

Palaeoenvironmental Bibliography

Allen, M. and Lodwick, L. 2017. Agricultural strategies in Roman Britain. In Allen, M., Lodwick, L., Brindle, T., Fulford, M. and Smith, A. *The Rural Economy of Roman Britain. Volume 2: The rural economy of Roman Britain*. Britannia Monograph series No. 30. The society for the promotion of Roman Studies, London: 142-177

Allen, M. 2017. Pastoral Farming. In Allen, M., Lodwick, L., Brindle, T., Fulford, M. and Smith, A. *The Rural Economy of Roman Britain. Volume 2: The rural economy of Roman Britain*. Britannia Monograph series No. 30. The society for the promotion of Roman Studies, London: 85-141

Allison, E. 2018. Insect remains from Site 17. In Hart, J. and Alexander, M. Archaeological investigations along the route of the A477 St Clears to Red Roses Road improvement scheme, 2012: a summary report SN 21957 21142 to SN 22675 21552. *Archaeology in Wales* 37-52, 49.

Andrews, P., Timberlake, S. Craddock, B., Gilmour, A., Pickin, J., Roseveare, M, Treasure, E., and Moles, N. 2022. Possible Cistercian Iron Smelting at Cwmystwyth, Ceredigion: Archaeological investigations at Penparc 2020-22. *Archaeology in Wales* 62: 59-72

Ballatyne, R. 2018. Charcoal Report. In Timberlake, S. An archaeological excavation of the pant morcell kerb cairn/kerb circle, Cwmystwyth Mines, Upper Ystwyth Valley, Ceredigion (2016). *Archaeology in Wales* 57-58, 109

Barber, K., Brown, A., Langdon, P. and Hughes, P. 2013. Comparing and cross-validating lake and bog palaeoclimatic records: a review and a new 5,000 year chironomid-inferred temperature record from northern England. *Journal of Paleolimnology* 49(3), 497-512.

Barr, K. 2018. *Prehistoric avian, mammalian and H. sapiens footprint tracks from intertidal sediments as evidence of human palaeoecology*. University of Reading unpublished PhD.

Bell, M. 2007. *Prehistoric coastal communities: the Mesolithic in western Britain*. CBA Research Report 149. York: Council for British Archaeology.

Bell, M, Walker, T and Turner, A. 2025. Fleeting Finds: investigating intertidal discoveries in the Severn Estuary. *Current Archaeology* 418, 28-33.

Bermingham, N. 2016. Animal Bones. In Hopewell, D., A Roman Settlement at Tai Cochion, Llandinan, on Anglesey. *Archaeologia Cambrensis* 165, 78-84.

Bickerdike, H.L., Evans, D.J.A., Stokes, C.R. and Ó Cofaigh, C., 2018. The glacial geomorphology of the Loch Lomond (Younger Dryas) Stadial in Britain: a review. *Journal of Quaternary Science*, 33(1): 1-54.

Britton, G. and Muldner, K. 2013. Stable isotope evidence of saltmarsh economies. In Bell, M. *The Bronze Age in the Severn Estuary*. York: CBA Research Report 172, 263-273

Brown, A. 1977. Clearances and clearings: deforestation in Mesolithic/Neolithic Britain. *Oxford Journal of Archaeology* 16(2): 133-46

Brown, A. 2010. Pollen analysis and planted ancient woodland restoration strategies: a case study from the Wentwood, southeast Wales, UK. *Vegetation History and Archaeobotany*, 19(2), pp.79-90.

Brown, A.G. and Meadows, I., 2000. Roman vineyards in Britain: finds from the Nene Valley and new research. *Antiquity*, 74(285), pp.491-492.

Brown, T.G., Steven R. Davis, S.R., Hatton, J., O'Brien, C., Reilly, F., Taylor, K., Dennehy, E., Lorna O'Donnell, L., Bermingham, N., Mighall, T., Timpany, S., Tetlow, E., Wheeler, J. and Wynne, S. 2016 The Environmental Context and Function of Burnt-Mounds: New Studies of Irish Fulachtaí Fiadh. *Proceedings of the Prehistoric Society* 82, 259-290.

Buckley, S. 2000. *Palaeoecological Investigations of Blanket Mires in Upland Mid-Wales*. Unpublished PhD Thesis, University of Wales Lampeter

Buckley, M., Fraser, S., Herman, J., Melton, N.D., Mulville, J. and Pálsdóttir, A.H. 2014 Species identification of archaeological marine mammals using collagen fingerprinting. *Journal of Archaeological Science* 41, 631-641.

Büntgen, U., Tegel, W., Nicolussi, K., McCormick, M., Frank, D., Trouet, V., Kaplan, J.O., Herzig, F., Heussner, K.U., Wanner, H. and Luterbacher,

Palaeoenvironmental

J., 2011. 2500 years of European climate variability and human susceptibility. *Science*, 331(6017): 578-582.

Burnham, B. and Wachter, J. 1990. *The Small Towns of Roman Britain*. London, Batsford.

Calis, R. 2023. A4226 Road Improvement Scheme, Barry, Vale of Glamorgan. APPENDIX D, Part 1: ANIMAL BONE – Mammal, Bird, and Fish. Unpublished Rubicon Heritage Report.

Candy, I., White, T.S. and Elias, S., 2016. How warm was Britain during the Last Interglacial? A critical review of Ipswichian (MIS 5e) palaeotemperature reconstructions. *Journal of Quaternary Science*, 31(8), pp.857-868.

Carruthers, W. 2018. Charred Plant Remains. In Jones, I., Williams, D., and Williams, S. Early medieval enclosure at Glanfred, near Llandre, Ceredigion. *Archaeologia Cambrensis* 167, 230-233.

