of a large and varied series of fossil insects and other associated fossils in the Eocene (Tertiary) Strata of the Isle of Wight. *Proceedings of the Warwickshire Naturalists' and Archaeologists' Field Club*, pp. 1–12.
- Brongniart, A. (1828–1838) *Histoire des végétaux fossiles* (2 volumes), Paris.
- Brongniart, C. (1893) *Recherches pour servir à l'Histoire des Insectes Fossiles des Temps Primaires, Précédées d'une Étude sur la Nervation des Ailes des Insectes*. Thèse présentée à la Faculté des Sciences de Paris, 821, 495 pp.
- Brown, D.J. and Henderson, J. (1867) On the Silurian rocks of the Pentland Hills, with notes on brachiopoda by Davidson, T. *Transactions of the Edinburgh Geological Society*, 1, 23–33.
- Brown, R.H., Richardson, M., Boulter, D., Ramshaw, J.A.M., and Jefferies, R.P.S. (1972) The amino acid sequence of cytochrome c from *Helix aspersa* Mueller (Garden snail), *Biochemical Journal*, 128, 971–4.
- Browne, M.A.E. (2005a) Aberlemno Quarry, Angus. In *The Old Red Sandstone of Great Britain* (W.J. Barclay, M.A.E. Browne, A.A. McMillan, E.A. Pickett, P. Stone and P.R. Wilby), GCR Series, No. 31, *Joint Nature Conservation Committee*, Peterborough, pp. 161–3.
- Browne, M.A.E. (2005b) Tillywhandland Quarry. In *The Old Red Sandstone of Great Britain* (W.J. Barclay, M.A.E. Browne, A.A. McMillan, E.A. Pickett, P. Stone and P.R. Wilby), GCR Series, No. 31, *Joint Nature Conservation Committee*, Peterborough, pp. 163–6.
- Browne, M.A.E. and Barclay, W.J. (2005a) Introduction to the Midland Valley of Scotland and adjacent areas. In *The Old Red Sandstone of Great Britain* (W.J. Barclay, M.A.E. Browne, A.A. McMillan, E.A. Pickett, P. Stone and P.R. Wilby), GCR Series, No. 31, pp. 127–39.
- Browne, M.A.E. and Barclay, W.J. (2005b) The Toutties, Aberdeenshire. In *The Old Red Sandstone of Great Britain* (W.J. Barclay, M.A.E. Browne, A.A. McMillan, E.A. Pickett, P. Stone and P.R. Wilby), GCR Series, No. 31, *Joint Nature Conservation Committee*, Peterborough, pp. 140–5.
- Browne, M.A.E., Smith, R.A. and Aitken, A.M. (2002) Stratigraphical framework for the Devonian (Old Red Sandstone) rocks of Scotland south of a line from Fort William to Aberdeen. *British Geological Survey, Research Report, RR/01/04*.
- Buchardt, B. (1978) Oxygen isotope palaeotemperatures from the Tertiary period in the North Sea area. *Nature*, 275, 121–3.
- Buckland, W and Conybeare, W.D. (1824) Observations on the southwestern coal district of England. *Transactions of the Geological Society of London*, 1 210–316.
- Budd, G.E. and Jensen, S. (2004) The limitations of the fossil record and the dating of the origin of the Bilateria. In *Telling the Evolutionary Time* (ed. P.C.J. Donoghue and M.P. Smith), CRC Press, Boca Raton, USA, pp. 66–89

- Bull, E.E. (1987) Upper Llandovery dendroid graptolites from the Pentland Hills, Scotland. *Palaeontology*, 30, 117–40.
- Bull, E.E. and Loydell, D. (1995) Uppermost Telychian graptolites from the North Esk Inlier, Pentland Hills, near Edinburgh. *Scottish Journal of Geology*, 31, 136–70.
- Butler, A.J., Woodcock, N.H. and Stewart, D.M. (1997) The Woolhope and Usk Basins: Silurian rift basins revealed by subsurface mapping of the southern Welsh Borderland. *Journal of the Geological Society, London*, 154, 209–23.
- Calman, W.T. (1926) The Rhynie crustacea. *Nature*, 118, 89–90.
- Campbell, R. (1911) Preliminary note on the geology of south-eastern Kincardineshire. *Geological Magazine*, 8, 63–9.
- Campbell, R. (1912a) Cambrian, Downtonian and Lower Old Red Sandstone rocks near Stonehaven. *Proceedings of the Geologists' Association*, 23, 291–4; 297–8.
- Campbell, R. (1912b) Cambrian, Downtonian and Lower Old Red Sandstone rocks near Stonehaven. *Proceedings of the Geologists' Association*, 23, 295–8.
- Campbell, R. (1913) The geology of southeastern Kincardineshire. *Transactions of the Royal Society of Edinburgh*, 42, 923–60.
- Campbell, S. and Bowen, D.Q. (1989) *Quaternary of Wales*. Geological Conservation Review Series, No. 2. Nature Conservancy Council, Peterborough, 237 pp.
- Campbell, S., Hunt, C.O., Scourse, J.D. and Keen, D.H. (1998). *Quaternary of South-West England*. Geological Conservation Review Series, No. 14. Joint Nature Conservation Committee, Peterborough, 439 pp.
- Carpenter, F.M. (1971) The Lower Permian insects of Kansas. *Psyche*, 78, 79–87.
- Carpenter, F.M. (1992) Superclass Hexapoda. In *Treatise on Invertebrate Paleontology, Part R, Arthropoda 3–4* (ed R.L. Kaesler), Geological Society of America, Boulder, Colorado and The University of Kansas, Lawrence, Kansas, 655 pp.
- Carroll, S. (1995) Geology of the Stonehaven District, 1:10 000 sheets NO88NW, NO88NE, NO88SW and NO88SE (South of the Highland Boundary fault). *British Geological Survey, Onshore Geology Series, Technical Report, WA/94/20*.
- Cater, J.M.L., Briggs, D.E.G. and Clarkson, E. N. K. (1989) Shrimp-bearing sedimentary successions in the Lower Carboniferous (Dinantian) Cementstone and Oil Shale Groups of northern Britain. *Transactions of the Royal Society of Edinburgh, Earth Sciences*, 80, 5–15.
- Cavalier-Smith, T. (1998) A revised six-kingdom system of life. *Biological Reviews*, 73, 203–66.
- Chandler, M.E.J. (1963) Revision of the Oligocene Floras of the Isle of Wight. *Bulletin of the British Museum (Natural History) Geology*, 6, 321–84.
- Channell, J.E.T and McCabe, C., (1992) Palaeomagnetic data from the Borrowdale Volcanic Group: volcano-tectonics and Late Ordovician palaeolatitudes. *Journal of the Geological Society of London*, 149, 881–8.
- Cherns, L. (1988) Faunal and facies dynamics in the upper Silurian of the Anglo-Welsh Basin. *Palaeontology*, 31, 451–502.
- Christiansen, K. (1964) Bionomics of Collembola. *Annual Reviews of Entomology*, 9, 147–78.
- Claridge, M.F. and Lyon, A.G. (1961). Lung-books in the Devonian Palaeocharinidae (Arachnida). *Nature* 191: 1190–1.
- Clarke, B.B. (1951) The geology of Dinmore Hill, Herefordshire, with a description of a new myriapod from the Ditton rocks there. *Transactions of the Woolhope Naturalists' Field Club*, 33, 222–36.

- Clarkson, E.N.K. (1985) Palaeoecology of the Dinantian of Foulden, Berwickshire, Scotland. *Transactions of the Royal Society of Edinburgh, Earth Sciences*, 76, 97–100.
- Clarkson, E.N.K. (2000) Pentland Odyssey. *Scottish Journal of Geology*, 36, 8–16.
- Clarkson, E.N.K. and Taylor, C. M. (1989) *A Field Guide to the Silurian Rocks of the North Esk Inlier*. Grant Institute of Geology, Edinburgh, pp. 1–15.
- Clarkson, E.N.K., Milner, A.R. and Coates, M.I. (1994 [for 1993]), Palaeoecology of the Viséan of East Kirkton, West Lothian, Scotland, *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 84, 417–25.
- Clarkson, E.N.K., Harper, D.A.T. and Taylor, C.M. (2001 [for 2000]) Scottish Silurian shorelines. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 91, 479–487.
- Clarkson, E.N.K., Harper, D.A.T., Taylor, C.M., and Anderson, L.I. (eds) (2007) *The Silurian Fossils of the Pentland Hills, Scotland*, The Palaeontological Association.
- Clayton, G. (1985) Plant miospores from the Dinantian of Foulden, Berwickshire, Scotland. *Transactions of the Royal Society of Edinburgh, Earth Sciences*, 76, 21–24.
- Cleal, C.J. and Rees, P.M. (2003). The Mid Jurassic flora from Stonesfield, Oxfordshire, UK. *Palaeontology*, 46, 739–801.
- Cleal, C.J. and Thomas, B.A. (1995) *Palaeozoic Palaeobotany of Great Britain*, Chapman and Hall, London, 295 pp.
- Cleal, C.J. and Thomas, B.A. (1996) *British Upper Carboniferous Stratigraphy*, GCR Series, Chapman and Hall, London, 339 pp.
- Cleal, C.J., Thomas, B.A., Batten, D.J. and Collinson, M.E. (2001) *Mesozoic and Tertiary Palaeobotany of Great Britain*, GCR Series, No. 22, Joint Nature Conservation Committee, Peterborough, 335 pp.
- Cleevely, R.J. (1983) *World Palaeontological Collections. British Museum (Natural History)*, Mansell Publishing Ltd, London, 365 pp.
- Clements, R.G. (1993) Type-section of the Purbeck Limestone Group, Durlstone Bay, Swanage, Dorset. *Proceedings of the Dorset Natural History and Archaeological Society*, 144, 181–206.
- Coates, M.I., (1994 [for 1993]) Actinopterygian and acanthodian fishes from the Viséan of East Kirkton, West Lothian, Scotland. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 84, 317–27.
- Cocks, L.R.M., Holland, C.H., Rickards, R.B. and Strachan, I. (1971) A correlation of Silurian rocks in the British Isles. *Journal of the Geological Society of London*, 127, 103–36.
- Cocks, L.R.M., Holland, C.H. and Rickards, R.B. (1992) A revised correlation of Silurian rocks in the British Isles. *Geological Society of London, Special Report*, 21, 32 pp.
- Collinson, M.E. (1983) Palaeofloristic assemblages and palaeoecology of the Lower Oligocene Bembridge Marls, Hamstead Ledge, Isle of Wight. *Botanical Journal of the Linnaean Society*, 86, 177–225.
- Collinson, M.E. (1999a) Plant and animal diets. In *Fossil Plants and Spores: Modern Techniques* (ed. T.P. Jones and N.P. Rowe), Geological Society, London, pp. 316–19
- Collinson, M.E. (1999b) Evolution of angiosperm fruit and seed morphology and associated functional biology: status in the late Cretaceous and Palaeogene. In *The Evolution of Plant Architecture* (eds M.H. Kurmann and A.R. Hemsley), Royal Botanic Gardens, Kew, pp. 331–57.

- Collinson, M.E. and Hooker, J.J. (1987) Vegetational and mammalian faunal changes in the Early Tertiary of southern England. In *The Origin of Angiosperms and their Biological Consequences* (eds E.M. Friis, W.G. Chaloner and P.R. Crane) Cambridge University Press, Cambridge, pp. 259–303.
- Collinson, M.E., Singer, R.L. and Hooker, J.J. (1993) Vegetational change in the latest Eocene of southern England. *Proceedings of the International Symposium on Palaeofloristic and Palaeoclimatic Changes during Cretaceous and Tertiary, Bratislava, September 14–20, 1992*, pp. 81–7.
- Conway Morris, S. (1997). Molecular clocks: Defusing the Cambrian 'explosion'? *Current Biology*, 7, p. 71.
- Conway Morris, S. (2000) The Cambrian explosion: slow-fuse or megatonnage? *Proceedings of the National Academy of Sciences*, 97, 4426–9.
- Coope, G.R. (1977) Coleoptera as clues to the understanding of climatic changes in North Wales towards the end of the last (Devensian) Glaciation. *Cambria*, 4, 65–72.
- Coope, G.R. (1979) Late Cenozoic fossil Coleoptera: evolution, biogeography and ecology. *Annual Review of Ecology and Systematics*, 10, 247–67.
- Coope, G.R. and Brophy, J.A. (1972) Late-glacial environmental changes indicated by a coleopteran succession from North Wales. *Boreas*, 1, 97–142.
- Cooper, J. (1977) The palaeontology of the London Clay (Lower Eocene) of the Herne Bay coastal section, Kent, England. *Proceedings of the Geologists' Association*, 88, 163–78.
- Cooper, J. (1979) Lower Tertiary fresh-water Mollusca from Mull, Argyllshire. *Tertiary Research*, 2, 69–74.
- Coram, R.A. (2005) Palaeoecology and palaeoenvironmental significance of Early Cretaceous fossil insects from the Purbeck Limestone Group, Dorset, UK. Unpublished PhD thesis, University of Reading, 230 pp.
- Coram, R. and Jarzembowski, E.A. (1998 [for 1997]) Insect-bearing horizons in the type Purbeck and new Purbeck/Wealden flies (Diptera). *Proceedings of the Dorset Archaeological and Natural History Society*, 119, 135–140.
- Coram, R.A. and Jarzembowski, E.A. (2002) Diversity and ecology of fossil insects in the Dorset Purbeck succession, southern England. *Special Papers in Palaeontology*, 68, 257–68.
- Costa, L.I. and Downie, C. (1976) The distribution of the dinoflagellate *Wetzeliiella* in the Palaeogene of North-Western Europe. *Palaeontology*, 19, 591–614.
- Cox, B.M and Sumbler, M.G. (2002) *British Middle Jurassic Stratigraphy*, GCR Series, No. 26, Joint Nature Conservation Committee, Peterborough, 508 pp.
- Crane, P.R. and Goldring, R. (1991) The Reading Formation (late Palaeocene to early Eocene) at Cold Ash and Pincet's Kiln (Berks.) in the western London Basin. *Tertiary Research*, 12, 147–58.
- Crepet, W.L. (1996) Timing in the evolution of derived floral characters: Upper cretaceous (Turonian) taxa with tricolpate and tricolpate-derived pollen. *Review of Paleobotany and Palynology*, 90, 339–59.
- Crepet, W.L. (2001) Plant-Animal Interactions: Insect Pollination. In Briggs and Crowther *Palaeobiology* p. 426–9.
- Crowson, R.A. (1970) *Classification and Biology*, Heinemann Educational Books Ltd, London, ix + 350 pp.
- Crowson, R.A. (1985) Comments on Insecta of the Rhynie Chert. *Entomologia Generalis, Stuttgart*, 11, 97–8.
- Currie, L.D. (1927) *On Cyamocephalus*, a new synziphosuran from the Upper Silurian of Lesmahagow, Lanarkshire. *Geological Magazine*, 64, 153–7.

