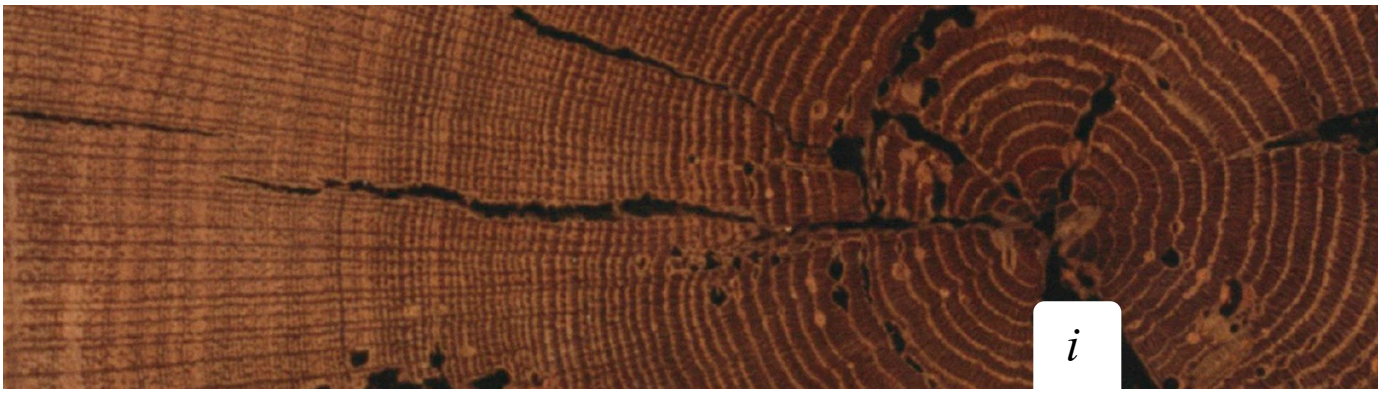
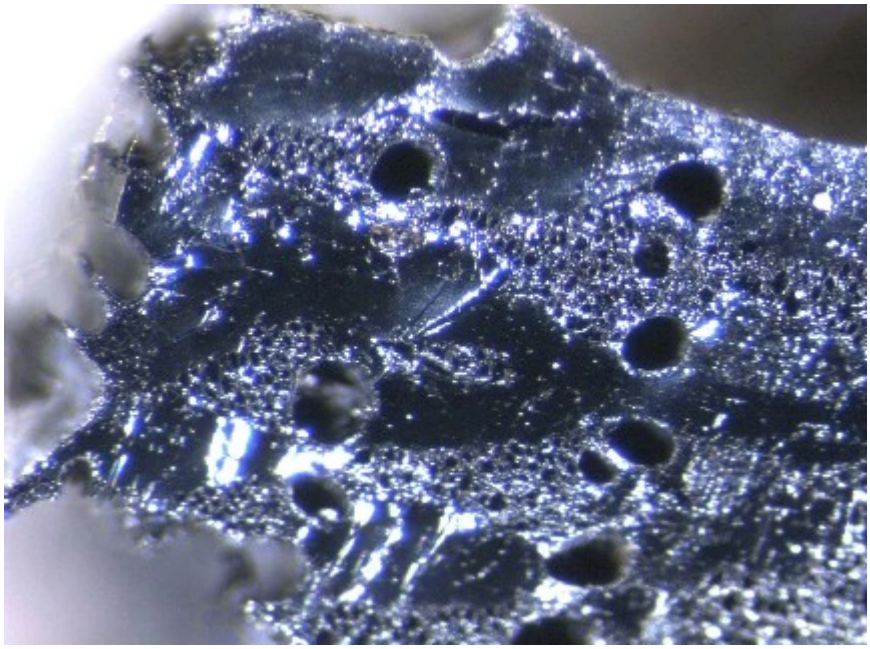
Historic England



Charcoal and Wood Work Group

Published 29 October 2012 Updated 29 July 2025

The Charcoal and Wood Work Group (CWWG) is aimed primarily at British specialists, working on British or international material. The group aims to foster communication and dissemination of ideas between specialists engaged in different studies of historical wood utilisation, such as wood-working technologists and wood anatomists, and also between those employed as freelancers or in commercial units and universities, as well as students.