Carruthers, W. 2022. Archaeobotany. In Thomas, S. *Archaeological Excavation Analysis: 113-117 Priory Street, Carmarthen, Carmarthenshire*. Unpublished Archaeology Wales Report No. 2146

Carruthers, W. 2023. Charred Plant Remains. In Gilbert, D., and Rees, V. *A4226 Road Improvement Scheme Barry, Vale of Glamorgan APPENDIX E: ENVIRONMENTAL*. Unpublished Rubicon Heritage Report.

Caseldine, A.E. 2013. Pollen evidence from burial 3. In Murphy, K. and Murphy, F., The excavation of two Bronze Age round barrows at Pant y Butler, Llangoedmor, Ceredigion, 2009-10. *Archaeologia Cambrensis* 162, 50-53.

Caseldine, A. 2018 Humans and Landscape, *Internet Archaeology* 48.

Caseldine, A. 2022. The beginnings of agriculture in Wales: the evidence from Gwernvale. In Whittle, A., and Britnell, W. (eds) *The First Stones : Penywyrld, Gwernvale and the Black Mountains Neolithic Long Cairns of South-East Wales*. Oxford, Oxbow Books: 115-155.

Caseldine, A.E. and Elliot, L. 2019. Charred plant remains and charcoal from Roman sites in the Walton Basin. In Britnell, W.J. and Jones, N.W., A landscape revisited: recent work on Roman sites in the Walton Basin, Radnorshire. *Archaeologia Cambrensis* 168, 82-87.

Palaeoenvironmental

Caseldine, A.E. and Griffiths, C.J. 2018. Palaeoenvironmental analysis at the Hindwell Cursus. In Britnell, W.J. and Jones, N.W., *The Dyffryn Lane and Hindwell Neolithic cursuses and other cursus monuments in Wales revisited*. *Archaeologia Cambrensis* 167, 44-48.

Caseldine, A. and Griffiths, C. 2019 The Plant Remains. In Lane, A. and Redknap, M. *Llangorse Crannog. The excavation of an early medieval royal site in the kingdom of Brycheiniog*. Oxbow Books, Oxford: 158-173.

Caseldine, A.E. and Griffiths, C.J. 2013. Palaeoenvironmental evidence. In Hughes, G. and Murphy, K., *Fan Foel round barrow, Mynydd Du, South Wales: archaeological excavation and palaeoenvironmental analysis, 2002-04*. *Archaeologia Cambrensis* 162, 125-135.

Caseldine, A. and Griffiths, C. 2024 Charred plant remains, in M. Shiner and H. Wilson, *Excavations at Portclew Chapel, Freshwater East, Pembrokeshire 2008-9*. *Archaeologia Cambrensis* 173, 193-200

Caseldine, A.E., Griffiths, C.J., Bale, R.J. 2017a. Charred plant remains and charcoal. In Jones, N.W. and Gibson, A.M., *Neolithic palisaded enclosures of Radnorshire's Walton Basin*. *Archaeologia Cambrensis* 166, 59-63.

Caseldine, A., Griffiths, C.J., Giorgi, J.A. and Rackham, J. 2016a. Charred plant remains and charcoal from the 2010 and 2011 excavations. In Hopewell, D., *A Roman Settlement at Tai Cochion, Llandinan, on Anglesey*. *Archaeologia Cambrensis* 165, 83-104.

Caseldine, A., Griffiths, C.J., Jones, S., Peck, I. and Smith, G. 2016b. A Late Post-glacial environmental record and an Early Neolithic intertidal peat land surface at Porth Neigwl, Llyn, North Wales. *Studia Celtica* 50, 1-18.

Caseldine, A., Griffiths, C., and Peck, I. 2017b. Palaeoenvironmental evidence. In Smith, G., Caseldine, A., Griffiths, C., and Peck, I., and Jenkins, D. *An Early Bronze Age burnt mound trough and boat fragment with accompanying palaeobotanical and pollen analysis at Nant Farm, Porth Neigwl, Llŷn Peninsula, Gwynedd*. *Studia Celtica*, 51(1): 24-51

Caseldine, A.E., Griffiths, C.J., Roberts, J.G., Smith, G., and Williams, J. L., 2017c. Land use and environmental history of Waun Llanfair, an

Palaeoenvironmental

upland landscape above Penmaenmawr, North Wales. *Archaeologia Cambrensis* 166, 89-140.

Caseldine, A., Walker, M., James, J., Johnson, S. and Robinson, M. 2022 Palaeoecological Investigations. In. Murphy, K., and Page, N., The discovery and investigation of the Roman road west of Carmarthen. *Archaeologia Cambrensis* 171: 29-72

Chambers, F.M., Mauquoy, D., Gent, A., Pearson, F., Daniell, J.R.G. and Jones, P.S. 2007. Palaeoecology of degraded blanket mire in South Wales: Data to inform conservation management. *Biological Conservation* 137 (2), 197-209

Chambers, F.M., Cloutman, E.W., Daniell, J.R.G., Mauquoy, D. and Jones, P.S. 2013. Long-term ecological study (palaeoecology) to chronicle habitat degradation and inform conservation ecology: an exemplar from the Brecon Beacons, South Wales. *Biodiversity and Conservation* 22: 719-736

Charlton, S., Alexander, M., Collins, M., Milner, N., Mellars, P., O'Connell, T.C., Stevens, R.E. and Craig, O.E. 2016 Finding Britain's last hunter-gatherers: A new biomolecular approach to 'unidentifiable' bone fragments utilising bone collagen. *Journal of Archaeological Science* 73, 55-61.

Charman, D. J., Blundell, A., Chiverrell, R., Hendon, D. and Langdon, P. G. (2006) Compilation of non-annually resolved Holocene proxy climate records: stacked Holocene peatland palaeo-water table reconstructions from northern Britain. *Quaternary Science Reviews* 25, 336–350.