- Curry, D. and Hailwood, E.A. (1986) English reference sections which span the Eocene/Oligocene boundary. In *Terminal Eocene Events* (eds C. Pomeroy and I. Premolisilva) Elsevier, Amsterdam, pp. 87–90.
- Cutler, D.J. (2000) Estimating divergence times in the presence of an overdispersed molecular clock. *Molecular Biology and Evolution*, 17, 1647–60.
- Daley B. (1972) Macroinvertebrate assemblages from the Bembridge Marls (Oligocene) of the Isle of Wight, England, and their palaeoenvironmental significance. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 11, 11–32.
- Daley, B. (1999) Paleogene sections in the Isle of Wight, a revision of their description and significance in the light of research undertaken in recent decades. *Tertiary Research*, 19, 1–69.
- Daley, B. and Balson, P. (1999) *British Tertiary Stratigraphy*, GCR Series, No. 15, Joint Nature Conservation Committee, Peterborough, 388 pp.
- Daley, B. and Edwards, N. (1974) Weekend Field Meeting: the Upper Eocene–Lower Oligocene Beds of the Isle of Wight. *Proceedings of the Geologists' Association*, 85, 281–92.
- Denison, R.H. (1964) The Cyathaspidae: A family of Silurian and Devonian jawless vertebrates. *Feldiana: Geology*, 13, 309–473.
- Dickens, G.R., Castillo, M.M. and Walker, J.C.G. (2003) A blast of gas in the latest Paleocene: Simulating first-order effects of massive dissociation of oceanic methane hydrates. *Geology*, 25, 259–62.
- Dineley, D.L. (1999a) Silurian fossil fishes sites of Scotland. In *Fossil Fishes of Great Britain* (D.L. Dineley and S.J. Metcalf), GCR Series, No. 16, Joint Nature Conservation Committee, Peterborough, pp. 31–62.
- Dineley, D.L. (1999b) Late Silurian fossil fishes sites of the Welsh Borders. In *Fossil Fishes of Great Britain* (D.L. Dineley and S.J. Metcalf), GCR Series, No. 16, Joint Nature Conservation Committee, Peterborough, pp. 63–106.
- Dineley, D.L. (1999c) Early Devonian fossil fishes sites of Scotland. In *Fossil Fishes of Great Britain* (D.L. Dineley and S.J. Metcalf), GCR Series, No. 16, Joint Nature Conservation Committee, Peterborough, pp. 145–66.
- Dineley, D.L. and Metcalf, S.J. (1999) *Fossil Fishes of Great Britain*, GCR Series, No. 16, Joint Nature Conservation Committee, Peterborough, 675 pp.
- Dixon, F. (1850) *The Geology and Fossils of the Tertiary and Cretaceous Formations of Sussex*, [2nd edition 1878], Longman, Brown, Green and Longmans, London.
- D'Orbigny, A. (1850) Division des terrains jurassiques en étages. In *Paléontologie. Française: Description des Mollusques et Rayonnes Fossiles (Premier serie Animaux): Terrains Jurassiques, Tome 1: Céphalopodes*, Victor Masson, Paris, pp. 600–11.
- Dubinin, V.B. (1962) Class Acaromorpha: mites, or gnathosomic chelicerate arthropods. In *Fundamentals of Paleontology* (ed. B.B. Rodendorf). Academy of Sciences of USSR, Moscow, 447–73.
- Duff, P. McL. D. and Smith, D. (1992) *Geology of England and Wales*, Geological Society of London, 651 pp.
- Dunlop, J. (1994a) Palaeobiology of the Trigonotarvida. Unpublished PhD thesis, University of Manchester.
- Dunlop, J.A. (1994b) The palaeobiology of the Writhlington trigonotarbid. *Proceedings of the Geologists' Association*, 105, 287–96.
- Dunlop, J.A. (1994c) An Upper Carboniferous amblypygid from the Writhlington Geological Nature Reserve. *Proceedings of the Geologists' Association*, 105, 245–50.

- Dunlop, J.A. (1996) A trigonotarbid arachnid from the Upper Silurian of Shropshire. *Palaeontology*, 39, 605–14.
- Dunlop, J.A. (1998) A replacement name for the trigonotarbid arachnid *Eotarbus* Dunlop. *Palaeontology*, 42, 191.
- Dunlop, J.A. and Anderson, L.I. (2005) A fossil harvestman (Arachnida, Opiliones) from the Mississippian of East Kirkton, Scotland. *Journal of Arachnology*, 33, 482–9.
- Dunlop, J.A. and Seldon, P.A. (1998) The early history and phylogeny of the chelicerates. In *Arthropod Relationships* (eds R.A. Fortey and R.H. Thomas), Systematics Association Special Volume Series, 55, 222–35.
- Dunlop, J.A., Anderson, L. and Braddy, S.J. (1999 [for 1998]) A new chasmataspid (Chelicerata: Chasmataspida) from the Lower Devonian of the Midland valley of Scotland. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 89, 161–5.
- Dunlop, J.A., Anderson, L.I., Kerp, H. and Hass, H. (2004). A harvestman (Arachnida: Opiliones) from the Early Devonian Rhynie cherts, Aberdeenshire, Scotland. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 94, 341–54.
- Edwards, R.A. and Freshney, E.C. (1987) Lithostratigraphical classification of the Hampshire Basin Palaeogene deposits (Reading Formation to Headon Formation). *Tertiary Research*, 8, 43–73.
- Edwards, D. and Selden, P.A. (1993) The development of early terrestrial ecosystems. *Botanical Journal of Scotland*, 46, 337–66.
- Edwards, D., Selden, P.A., Richardson, J.B., and Axe, L. (1995) Coprolites as evidence for plant-animal interaction in Siluro-Devonian terrestrial ecosystems. *Nature* 377, 329–31
- Edwards, D., Davies, K.L., Richardson, J.B., Wellman, C.H. and Axe, L. (1996) Ultrastructure of *Synoisporites downtonensis* and *Retusotrilites* cf. *coronadus* in spore masses from the Pridoli of the Welsh Borderland. *Palaeontology*, 29, 783–800.
- Eldredge, N. (1974) Revision of the Suborder Synziphosurina (Chelicerata, Merostomata), with remarks on merostome phylogeny. *American Museum Novitates*, 2543, 1–41.
- Eldredge, N. and Plotnick, R.E. (1974) Revision of the Pseudoniscine Merostome Genus *Cyamocephalus* Currie. *American Museum Novitates*, 2557, 1–10.
- Elles, G.L. and Slater, I.L. (1906) The highest Silurian rocks of the Ludlow district. *Quarterly Journal of the Geological Society, London*, 62, 195–222.
- Elliot, R.E. (1995) *Micropalaeontology of the Leintwardine Group (Ludlow Series, Silurian) in the Welsh Borderland, Wales and Estonia*. Unpublished PhD thesis, University of Leicester.
- Ellis, N.V., Bowen, D.Q., Campbell, S., Knill, J.L., McKirdy, A.P., Prosser, C.D., Vincent, M.A., Wilson, R.C.L. (1996) *An Introduction to the Geological Conservation Review*, Joint Nature Conservation Committee, Peterborough, 131 pp.
- Ellison, R.A., Jolley, D.W., King, C. and Knox, R.W.O'B. (1994) A revision of the lithostratigraphic classification of the early Palaeogene strata in the London Basin and East Anglia. *Proceedings of the Geologists' Association*, 105, 187–97.
- Emeleus, C.H. and M.C. Gyopari, (1992) *British Tertiary Volcanic Province*, GCR Series No. 4, Chapman and Hall, London, 259 pp.
- Engel, M.S. and Grimaldi, D.A. (2004) New light shed on the oldest insect. *Nature*, 427, 627–30.
- Etheridge, R. (1879) On the occurrence of the genus *Dithyrocaris* in the Lower Carboniferous, or Calceiferous Sandstone Series, of Scotland, and that of a second species of *Anthropalaemon* in these beds. *Quarterly Journal of the Geological*

Society, 35, 471.

- Etheridge, R., Woodward, H. and Jones, T.R. (1886 [for 1885]) On the fossil Phyllopoda of the Palaeozoic rocks. *Report of the British Association for the Advancement of Science*, 326–61.
- Fabricus, J.C. (1778) *Philosophia Entomologica Sistens Scientiae Fundamenta; adiectis Definitionibus, Exemplis, Observationibus; Adumbrationibus*, Bohnii, Hamburg et Kilonii, Germany, 178 pp.
- Fabricus, J.C. (1790) Nova insectorum genera. *Skifter of Naturhistorie-Selskabet Kiobenhavn*, 1, 213–28.
- Factor, D.F. and Feldmann, R.M. (1985) Systematics and paleoecology of malacostracan arthropods in the Bear Gulch Limestone (Namurian) of Central Montana. *Annals Carnegie Museum*, 54, 319–56.
- Fayers, S. and Trewin, N.H. (2001) A new crustacean from the Pragian Rhynie Chert, Rhynie, Aberdeenshire, Scotland. *Palaeontological Association Newsletter*, 48, 40.
- Fayers, S.R. and Trewin, N.H. (2003) A new crustacean from the Early Devonian Rhynie chert, Aberdeenshire, Scotland. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 93, 355–82.
- Fayers, S.R. and Trewin, N.H. (2004) A review of the palaeoenvironments and biota of the Windyfield Chert. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 94, 325–39.
- Feng, D.-F., Cho, G., and Doolittle, R.F. (1997) Determining divergence times with a protein clock: update and reevaluation. *Proceedings of the National Academy of Sciences, USA*, 94, 13028–33.
- Fielding, C.R. (1984a) Upper delta plain lacustrine and fluviolacustrine facies from the Westphalian of the Durham coalfield, NE England. *Sedimentology*, 31, 547–67.
- Fielding, C.R. (1984b) A coal depositional model for the Durham Coal Measures of NE England. *Journal of the Geological Society, London*, 141, 919–31.
- Fielding, C.R. (1986) Fluvial channel and overbank deposits from the Westphalian of the Durham coalfield, NE England. *Sedimentology*, 33, 119–40.
- Fisher, D.C. (1982) Phylogenetic and macroevolutionary patterns within the Xiphosurida. *Proceedings of the North American Paleontological Convention*, 1, 175–80.
- Fisher, O. (1856). On the Purbeck strata of Dorsetshire. *Transactions of the Cambridge Philosophic Society*, 9, 555–81.
- Fitton, W.H. (1828) Notice sur les conches des carrieres de Stonesfield qui renferment les ossements de mammifères. *Annales de Science Naturel, Paris*, 14, 378–84.
- Fleck, G. and Nel, A. (2003) Revision of the Mesozoic family Aeschnidiidae (Odonata: Anisoptera). *Zoologica*, 153, 1–172.
- Fleck, G., Bechly, G., Martinez-Delclòs, X., Jarzembowski, E.A, and Nel, A. (2004) A revision of the Upper Jurassic–Lower Cretaceous dragonfly family Tarsophlebiidae, with a discussion on the phylogenetic positions of the Tarsophlebiidae and Sieblosiidae (Insecta, Odonatoptera, Panodonata). *Geodiversitas*, 26, 33–60.
- Fleck, G., Nel, A., Bechley, G., Delthis, X., Jarzembowski, E. A. and Coram, R.A. (2008) New Lower Cretaceous 'libelluloid' dragonflies (Insecta: Odonata: Cavilabiata) with notes about estimated divergence dates for this group. *Palaeodiversity*, 1, 19–36.
- Forbes, E. (1851) On the Estuary Beds and the Oxford Clay at Loch Staffin, in Skye. *Quarterly Journal of the Geological Society of London*, 7, 104–13.

- Forbes, E. (1853) On the Fluvio-marine Tertiaries of the Isle of Wight. *Quarterly Journal of the Geological Society of London*, 9, 259–270.
- Fortey, R. (2001) The Cambrian Explosion, *Science*, 393, 438–9.
- Fortey, R.A. and Thomas, R.H. (eds) (1998) *Arthropod Relationships*, Systematics Association Special Volume Series 55, Chapman and Hall, London, 383 pp.
- Fortey, R.A., Jackson, J. and Strugnell, J. (2004), Phylogenetic fuses and evolutionary 'explosions': conflicting evidence and critical tests. In *Telling the Evolutionary Time*, (eds P.C.J. Donoghue and M.P. Smith), CRC Press, Boca Raton, USA, pp. 41–65.
- Francis, E.H. (1983). Carboniferous. In *Geology of Scotland* (ed. G.Y. Craig), 2nd edn, Scottish Academic Press, Edinburgh, 253–96.
- Francis, J.E. (1984) The seasonal environment of the Purbeck (Upper Jurassic) fossil forests. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 48, 285–307.
- Friend, P.F. and Williams, B.J.P. (1978) *A Field Guide to Selected Outcrop Areas of the Devonian of Scotland, the Welsh Borderland and South Wales: International Symposium on the Devonian System (P.A.D.S. 78)*, the Palaeontological Association, 106 pp.
- Gale, A.S. (2000) Early Cretaceous: rifting and sedimentation before the flood. In *Geological History of Britain and Ireland* (eds N.H. Woodcock and R. Strachan), Blackwell Science, Oxford, 423 pp.
- Gale, A. and Self, A. (2005) The Insect Limestone of the Isle of Wight, INTAS field excursion. University of Greenwich, unpublished report.
- Gallois, R.W. and Worssam, B.C. (1993) *Geology of the Country around Horsham*. Memoir of the British Geological Survey, 302, viii + 130 pp.
- Gardiner, C.I. (1927) The Silurian Inlier of Woolhope (Herefordshire). *Quarterly Journal of the Geological Society of London*, 83, 501–50.
- Gardner, J.S. (1888 [for 1887]) On the higher Eocene beds of the Isle of Wight: *Report of the British Association for the Advancement of Science*, 414–23.
- Geikie, A. (1881) A recent 'find' in British Palaeontology. *Nature*, 25, 1–3.
- Geikie, A. (1861) In *The Geology of the Neighbourhood of Edinburgh* (eds H.H. Howell and A. Geikie). Memoir of the Geological Survey of the United Kingdom.
- Geikie, A. (1881) A recent 'find' in British Palaeontology. *Nature*, 25, 1–3.
- George, T.N., Johnson, G.A.L., Mitchell, M. *et al.* (1976) *A Correlation of Dinantian Rocks in the British Isles*. The Geological Society, London, Special Report, 7, 87 pp.
- Germar, E.F. (1813) Insekten in Bernstein eingeschlossen beschreiben aus dem akademischen Mineralien-Cabinet zu Halle. *Magazin Entomologie*, 1, 11–18.
- Getty, T.A. (1980) Lower Jurassic Chart. In *A Correlation of Jurassic Rocks in the British Isles: Part One* (eds J.C. Cope, T.A. Getty, M.K. Howarth, N. Morton and H.S. Torrens) The Geological Society, London, Special Report, No. 14, 33–47.
- Gillen, C. and Trewin, N.H. (1987) Dunnottar to Stonehaven and the Highland Boundary Fault. In *Excursion Guide to the Geology of the Aberdeen Area* (eds N.H. Trewin, B.C. Kneller and C. Gillen). Scottish Academic Press, Edinburgh, pp.

Giribet, G., Edgecombe, G.D., Wheeler, W.C. and Babbitt, C. (2002) Phylogeny and systematic position of Opiliones: a combined analysis of chelicerate relationships using morphological and molecular data. *Cladistics*, 18, 5–70.

Gladwell, D. (2005) *The Biota of Upper Silurian Submarine Channel Deposits, Welsh Borderland*. Unpublished PhD thesis, University of Leicester.

Goldring, R. and Stevenson, P. (1972) The depositional environment of three Starfish beds. *Neues Jahrbuch für Geologie und Paläontologie, Monatshefte*, 10, 611–24.

Gorochov, A.V. and Rasnitsyn, A.P. (2002) Superorder Gryllida Laicharting, 1781 (= Orthopteroidea Handlirsch, 1903). In *History of Insects* (eds A.P. Rasnitsyn and D.L.J. Quicke) Kluwer Academic Publishers, Dordrecht, pp.293–303.

Gorochov, Jarzembowski E.A. and Coram, R.A. (2006) Grasshoppers and crickets (Insecta: Orthoptera) from the Lower Cretaceous of southern England. *Cretaceous Research*, 27, 641–62.

Goss, H. (1900) *The Geological Antiquity of Insects*, 2nd edn, Gurney and Jackson, London, iv+52 pp.

Gradstein, F.M., Ogg, J.G. and Smith, A.G. (2004) *A Geologic Time Scale 2004*, Cambridge University Press, 589 pp.

Green, G. W (1992) *Bristol and Gloucester District* (3rd edition). British Regional Geology, HMSO, London.

Greenslade, P (1988) Reply to R.A. Crowson's "Comments on Insecta of the Rhynie Chert." [1985, *Entomologia Generalis*, 11 (1/2), 97–8]. *Entomologia Generalis, Stuttgart*, 13, 115–17.

Greenslade, P and Whalley, U.S. (1986) The systematic position of *Rhyniella praecursor* Hirst & Maulik (Collembola), the earliest known hexapod. In *2nd International Symposium on Apterygota* (ed. R. Dallai). University of Siena, Siena, Italy, pp. 319–23.

Grimaldi, D. (1999) The co-radiations of pollinating insects and angiosperms in the Cretaceous. *Annals of the Missouri Botanical Garden*, 86, 373–406.