Fragment of deciduous oak charcoal showing evidence of 'vitrification' recovered from a late 1st century AD layer associated with repair to the seating bank of Chester amphitheatre © English Heritage

CWWG meetings

Next meeting

The next meeting will be a joint meeting with the Archaeobotanical Work Group, hosted by Oxford Archaeology North, in Lancaster, on **Saturday 26 April 2025**, from 10am to 4pm. We will be discussing how to assess charcoal as part of a routine flot assessment, exploring how many fragments are "enough", and looking at examples of the other characteristics to record. There will also be time for in-person attendees to bring their own material along to look at.

There is the option of attending remotely for some of the day; if you are interested in this, please contact Ruth Pelling ***(mailto:ruth.pelling@HistoricEngland.org.uk)***.

Minutes of previous meetings

- Oxford (June 2012 ***(https://historicengland.org.uk/content/docs/research/cwwg-minutes-jun12pdf/)***)
- Worcester (March 2013 ***(https://historicengland.org.uk/content/docs/research/cwwg-03-2013pdf/)***)
- Cambridge (May 2014 ***(https://historicengland.org.uk/content/docs/research/cwwg-minutes-may14pdf/)***)
- York (October 2015 ***(https://historicengland.org.uk/content/docs/research/cwwg-minutes-oct15pdf/)***)
- Birmingham (joint Archaeobotany and CWWG meeting April 2018 ***(https://historicengland.org.uk/content/docs/research/cwwg-22-april-2018/)***)
- York (June 2023 ***(https://historicengland.org.uk/content/docs/research/cwwg-york-jun2023/)***)

Oak pollards at Staverton park, Suffolk © Dana Challinor

CWWG weblist and contact for the group

The Charcoal and Wood weblist ***(https://www.jiscmail.ac.uk/cgi-bin/webadmin?A0=WOOD-CHARCOAL)*** provides a digital forum for discussion, the dissemination of notices about conferences, meetings and publications, and promotes communication with international colleagues and researchers.

The CWWG can be contacted through the weblist or contact Dana Challinor direct: dana.challinor@gmail.com ***(mailto:dana.challinor@gmail.com)***

Poplar timbers from Aynho © Dana Challinor

Useful resources

1) Identification text and keys

Books and journal articles

- Gale, R and Cutler, D 2000 'Plants in archaeology: identification manual of artefacts of plant origin from Europe and the Mediterranean' Otley: Westbury Publishing

- Greguss, P 1959 Holzanatomie der europäischen Laubhölzer und Sträucher. ***(http://real-eod.mtak.hu/14101/)*** Budapest: Akadémiai Kiadó

- Hather, J 2000 'The identification of the northern European woods: a guide for archaeologists and conservators' London: Archetype Publications

- Phillips, EWJ 1941 'The identification of coniferous woods by their microscopic structure ***(https://doi.org/10.1111/j.1095-8339.1941.tb01390.x)***' **Journal of the Linnean Society of London, Botany52** (343), 259–320

- Richter, HG, Grosser, D, Heinz, I and Gasson, PE (eds) 2004 'IAWA List of Microscopic Features for Softwood Identification ***(https://www.iawa-website1.org/uploads/soft/Abstracts/01_IAWA-Softwood_List.pdf)***' IAWA Journal 25(1), 1–70. Published for the International Association of Wood Anatomists at the Nationaal Herbarium Nederland, Leiden, The Netherlands

- Shigo, AL and Marx, HG 1977 'Compartmentalization of Decay in Trees' ***(https://naldc.nal.usda.gov/catalog/CAT87209944)***. [CODiT] **Agriculture Information Bulletin 405**, Forest Service, United States Department of Agriculture Forest Service, 1–73

- Schweingruber, FH 1990 'Microscopic Wood Anatomy: Structural Variability of Stems and Twigs in Recent and Subfossil Woods from Central Europe' [digital reprint available]

- Schweingruber, FH 1990 'Anatomy of European Woods: An Atlas for the Identification of European Trees, Shrubs and Dwarf Shrubs' [digital reprint available]