Clark, C.D., Chiverrell, R.C., Fabel, D., Hindmarsh, R.C., Ó Cofaigh, C. and Scourse, J.D., 2021. Timing, pace and controls on ice sheet retreat: an introduction to the BRITICE-CHRONO transect reconstructions of the British–Irish Ice Sheet. *Journal of Quaternary Science* 36(5): 673-680.

Clarke, C. 1999. Palynological investigations of a Bronze Age cist burial from Whitsome, Scottish Borders, Scotland. *Journal of Archaeological Science* 26: 553-560

Coard, R., 2018. Animal Bone. In Davies, J.L. and Driver, T. The Romano-British villa at Abermagwr, Ceredigion: excavations 2010-15. *Archaeologia Cambrensis* 167,197

Palaeoenvironmental

Comeau, R. and Burrow, S. 2021 'Corn-drying kilns in Wales: a review of the evidence'. *Archaeologia Cambrensis*, 170: 111-149

Comeau, R. and Burrow, S. 2021 'Corn-drying kilns in Wales: a gazetteer' [Available in illustrated pdf and Excel formats from ADS archive 'Corn-Drying Kilns in Wales': <https://doi.org/10.5284/1085018>].

Comeau, R. 2021 'Crop processing and early medieval settlement: the evidence for Bayvil, Pembrokeshire'. *Medieval Settlement Research* 36: 61-67

Comeau, R., Shiner, M., and Seaman, A. 2024. Five Mile Lane, the early medieval evidence: discussion. In Gilbert D., Morgan-James R., and Sinnott, S. (eds.) 2024. *A Journey of 6000 Years of History: Archaeological Investigations along the A4226 Five Mile Lane Improvement Scheme*. Red River Archaeology Group Monograph No. 1

Crew, P. and Mighall, T. 2013 The fuel supply and woodland management at a 14th century bloomer in Snowdonia: a multi-disciplinary approach, in J Humphris and T Rehren (eds) *The World of Iron*. London: Archetype: 473–482.

Crew, P. 2022. Crawcwellt Bronze Age Burial and Settlement. *Archaeology in Wales* 62: 25-40

Daffern, N. 2014 Pollen analysis. In Mann, A. and Hurst, D., Buttington Cross, Powys: A Bronze Age Barrow and Post-Roman Grain Processing Site. *Archaeology in Wales*, 137.

Darvill, T., David, A., Griffiths, S., Hart, J., James, H., Murphy, K., and Rackham, J. 2020. *Timeline. The archaeology of the South Wales gas pipeline*. Cirencester, Cotswold Archaeology Monograph 13

Davidson, A., Davies, W., and Gray, M. 2017. A Research Framework for the Archaeology of Wales: Medieval. *A Research Framework for the Archaeology of Wales*.

<https://archaeoleg.org.uk/pdf/review2017/medreview2017.pdf>

Davies, D. and Loader, N.J., 2020. An evaluation of English oak earlywood vessel area as a climate proxy in the UK. *Dendrochronologia*, 64: 125777.

Davies, T. 2019. Culture, Climate, Coulter and Conflict: Pollen Studies From Early Medieval Wales. In Comeau, R. & Seaman, A. (Eds.) *Living off*

Palaeoenvironmental

the Land: Agriculture in Wales c. 400 to 1600 AD. Windgather Press: 174-198.

Davies, T., 2022. War, peace and pollen: examining the landscape of later medieval Wales. *Medieval Settlement Research*, 37: 22-39.

Davies, T. 2022b. *Brecon Beacons Palaeoenvironmental Assessment*. Unpublished report to Brecon Beacons National Park Authority.

Davies, T., Rippon, S., Seaman, A. 2018. Manifestations of Empire: Palaeoenvironmental analysis and the end of Roman Britain. *Medieval Settlement Research* 33: 92-3

Davis, O., 2017, December. Filling the gaps: the Iron Age in Cardiff and the Vale of Glamorgan. In *Proceedings of the Prehistoric Society* 83: 325-356)

Dinnis, R., Pate, A. and Reynolds, N. 2016. Mid-to-Late Marine Isotope Stage 3 mammal faunas of Britain: a new look. *Proceedings of the Geologists' Association* 127, 435-444.

Doriga, I., 2021 Charred Plant Remains in Saunders. B., Neolithic and Romano-British Lowland Farming Practices in North-West Wales: Archaeological investigations along section 3 of the Llangefni Link Road, Ynys Môn. *Archaeology in Wales* 61: 7-40

Faillace, K., Madgwick, R. 2019. *Multi-isotope analysis of human remains from Llangefni College Campus Site Extension - Llangefni, Anglesey*. Prepared for Archaeology Wales Ltd. (Unpublished report)

Faillace, K., Madgwick, R. 2020. *St Athan SMR human osteology and multi-isotope analysis*. Prepared for Black Mountains Archaeology Ltd. (Unpublished report)

Faillace, K., Madgwick, R., and Joyce, R. 2019. *The human bone from Llangefni College Campus Site Extension - Llangefni, Anglesey*. Prepared for Archaeology Wales Ltd. (Unpublished report)

Forster, E. and Charles, M., 2022. Agricultural land use in central, east and south-east England: arable or pasture? In McKerracher, M. and Hamerow, H. (eds), *New Perspectives on the Medieval 'Agricultural Revolution': Crop, Stock and Furrow*. Liverpool: Liverpool University Press: 61-85.

Palaeoenvironmental

Foulds, S.A., Griffiths, H.M., Macklin, M.G. and Brewer, P.A. 2014a Geomorphological records of extreme floods and their relationship to decadal-scale climate change. *Geomorphology* 216: 193-207.

Foulds, S.A., Brewer, P.A., Macklin, M.G., Haresign, W., Betson, R.E. and Rassner, S.M.E. 2014b Flood-related contamination in catchments affected by historical metal mining: An unexpected and emerging hazard of climate change. *Science of the Total Environment* 476-477: 165-180.