Grimaldi, D. and Engel, M.S. (2005) *Evolution of the Insects*. Cambridge University Press, Cambridge, 754 pp.

Gu, X. (1998) Early metazoan divergence was about 830 million years ago. *Journal of Molecular Evolution*, 47, 369–71.

Guion, P.D. and Fielding, C.R. (1988) Westphalian A and B sedimentation in the Pennine Basin, UK.. In *Sedimentation in a Synorogenic Basin Complex. the Upper Carboniferous of Northwest Europe* (eds B.M. Besley and G. Kelling), Blackie, Glasgow, pp. 153–77.

Habgood, K.S., Edwards, D. and Axe, L. (2004, for 2003) Embryophytic sporophytes in the Rhynie and Windyfield cherts. *Transactions of the Royal Society of Edinburgh Earth Sciences*, 94, 397–410.

Habgood, K.S., Hass, H. and Kerp, H. (2004) Evidence for an early terrestrial food web: coprolites from the Early Devonian Rhynie chert. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 94, 371–89.

Haeckel, E. (1866) *Generelle Morphologie der Organismen: Allgemeine Grundzüge der Organischen Formen-Wissenschaft, mechanische begründet durch die von Charles Darwin reformirte Descendenz-Theorie: Zweiter Band: Allgemeine Entwicklungsgeschichte der Organismen*, Georg Reimer, Berlin, 462 pp.

Hallam, A (1985) A review of Mesozoic climates. *Journal of the Geological Society*, 142, 433–45.

Handlirsch, A. (1906–8) *Die Fossilen Insekten und die Phylogenie der rezenten Formen: Ein Handbuch für Paläontologen und Zoologen*, Engelmann, Leipzig, 3 vols, 1–640, 641–1120 and 1121–1430 pp.

- Hanken, N.M. and Størmer, L. (1975) The trail of a large Silurian eurypterid. *Fossils and Strata*, 4, 255–70.
- Haq, B.U., Hardenbol, J. and Vail, P.R. (1987) Chronology of fluctuating sea levels since the Triassic. *Science*, 235, 1156–67.
- Harland, W.B., Cox, A.V. and Llewellyn, P.G. (1982) *A Geologic Time Scale*, Cambridge University Press, Cambridge.
- Harley, J. (1861) On the Ludlow Bone Bed and its Crustacean remains. *Quarterly Journal of the Geological Society, London*, 17, 542–52.
- Harrison, C.J.O. and Walker, C.A. (1979) Birds of the British Middle Eocene. *Tertiary Research Special Paper*, 5, 29–43.
- Haswell, G.C. (1865) *On the Silurian Formation in the Pentland Hills*. William P. Nimmo, Edinburgh, 48 pp.
- Haszeldine, R.S. (1983) Fluvial bars reconstructed from a deep, straight channel, Upper Carboniferous coalfield of northeast England. *Journal of Sedimentary Petrology*, 53, 1233–47.
- Haszeldine, R.S. (1984) Muddy deltas in freshwater lakes, and tectonism in the Upper Carboniferous coalfield of NE England. *Sedimentology*, 31, 811–22.
- Haszeldine, R.S. and Anderton, R. (1980) A braidplain facies model for the Westphalian B coal measures of north-east England. *Nature*, 284, 51–3.
- Hausdorf, B. (2000) Early evolution of the Bilateria. *Systematic Biology*, 49, 130–42.
- Hawkins, H.L. and Hampton, S.M. (1927) The occurrence, structure, and affinities of *Echinocystis* and *Palaeodiscus*. *Quarterly Journal of the Geological Society, London*, 83, 574–601.
- Henderson, J. and Brown, D.J. (1870) On the Silurian rocks of the Pentland Hills, Part II. *Transactions of the Edinburgh Geological Society*, 1, 266–72.
- Hennig, W. (1953) Kritische Bemerkungen zum phylogenetischen System der Insekten. *Beiträge zur Entomologie*, 3, 1–85.
- Hennig, W. (1969) *Die Stammesgeschichten der Insekten*, Kramer, Frankfurt am Main, 436 pp.
- Hessler, R.R. (1969) Peracarida. In *Treatise on Invertebrate Paleontology. Part R. Arthropoda* 4 (1), R360–R393. Geological Society of America and University of Kansas Press, Boulder, Colorado, and Lawrence, Kansas.
- Hewitt, R.A. (1988) Outline of research on the ecology and evolution of the Eocene nautiloid cephalopods from the London Clay, England. *Tertiary Research*, 10, 65–81.
- Hibbert, S. (1836) On the Freshwater Limestones of Burdiehouse in the neighbourhood of Edinburgh. *Transactions of the Royal Society of Edinburgh*, 13, 169–282.
- Hickling, G. (1908) The Old Red Sandstone of Forfarshire, Upper and Lower. *Geological Magazine*, 5, 396–408.
- Hickling, G. (1912) On the geology and palaeontology of Forfarshire. *Proceedings of the Geologists' Association*, 23, 302–11.
- Hirst, S. (1923) On some arachnid remains from the Old Red Sandstone (Rhynie Chert Bed, Aberdeenshire). *Annals and Magazine of Natural History (9th series)*, 12, 455–74.
- Hirst, S. and Maulik, S. (1926) On some arthropod remains from the Rhynie Chert (Old Red Sandstone). *Geological Magazine*, 63, 69–71.

- Holland, C.H., Lawson, J.D. (1963) Facies patterns in the Ludlovian of Wales and the Welsh Borderland. *Liverpool and Manchester Geological Journal*, 3, 269–88.
- Holland, C.H. and Williams, E.M. (1985) The Ludlow–Downton transition at Kington, Herefordshire. *Geological Journal*, 20, 31–41.
- Holland, C.H., Lawson, J.D. and Walmsley, V.G. (1963) The Silurian rocks of the Ludlow District. *Bulletin of the British Museum (Natural History), Geology*, 8, 93–171.
- Hooker, J.J. (1992) British mammalian palaeocommunities across the Eocene–Oligocene transition and their environmental implications. In *Eocene–Oligocene Climatic and Biotic Evolution* (eds D.R. Prothero and W.A. Berggren), Princeton University Press, pp. 494–515.
- Hooker, J.J. and Collinson, M.E. (2001) Plant–Animal Interactions: Dispersal. In Briggs, D.E.G. and Crowther, P.R. *Palaeobiology H*, p. 429–31.
- Horne, D.J. (1988) Cretaceous Ostracoda of the Weald. *British Micropalaeontological Society Field Guide*, 4, 42.
- Horne, D.J. (1995) A revised ostracod biostratigraphy for the Purbeck and Wealden of England. *Cretaceous Research*, 16, 639–63.
- House, M.R. (1993) Fluctuations in ammonoid evolution and possible environmental controls. In *The Ammonoidea: environment, ecology, and evolutionary change* (ed. M.R. House), The Systematics Association Special Volume, 47, Clarendon Press, Oxford, pp. 13–34.
- Howell, H.H. and Geikie, A. (1861). The geology of the neighbourhood of Edinburgh. *Memoir of the Geological Survey*, sheet 32 (Scotland).
- Huxley, T.H. and Salter, J.W. (1856) Appendix to article: Banks, R.W. On the Tilestones or Downton Sandstones, in the neighbourhood of Kington, and their contents. *Quarterly Journal of the Geological Society of London*, 12, 100.
- Huxley, T.H. and Salter, J.W. (1859) I. On the anatomy and affinities of the genus *Pterygotus* (by T.H. Huxley), II. Description of the species of *Pterygotus* (by J.W. Salter). *Memoirs of the Geological Survey of the United Kingdom, Monograph*, 1, 1–105.
- Insole, A. and Daley, B. (1985) A revision of the lithostratigraphical nomenclature of the Late Eocene and Early Oligocene strata of the Hampshire Basin, southern England. *Tertiary Research*, 7, 67–100.
- Institute of Geological Sciences (1973) Geological Special Sheet (1:25 000), Leintwardine–Ludlow.
- Jarzemkowski, E.A. (1976) Report of Easter Field meeting: the Lower Tertiaries of the Isle of Wight. *Tertiary Research*, 1, 11–16.
- Jarzemkowski, E.A. (1977) Insect fossils from the Wealden of the Weald. *Proceedings of the Geologists' Association*, 87, 443–6.
- Jarzemkowski, E. (1980a) Fossil insects from the Bembridge Marls, Palaeogene of the Isle of Wight, southern England. *Bulletin of the British Museum Natural History (Geology)*, 33, 239–93.
- Jarzemkowski, E.A. (1980b) Fossil insects from the Lower Hamstead Beds (Lower Oligocene) of the Isle of Wight. *Proceedings of the Isle of Wight Natural History and Archaeological Society*, 7 (3) 167–70.
- Jarzemkowski, E.A. (1981) An early Cretaceous termite from southern England. *Systematic Entomology*, 6, 91–6.

- Jarzembowski, E.A. (1987) Early Cretaceous insects from Southern England. Unpublished PhD thesis, University of Reading, 421pp.
- Jarzembowski, E.A. (1989a) A century plus of fossil insects. *Proceedings of the Geologists' Association*, 100, 433–55.
- Jarzembowski, E.A. (1989b) Writhlington Geological Nature Reserve. *Proceedings of the Geologists' Association*, 100, 219–34.
- Jarzembowski, E.A. (1990) Early Cretaceous zygoteroids of southern England, with the description of *Cretacoenagrion allenii* gen. nov., spec. nov. (Zygoptera: Coenagrionidae: "Anisozygoptera": Tarsophlebiidae, Euthemistidae). *Odonatologica*, 19, 27–37.
- Jarzembowski, E.A. (1991a) The Weald Clay of the Weald: report of 1988/89 field meetings. *Proceedings of the Geologists' Association*, 102, (2), pp. 83–92.
- Jarzembowski, E.A. (1991b) New insects from the Weald Clay of the Weald. *Proceedings of the Geologists' Association*, 102 (2), 93–108.
- Jarzembowski, E.A. (1992) Fossil insects from the London Clay (Early Eocene) of southern England. *Tertiary Research*, 13, 2–4, 87–94.
- Jarzembowski, E.A. (1995) Fossil caddisflies (Insecta: Trichoptera) from the Wealden of southern England I. *Cretaceous Research*, 16 C6, 695–703.
- Jarzembowski, E.A. (1999a) Fossil insect sites. *Meganeura*, 3, 9–11.
- Jarzembowski, E.A. (1999b) Fossil record. In D.W. Baldock (ed.) *Grasshoppers and crickets (cockroaches and earwigs) of Surrey*, Surrey Wildlife Trust, Woking, pp. 20–2.
- Jarzembowski, E.A. (2003) 'Burnt' beetles (insecta: Coleoptera) from the Wealden of southern England. In *Proceedings of the Second Congress on Palaeoentomology*, 2001, (eds E. Krzeminska and W. Krzeminska). *Acta zoologica cracoviensia*, 46 (supplement), 139–45.
- Jarzembowski, E.A. (2004) Atlas of animals from the Late Westphalian of Writhlington, United Kingdom. *Geologica Balcanica*, 34 (1–2), 47–50.
- Jarzembowski, E.A. and Coram, R. (1997) New fossil insect records from the Purbeck of Dorset and Wealden of the Weald. *Proceedings of the Dorset Natural History and Archaeological Society*, 118, 119–24.
- Jarzembowski, E.A. and Mostovski, M.B. (2000) A new species of *Sinonemestrius* (Diptera: Brachycera) from the Weald Clay (Lower Cretaceous, southern England) with a discussion of its affinities and stratigraphical implications. *Cretaceous Research*, 21, 761–5.
- Jarzembowski, E.A. and Nel, A. (1996) Geology and fossil record. In *Dragonflies of Surrey* (ed. P. Follett), Surrey Wildlife Trust, Woking, pp. 5–11.
- Jarzembowski, E.A. and Ross, A. (1993) The geological record of insects. *Geology Today*, 9, 218–23.
- Jarzembowski, E.A. and Ross, A.J. (1996) Insect origination and extinction in the Phanerozoic. In *Biotic recovery from mass extinction events*, *Geological Society Special Publication*, 102, 65–78.
- Jarzembowski, E.A. and Schneider, J.W. (2007) The stratigraphical potential of blattodean insects from the late Carboniferous of southern Britain. *Geological Magazine*, 144 (3), 449–56.

- Jenkinson, A. (ed.) (1991) *Mortimer Forest Geological Trail*, Forestry Commission (Marches Forest District), Whitcliffe, Ludlow
- Jennings, J.S. (1961) The geology of the eastern part of the Lesmahagow inlier. Unpublished PhD thesis, University of Edinburgh.
- Jepson, J.E. and Jarzembowski, E.A. (2008) Two new species of snakefly (Insecta: Raphidioptera) from the Lower Cretaceous of England and Spain with a review of other fossil raphidiopterans from the Jurassic/Cretaceous transition. *Alavesia*, 2, 193–201.
- Jepson, J.E., Makarkin, V.N. and Jarzembowski, E.A. (in press) New lacewings (Insecta: Neuroptera) from the Lower Cretaceous Wealden Supergroup. *Cretaceous Research*.
- Jeram, A.J. (1994a) Scorpions from the Viséan of East Kirkton, West Lothian, Scotland, with a revision of the infraorder Mesoscorpionina. *Transactions of the Royal Society of Edinburgh, Earth Sciences*, 84, 283–99.
- Jeram, A.J. (1994b) Carboniferous Orthosterni and their relationship to living scorpions. *Palaeontology*, 37, 513–50.
- Jeram, A.J. (1998) Phylogeny, classification and evolution of Silurian and Devonian scorpions. In *Proceedings of the 17th European Colloquium of Arachnology, Edinburgh 1997*. (ed. P. A. Selden). British Arachnological Society, Burnham Beeches, Bucks, pp. 18–31.
- Jeram, A.J. and Selden, P.A. (1994) [for 1993] Eurypterids from the East Kirkton Limestone, West Lothian. *Transactions of the Royal Society of Edinburgh, Earth Sciences*, 84, 301–08.
- Jeram, A.J. and Selden, P.A. (1994) [for 1993] Eurypterids from the Viséan of East Kirkton, West Lothian, Scotland, *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 84, 301–8.
- Jeram, A.J., Selden, P.A., and Edwards, D. (1990) Land animals in the Silurian: arachnids and myriapods from Shropshire, England. *Science*, 250, 658–66.
- Johnson, J.G., Klapper, G., and Sandberg, C.A. (1985) Devonian eustatic fluctuations in Euamerica. *Bulletin of the Geological Society of America*, 96, 567–87.
- Johnson, E.W., Briggs, D.E.G., Suthren, R.J., Wright, J.L. and Tunnicliff, S.P. (1994) Non-marine arthropod traces from the subaerial Ordovician Borrowdale Volcanic Group, English Lake District. *Geological Magazine*, 131, 395–406.
- Jolley, D.W. (1997) Palaeosurface palynofloras of the Skye Lava Field, and the age of the British Tertiary Volcanic Province. In *Palaeosurfaces: Recognition, Reconstruction and Palaeoenvironmental Interpretation* (ed. M. Widdowson), Geological Society London, Special Publication, 120, 67–94.
- Jones, T.R. (1886) On Palaeozoic Phyllopoda. *Geological Magazine*, 3 (10), 456–62
- Jones, T.R. and Woodward, H. (1888–1899) A monograph of the British Palaeozoic Phyllopoda (Phyllocarida, Packard). *Palaeontographical Society Monograph*. Part 1 (1888), 1–72; Part 2 (1892), 73–124; Part 3 (1898), 125–76; Part 4 (1899), 177–211.
- Keen, M.C. (1977) Ostracod assemblages and depositional environments of the Headon, Osborne and Bembridge Beds (upper Eocene) of the Hampshire Basin. *Palaeontology*, 20, 405–45.
- Kellaway, G.A. (1970) The Upper Coal Measures of south west England compared with those of South Wales and the southern Midlands. *Compte rendu 6e Congrès International de Stratigraphie et de Géologie du Carbonifère* (Sheffield 1967), 2, 1039–56.
- Kellaway, G.A. and Welch, F.B. (1948). *Bristol and Gloucester District*. British Regional Geology, HMSO, London.