Fyfe R.M. and Perez M. 2016. The pollen and non-pollen palynomorphs from the cist samples, in Jones A.M. *Preserved in the Peat: An Extraordinary Bronze Age Burial on Whitehorse Hill, Dartmoor, and its Wider Context*. Oxford: Oxbow Books: 60-62

Garrow, D. and Sturt, F. 2017. *Stepping stones to the Neolithic? Islands, maritime connectivity and the 'western seaways' of Britain, 5000-3500 BC [data-set]*. York: Archaeology Data Service [distributor]
<https://doi.org/10.5284/1016098>

Gearey, B., Hill, T., and Tetlow, E., 2020. Part XX: Pollen assessments. in Kenney, J., McGuinness, N., Cooke, R. and Rees, C. *Parc Cybi Holyhead. Final reports on Excavations. Volume 3: Specialist Reports*: 620-654.

Gibbard, P.L., Hughes, P.D. and Rolfe, C.J., 2017. New insights into the Quaternary evolution of the Bristol Channel, UK. *Journal of Quaternary Science*, 32(5): 564-578.

Gidney, L. 2017. Burnt Bone. In Jones, N.W. and Gibson, A.M., Neolithic palisaded enclosures of Radnorshire's Walton Basin. *Archaeologia Cambrensis* 166: 59

Gilbert D., Morgan-James R., and Sinnott, S. (eds.) 2024. *A Journey of 6000 Years of History: Archaeological Investigations along the A4226 Five Mile Lane Improvement Scheme*. Red River Archaeology Group Monograph No. 1.

Gilchrist, R., 1988. A reappraisal of Dinas Powys: local exchange and specialized livestock production in 5th-to 7th-century Wales. *Medieval Archaeology*, 32(1): 50-62.

Glasser, N.F., Davies, J.R., Hambrey, M.J., Davies, B.J., Gheorghiu, D.M., Balfour, J., Smedley, R.K. and Duller, G.A.T., 2018. Late Devensian

Palaeoenvironmental

deglaciation of south-west Wales from luminescence and cosmogenic isotope dating. *Journal of Quaternary Science*, 33(7): 804-818.

Grant, I., and Jones, N. 2023. Excavations in advance of the Four Crosses bypass, Powys 2010. *Archaeologia Cambrensis* 172: 33-85

Grant, F. 2018. Palaeoenvironmental Assessment. In Davies, J.L. and Driver, T. The Romano-British villa at Abermagwr, Ceredigion: excavations 2010-15. *Archaeologia Cambrensis* 167: 197-199

Gregory, R.A., Rutherford, M., and Druce, D. 2018. Archaeological and Palaeoenvironmental investigation along the Burbo Bank extension offshore wind farm, onshore export cable, Denbighshire, North Wales SJ 036 825 to SJ 021 734. *Archaeology in Wales* 57-58: 3-35.

Griffiths, S. (2018). A cereal problem? What the current chronology of early cereal domesticates might tell us about changes in late fifth and early fourth millennium cal BC Ireland and Britain. *Environmental Archaeology*: 73-79.

Griffiths, S., Brown, L., Carlin, N., et al. 2023 Radiocarbon, Big Data and International Heritage. *Radiocarbon*. 2024;66(6):1606-1615.

Griffiths, C.J and Nayling, N. 2019. Wood identifications. In Lane, A, and Redknap, M. *Llangorse Crannog. The excavation of an early medieval royal site in the kingdom of Brycheiniog*. Oxbow Books, Oxford: 148-149.

Griffiths S, Brown L, Carlin N, et al. 2023. Radiocarbon, big data and national heritage. *Radiocarbon*. 2024;66(6):1606-1615.

Grinter, P., 2020. Part XIX.1: Evaluation of plant macrofossils. in Kenney, J., McGuinness, N., Cooke, R. and Rees, C. *Parc Cybi Holyhead. Final reports on Excavations. Volume 3: Specialist Reports*: 514-574

Guest, P., Ma, H., Mion, L., Lamb, A., and Madgwick R. 2023. Feeding the Roman Army in Britain. *Antiquity*: 1-5.

Hadjikoumis, A. 2022. Animal Bones: Mammals and Birds. In Murphy, K. and Hemer, K. (eds.). *Excavation of an early medieval cemetery at St Patrick's Chapel, St Davids, Pembrokeshire. Final Report*. Unpublished report by Dyfed Archaeological Trust: 272-282

Palaeoenvironmental

Harrison, S., Hughes, L., Glasser, N. and Kuras, O., 2021. Late Quaternary solifluction sheets in the British uplands. *Journal of Quaternary Science*: 1162-1173..

Hart, J, Pearson, A., and Reynish, S. 2022 Iron Age and Roman Enclosures, and evidence for early medieval iron processing at Plasdwr, Radyr, Cardiff: Excavations in 2019-20. *Archaeology in Wales* 62: 41-58

Hart, J., Alexander, A., Allison, E., Batchelor, R., Benetto, L., Cobain, S., McSloy, E., and Statsney, P. 2018. Archaeological investigations along the route of the A477 St Clears to Red Roses Road improvement scheme, 2012: A summary report. SN 21957 21142 to SN 22675 21552. *Archaeology in Wales* 57-58: 37-52

Hart, J., Rackham, J., Griffiths, S., and Challinor, D. 2014, Burnt mounds along the Milford Haven to Brecon gas pipeline, 2006-07. *Archaeologia Cambrensis* 163: 133-72.

Haslett, SK and Willis, D. 2022 Exploring the post-glacial history of the cardigan bay coast and sites of sediment accumulation. *Journal of the Ceredigion Historical Society* 19 (2): 1-10.

Hemer, K. 2022. Human Remains. In Murphy, K. and Hemer, K. (eds.). *Excavation of an early medieval cemetery at St Patrick's Chapel, St Davids, Pembrokeshire. Final Report.* Unpublished report by Dyfed Archaeological Trust: 172-181.

Hemer, K. A., Lamb, A. L., Chenery, C. A. and Evans, J. A., 2017. 'A multi-isotope investigation of diet and subsistence amongst island and mainland populations from early medieval western Britain', *American Journal of Physical Anthropology* 162(3): 423-440.

Higbee, L. 2021. Animal bone. In Saunders. B., Neolithic and Romano-British Lowland Farming Practices in North-West Wales: Archaeological investigations along section 3 of the Llangefni Link Road, Ynys Môn. *Archaeology in Wales* 61: 19-20

Hingley, R. 1989. *Rural Settlement in Roman Britain*. London, Seaby.

Historic Environment Group 2020. *Historic Environment and Climate Change in Wales: Sector Adaptation Plan*. Welsh Government Report (<https://cadw.gov.wales/sites/default/files/2020->

[02/Adaptation%20Plan%20-%20FINAL%20WEB%20-%20English%20%281%29.pdf](#) Accessed 04/2/25)

Holmes, M. 2022. Innovation, Technology and Social Change: The Adoption of the Mouldboard Plough and Its Impact on Human–Animal Relationships. In McKerracher, M. and Hamerow, H. (eds), 2022. *New Perspectives on the Medieval 'Agricultural Revolution': Crop, Stock and Furrow*. Liverpool: Liverpool University Press: 87-107.

Hopewell, D. 2016. Shells. In Hopewell, D., A Roman Settlement at Tai Cochion, Llandinan, on Anglesey. *Archaeologia Cambrensis* 165: 77-78.

Hopewell, D. and Edwards, N. 2017. Early medieval settlement and field systems at Rhuddgaer, Anglesey. *Archaeologia Cambrensis* 166: 213-242

Hudson, C. 2021 'An island of oysters': excavation of a shell midden at Hir Ynys, Llanfrothen, Gwynedd. *Archaeology in Wales* 61: 45-64

Jacobi, R. M. 1980. The early Holocene settlement of Wales. In: J.A. Taylor ed. *Culture and Environment in Prehistoric Wales*. Oxford: British Archaeological Reports.

Jarman, R., 2019. Sweet chestnut (*Castanea sativa*) in Britain: a multi-proxy approach to determine its origins and cultural significance. PhD Thesis, University of Gloucestershire..

Jarman, R., Mattioni, C., Russell, K., Chambers, F.M., Bartlett, D., Martin, M.A., Cherubini, M., Villani, F., Webb, J., 2019. DNA analysis of *Castanea sativa* (sweet chestnut) in Britain and Ireland: elucidating European origins and genepool diversity. *PLoS ONE*, 14(9): e0222936

Jarman, R., Chambers, F.M., Webb, J., 2019. Landscapes of sweet chestnut (*Castanea sativa*) in Britain – their ancient origins. *Landscape History*, 40(2): 5-40.

Jarman, R., Hazell, Z., Campbell, G., Webb, J., Chambers, F.M., 2019. Sweet chestnut (*Castanea sativa*) in Britain: re-assessment of its status as a Roman archaeophyte. *Britannia*, 50: 1-26.

Jarman, R., Moir, A.K., Webb, J., Chambers, F.M., Russell, K., 2018. Dendrochronological assessment of British veteran sweet chestnut (*Castanea sativa*) trees: successful cross-matching, and cross-dating with

Palaeoenvironmental

British and French oak (*Quercus*) chronologies. *Dendrochronologia*, 15: 10–21.

Jenkins, D.A., Timberlake, S., Davidson, A., Mal, K., Marshall, P., Mighall, T., O'Brien, C. and Smith, D.N., 2021. Copper Mining in the Bronze Age at Mynydd Parys, Anglesey, Wales. *Proceedings of the Prehistoric Society* 87: 261-291

Jones, J. 2015 Charred plant remains. In Reynolds, J. The Roman Cremation Cemetery at Ultra Pontem, Caerleon; the Coed site. *Archaeologia Cambrensis* 164: 153-156.

Jones, J., and Challinor, D. 2021. Palaeoenvironmental analysis: charred plant remains and charcoal. In Walker, E., and Davis, O. Burry Holms, Gower, Wales, UK: the prehistory of an island. *Archaeological Journal* 179(1): 83–140.

Jones, I. and Davies, T. 2019. *Attenuation Ponds, Wonastow Road, Monmouth. Archaeological Watching Brief (2016)*. Unpublished report for David Wilson Homes.

Jones, R., Chambers, F.M. and Benson-Evans, K., 1991. Heavy metals (Cu and Zn) in recent sediments of Llangorse Lake, Wales: non-ferrous smelting, Napoleon and the price of wheat—a palaeoecological study. *Hydrobiologia*, 214(1): 149-154.

Jones, A.F., Brewer, P.A., and Macklin, M.G., 2010, Geomorphological and sedimentological evidence for variations in Holocene flooding in Welsh river catchments. *Global and Planetary Change*, 70: 92-107.

Jones, A.F., Macklin, M.G. and Brewer, P.A. 2012 A geochemical record of flooding on the upper River Severn, UK, during the last 3750 years. *Geomorphology* 179: 89-105.

Jones I, Williams D, Williams S, Carruthers W, Madgwick R, Young T 2018. Early medieval enclosure at Glanfred, near Llandre, Ceredigion. *Archaeologia Cambrensis* 167: 221-243.

Jones, G., Davies, S.M., Staff, R.A., Loader, N.J., Davies, S.J. and Walker, M.J., 2020. Traces of volcanic ash from the Mediterranean, Iceland and North America in a Holocene record from south Wales, UK. *Journal of Quaternary Science*, 35(1-2): 163-174.