- Kelly, S.B. (1992) Milankovitch cyclicity recorded from Devonian non-marine sediments. *Terra Nova*, 4, 578–84.
- Kethley, J.B., Norton, R.A., Bonamo, P.M. and Shear, W.A. (1989). A terrestrial alicorhagiid mite (Acari: Acariformes) from the Devonian of New York. *Micropalaeontology*, 35, 367–73.
- Kevan, P.G., Chaloner, W.G. and Savile, D.B.O. (1975) Interrelationships of early terrestrial arthropods and plants. *Palaeontology*, 18, 391–417.
- Kiaer, J. (1911) A new Downtonian fauna in the sandstone series of the Kristiania area: a preliminary report. *Skrifter uit gift av det Norske vidensapsakademi i Oslo, Matematisk-naturvidenskapelig Klasse*, 7, 1–22, Kristiania, Oslo.
- Kidston, R. (1883) Report on Fossil Plants, collected by the Geological Survey of Scotland in Eskdale and Liddesdale. *Transactions of the Royal Society of Edinburgh*, 30, 531–50.
- Kidston, R. (1903) The Fossil Plants of the Carboniferous Rocks of Canonbie, Dumfriesshire, and of Parts of Cumberland and Northumberland. *Transactions of the Royal Society of Edinburgh*, 40, 741–833.
- Kidston, R. (1923–5) Fossil plants of the Carboniferous rocks of Great Britain. *Memoir of the Geological Survey of Great Britain, Palaeontology*, 2, 1–670.
- King, C. (1981) The stratigraphy of the London Clay and associated deposits. *Tertiary Research Special Paper*, 6, 1–158.
- King, W.W. (1934) The Downtonian and Dittonian strata of Great Britain and North-Western Europe. *Quarterly Journal of the Geological Society of London*, 90, 526–70.
- Kirk, N.H. (1951) The Silurian and Downtonian rocks of the anticlinal disturbance of Breconshire and Radnorshire: Pont Faen to Presteigne. *Abstracts of the Proceedings of the Geological Society of London*, 1474, 72–4.
- Kjellesvig-Waering, E.N. (1950) A new Silurian *Hughmilleria* from West Virginia. *Journal of Paleontology*, 24, 228.
- Kjellesvig-Waering, E.N. (1951) Downtonian (Silurian) Eurypterida from Perton, near Stoke Edith, Herefordshire. *Geological Magazine*, 87, 1–24.
- Kjellesvig-Waering, E.N. (1954) Note on a new Silurian scorpion from Shropshire, England. *Journal of Paleontology*, 28, 485–86.
- Kjellesvig-Waering, E.N. (1958) The genera, species and subspecies of the family Eurypteridae, Burmeister, 1845. *Journal of Paleontology*, 32, 143–48.
- Kjellesvig-Waering, E.N. (1959) A taxonomic review of some late Palaeozoic Eurypterida. *Journal of Paleontology*, 33, 251–6.
- Kjellesvig-Waering, E.N. (1961) The Silurian Eurypterida of the Welsh Borderland. *Journal of Paleontology*, 35, 789–835.
- Kjellesvig-Waering, E.N. (1964) A synopsis of the family Pterygotidae Clarke and Ruedemann, 1912 (Eurypterida). *Journal of Paleontology*, 38, 331–61.
- Kjellesvig-Waering, E.N. (1966) A revision of the families and genera of the Stylonuracea (Eurypterida). *Fieldiana (Geology)*, 14, 169–97.
- Kjellesvig-Waering, E.N. (1971) A new Downtonian stylonurid from central England (Silurian, Eurypterida). *Journal of Paleontology*, 45, 538–9.
- Kjellesvig-Waering, E.N. (1986) A re-study of the fossil Scorpionida of the world. *Paleontographica Americana* 55, 1–287.

- Klimaszewski, S.M. and Popov, Y.A. (1993) New fossil hemipteran insects from southern England. *Annals of the Upper Silesian Museum in Bytom. Entomology Supplement*, 19 pp.
- Knox, R.W.O'B. (2002) Tertiary sedimentation. In *The Geology of Scotland* (ed. N.H. Trewin) Geological Society of London, p. 361–70.
- Krantz, G.W. and Lindquist, E.E. (1979) Evolution of phytophagous mites (Acari). *Annual Reviews of Entomology*, 24, 121–58.
- Krzemiński, W (1993) The systematic position of *Stibadocerites europaeus* ZEUNER from the Upper Cretaceous of Scotland (Diptera: Tipulomorpha). *Annals of the Upper Silesian Museum, Entomology*, Supplement 1, 77–80.
- Krzemiński, W and E. Jarzembowski (1999) *Anne triassica*, n.sp., the oldest representative of Chironomidae. *Polskie Pismo Entomologiczne*, 68, 445–9.
- Kühne, W.G. and Schliiter, T (1985) A fair deal for the Devonian arthropod fauna of Rhynie. *Entomologia Generalis, Stuttgart*, 11, 91–6.
- Kvacek, Z. (1994) Connecting links between the Arctic Palaeogene and European Tertiary floras. In *Cenozoic Plants and Climates of the Arctic* (eds M.C. Boulter and H.C. Fisher) Springer, Berlin (NATO ASI Series, Volume 127), pp. 251–66.
- La Touche, J.D. (1884) *A Handbook of the Geology of Shropshire*. Edward Stanford, London, 1–99.
- Labandeira, C.C. and Sepkoski, J.J., Jr. (1993) Insect diversity in the Fossil Record. *Science*, 261, 310–15.
- Lakasevitch, E.D., Jarzembowski, E.A. and Coram, R.A. (2001) New true flies (Insecta: Diptera) from the Lower Cretaceous of southern England. *Cretaceous Research*, 22, 451–460.
- Lamont, A. (1947a) Gala–Tarannon beds in the Pentland Hills near Edinburgh. *Geological Magazine*, 84, 193–208.
- Lamont, A. (1947b) Gala–Tarannon beds in the Pentland Hills, near Edinburgh. *Geological Magazine*, 84, 289–303.
- Lamont, A. (1952) Ecology and correlation of the Pentlandian — a new division of the Silurian System in Scotland. *International Geological Congress, Report of the Eighteenth Session, Great Britain 1948*, London, Part 10, pp. 27–32.
- Lamont, A. (1955) Scottish Silurian Chelicerata. *Transactions of the Royal Society of Edinburgh*, 16, 200–16.
- Lang, W.H. (1937) On the plant remains from the Downtonian of England and Wales. *Philosophical Transactions of the Royal Society of London, Series B*, 227, 245–91.
- Lang, W.D. and Spath, L.F. (1926) The Black Marl of Black Ven and Stonebarrow, in the Lias of the Dorset coast. *Quarterly Journal of the Geological Society of London*, 82, 144–87.
- Lang, P.J., Scott, A.C. and Stephenson, J. (1995) Evidence of plant–arthropod interactions from the Eocene Branksome Sand Formation, Bournemouth, England: introduction and description of leaf mines. *Tertiary Research*, 15, 145–74.
- Latham, M. H. (1932) Scottish Carboniferous Ostracoda. *Transactions of the Royal Society of Edinburgh, Earth Sciences*, 57, 352–95.
- Latreille, P.A. (1796) *Précis des Caracteres des Insectes Disposes dans un Ordre Naturel*, F.Bourdeaux, Brive, 210 pp.
- Laurie, M. (1892) On some eurypterid remains from the upper Silurian rocks of the Pentland hills. *Transactions of the Royal Society of Edinburgh*, 37, 151–61.
- Laurie, M. (1893) The anatomy and relationships of the Eurypteridae. *Transactions of the Royal Society of Edinburgh*, 37, 509–28.

- Laurie, M. (1899) On a Silurian scorpion and some additional remains from the Pentland hills. *Transactions of the Royal Society of Edinburgh*, 39, 575–90.
- Lawson, J.D. (1977) *Mortimer Forest Geological Trail*, Nature Conservancy Council, London, 16 pp.
- Lawson, J.D. and White D.E. (1989) The Ludlow Series in the Ludlow area. In *A Global Standard for the Silurian System* (eds C.H. Holland and M.G. Bassett), National Museum of Wales, Geological Series, 9, 73–90.
- Leary, R. L. (1980) *Labriscorio alliedensis*: a new Carboniferous scorpion from Rock Island County, Illinois. *Journal of Paleontology*, 54, 1255–7.
- Leeder, M. R. (1974) Lower Border Group (Tournaisian) fluvio-deltaic sedimentation and palaeogeography of the Northumberland basin. *Proceedings of the Yorkshire Geological Society*, 40, 129–80.
- Lhwyd, E. 1699. *Lithophylacii Britannici ichnographia. Sive Lapidum aliorumque Fossilium Britannicorum singulari figura insignium, quotquot hactenus vel ipse invenit vel ab amicis accepit, Distributio Classica: Scrinii sui lapidarii Repertorium cum locis singulorum natalibus exhibens. Additis rariorum aliquot figuris aere incis; cum Epistolis ad Clarissimos Viros de quibusdam circa marina Fossilia & Stirpes minerales praesertim notandis*. First Edition. Printed for the subscribers, London, 139 pp.
- Liengjaren, M., Costa, L. and Downie, C. (1980) Dinoflagellate cysts from the Upper Eocene–Lower Oligocene of the Isle of Wight. *Palaeontology*, 23, 475–99.
- Lightbody, R. (1869) Notes on the Geology of Ludlow. *Geological Magazine*, 6, 353–5.
- Lister, T.R. (1970) A monograph of the acritarchs and chitinozoa from the Wenlock and Ludlow Series of the Ludlow and Millichope areas. Part 1. Shropshire. *Palaeontographical Society Monograph*, 124 (528), 100 pp.
- Lovelock, C.E. (1998) The Sedimentary Environments and Biofacies of the Silurian Inlier at Lesmahagow, Midland Valley of Scotland. Unpublished PhD thesis, University of Edinburgh.
- Lukashevich, E.D., Coram, R.A., Jarzembowski, E.A. (2001) New true flies (Insecta: Diptera) from the Lower Cretaceous of southern England. *Cretaceous Research*, 22, 451–60.
- Lumsden, G.I. and Wilson, R.B. (1961) The stratigraphy of the Archerbeck Borehole, Canonbie, Dumfriesshire. *Bulletin of the Geological Survey of Great Britain*, 18, 1–89.
- Lumsden, G.I., Tulloch, W, Howells, M.F. and Davies, A. (1967) The Geology of the Neighbourhood of Langholm. *Memoir of the Geological Survey of Great Britain (Scotland)*. HMSO, Edinburgh. viii + 255 pp.
- Lynch, M. (1999) The age and relationships of major animal phyla. *Evolution*, 53, 319–25.
- MacGregor, A.R. (1968) *Fife and Angus Geology*, Blackwood, Edinburgh and London, 266 pp.
- Maclaren, C. (1839) *A Sketch of the Geology of Fife and the Lothians. Including Detailed Descriptions of Arthur's Seat and the Pentland Hills*. A. and C. Black, Edinburgh, xv + 235 pp.
- MacNaughton, R.B., Cole, J.M., Dalrymple, R.W., Braddy, S.J., Briggs, D.E.G. and Lukie, T.D. (2002) First steps on land: Arthropod trackways in Cambrian–Ordovician eolian sandstone, southeastern Ontario, Canada. *Geology*, 30, 391–4.
- McGill, R.A.R., Hall, A.J., Fallick, A.E. and Boyce, A.J. (1993) The palaeoenvironment of East Kirkton, West Lothian, Scotland: stable isotope evidence from silicates and sulphides, *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 84, 223–37.
- Machin, J. (1971) Plant microfossils from the Tertiary deposits of the Isle of Wight. *New Phytologist*, 70, 851–72.

- Mackie, A. (1980) Sandstone quarrying in Angus — some thoughts on an old craft. *The Edinburgh Geologist*, 8, 14–25.
- Maguire, K., Thompson, J. and Gowland, S. (1996) Dinantian depositional environments along the northern margin of the Solway Basin, UK, Geological Society of London, 107. 163–82
- Manning, P.L. (1993) Palaeoecology of the eurypterids of the Welsh Borderland. Unpublished PhD thesis, University of Manchester.
- Manning, P.A. and Dunlop, J.A. (1995) The respiratory organs of eurypterids. *Palaeontology*, 38, 287–97.
- Marden, J.H. and Kramer, M.G. (1994) Surface skimming stoneflies: A possible intermediate stage in insect flight evolution. *Science*, 266, 427–30.
- Marshall, J.E. (1991) Palynology of the Stonehaven Group, Scotland: evidence for a Mid-Silurian age and its geological implications. *Geological Magazine*, 128, 283–6.
- Marshall, J.E.A., Hausgton, P.D.W. and Hillier, S.J. (1994) Vitrinite reflectivity and the structure and burial history of the Old Red Sandstone of the Midland Valley of Scotland. *Journal of the Geological Society of London*, 151, 425–38.
- Marston, A. (1865) Short geological guide, ten miles around Ludlow. In *Handbook to Ludlow*, 3rd edn, John Evans, Ludlow, pp. 145–68.
- Marston, A. (1870) On the transition beds between the Silurian and the Devonian rocks. *Geological Magazine*, 7, 408–10.
- Martin, D.M. (1991) Organically preserved dinosaur skin: taphonomic and biological implications. *Modern Geology*, 16, 61–8.
- Martinez-Delclòs, X., Nél, A. and Popov, Y.A. (1995) Systematics and functional morphology of *Iberonepa romerali* n. gen and sp., Belostomatidae from the Spanish Lower Cretaceous (Insecta. Heteroptera). *Journal of Paleontology*, 69, 496–508.
- Martini, E. (1972) Die Gattung *Eosphaeroma* (Isopoda) im europäischen Alttertiär. *Senckenbergiana, Lethaea*, 53, 65–79.
- Massoud, Z. (1967) Contribution à l'étude de *Rhyniella praecursor* Hirst & Maulik 1926, Collemboule fossile du Dévonien. *Revue d'Ecologie et Biologie du Sol*, 4, 497–505.
- Meek, F.B. and Worthen, A. H. (1865) Notice of some new types of organic remains from the Coal Measures of Illinois. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 17, 41–5.
- Meyer, H.W. (2003) *The Fossils of Florissant*, Smithsonian Institution Press, Washington DC, 258 pp.
- Miller, C.G. (1995) Ostracode and conodont distribution across the Ludlow/ Pridoli boundary of Wales and the Welsh Borderland. *Palaeontology*, 38, 341–84.
- Miller, C.G. and Aldridge, R.J. (1993) The taxonomy and apparatus structure of the Silurian distomodontid conodont *Coryssognathus* Link & Druce, 1972. *Journal of Micropalaeontology*, 12, 241–55.
- Miller, C.G. and Aldridge, R.J. (1997) *Ozarkodina remscheidensis* plexus conodonts from the upper Ludlow (Silurian) of the Welsh Borderland and Wales. *Journal of Micropalaeontology*, 16, 41–9.
- Miller, H. (1841) *The old Red Sandstone: or New Walks in an old Field*, J. Johnstone, Edinburgh, 275 pp.
- Milner, A.R. and Panchen, A.L. (1973) Geographical variation in the tetrapod faunas of the Upper Carboniferous and Lower Permian. In *Implications of Continental Drift to the Earth Sciences*, (eds D.H. Tarling and S.K. Runcorn), Volume 1, Academic Press, New York, pp. 353–368.

Milner, A.R. and S.E.K. Sequeira, (1994), The temnospondyl amphibians from the Viséan of East Kirkton, West Lothian, Scotland. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 84, 331–61.

Moore, L.R. (1937) The sequence and structure of the Radstock Basin. *Proceedings of the Bristol Naturalists' Society Series 4*, 8, 257–305.

Moore, R.C. (1953–1969) *Treatise on Invertebrate Paleontology*, Geological Society of America, Boulder, Colorado and University of Kansas Press, Lawrence.

Moore, L.R. and Trueman, A.E. (1937) The Coal Measures of Bristol and Somerset. *Quarterly Journal of the Geological Society of London*, 93, 195–240.

Moore, L.R. and Trueman, A.E. (1942) The Bristol and Somerset coalfields with particular reference to their future development. *Proceedings of the South Wales Institute of Engineers*, 57, 180–247, 303–305.

Morris, S.F. (1980) *Catalogue of Type and Figured Specimens of Fossil Crustacea (excl. Ostracoda), Chelicerata, Myriapoda, and Pycnogonida in the British Museum (Natural History)*. British Museum (Natural History), London, 53 pp.

Morrissey, L.B. and Braddy, S.J. (2004) Terrestrial trace fossils from the Lower Old Red Sandstone, southwest Wales. In *The Lower Old Red Sandstone of the Anglo-Welsh Basin* (eds B.P.J. Williams, R.D., Hillier and S.B. Marriott, S.B.), Geological Journal Special Issue, 39, 315–36.

Mostovski, M.B., Jarzembowski, E.A. Coram, W.A. and Ansorge, J. (2000) Curious snipe-flies (Diptera: Rhagionidae) from the Purbeck of Dorset, the Wealden of the Weald and the Lower Cretaceous of Spain and Transbaikalia. *Proceedings of the Geologists' Association*, 111, 153–60.

Mostovski, M.B., Jarzembowski, E.A., and Coram, R. (2003) Horse-flies and athericids (Diptera: Tabanidae and Athericidae) from the Lower Cretaceous of England and Transbaikalia. *Paleontological Journal*, 2, 57–64.

Muller, S.W.M. and Campbell, A. (1954) The relative number of living and fossil species of animals. *Systematic Zoology*, 3, 169–71.

Murchison, R.I. (1835) On the Silurian System of rocks. *Philosophical Magazine*, 7, 46–52.

Murchison, R.I. (1839) *The Silurian System, founded on geological researches in the counties of Salop, Hereford, Radnor, Montgomery, Caermarthen, Brecon, Pembroke, Monmouth, Gloucester, Worcester and Stafford; with descriptions of the coalfields and overlying formations*, 2 vols., John Murray, London, 768 pp.

Murchison, R.I. (1853) On some of the remains in the Bone-Bed of the Upper Ludlow rock. *Quarterly Journal of the Geological Society, London*, 9, 16–17.

Murchison, R.I. (1854) *Siluria*, John Murray, London, xix + 592 pp.

Murchison, R.I. (1856) On the discovery, by Mr Robert Slimon, of fossils in the uppermost Silurian rocks near Lesmahago in Scotland, with observations on the relations of the Palaeozoic strata in that part of Lanarkshire. *Quarterly Journal of the Geological Society, London*, 12, 15–24.

Murchison, R.I. (1872) *Siluria*, 5th edition, John Murray, London, xvii + 566 pp.

Murray, J.W. and Wright, C.A. (1974) Palaeogene Foraminiferida and palaeoecology, Hampshire and Paris Basins and the English Channel. *Palaeontology, Special Paper*, 14, 1–129.

Murray, J.W. (1992) Palaeogene and Neogene. In *Atlas of Palaeogeography and Lithofacies* (eds J.C.W. Cope, J.K. Ingham and P.F. Rawson). Memoir of the Geological Society, London, 13, 141–7.

- Mussett, A.E. (1986) ^{40}Ar – ^{39}Ar step-heating ages of the Tertiary igneous rocks of Mull, Scotland. *Journal of the Geological Society of London*, 143, 887–96.
- Mykura, W. (1986) Pentland Hills. In *Lothian Geology. An Excursion Guide* (eds. A.D. McAdam and E.N.K. Clarkson), Scottish Academic Press, Edinburgh, pp. 161–73.
- Mykura, W. (1991) Old Red Sandstone. In *Geology of Scotland*. (ed. G.Y. Craig). Third edition. The Geological Society of London, pp. 297–346.
- Mykura, W and Smith, J.D.D. (1962) Silurian. In *The Geology of the Neighbourhood of Edinburgh* (eds G. H. Mitchell and W Mykura), *Memoir of the Geological Survey*, Sheet 32 (Scotland).
- Nairn, A.E.M. (1956) The Lower Carboniferous Rocks between the Rivers Esk and Annan, Dumfriesshire. *Transactions of the Geological Society of Glasgow*, 22, 80–93.
- Nei, M. Xu, P. and Glazko, G. (2001) Estimation of divergence times from multi-protein sequences for a few mammalian species and several distantly related organisms. *Proceedings of the National Academy of Sciences, USA*, 98, 2497–502.
- Nel, A. and Jarzembowski, E.A. (1996) Description and revision of Anisozygoptera from the Lower Cretaceous of England (Odonata: Stenophlebiidae, Camptophlebiidae?, Epiophlebiidae, Euthemistidae). *Cretaceous Research*, 17 (1), 87–96.
- Nel, A. and Jarzembowski, E.A. (1998) New protomyrmeleontid dragonflies from the Lower Cretaceous of Southern England. (Insecta, Odonata, Archizygoptera). *Cretaceous Research*, 19 (3/4), 393–402.
- Nel, A., Martinez-Delclòs, X., Paicheler, J.-C. and Henrotay, M. (1993) Les “Anisozygoptera” fossiles. Phylogenie et classification (Odonata), *Martinia*, Numero hors-serie, 3, Societe Francaise d'Odonatologie, Bois-d'Arcy, France.
- Norton, R.A., Bonamo, P.M., Grierson, J.D. and Shear, W.A. (1989) Fossil mites from the Devonian of New York State. In *Progress in Acarology. Vol. 1*. (ed. G.P. Channabasavanna and C.A. Viraktamath), Oxford & IBH Publishing, New Delhi, pp. 271–7.
- Nye, E., Feist-Burkhardt, S., Horne, D.J., Ross, A.J. and Whittaker, J.E. (2008) The palaeoenvironment associated with a partial Iguanodon skeleton from the Upper Weald Clay (Barremian, Early Cretaceous) at Smokejacks Brickworks (Ockley, Surrey, UK), based on palynomorphs and ostracods. *Cretaceous Research*, 29, 417–44.
- Ogg, J.G., Hasenyager, W and Wimbledon, W.A. (1995) Jurassic–Cretaceous boundary:Portland–Purbeck magnetostratigraphy and possible correlation with the Tethyan Realm. *Geobios*, 17, 519–27.
- Oppel, A. (1857) *Die Juraformation: Englands, Frankreichs und des Südwestlichen Deutschlands*, Verlag von Ebner und Seubert, Stuttgart, 857 pp.
- Page, D. (1856a for 1855) On the *Pterygotus* and *Pterygotus* Beds of Great Britain. *Report of the British Association for the Advancement of Science*, Glasgow, 89–91.
- Page, D. (1856b) *Advanced Text Book of Geology*, 1st edn, Blackwood and Sons, Edinburgh, 325 pp.
- Page, D (1859) *Advanced Text Book of Geology*, 2nd edn, Blackwood and Sons, Edinburgh, 403 pp.
- Palmer, D., Johnston, J.D., Dooley, T and Maguire, K. (1989) The Silurian of Clew Bay, Ireland: part of the Midland Valley of Scotland? *Journal of the Geological Society of London*, 146, 385–8.
- Palmer, D. (2000) Birk Knowes. In *British Silurian Stratigraphy* (R J. Aldridge, David J. Siveter, Derek J. Siveter, P.D. Lane, D. Palmer and N.H. Woodcock), GCR Series, No. 19, Joint Nature Conservation Committee, Peterborough, 176–80.

- Paterson, I.B., McAdam, A.D. and MacPherson, K.A.T. (1998) Geology of the Hamilton District. *Memoir of the Geological Survey*, Sheet 23W (Scotland), 94 pp.
- Peach, B.N. (1882a) On some fossil myriapods from the Lower Old Red Sandstone of Forfarshire. *Proceedings of the Royal Physical Society of Edinburgh*, 7, 117–88.
- Peach, B.N. (1882b) On some new Crustacea from the Lower Carboniferous rocks of Eskdale and Liddesdale. *Transactions of the Royal Society of Edinburgh*, 30, 73–91.
- Peach, B.N. (1882c) On some new species of fossil scorpions from the Carboniferous rocks of Scotland and the English Borders, with a review of the genera *Eoscorpius* and *Mazonia* of Messrs. Meek and Worthen. *Transactions of the Royal Society of Edinburgh*, 30, 397–412.
- Peach, B.N. (1888) On a new eurypterid from the Upper Coal Measures of Radstock, Somersetshire. *Proceedings of the Royal Physical Society of Edinburgh*, 9, 438–45.
- Peach, B.N. (1899) On some new myriapods from the Palaeozoic rocks of Scotland. *Proceedings of the Royal Physical Society of Edinburgh*, 14, 113–26.
- Peach, B.N. (1908) *Monograph on the Higher Crustacea of the Carboniferous rocks of Scotland*. Memoir of the Geological Survey of Great Britain (Palaeontology), 82 pp.
- Peach, B.N. and Horne, J. (1899) The Silurian Rocks of Britain. I, Scotland. *Memoir of the Geological Survey*, xviii + 749 pp.
- Peach, B. N. and Horne, J. (1903) The Canonbie coalfield: its geological structure and relations to the Carboniferous rocks of the north of England and central Scotland. *Transactions of the Royal Society of Edinburgh*, 40, 835–78.
- Petrulevicius, J.F. and Jarzembowski, E.A. (2004) The first hangingfly (Insecta: ecoptera: Bittacidae) from the Cretaceous of Europe. *Journal of Paleontology*, 78, (6), 1198–201.
- Petrunkévitch, A. I. (1913). A monograph of the terrestrial Paleozoic Arachnida of North America. *Transactions of the Connecticut Academy of Arts and Sciences*, 18, 1–137.
- Petrunkévitch, A. (1949) A study of Palaeozoic Arachnida. *Transactions of Connecticut Academy of Arts and Sciences* (New Haven), 37, 60–315.
- Petrunkévitch, A. (1955) Arachnida. In *Treatise on Invertebrate Paleontology. Arthropoda Part 2. Cbelicerata* (ed R.C. Moore). University of Kansas Press and Geological Society of America, Lawrence, pp. 42–162.
- Phillips, E.R. and Carroll, S. (1995) The petrology and provenance of the basal Lower Old Red Sandstone exposed between Rithery Head and Dunnicaer, Stonehaven, Scotland. *British Geological Survey, Technical Report WG/95/21*.
- Phillips, J. (1848) The Malvern Hills, compared with the Palaeozoic districts of Abberley, Woolhope, May Hill, Tortworth and Usk. *Memoir of the Geological Survey of the United Kingdom*, 2, (1), 1.
- Plotnick, R.E. (1999) Habitat of Llandoveryan–Lochkovian eurypterids. In *Paleocommunities: a Case Study from the Silurian and Lower Devonian* (eds A.J. Boucot and J.D. Lawson), Cambridge University Press, Cambridge, 106–31.
- Pocock, R. I. (1911) A monograph of the terrestrial Carboniferous Arachnida of Great Britain. *Monograph of the Palaeontographical Society*, London, 84 pp.
- Pocock, R.W. (1930) The Petalocrinus Limestone horizon at Woolhope. *Quarterly Journal of the Geological Society*, London, 86, 50–62.

- Poinar, G. and J. (1999) *The Amber Forest, a Reconstruction of a vanished World*, Princeton University Press, 239p.
- Pollard, J.E. (1985) Coprolites and ostracods from the Dinantian of Foulden, Berwickshire, Scotland. *Transactions of the Royal Society of Edinburgh, Earth Sciences*, 76, 49–51.
- Pollard, J.E. and Hardy, P.G. (1991) Trace fossils from the Westphalian D of Writhlington Geological Nature Reserve, nr. Radstock, Avon. *Proceedings of the Geologists' Association*, 102, 169–78.
- Pollitt, J.R., Braddy, S.J. and Dunlop, S.A. (2004) The phylogenetic position of the extinct arachnid order Phalangiotarbida Haase, 1890, with reference to the fauna from Writhlington Geological Nature Reserve (Somerset, UK). *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 94, 243–59.
- Prokop, J., Smith, R., Jarzembowski, E.A. and Nel, A. (2006) New homiopterids from the late Carboniferous of England (Insecta; Palaeodictyoptera). *Comptes-Rendu Palevol*, 5 (7), 876–73.
- Radley, J.D. (2005) Derived fossils in the southern English Wealden (non-marine early Cretaceous): a review. *Cretaceous Research*, 26 (4), 657–64.
- Ramsey, A.C., Aveline, W.T., Bristow, H.W. and James, T.E. (1850) Geological map, 1:63, 000 Old Series, sheet 56 SE, Radnor. British Geological Survey, Nottingham.
- Rasnitsyn, A.P. and Quicke, D.L.J.(eds) (2002) *History of Insects*, Kluwer Academic Publishers, Dordrecht, xii+517 pp.
- Rasnitsyn, A.P., Jarzembowski, E.A. and Ross, A.J. (1998) Wasps (Insecta: Vespida = Hymenoptera) from the Purbeck and Wealden (Lower Cretaceous) of southern England and their biostratigraphical and palaeoenvironmental significance. *Cretaceous Research*, 19, 329–91.
- Rawson, P F. (1992) Cretaceous. In *Geology of England and Wales* (eds P McL. D. Duff and A.J. Smith), The Geological Society, London, pp. 355–88.
- Ray, J. (1710) *Historia Insectorum*, A. & J. Churchill, London, 400 pp.
- Reid, C. (1897) *The Geology of the Country around Bognor*. Memoirs of the Geological Survey of Great Britain (England and Wales), HMSO, London, 12 pp.
- Reid, E.M. and Chandler, M.E.J. (1926). *Catalogue of Cainozoic Plants in the Department of Geology*. 1, *The Bembridge Flora*. British Museum (Natural History), London, 206 pp.
- Remy, A. Selden, P.A. and Trewin, N.H. (1999). Gli strati di Rhynie. In *Alle Radici della Storia Naturale d'Europa* (ed. G. Pinna) Jaca Book spA, Milan, pp. 28–35.
- Rice, C.M., Ashcroft, W.A., Batten, D.J., Boyce, A.J., Caulfield, J.B.D., Fallick, A.E., Hole M.J., Jones, E., Pearson, M.J., Rogers, G., Saxton, J.M., Stuart, F.M., Trewin, N.H. and Turner, G. (1995) A Devonian auriferous hot spring system, Rhynie, Scotland. *Journal of the Geological Society, London* 152, 229–50.
- Richardson, J.B. and Lister, T.R. (1969) Upper Silurian and Lower Devonian spore assemblages from the Welsh Borderland and South Wales. *Palaeontology*, 12, 201–252.
- Richardson, J.B. and MacGregor, D.C. (1986) Silurian and Devonian spore zones of the Old Red Sandstone continent and adjacent regions. *Geological Survey of Canada Bulletin*, No 364, 79 pp.
- Richardson, J.B. and Rasul, S.M. (1990) Palynofacies in a late Silurian regressive sequence in the Welsh Borderland and Wales. *Journal of the Geological Society, London*, 147, 765–86.