Palaeoenvironmental

Kenney, J., Lynch, F., and Davidson, A., 2021. *A Welsh landscape through time: excavations at Parc Cybi, Holy Island, Anglesey*. Oxbow Books, Oxford

Lamb, H. 1977. *Climate: Present, Past and Future. Volume 2 - Climate History and the future*. Methuen & Co Ltd, London

Lamb, H. 1995. *Climate, History and the modern world (2nd edition)*. Routledge, London

Lane, A. and Redknap, M. 2019. *Llangorse Crannog. The excavation of an early medieval royal site in the kingdom of Brycheiniog*. Oxford, Oxbow Books

Little, M., 2015. *Hunters, Fishers and Foragers in Wales: towards a social narrative of Mesolithic lifeways*. Oxbow Books.

Loader, N.J., Young, G.H., McCarroll, D., Davies, D., Miles, D. and Bronk Ramsey, C., 2020. Summer precipitation for the England and Wales region, 1201–2000 ce, from stable oxygen isotopes in oak tree rings. *Journal of Quaternary Science*, 35(6): 731-736.

Loader, N.J., McCarroll, D., Miles, D., Young, G.H., Davies, D., Ramsey, C.B., Williams, M. and Fudge, M., 2021. Dating of non-oak species in the United Kingdom historic buildings archive using stable oxygen isotopes. *Dendrochronologia*: 125862.

Lodwick, L. 2017. Plant foods and Resources. In Allen, M., Lodwick, L., Brindle, T., Fulford, M. and Smith, A. *The Rural Economy of Roman Britain. Volume 2: The rural economy of Roman Britain*. Britannia Monograph series No. 30. The society for the promotion of Roman Studies, London: 11-84

Lopez-Doriga, I. 2021. Environmental evidence. In: Saunders, B., Neolithic and Romano-British lowland farming practices in North-West Wales: Archaeological investigations along Section 3 of the Llangefni Link Road, Ynys Môn. Archaeology in Wales

Maccarinelli, A. 2022. Fish Bones. In Murphy, K. and Hemer, K. (eds.). *Excavation of an early medieval cemetery at St Patrick's Chapel, St Davids, Pembrokeshire. Final Report*. Unpublished report by Dyfed Archaeological Trust: 273-289

Palaeoenvironmental

Macklin, M.G. and Coulthard, T.J. 2011 How sensitive are rivers to climate and land-use change. *Journal of Quaternary Science* 16: 347-351.

Macklin, M.G., Lewin, J., Woodward, J.C. 2012 The fluvial record of climatic change. *Philosophical Transactions of the Royal Society A* 370: 2143-2172.

Madgwick R 2016. New light on feasting and deposition: Exploring accumulation history through taphonomic analysis at later prehistoric middens in Britain. *Archaeological and Anthropological Sciences* 8: 329-341.

Madgwick, R., Faillace, K. 2021. *The human remains from Hoyle's Mouth Cave*. Unpublished report

Madgwick, R. Redknap, M, & Davies, B. 2016. Illuminating Lesser Garth Cave, Cardiff: the human remains and post-Roman archaeology in context. *Archaeologia Cambrensis* 165: 201-230.

Madgwick, R., Lewis, J., Grimes, V. and Guest, P., 2019. On the hoof: exploring the supply of animals to the Roman legionary fortress at Caerleon using strontium ($^{87}\text{Sr}/^{86}\text{Sr}$) isotope analysis. *Archaeological and Anthropological Sciences*, 11(1): 223-235.

Maltby, M. and Hambleton, E. 2014 Deer and humans in South Wales during the Roman and Medieval Periods. In Baker, K., Carden, R. and Madgwick, R., *Deer and People*. Oxford, Oxbow Books: 187-199.

Mann, A., and Hurst, D., 2014. Buttington Cross, Powys: A Bronze Age Barrow and Post-Roman Grain Processing Site, *Archaeology in Wales*, 53, 130 - 139

McKenna, R. 2018. Charred Plant Remains and Charcoal. In Brightman, J., Johnson, B., Tinsley, A., and Waddington, C. Prehistoric settlement and activity at Bolton Hill, Pembrokeshire. *Archaeologia Cambrensis* 167: 79-81.

McKenna, R., 2020a Part XIX.2: Part XIX.3: Full analysis of charcoal from selected samples. in Kenney, J., McGuinness, N., Cooke, R. and Rees, C. *Parc Cybi Holyhead. Final reports on Excavations. Volume 3: Specialist Reports*: 620-654

Palaeoenvironmental

McKenna, R., 2020b Part XIX.2: Detailed assessment of charcoal in samples proposed for further analysis. in Kenney, J., McGuinness, N., Cooke, R. and Rees, C. *Parc Cybi Holyhead. Final reports on Excavations. Volume 3: Specialist Reports*: 575-619

McKenna, R., 2020c Part XIX.2: Part XIX.4: Full analysis of charred plant remains from selected samples. in Kenney, J., McGuinness, N., Cooke, R. and Rees, C. *Parc Cybi Holyhead. Final reports on Excavations. Volume 3: Specialist Reports*: 655-682

McKenna, R., 2020d Part XIX.1: Evaluation of plant macrofossils. in Kenney, J., McGuinness, N., Cooke, R. and Rees, C. *Parc Cybi Holyhead. Final reports on Excavations. Volume 3: Specialist Reports*: 514-574

Mighall, T.M. 2013 *A Further Palaeoenvironmental Assessment of the Blanket Peat Surrounding the Source of the Severn, Plynlimon, and Its Wider Context*. Unpublished report, Metal Links Project/RCAHMW

Mighall, T., Timberlake, S., Clark, S., and Caseldine, A. 2002 A palaeoenvironmental investigation of sediments from the prehistoric mine of Copa Hill, Cwmystwyth, mid Wales, *Journal of Archaeological Science* 29: 1161-1188

Morgan, R. 2018. Excavation on land to the rear of 1 Westgate Street, Cowbridge. *Archaeology in Wales* 57-58: 53-60

Morriss, S.H.M. 2001. *Recent human impact and land use change in Britain and Ireland: a pollen analytical and geochemical study*. Unpublished PhD thesis, University of Southampton.