- Richardson, J.B., Ford, J.H. and Parker, J. (1984) Miospores, correlation and age of some Scottish Lower Old Red Sandstone sediments from the Sytrathmore region (Fife and Angus). *Journal of Micropaleontology*, 3, 109–24.
- Ritchie, A. (1968) *Lanarkopterus dolichoschelus* (Størmer) gen. nov., a mixopterid eurypterid from the Upper Silurian of the Lesmahagow and Hagshaw Hills inliers, Scotland. *Scottish Journal of Geology*, 4, 317–38.
- Ritchie, A. (1985) *Ainiktozoon loganense* Scourfield, a protochordate? from the Silurian of Scotland. *Alcheringa*, 9, 117–42.
- Robertson, G. (1983) The geology of the North Esk Inlier. In *Field Guide for meeting on The Autecology of Silurian Organisms*. The Palaeontological Association, Glasgow.
- Robertson, G. (1986) The North Esk Inlier. In *Lothian Geology. An Excursion Guide* (eds A.D. McAdam and E.N.K. Clarkson). Scottish Academic Press, Edinburgh, pp. 174–85.
- Robertson, G. (1989) A palaeoenvironmental interpretation of the Silurian rocks in the Pentland Hills, near Edinburgh, Scotland. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 80, 127–41.
- Robertson, G. (1999) Upper Llandovery fossil associations in the Pentland Hills, near Edinburgh, Scotland. In *Paleocommunities: a Case Study from the Silurian and Lower Devonian* (eds A.J. Boucot and J.D. Lawson), Cambridge University Press, Cambridge, 408–18.
- Robison, R.A. and Kaesler, R.L. (1987) Phylum Arthropoda. In *Fossil Invertebrates* (eds R.S. Boardman, A.H. Cheetham and A.J. Rowell), Blackwell Scientific Publications, Palo Alto, USA, 713 pp.
- Robinson, J. E. (1980) Ostracod faunas. In *Geology of the Country around Bellingham* (eds D.V. Frost and D.W. Holliday). Memoir of the Institute of Geological Science, HMSO, London, pp. 51–6
- Robinson, R.A.J., Rennie, C.A. and Oliver, G.J.H. (1998) Palaeocurrent data, source terrains and the palaeogeographic setting of the Dalradian block: the Stonehaven–Dunnottar Groups revisited. *Tectonic Studies Group Annual General Meeting* (St Andrews), p. 71.
- Rohdendorf, B.B. and Rasnitsyn, A.P. (1980) Istoricheskoe razvitiye klasse nasekomykh. *Trudy paleontologicheskogo instituta akademii nauk SSSR*, 175, 1–269.
- Rolfe, W.D.I. (1960) The Silurian inlier of Carmichael, Lanarkshire. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 64, 245–60.
- Rolfe, W.D.I. (1962a [for 1961]) The geology of the Hagshaw Hills Silurian Inlier, Lanarkshire. *Transactions of the Edinburgh Geological Society*, 18, 240–69.
- Rolfe, W.D.I. (1962b) Grosser morphology of the Scottish Silurian phyllocarid crustacean *Ceratiocaris papilio* Salter in Murchison. *Journal of Paleontology*, 36, 912–32.
- Rolfe, W.D.I. (1973a) Excursion 14. The Hagshaw Hills Silurian inlier. In *Excursion Guide to the Geology of the Glasgow District* (ed. B.J. Bluck), Geological Society of Glasgow, pp. 105–19.
- Rolfe, W.D.I. (1973b) Excursion 15. Silurian arthropod and fish assemblages from Lesmahagow, Lanarkshire. In *Excursion guide to the geology of the Glasgow District* (ed. B.J. Bluck), Geological Society of Glasgow, pp. 119–26.
- Rolfe, W.D.I. (1980) Early invertebrate terrestrial faunas. In *The Terrestrial Environment and the Origin of Land Vertebrates* (ed. A.L. Panchen), *Systematics Association Special Volume*, No. 15, Academic Press, London and New York, pp. 117–57.

- Rolfe, W.D.I. (1992a) Excursion 21, Hagshaw Hills. In *Geological Excursions around Glasgow and Girvan* (eds J.D. Lawson and D.S. Weedon), Geological Society of Glasgow, pp. 265–87.
- Rolfe, W.D.I. (1992b) Excursion 22, Lesmahagow Hills. In *Geological Excursions around Glasgow and Girvan* (eds J.D. Lawson and D.S. Weedon), Geological Society of Glasgow, pp. 280–7.
- Rolfe, W.D.I. and Beckett, E.C.M. (1984) Autecology of Silurian Xiphosurida, Scorpionida, Cirripedia, and Phyllocarida. In *Autecology of Silurian Organisms* (eds M.G. Bassett and J.D. Lawson), *Special Papers in Palaeontology*, 32, 27–37.
- Rolfe, W.D.I. and Burnaby, T.P. (1961) A preliminary study of the Silurian ceratiocaridids (Crustacea: Phyllocarida) of Lesmahagow, Scotland. *Breviora*, 149, 1–9.
- Rolfe, W.D.I. and Edwards, V.A. (1979) Devonian Arthropoda (Trilobita and Ostracoda excluded). In *The Devonian System. A Palaeontological Association International Symposium*. (ed. M.R. House, C.T. Scrutton and M.G. Bassett), *Special Papers in Palaeontology*, 23, 325–9.
- Rolfe, W.D.I., Durant, G.P., Brand, W.J., Baird, W.J., Chaplin, C., Paton R.L. and Reekie, R.J. (1994 [for 1993]) The East Kirkton Limestone, Viséan, West Lothian, Scotland: introduction and stratigraphy, *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 84, 177–88.
- Romano, M and Whyte, M. (2001) Xiphosurid behaviour as deduced from tracks of Middle Jurassic age, Cleveland Basin, Yorkshire (abs.) *Palaeontological Association Newsletter*, A8, 29.
- Ross, A.J. (2005) INTAS Project 03–51–4367; Unpublished report, Natural History Museum (Palaeontology), London.
- Ross, A.J. and Cook, E. (1995) The stratigraphy and palaeontology of the Upper Weald Clay (Barremian) at Smokejacks Brickworks, Ockley, Surrey, England. *Cretaceous Research*, 16, 705–16.
- Ross, A.J. and Jarzembowski, E.A. (1996). A Provisional checklist of Fossil Insects from the Purbeck Group of Wiltshire. *Wiltshire Archaeological and Natural History Magazine*, 89, 106–15.
- Ross, A.J., Jarzembowski, E.A. and S.J. Brooks (2000) The Cretaceous and Cenozoic record of insects (Hexapoda) with regard to global change. In *Biotic Response to Global Change: the last 145 million years*, (S.J. Culver and P.F. Rawson), Natural History Museum and Cambridge University Press, pp. 288–302.
- Runnegar, B. (1982) A molecular-clock date for the origin of the animal phyla. *Lethaia*, 15, 199–205.
- Runnegar, B. (1986) Molecular palaeontology. *Palaeontology*, 29, 1–24.
- Sahagian, D., Pinous, O., Olfieriev, A. and Zakharov, V. (1996) Eustatic Curve for the Middle Jurassic–Cretaceous based on Russian Platform and Siberian Stratigraphy: Zonal resolution. *American Association of Petroleum Geologists Bulletin*, 80, 1433–58.
- Salter, J.W. (1855) Descriptions of a few species from Wales and Westmoreland, referred to in the foregoing work. In *A Synopsis of the Classification of the British Lower Palaeozoic Rocks, with a Detailed Systematic Description of the British Palaeozoic Fossils in the Geological Museum of the University of Cambridge* (A. Sedgwick and F. McCoy), Appendix A. Deighton, Bell and Co., Cambridge, pp. i–viii.
- Salter, J.W. (1856) On some new Crustacea from the uppermost Silurian rocks. *Quarterly Journal of the Geological Society of London*, 12, 26–34.
- Salter, J.W. (1857) On some new Palaeozoic starfishes. *Annals and Magazine of Natural History*, 2nd series, 20, 321–34.
- Salter, J.W. (1859a) Description of the species of *Pterygotus*. In I. *On the anatomy and affinities of the genus Pterygotus*, II. *Description of the species of Pterygotus* (T.H. Huxley and J.W. Salter), *Memoirs of the Geological Survey of the United Kingdom*, 1, 1–10.

Kingdom, Monograph 1, 37–105.

- Salter, J.W. (1859b) On some new species of *Eurypterus*; with notes on the distribution of species. *Quarterly Journal of the Geological Society of London*, 15, 229–36.
- Salter, J.W. (1860) On new fossil Crustacea from the Silurian rocks. *Annals and Magazine of Natural History*, 5, 153–62.
- Salter, J.W. (1863) On some species of *Eurypterus* and allied forms. *Quarterly Journal of the Geological Society of London*, 19, 81–7.
- Salter, J.W. (1873) *A Catalogue of the Collection of Cambrian and Silurian Fossils in the Geological Museum of the University of Cambridge*, University Press, Cambridge, xlviii + 204 pp.
- Schuster, R. and I.J. Schuster. (1977) Ernährungs- and fortpflanzungsbiologische Studien an der Milbenfamilie Nanorchestidae (Acari, Trombidiformes). *Zoologischer Anzeiger*, 199, 89–94.
- Schram, F.R. (1979) British Carboniferous Malacostraca. *Fieldiana Geology*, 40, 1–129.
- Schram, F.R. (1981) Late Palaeozoic crustacean communities. *Journal of Paleontology*, 55, 126–37.
- Schram, F.R. (1983) Lower Carboniferous biota of Glencartholm, Eskdale, Dumfriesshire. *Scottish Journal of Geology*, 19, 1–15.
- Schram, F.R., Vonk, R. and Hof, C.H.J. (1997) Mazon Creek Cycloidea. *Journal of Paleontology*, 71, 261–84.
- Scott, A.C. (1979) The ecology of Coal Measure floras from northern Britain. *Proceedings of the Geologists' Association*, 90 (3), 97–116.
- Scott, A.C., Brown, R., Galtier, J. and Meyer-Berthaud, B. (1994, [for 19931] Fossil plants from the Viséan of East Kirkton, West Lothian, Scotland, *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 84, 249–60.
- Scourfield, D.J. (1920a) On a new type of crustacean. *Reports of the British Association*, 1919, 110.
- Scourfield, D.J. (1920b) On a new type of crustacean. *Reports of the British Association*, 1920, 261.
- Scourfield, D.J. (1926) On a new type of crustacean from the Old Red Sandstone (Rhynie Chert Bed, Aberdeenshire) — *Lepidocaris rhyniensis*, gen. et sp. nov. *Philosophical Transactions of the Royal Society of London B* 214, 153–187.
- Scourfield, D.J. (1937) An anomalous fossil organism, possibly a new type of chordate, from the Upper Silurian of Lesmahagow, Lanarkshire — *Ainiktozoon loganense* gen. et sp. nov. *Proceedings of the Royal Society of London*, series B, 121, 533–47.
- Scourfield, D.J. (1940a) 'Two new and nearly complete specimens of young stages of the Devonian fossil crustacean *Lepidocaris rhyniensis*. *Proceedings of the Linnean Society of London*, 152, 290–8.
- Scourfield, D.J. (1940b) The oldest known fossil insects (*Rhyniella praecursor* Hirst & Maulik). Further details from additional specimens. *Proceedings of the Linnean Society of London* 152, 113–31.
- Scourfield, D.J. (1940c) The oldest known fossil insect. *Nature*, 145, 799–801.
- Scudder, S.H. (1885) Arachnoidea, Spinnen, Skorpione. In *Zittel's Handbuch der Paläontologie. I Abt. (in full, please)* Vol. 2. (ed. A. Zittel), pp. 732–46.
- Scudder, S.H. (1885) Systematische Übersicht der fossilen Myriapoden, Arachnoiden, and Insekten. In *Handbuch der Paläontologie* (ed. K.A. Zittel), R. Oldenberg, München, pp. 721–831

- Scudder, S.H. (1886) Systematic review of our present knowledge of fossil insects, including myriapods and arachnids. *Bulletin of the United States Geological Survey*, 5, 1–128.
- Scudder, S.H. (1887) Myriapodes, Arachnides, Insectes. In *Traite de Paléontologie* (eds K.A. Zittel and C.E. Barrois), O. Dion, Paris, pp. 720–833.
- Sedgwick, A. and M'Coy, F. (1855) *A Synopsis of the Classification of the British Lower Palaeozoic Rocks, with a Detailed Systematic Description of the British Palaeozoic Fossils in the Geological Museum of the University of Cambridge*, Deighton, Bell and Co., Cambridge, viii + 661 pp.
- Selden, P.A. (1981) Functional morphology of the prosoma of *Baltoeurypterus tetragonophthalmus* (Fischer) (Chelicerata: Eurypterida). *Transactions of the Royal Society of Edinburgh*, 72, 9–48.
- Selden, P.A. (1984) Autecology of Silurian eurypterids. In *Autecology of Silurian Organisms* (eds M.G. Bassett and J.D. Lawson), *Special Papers in Palaeontology*, 32, 39–54.
- Selden, P.A. (1986) A new identity for the Silurian arthropod *Necrogammarus*. *Palaeontology*, 29, 629–31.
- Selden, P.A. (2001a) Terrestrialisation of Animals. In *Palaeobiology II*, (eds D.E.G. Briggs and P.R. Crowther, P.R.) Blackwell, p.71–4.
- Selden, P.A. (2001b) Eocene spiders from the Isle of Wight with preserved respiratory structures. *Palaeontology*, 44 (4), 695–729.
- Selden, P.A. and Edwards, D. (1989) Colonisation of the land. In *Evolution and the Fossil Record* (ed. K.C. Allen and D.E. Briggs), Smithsonian Institution Press, Washington, D.C., pp 122–52.
- Selden, P.A. and Siveter, D.J. (1987) The origin of the limuloids. *Lethaia*, 20, 383–92.
- Selden, P. A. and Siveter, D. J. (2001) *New Fossil Arachnids of Carboniferous (Westphalian D) Age from Somerset, UK, and the Restoration of Deformed Fossils*. Abstracts, Third International Conference on Trilobites and their Relatives, Oxford, 2001, Palaeontological Association, p. 27.
- Selden, P.A. and White, D.E. (1983) A new Silurian arthropod from Lesmahagow, Scotland. In *Trilobites and Other Arthropods: Papers in Honour of Professor H.B. Whittington FRS*, (eds D.E.G. Briggs and P.D. Lane), *Special Papers in Palaeontology*, 30, 41–50.
- Selden, P.A., Shear, W.A. and Bonamo, P M. (1991) A spider and other arachnids from the Devonian of New York, and reinterpretations of Devonian Araneae. *Palaeontology*, 34, 241–81.
- Selden, P.A., Corronca, J.A. and Hünicken, M.A. (2005) The true identity of the supposed giant fossil spider Megarachne. *Biology Letters*, 1, 44–8.
- Sellwood, B.W. and McKerrow, W.S. (1974) Depositional environments in the lower part of the Great Oolite Group of Oxfordshire and north Gloucestershire. *Proceedings of the Geologists' Association*, 85, 198–210.
- Seward, A.C. and Holtum, R.E. (1924) Tertiary Plants from Mull. In *Tertiary and Post-Tertiary Geology of Mull, Loch Aline and Oban* (eds E.B. Bailey, C.T. Clough, W.B. Wright, J.E. Richey and G.V. Wilson *et al.*). Memoir of the Geological Survey of Great Britain, HMSO, Edinburgh, pp. 67–90.
- Shear, W.A. (1991) The early development of terrestrial ecosystems. *Nature*, 351, 283–9.
- Shear, W.A., (1994 [for 1993]) Myriapodous arthropods from the Viséan of East Kirkton, West Lothian, Scotland, *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 84, 309–16.