Mulville, J., Powell, A., and Best, J. 2019. The Animal Bone from Llangorse Crannog. In Lane, A, and Redknap, M. Llangorse Crannog. *The excavation of an early medieval royal site in the kingdom of Brycheiniog*. Oxbow Books, Oxford: 174-183.

Murphy, F. and Meek, J. 2022. Excavations at St Ishmael deserted medieval settlement, Carmarthenshire. *Archaeologia Cambrensis* 171: 205-232

Murphy, K. and Hemer, K. 2022. *Excavation of an early medieval cemetery at St Patrick's Chapel, St Davids, Pembrokeshire*. Final Report. Unpublished report by Dyfed Archaeological Trust

Palaeoenvironmental

O'Brien, C. 2023. Plant macrofossils and charcoal. In Grant, I., and Jones, N. Excavations in advance of the Four Crosses bypass, Powys 2010. *Archaeologia Cambrensis* 172: 60-71

Page N., Hughes G, Jones, R. and Murphy, K. 2012, Excavations at Erglodd, Llangynfelyn, Ceredigion: prehistoric/Roman lead smelting site and medieval trackway. *Archaeologia Cambrensis* 161: 285-356

Page, N. and Murphy, K. 2022. The Roman road west of Carmarthen. *Archaeologia Cambrensis* 171: 29-71

Palmer, A.P., Matthews, I.P., MacLeod, A., Abrook, A., Akkerman, K., Blockley, S.P.M., Candy, I., Francis, C., Hoek, W.Z., Kingston, F. and Maas, D., 2021. The late quaternary sediment successions of Llangorse Lake, south Wales. *Proceedings of the Geologists' Association*, 132(3): 284-296.

Pardoe, H. S. 2019. The Pollen and Earliest Environmental Data. In Lane, A, and Redknap, M. Llangorse Crannog. *The excavation of an early medieval royal site in the kingdom of Brycheiniog*. Oxbow Books, Oxford: 152-158.

Parry, M., 1985. Upland settlement and climatic change: the medieval evidence. In Spratt, D., and Burgess, C. (eds) *Upland settlement in Britain*. BAR British Series 143:35-49

Philp, R. 2018. Changing Tides: *The Archaeological Context of Sea Level Change in Prehistoric South Wales*. Unpublished PhD thesis, Cardiff University.

Philp, R. 2018. *A Palaeoenvironmental Investigation at Friog Corner, Fairbourne, Dolgellau*. Archaeology Wales Report No. 1708

Philp, R. 2019. *Stanage Park Lake, Knighton: Palaeoenvironmental Investigation*. Archaeology Wales Report No. 1809

Philp, R., Carruthers, W. and Thomas, S. 2023. A Rare Roman Assemblage for Wales: Archaeobotany Related to Excavations at 113-117 Priory Street, Carmarthen. In *AEA Newsletter* 159: 3-6.

Rackham, J. 2020. Environment and economy: the evidence from plant remains recovered along the pipeline. In Darvil, T., Andrew, D., Griffiths, S., Hart, J., James, H., Murphy, K, and Rackham, J. *Timeline: the*

archaeology of the south Wales gas pipeline. Cotswold Archaeology Monograph 13, Cirencester

Ray, K., Bailey, R., Copeland, T., Davies, T., Delaney, L., Finch, D., Heaton, N., Hoyle, J., & Maddison, S. 2021. Offa's Dyke: a continuing journey of discovery". *Offa's Dyke Journal*

Rees-Hughes, L., Barlow, N.L., Booth, A.D., West, L.J., Tuckwell, G. and Grossey, T., 2021. Unveiling buried aeolian landscapes: reconstructing a late Holocene dune environment using 3D ground-penetrating radar. *Journal of Quaternary Science*, 36(3), pp.377-390.

Rippon, S. 1997. *The Severn Estuary. Landscape Evolution and Wetland Reclamation*. London, Leicester University Press.

Rippon, S. 2001. "Reclamation and regional economies of medieval marshland in Britain." In *Recent Development in Wetland Research*, edited by B. Raftery, 139–48. Dublin: University College Press

Ryan, C. Richer, S., Brabham, P. Mulville, J., Ramsay, T., and Bruford, M. (forthcoming) *The use of ancient DNA from sediment as a viable measure of Quaternary biodiversity within the Brecon Beacons National Park: a feasibility study*.

Sassoon, D., Fletcher, W. J., Hotchkiss, A., Owen, F., & Feng, L. (2021). Scots pine (*Pinus sylvestris*) dynamics in the Welsh Marches during the mid to late-Holocene. *The Holocene*, 31(6), pp. 1033-1046.

Saunders, B. 2021. Neolithic and Romano-British Lowland Farming practices in north-west Wales: Archaeological investigations along section 3 of the Llangefni link road, Ynys Mon: *Archaeology in Wales* 61: 7-40.

Shennan, I., Bradley, S.L. and Edwards, R., 2018. Relative sea-level changes and crustal movements in Britain and Ireland since the Last Glacial Maximum. *Quaternary Science Reviews*, 188: 143-159.

Silva-Sánchez, N. and Armada, X.L., 2023. Environmental impact of Roman mining and metallurgy and its correlation with the archaeological evidence: A European perspective. *Environmental Archaeology*: 1-25.

Palaeoenvironmental

Simmons, I. G. 1996. *The environmental impact of later Mesolithic cultures: the creation of moorland landscape in England and Wales*. Edinburgh: Edinburgh Univ Press

Simmons, E. 2017. Charred Plant Remains and Wood Charcoal. In Parker Pearson, M., Casswell, C., and Welham, K. Excavations at the Castell Mawr Iron Age hillfort, Pembrokeshire. *Archaeologia Cambrensis* 166: 163-167.