- Shear, W.A. and Kukalova-Peck, J. (1989) The ecology of Paleozoic terrestrial arthropods: the fossil evidence. *Canadian Journal of Zoology*, 68, 1807–34.
- Shear, W.A. and Selden, P.A. (1995) *Eoarthropleura* (Arthropoda, Arthropleurida) from the Silurian of Britain and ten Devonian of North America. *Neus Jabrbuch für Geologie and Paläontologie, Abhandlungen*, 196, 345–347.
- Shear, W.A. and Selden, P.A. (1999) Rustling in the undergrowth: animals in early terrestrial ecosystems. In *Plants Invade the Land: Evolutionary and Environmental Perspectives* (eds P.G. Gensel and D. Edwards), Columbia University Press, pages?.
- Shear, W.A., Bonamo, P.M., Grierson, J.D., Rolfe, W.D.I., Smith, E.L. and Norton, R.A. (1987a) Early land animals in North America: evidence from Devonian age arthropods from Gilboa, New York. *Science, Washington* 224, 492–4.
- Shear, W.A., Selden, P.A., Rolfe, W.D.I., Bonamo, P.M. and Grierson, J.D. (1987b). New terrestrial arachnids from the Devonian of New York (Arachnida, Trigonotarbitida). *American Museum Novitates*, 2901, 1–74.
- Shear, W.A., Jeram, A.J. and Selden, P.A. (1998) Centiped legs (Arthropoda, Chilopoda, Scutigermorpha) from the Silurian and Devonian of Britain and the Devonian of North America. *American Museum Novitates*, 3231, 1–16.
- Simms, M.J., Chidlaw, N., Morton, N., and Page, K.N. (2004) *British Lower Jurassic Stratigraphy*. Geological Conservation Review Series, No. 30, Joint Nature Conservation Committee, Peterborough, 458 pp.
- Simpkins, K. (1968) Aspects of the Quaternary history in central Caernarvonshire, Wales. Unpublished PhD thesis, University of Reading.
- Simpkins, K. (1974) The late-glacial deposits at Glanllynau, Caernarvonshire. *New Phytologist*, 73, 605–18.
- Siveter, David J. (1978) The Silurian. In *A Stratigraphical Index of British Ostracoda* (eds R.H. Bate and E. Robinson). *Geological Journal Special Issue*, 8, 57–100.
- Siveter, David J. (1989) Ostracodes. In *A Global Standard for the Silurian System* (eds M.G. Bassett and C.H. Holland). National Museum of Wales, Geological Series, No. 9, Cardiff, pp. 252–67.
- Siveter, David, J. (2000a) Ree Burn–Glenbuch Loch. In *British Silurian Stratigraphy* (R.J. Aldridge, David J. Siveter, Derek J. Siveter, P.D. Lane, D. Palmer and N.H. Woodcock), GCR Series, No. 19, Joint Nature Conservation Committee, Peterborough, 314–18.
- Siveter, David, J. (2000b) Lyne Water and Lynslie Burn. In *British Silurian Stratigraphy* (R.J. Aldridge, David J. Siveter, Derek J. Siveter, P.D. Lane, D. Palmer and N.H. Woodcock), GCR Series, No. 19, Joint Nature Conservation Committee, Peterborough, 319–23.
- Siveter, David, J. (2000c) The Whitcliffe. In *British Silurian Stratigraphy* (R.J. Aldridge, David J. Siveter, Derek J. Siveter, P.D. Lane, D. Palmer and N.H. Woodcock), GCR Series, No. 19, Joint Nature Conservation Committee, Peterborough, 345–50.
- Siveter, David, J. (2000d) Church Hill Quarry. In *British Silurian Stratigraphy* (R.J. Aldridge, David J. Siveter, Derek J. Siveter, P.D. Lane, D. Palmer and N.H. Woodcock), GCR Series, No. 19, Joint Nature Conservation Committee, Peterborough, 357–61.
- Siveter, David, J. (2000e) Perton Road and Quarry. In *British Silurian Stratigraphy* (R.J. Aldridge, David J. Siveter, Derek J. Siveter, P.D. Lane, D. Palmer and N.H. Woodcock), GCR Series, No. 19, Joint Nature Conservation Committee, Peterborough, 386–90.
- Siveter, David, J. (2000f) Ludford Lane and Ludford Corner. In *British Silurian Stratigraphy* (R.J. Aldridge, David J. Siveter, Derek J. Siveter, P.D. Lane, D. Palmer and N.H. Woodcock), GCR Series, No. 19, Joint Nature Conservation

Committee, Peterborough, 432–37.

Siveter, David J., Owens, R.M. and Thomas, A.T. (1989) *Silurian Field Excursions: a Geotraverse across Wales and the Welsh Borderland*, National Museum of Wales, Geological Series, No. 10, Cardiff, 133 pp.

Siveter, D.J., Williams, M. and Waloszek, D. (2001) A Phosphatocopid Crustacean with Appendages from the Lower Cambrian. *Science*, 293, p. 479–81.

Skelhorn, R.R. (1969) *The Tertiary Igneous Geology of the Isle of Mull*, Geologists' Association guide, No.20, Benham & Co, Colchester..

Smith, E.J. A'Court, (1874) Discovery of the remains of plants and insects, Isle of Wight, England. *Nature*, London, 11, p. 88.

Smith, D.M. (2000a) The evolution of plant-insect interactions: insights from the fossil record. Unpublished PhD, University of Arizona, Tucson.

Smith, D.M. (2000b) Beetle taphonomy In a recent ephemeral lake, southeastern Arizona. *Palaios*, 15, 152–60

Smith R.F. (1973) *History of Entomology*. Annual Reviews, Palo Alto, California, 517 pp.

Smith, R.D.A. and Ainsworth R.B. (1989) Hummocky cross-stratification in the Downtonian of the Welsh Borderland. *Journal of the Geological Society, London*, 146, 897–900.

Smith, A., Braddy, S.J., Marriott, S.B. and Briggs, D.E.G. (2001) Arthropod trackways from the Lower Devonian of South Wales: a functional analysis of producers and their behaviour, *Palaeontological Association Newsletter*, 48, 32.

Smithson, T.R. and Rolfe, W.D.I. (1991), *Westlothiana* gen nov: naming the earliest known reptile, *Scottish Journal of Geology*, 26, 137–8.

Smithson, T.R., Carroll, R.L. Panchen A.L. and Andrews, S.M. (1994 [for 1993]), *Westlothiana lizziae* from the Viséan of East Kirkton, West Lothian, Scotland, and the amniote stem. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 84, 383–412.

Snodgrass, R.E. (1938) Evolution of the Annelida, Onychophora and Arthropoda, *Smithsonian Miscellaneous Collections*, 57, 1–159.

Soper, N.J., England, R.W., Snyder, D.B. and Ryan, P.D. (1992) The lapetus suture zone in England, Scotland and eastern Ireland; a reconciliation of geological and deep seismic data. *Journal of the Geological Society, London*, 149, 697–700.

Spencer, W.K. (1914–1940) The Palaeozoic Asterozoa. *Paleontographical Society Monograph*, Part 1 (1914), 67 (328), 1–56; Part 2 (1916), 69 (335), 57–108; Part 3 (1918), 70, (338), 109–68; Part 4 (1919), 71 (342), 169–96; Part 5 (1922), 74 (349), 197–236; Part 6 (1924), 76 (356), 237–324; Part 7 (1927), 79 (366), 325–88; Part 8 (1930), 82 (376), 389–436; Part 9 (1934), 87 (394), 437–94; Part 10 (1940), 94 (420), 495–540.

Squirrell, H.C. and Tucker, E.V. (1960) The geology of the Woolhope inlier (Herefordshire). *Quarterly Journal of the Geological Society, London*, 116, 139–86.

Squirrell, H.C. and Tucker, E.V. (1967) Woolhope and Gorsely. In *The Silurian Inliers of the south-eastern Welsh Borderland* Q.D. Lawson, M.L.K. Curtis, H.C. Squirrel, E.V. 'Ducker and V.G. Walmsley, first edition), *Geologists' Association Guide*, 5, 8–21.

Squirrell, H.C. and Tucker, E.V. (1982) Woolhope and Gorsely. In *The Silurian Inliers of the south-eastern Welsh Borderland* O.D Lawson, M.L.K. Curtis, H.C. Squirrell, E.V. Tucker and V.G. Walmsley, 2nd edition). *Geologists'*

- Stamp, L.D. (1923) The base of the Devonian, with special reference to the Welsh Borderland. *Geological Magazine*, 60, 276–82, 331–6, 367–72, 385–410.
- Stephenson, J. and Scott, A.C. (1992) The geologic history of insect-related plant damage. *Terra Nova*, 4, 542–52.
- Stockwell, S. A. (1989) Revision of the phylogeny and higher classification of scorpions (Chelicerata). PhD thesis, University of California, Berkeley. Published by University Microfilms International, Ann Arbor, Michigan.
- Størmer, L. (1934 [for 1933J) Merostomata from the Downtonian Sandstone of Ringerike, Norway. *Skrifter utgitt av det Norsk Videnskapsakademi i Oslo. Matematisk-naturvidenskapelig Klasse*, 10, 125 pp.
- Størmer, L. (1935) *Dictyocaris* Salter, a large Crustacean from the Upper Silurian and Downtonian. *Norsk geologisk tidsskrift*, 15, 267–98.
- Størmer, L. (1936 [for 1934]) *Mixopterus dolichoschelus* (Laurie M.S), a Downtonian eurypterid from Scotland. *Summary Progress of the Geological Survey*, 41–6.
- Størmer, L. (1952) Phylogeny and taxonomy of fossil horseshoe crabs. *Journal of Paleontology*, 26, 630–9.
- Størmer, L. (1955) Merostomata. In *Treatise on Invertebrate Paleontology, P, Arthropoda 2*, (ed. R.C. Moore), University of Kansas and Geological Society of America, Lawrence, Kansas, pp. 4–21.
- Størmer, L. (1963) *Gigantoscrapio willsi*, a new scorpion from the Lower Carboniferous of Scotland and its associated preying microorganisms. *Skr. Norsk Vidensk.-Akad. Mat. Naturvidensk. Kl.* 8: 1–171.
- Størmer, L. (1973) Arthropods from the Lower Devonian (Lower Emsian) of Alken an der Mosel, Germany. Part 3, Eurypterida, Hughmilleridae. *Senckenbergiana Lethaea*, 54, 119–205.
- Størmer, L. (1976) Arthropods from the Lower Devonian (Lower Emsian) of Aiken-an-der-Mosel, Germany. Part 5: Myriapoda and additional forms, with general remarks on fauna and problems regarding invasion of the land by arthropods. *Senckenbergiana Lethaea* 57, 87–183.
- Størmer, L. (1977) Arthropod invasion of land during late Silurian and Devonian times. *Science, Washington* 197, 1362–4.
- Størmer, L. and Waterston, C.D. (1968) *Cyrtoctenus* gen. nov., a large Palaeozoic arthropod with pectinate appendages. *Transactions of the Royal Society of Edinburgh*, 68, 63–104.
- Strickland, H.E. (1853) On the distribution and organic contents of the Ludlow Bone Bed in the districts of Woolhope and May Hill etc. *Quarterly Journal of the Geological Society, London*, 9, 8–12.
- Sukatsheva, I.D. and Jarzembowski, E.A. (2001) Fossil caddisflies (Insecta: Trichoptera) from the Early Cretaceous of southern England II. *Cretaceous Research*, 22(6), 685–94.
- Sutherland, S.J.E. (1994) Ludlow chitinozoans from the type area and adjacent regions. *Palaeontographical Society Monograph*, 148 (591), 104 pp.
- Sutton, M.D. (2008) Tomographic techniques for the study of exceptionally preserved fossils. *Proceedings of the Royal Society (Biological Sciences)*, 275, 1587–93.
- Sutton, M.D., Briggs, D.E.G., Siveter, D.J. and Siveter D.J. (2001) An exceptionally preserved vermiform mollusc from the Silurian of England. *Nature*, 410, 461–3.

- Sweet, W.C. and Donoghue, P.C.J. (2001) Conodonts: Past, Present and Future. *Journal of Paleontology*, 75 (6), 1174–84. Symonds, W.S. (1859) The Old Red Sandstone of Herefordshire. *Edinburgh New Philosophical Journal, New Series*, 9, 232–45.
- Tait, D. (1925) Notice of a shrimp-bearing limestone in the Calciferous Sandstone Series at Granton, near Edinburgh. *Transactions of the Edinburgh Geological Society*, 11, 251–8.
- Tetlie, O.E. (2006a) Eurypterida (Chelicerata) from the Welsh Borderlands, England. *Geological Magazine*, 143, 723–35.
- Tetlie, O.E. (2006b) Two new Silurian species of *Eurypterus* (Chelicerata: Eurypterida) from Norway and Canada and the phylogeny of the genus. *Journal of Systematic Palaeontology*, 4, 397–412.
- Tetlie, O.E. and Braddy, S.J. (2004 [for 2003]) The first Silurian chasmataspid, *Loganamaraspis dunlopi* gen. et sp. nov. (Chelicerata: Chasmataspidida) from Lesmahagow, Scotland, and its implications for eurypterid phylogeny. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 94, 227–34.
- Tetlie, O.E., Anderson, L.I. and Poschmann, M. (2007) *Kiaeropterus* (Eurypterida; Stylonurina) recognised from the Silurian of the Pentland Hills. *Scottish Journal of Geology*, 43, 41–50.
- Thirlwall, M.F. (1981) Implications for Caledonian plate tectonic models of chemical data from volcanic rocks of the British Old Red Sandstone. *Journal of the Geological Society, London*, 138, 123–38.
- Thomas, B.A. and Cleal, C.J. (1994) Plant fossils from the Writhlington Geological Nature Reserve. *Proceedings of the Geologists' Association*, 105, 15–32.
- Thompson, R.N., Morrison, M.A., Dickin, A.P. *et al.* (1986) Two contrasting styles of interaction between basic magmas and continental crust in the British Tertiary Volcanic Province. *Journal of Geophysical Research*, 91, B6, 5985–97.
- Tillyard, R.J. (1917) *The Biology of Dragonflies*, Cambridge University Press, Cambridge, 396 pp.
- Tillyard, R. J. (1933) The panorpoid complex in the British Rhaetic and Lias. British Museum (Natural History), London.
- Tillyard, R. (1928) Some remarks on the Devonian fossil insects from the Rhynie Chert beds, Old Red Sandstone. *Transactions of the Entomological Society of London*, 76, 65–71.
- Tipper, J.C.T. (1975) Lower Silurian animal communities — three case histories. *Lethaia*, 8, 287–99.
- Tipper, J.C.T. (1976) The stratigraphy of the North Esk Inlier, Midlothian. *Scottish Journal of Geology*, 12, 15–22.
- Todd, J.A. (1991) A forest-litter animal community from the Upper Carboniferous?: notes on the association of animal body fossils with plants and lithology in the Westphalian D Coal Measures at Writhlington, Avon. *Proceedings of the Geologists' Association*, 102, 179–84.
- Tollerton, V.P. Jr. (1989) Morphology, taxonomy, and classification of the order Eurypterida Burmeister, 1843. *Journal of Paleontology*, 63, 642–57.
- Torrens, H.S. (1974) Standard Zones of the Bathonian. *Mémoires du Bureau de Recherche géologique et minière*, 75, 581–604.
- Trägårdh, I. (1909) *Speleorchestes*, a new genus of saltatorial Trombibiidae, which lives in termites' and ants' nests. *Arkiv fur Zoologie*, 6 (2), 1–14.
- Traquair, R.H. (1881) Report on fossil fishes collected by the Geological Survey of Scotland in Eskdale and Liddesdale. Part 1: Ganoidei. *Transactions of the Royal Society of Edinburgh*, 30, 15–71.

- Traquair, R.H. (1884a) Description of a fossil shark (*Ctenacanthus costellatus*) from the Lower Carboniferous rocks of Eskdale, Dumfriesshire. *Geological Magazine*, 1, 3–8.
- Traquair, R.H. (1884b) Description of a new species of *Elonichthys* from the Lower Carboniferous rocks of Eskdale, Dumfriesshire. *Geological Magazine*, 1, 8–10.
- Traquair, R.H. (1888a) Notes on Carboniferous Selachii. *Geological Magazine*, 5, 81–6.
- Traquair, R.H. (1888b) Further notes on Carboniferous Selachii. *Geological Magazine*, 5, 101–4.
- Traquair, R.H. (1890) Observations on some fossil fishes from the Lower Carboniferous rocks of Eskdale. *Annals and Magazine of Natural History*, 6, 491–4.
- Trewin, N.H. (1994a) A draft system for the identification and description of arthropod trackways. *Palaeontology*, 37, 811–23.
- Trewin, N.H. (1994b) Depositional environment and preservation of biota in the Lower Devonian hot-springs of Rhynie, Aberdeenshire, Scotland. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 84, 433–42.
- Trewin N.H. (2002) Geological history and structure of Scotland. In *The Geology of Scotland*, Geological Society of London, 4th edition, p.1–26.
- Trewin, N.H. and Davidson, R.G. (1996) An early Devonian lake and its associated biota in the Midland valley of Scotland. *Transactions of the Royal Society of Edinburgh, Earth Sciences*, 86, 233–46.
- Trewin, N.H. and Rice, C.M. (1992) Stratigraphy and sedimentology of the Devonian Rhynie chert locality. *Scottish Journal of Geology*, 28, 37–47.
- Trewin, N.H. and Rice, C.M. (eds.) (2004) The Rhynie hot-spring system: geology, biota and mineralisation. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 94, 283–529.
- Trewin, N.H. and Thirlwall, M.F. (2002) Old Red Sandstone. In *The Geology of Scotland* (ed. N.H. Trewin), 4th edition. The Geological Society of London, pp. 213–49.
- Turner, S. (1973) Siluro-Devonian thelodonts from the Welsh Borderland. *Journal of the Geological Society of London*, 129, 557–84.
- Tuxen, S.L. (1967) The entomologist J.C. Fabricius. *Annual Review of Entomology*, 12, 1–14
- Venables, E.M. (1929) On the London Clay of the Bognor District. *Proceedings of the Geologists' Association*, 40, 41–51.
- Venables, E.M. (1962) The London Clay of Bognor Regis. *Proceedings of the Geologists' Association*, 73, 245–71.
- Venables, E.M. and Taylor, H.E. (1963) An insect fauna of the London Clay. *Proceedings of the Geologists' Association*, 73, 273–9.
- van Konijnenburg-van Cittert, J.H.A. and Schmeissner, S. (1999) Fossil insect eggs on Lower Jurassic plant remains from Bavaria (Germany). *Palaeogeography, Palaeoclimatology, Palaeoecology*, 152, 215–23.
- von Sternberg, K. (1820–1838) *Versuch einer geognostisch-botanischen Darstellung der Flora der Vorwelt*, Leipzig, 2 volumes.
- Vršanský, P., Ansorge, J. (2007) Lower Jurassic cockroaches (Insecta: Blattaria) from Germany and England. *African Invertebrates*, 48, (1), 103–26.

- Vyalov, O.S. and Sukacheva, I.A. (1976) The fossil larval cases of caddisflies (Insecta, Trichoptera) and their stratigraphic significance. [In Russian] *Paleontologiya i Biostratigrafiya Mongolii, Trudy Sovmestnoy Sovetsko-Mongol'skoy Paleontologiya Expeditsii*, 6, 169–230.
- Walkden, G.M., Irwin, J.R. and Fallick, A.E. (1994 [for 1993]) *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 84, 213–21.
- Walker, E.F. (1985) Arthropod ichnofauna of the Old Red Sandstone at Dunure and Montrose, Scotland. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 76, 287–97.
- Walton, E.K. and Oliver, G.J.H. (1991) Lower Palaeozoic — stratigraphy. In *The Geology of Scotland* (ed. G.Y. Craig), 3rd edn, The Geological Society of London, pp. 161–93.
- Wang, D.Y.-C., Kumar, S. and Hedges, S.B. (1998) Divergence time estimates for the early history of animal phyla and the origin of plants, animals and fungi. *Proceedings of the Royal Society, London*, B266, 163–71.
- Warrington, G., Audley-Charles, M.G., Elliot, R.E., Evans, W.B., Ivimey-Cook, H.C. *et al.* (1980) *A Correlation of Triassic Rocks in the British Isles*, Geological Society of London, Special Report, 13, 78pp.
- Waterston, C.D. (1957) The Scottish Carboniferous Eurypterida. *Transactions of the Royal Society of Edinburgh*, 63, 265–88.
- Waterston, C.D. (1960) The median abdominal appendage of the Silurian eurypterid *Slimonia acuminata* (Salter). *Palaeontology*, 3, 245–59.
- Waterston, C.D. (1962) *Pagea sturrocki* gen. et sp. nov., a new eurypterid from the Old Red Sandstone of Scotland. *Palaeontology*, 5, 137–48.
- Waterston, C.D. (1964) Observations on pterygotid eurypterids. *Transactions of the Royal Society of Edinburgh*, 66, 9–33.
- Waterston, C.D. (1975) Gill structures in the Lower Devonian eurypterid *Tarsopterella scotica*. *Fossils and Strata*, 4, 241–54.
- Waterston, C.D. (1979) Problems of functional morphology and classification in stylonuroid eurypterids (Chelicerata, Merostomata), with observations on the Scottish Silurian Stylonuroidea. *Transactions of the Royal Society of Edinburgh*, 70, 251–322.
- Waterston, C.D. (1985) Chelicerata from the Dinantian of Foulden, Berwickshire, Scotland. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 76, 25–33.
- Waterston, C.D., Oelofsen, B.W. and Oosthuizen, R.D.F. (1985) *Cyrtoctenus wittebergensis* sp. nov. (Chelicerata: Eurypterida), a large sweep-feeder from the Carboniferous of South Africa. *Transactions of the Royal Society of Edinburgh*, 76, 339–58.
- Watkins, R. (1979) Benthic community organisation in the Ludlow Series of the Welsh Borderland. *Bulletin of the British Museum (Natural History), Geology*, 31, 175–280.
- Watson, D.M.S., Weston, T.S., White, E.I. and Toombs, H.A. (1948) Guide to excursion C16. *Vertebrate Palaeontology*. 16th International Geological Congress, Great Britain, London, pp. 2–3.
- Watson, N. (2001) Illustrations. *Kent Geologists' Group Newsletter*, 7.
- Watson, N. (in press) illustrations. *Wealden News*, 8.

- Watts, W.A. (1970) Tertiary and interglacial floras in Ireland. In *Irish Geographical Studies* (eds N. Stephens and R.E. Glasscock), The Queen's University Belfast, pp. 17–33.
- Wellman, C.H. (1993) A land plant microfossil assemblage of Mid Silurian age from the Stonehaven Group, Scotland. *Journal of Micropalaeontology*, 12, 47–66.
- Wellman, C.H. (1995) 'Phytodebris' from the Scottish Silurian and Lower Devonian continental deposits. *Review of Palaeobotany and Palynology*, 84, 255–79.
- Wellman, C.H. and Richardson, J.B. (1993) Terrestrial plant microfossils from the Silurian inliers of the Midland Valley of Scotland. *Palaeontology*, 36, 155–93.
- Westoll, T.S. (1951) The correlation of continental vertebrate-bearing rocks. The vertebrate-bearing strata of Scotland. *Report for the International Geological Congress, London (18th session)*, 1948 II, 5–21.
- Westoll, T.S. (1977) Northern Britain. In *A Correlation of the Devonian Rocks in the British Isles*, (M.R. House, J.B. Richardson, W.G. Chaloner, J.R.L. Allen, C.H. Holland and T.S. Westoll). *Geological Society of London, Special Report*, 8, pp. 66–93.
- Wellman, C.H. (1993) A land plant microfossil assemblage of Mid Silurian age from the Stonehaven Group, Scotland. *Journal of Micropalaeontology*, 12, 47–66.
- West, I.M. and El-Shahat, A. (1985) Dinosaur footprints and early correlation of Purbeck bivalve beds. *Proceedings of the Dorset Natural History and Archaeological Society*, 106, 169–70.
- Whalley, P.E.S. (1983) A survey of Recent and fossil cicadas (Insecta, Hemiptera–Homopodera) in Britain. *Bulletin of the British Museum Natural History (Geology)*, 37, 139–47.
- Whalley, P.E.S. (1985) The systematics and palaeogeography of the Lower Jurassic insects of Dorset, England. *Bulletin of the British Museum of Natural History*, 39 (3), 107–89.
- Whalley, P and Jarzembowski, E. A. (1981) A new assessment of Rhyniella, the earliest known insect, from the Devonian of Rhynie, Scotland. *Nature*, 291, 317.
- Whitaker, J.H. McD. (1962) The geology of the area around Leintwardine, Herefordshire. *Quarterly Journal of the Geological Society, London*, 118, 319–51.
- Whitaker, J.H. McD. (1994) Silurian basin slope sedimentation and mass movement in the Wigmore Rolls area, central Welsh Borderland. *Quarterly Journal of the Geological Society, London*, 151, 27–40.
- White, E.I. (1927) The fish-fauna of the Cementstones of Foulden, Berwickshire. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 55: 255–87.
- White, D.E. and Lawson, J.D. (1989) The Plidoli Series in the Welsh Borderland and south-central Wales. In *A Global Standard for the Silurian System* (eds C.H. Holland and M. G. Bassett). National Museum of Wales, Geological Series, No. 9, Cardiff, pp. 131–41.
- White, E.I. (1927) The fish-fauna of the Cementstones of Foulden, Berwickshire. *Transactions of the Royal Society of Edinburgh*, 55, 255–87.
- White, E.I. (1950) The vertebrate faunas of the Lower Old Red Sandstone of the Welsh Borders. *Bulletin of the British Museum of Natural History, Geology*, 1, 51–89.
- Whittington, H.B. (1980) The significance of the fauna of the Burgess Shale, Middle Cambrian, British Columbia. *Proceedings of the Geologists' Association, London*, 91, pp. 127–48.

- Whyte, M.A. (1994 [for 1993]), Scottish Carboniferous fresh-water limestones in their regional setting, *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 84, 239–48.
- Wilby, P.R. (2004) Geological map, 1: 50, 000 Series, sheet 197, Hay-on-Wye. *British Geological Survey*.
- Wilf, P and Labandeira, C.C. (1999) Response of Plant–Insect Associations to Paleocene–Eocene Warming, *Science*, 284, 2153–4.
- Wilf, P., Labandeira, C.C., Kress, W.J., Staines, C.L., Windsor, D.M., Allen, A.L. and Johnson, K.R. (2000) Timing the radiation of leaf beetles: hispines on gingers from the latest Cretaceous to the Recent. *Science*, 289, 291–4.
- Williams, L.A. (1983) Deposition of the Bear Gulch Limestone: a Carboniferous Plattenkalk from central Montana. *Sedimentology*, 30, 843–60.
- Wills, M.A., (2001) How good is the fossil record of arthropods? An assessment using stratigraphic congruence of cladograms. *Geological Journal*, 36, 187–210.
- Wills, M.A., Briggs, D.E.G. and Fortey, R.A. (1997) Evolutionary correlates of arthropod tagmosis: scrambled legs. In *Arthropod Relationships* (ed. R.A. Fortey and R.H. Thomas), Systematics Association Special Volume Series 55, Chapman and Hall, London, 383 pp.
- Wilson, D., Davies, J.R., Fletcher, C.J.N. and Smith, M. (1990) Geology of the South Wales Coalfield, Part VI, the country around Bridgend, 2nd edition. *Memoirs of the British Geological Survey* (Sheet 262). HMSO, London.
- Wilson, H.M. and Anderson, L.I. (2001) Palaeozoic Archidesmida (Diplopoda: Helminthomorpha) from Scotland: the Most Ancient Millipedes known. *Palaeontological Association Newsletter*, 48, 36.
- Wilson, H.M. and Anderson, L.I. (2004) Morphology and taxonomy of Paleozoic millipedes (Diplopoda: Chilognatha: Archipolypoda) from Scotland. *Journal of Paleontology*, 78, 169–84.
- Wilson, R.C.L., Drury, S.A. and J.L. Chapman (2000) *The Great Ice Age*, Routledge, London, 267 pp.
- Wood, S.P. and Rolfe, W.D.I. (1985) Introduction to the palaeontology of the Dinantian of Foulden, Berwickshire, Scotland. *Transactions of the Royal Society of Edinburgh, Earth Sciences*, 76, 1–6.
- Wood, S.P., Panchen, A.L. and Smithson, T.R. (1985) A terrestrial fauna from the Scottish Lower Carboniferous. *Nature*, 314, 355–6.
- Woodcock, N. and Strachan, R. (eds) (2000) *Geological History of Britain and Ireland*, Blackwell, Oxford, 423 pp.
- Woodward, H. (1864a) On a nearly perfect specimen of *Eurypterus lanceolatus* (Salter) from the Upper Ludlow rock at Lesmahagow, Lanarkshire. *Geological Magazine*, 1, 107–14.
- Woodward, H. (1864b) Descriptions of some new Palaeozoic Crustacea. *Geological Magazine*, 1, 196–200.
- Woodward, H. (1865a) On some new species of Crustacea belonging to the Order Eurypterida. *Quarterly Journal of the Geological Society, London*, 21, 4826.
- Woodward, H. (1865b) On a new genus of Eurypterida from the Lower Ludlow rock of Leintwardine, Shropshire. *Quarterly Journal of the Geological Society, London*, 21, 490–2.
- Woodward, H. (1866–1878) A monograph of the British fossil Crustacea belonging to the order Merostomata. *Palaeontographical Society (Monographs)*. Part 1 (1866), 19 (83), 1–44; Part 2 (1869), 22 (95), 45–70; Part 3 (1872a), 112 (25) 71–120; Part 4, (1872b), 28 (119), 121–80; Part 5, (1878), 32 (145), 181–263.

- Woodward, H. (1868a) On a new limuloid crustacean (*Neolimulus fakatus*) from the Upper Silurian of Lesmahagow, Lanarkshire. *Geological Magazine*, 5, 1–3.
- Woodward, H. (1868b) On some new species of Crustacea from the Upper Silurian rocks of Lanarkshire etc.; and further observations on the structure of *Pterygotus*. *Quarterly Journal of the Geological Society, London*, 24, 289–96.
- Woodward, H. (1870) On *Necrogammarus salweyi* (H. Woodward), an amphibious Crustacean from the Lower Ludlow of Leintwardine. *Transactions of the Woolhope Naturalists' Field Club*, 271–2.
- Woodward, H. (1871a [for 1870]) On a new species of *Eurypterus*, *Eurypterus Brodiei* (H. Woodward), from Perton, near Stoke Edith, Herefordshire. *Transactions of the Woolhope Naturalists' Field Club*, 276–79.
- Woodward, H. (1871b) On a new species of *Eurypterus* (*E. Brodiei*), from Perton, near Stoke Edith, Herefordshire. *Quarterly Journal of the Geological Society, London*, 27, 261–3.
- Woodward, H. (1871c) On some new phyllopodous crustaceans from the Palaeozoic rocks. *Geological Magazine*, 8, 104–7.
- Woodward, H. (1872c) Notes on some British Palaeozoic Crustacea belonging to the order Merostomata. *Geological Magazine*, 9, 433–41.
- Woodward, H. (1879) On the occurrence of Branchipus (or Chirocephalus) in a fossil state, associated with Eosphaeroma and with numerous insect remains, in the Eocene freshwater (Bembridge) limestone of Gurnet Bay, Isle of Wight. *Quarterly Journal of the Geological Society London*, 35, 342–50.
- Woodward, H. (1887) On a new species of *Eurypterus* from the Lower Carboniferous shales of Glencartholm, Eskdale, Scotland. *Geological Magazine*, 4, 481–4.
- Woodward, H. and Dixon, E.E.L. (1904) Long excursion to the Ludlow district. *Proceedings of the Geologists' Association*, 18, 487–91.
- Woodward, J. (1729) *An Attempt Towards a Natural History of the Fossils of England*, Fayram, Senex, Osborn & Longman, London, 2 volumes.
- Wray, G.A., Levington, J.S. and Shapiro, L.H. (1996) Molecular evidence for deep Precambrian divergences among metazoan phyla. *Science*, 274, 568–72.
- Wright, T. (1865) Report on Miss Holland's collection of Lias fossils. *Proceedings of the Cotteswold Naturalists' Field Club*, 3, 153–6.
- Wright, J.K. and Cox, B.M. (2001) British Upper Jurassic Stratigraphy, GCR, No. 21, Joint Nature Conservation Committee, Peterborough.
- Wyatt, R.J. (2002). Stonesfield, Oxfordshire. In *British Middle Jurassic Stratigraphy*, (eds B.M. Cox and M.G. Sumbler), GCR Series, No. 26, Joint Nature Conservation Committee, Peterborough.
- Xiao, S., Zhang, Y. and Knoll, A.H. (1998) Three-dimensional preservation of algae and animal embryos in a Neoproterozoic phosphorite, *Nature*, 391, p. 553
- Zangerl, R. and Richardson, E.S. (1963) The paleoecological history of two Pennsylvanian black shales. *Fieldiana Geological Memoir*, 4, 1–352.
- Zeuner, F.E. (1939) *Fossil Orthoptera Ensifera*, British Museum (Natural History), London.

Zeuner, F.E. (1941) The Eocene insects of the Ardtun Beds, Isle of Mull, Scotland. *Annals and Magazine of Natural History (series 11)*, 7, 82–100.

Zeuner, F.E. (1962) Fossil insects from the Lower Lias of Charmouth, Dorset. *Bulletin of the British Museum of Natural History (Geology)*, 7, 153–71.

Ziegler, P.A. (1990) *Geological Atlas of Western and Central Europe*, Shell Internationale Petroleum Maatschappij BY, The Hague.

[References](#)