Simmons, E. 2018. Charred plant macrofossils and charcoal. In Parker Pearson, M., Casswell, C., and Welham, K. A late Bronze Age ring-fort at Bayvil Farm, north Pembrokeshire. *Archaeologia Cambrensis* 167: 126-135.

Smith, G.H., Caseldine, A.E., Griffiths, C.J., Peck, I., Nayling, N. and Jenkins, D., 2017. An Early Bronze Age burnt mound trough and boat fragment with accompanying palaeobotanical and pollen analysis at Nant Farm, Porth Neigwl, Llŷn Peninsula, Gwynedd. *Studia Celtica*, 51(1): 1-63.

Stastney, P. and Batchelor, R. 2018. Monolith samples form Site 17. In Hart, J. and Alexander, M. Archaeological investigations along the route of the A477 St Clears to Red Roses Road improvement scheme, 2012: a summary report SN 21957 21142 to SN 22675 21552. *Archaeology in Wales* 57-58: 49.

Timberlake, S. 2016. New ideas on the exploitation of copper, tin, gold, and lead ores in Bronze Age Britain: *The mining, melting, and movement of metal*. *Materials and manufacturing processes* 32(7-8), pp.709-727.

Timberlake, S. and Haylock, K. 2018. Nantyreira mine, Plynlimon, Hafren Forest, SN 825875. *Archaeology in Wales* 57-58: 173-178.

Timberlake, S. and James, D. 2018 A new Early Bronze Age mine site at Cwmystwyth, Ceredigion: Archaeological excavations at Penparc (comet lode (W)) in 2017. *Archaeology in Wales* 57-58: 91-100.

Tipping, R., Davies, A., McCulloch, R. and Tisdall, E., 2008. Response to late Bronze Age climate change of farming communities in north east Scotland. *Journal of Archaeological Science* 35(8): 2379-2386

Palaeoenvironmental

Treasure, E. R., & Church, M. J. 2016. Can't find a pulse? Celtic bean (*Vicia faba* L.) in British prehistory. *Environmental Archaeology*, 22(2): 113–127.

Treasure, E.R., Gröcke, D.R., Caseldine, A.E. and Church, M.J., 2019, December. Neolithic farming and wild plant exploitation in Western Britain: archaeobotanical and crop stable isotope evidence from Wales (c. 4000–2200 cal BC). *Proceedings of the Prehistoric Society* 85: 193-222.

Turner, J. 1964. The Anthropogenic Factor in Vegetational History. I. Tregaron and Whixall Mosses. *New Phytologist* 63(1): 73-90

Van der Veen, M. 2014. Arable Farming, Horticulture, and Food: Expansion, Innovation, and Diversity. In Millett, M. Revell, L. and Moore, A. (eds) *The Oxford Handbook of Roman Britain*. Oxford Handbooks Online.

(https://www.researchgate.net/profile/Marijke_Van_Der_Veen/publication/279925896_Arable_Farming_Horticulture_and_Food_Arable_Expansion_Innovation_and_in_Marijke_The_Forthcoming_Edited_Louise_and_Oxford_Abstract_The_cereals_but_southern_though_Innovation_the_fruits_vegetables_and_/links/559e7ab208aeed377e57715b/Arable-Farming-Horticulture-and-Food-Arable-Expansion-Innovation-and-in-Marijke-The-Forthcoming-Edited-Louise-and-Oxford-Abstract-The-cereals-but-southern-though-Innovation-the-fruits-veg.pdf Accessed 20/7/19)

Van Loon, H. and Rogers, J.C., 1978. The seesaw in winter temperatures between Greenland and northern Europe. Part I: General description. *Monthly Weather Review*, 106(3), pp.296-310.

Waddington K, Bayliss A, Higham T, Madgwick R, Sharples N 2019. Histories of deposition: creating chronology for the Late Bronze Age-Early Iron Age transition in Southern Britain. *Archaeological Journal* 176: 84-133.

Walker, E.A., Chapman, E.M., Chivall, D., Faillace, K., Hodgkinson, P., Madgwick, R., O'Regan, H.J. 2021. Carreg Cennen Castle Cave, Llandeilo, Carmarthenshire: a review of the work undertaken by T. C. Cantrill in 1900. *Archaeologia* 170: 67-76

Palaeoenvironmental

Ward, A. 1997. Transhumance and settlement on the Welsh uplands: A view from the Black Mountain. In Edwards, N. (ed.), *Landscape and Settlement in Medieval Wales*. Oxbow Monograph 81, Oxford: 97-111

Watson, E.J., Swindles, G.T., Lawson, I.T., Savov, I.P. and Wastegård, S., 2017. The presence of Holocene cryptotephra in Wales and southern England. *Journal of Quaternary Science*, 32(4): 493-500.

Whelton, H., and Cramp, L. 2019. Summary of organic residue analysis. In Seaman, A., and Lane, A. Excavations of the Ty'n-y-Coed earthworks 2011-14: the Dinas Powys 'Southern Banks'. *Archaeologia Cambrensis* 168: 123-4.

Whittle, A. and Britnell, W., 2022. *The first stones: Penywyrldod, Gwernvale and the Black Mountains Neolithic long cairns of south-east Wales*. Oxford, Oxbow Books

Whittington, G. 1993. Palynological investigations at two Bronze Age burial sites in Fife. *Proceedings of the Society of Antiquaries of Scotland* 123: 211-213

Williams, R.A., 2012. Hidden bullion: silver production in north-east Wales. *Welsh Mines and Mining*, 2, pp.33-44.

Zhang, Y., Renssen, H., Seppä, H. and Valdes, P.J., 2018. Holocene temperature trends in the extratropical Northern Hemisphere based on inter-model comparisons. *Journal of Quaternary Science*, 33(4), pp.464-476.