- Wheeler, EA, Baas, P and Gasson, PE (eds) 1989 'IAWA List of Microscopic Features for Hardwood Identificat information ***(https://www.iawa-website1.org/uploads/soft/Abstracts/IAWA%20list%20of%20microscopic%20features%20***' IAWA Bulletin 10(3), 219–332. 4th printing 2007. Published for the International Association of Wood Anatomi Netherlands, Leiden

- White, L and Gasson, P (2008) **Mahogany.** Kew: Kew Publishing

Online databases

- InsideWood Database ***(https://insidewood.lib.ncsu.edu/welcome)*** [international scope]

- Schoch, W, Heller, I, Schweingruber, FH and Kienast, F 2004 'Wood anatomy of central European Species'. Online version ***(https://www.woodanatomy.ch)***

- Forestry and Forest Products Research Institute (FFPRI)'s Wood Database ***(https://db.ffpri.go.jp/WoodDB/index-E.html)*** [Japan]

- Kew's Jodrell Laboratory Microscope Slide Collection ***(https://www.kew.org/science/collections-and-resources/collections/microscope-slide-collection)***
  [slides being digitised but not available online yet]

Charcoal and/or wood collections

- IAWA Secretariat 2025 'Index Xylariorum 4.2' published as the 'Overview of Wood Collections ***(https://www.iawa-website1.org/en/Wood_collection/Overview_of_Wood_Collection.shtml)***
  '

- Scheel-Ybert, R 2016 'Charcoal collections of the world ***(https://doi.org/10.1163/22941932-20160148)***' **IAWA Journal 37(3)**, 489–505 [Journal of IAWA – the International Association of Wood Anatomists]

2) Sampling and recording methodologies and resources

Books and journal articles

- Gärtner, H and Schweingruber, F 2013 'Microscopic Preparation Techniques for Plant Stem Analysis'. Download for free ***(https://www.forstbuch.de/wp-content/uploads/2018/04/MicroscopicPreparationOnline.pdf)***

- Marguerie, D and Hunot, J-Y 2007 'Charcoal analysis and dendrology: Data from archaeological sites in north-western France ***(https://doi.org/10.1016/j.jas.2006.10.032)***' **Journal of Archaeological Science 34**, 1417–1433

Online resources

- Charcoal Analysis Web ***(http://pcwww.liv.ac.uk/~easouti/Index.htm)*** by Eleni Asouti

- Integrated Archaeobotanical Research Project ***(https://sites.google.com/sheffield.ac.uk/archaeobotany/)*** (charcoal and waterlogged wood)

Wood identification recording sheets

Historic England is creating a series of wood recording sheets to help standardise the recording of features and characteristics commonly encountered on archaeological wood (waterlogged and charcoal). Currently, two sheets for recording wood anatomical features for the basis of wood identifications (of NW European taxa) are available:

Download Hardwood Recording Sheet ***(https://historicengland.org.uk/content/docs/research/hardwood-recording-sheet/)***
(PDF, 49 KB)

Download Softwood Recording Sheet ***(https://historicengland.org.uk/content/docs/research/softwood-recording-sheet/)***
(PDF, 50 KB)

If you have any comments and suggestions on these, please email the author.

Wood technology and morphology

- Sands, R 1997 Prehistoric Woodworking: the Analysis and Interpretation of Bronze Age and Iron Age toolmarks ***(https://www.routledge.com/Prehistoric-Woodworking-The-Analysis-and-Interpretation-of-Bronze-and-Iron-Age-Toolmarks/Sands/p/book/9780905853345)***
London: Institute of Archaeology, University College London [reprinted in 2016 by Routledge]

Wood recording

- Allen, S 1994 The illustration of wooden artefacts: an introduction and guide to the depiction of wooden objects ***(https://www.archaeologists.net/sites/default/files/2025-04/11-wood.pdf)*** Association of Archaeological Illustrators and Surveyors, Technical Paper 11

- Milne, C and Milne, G (eds) 1994 'Section 3.4 Recording Timber and Timber Structures' in MOLA 1994 Archaeological Site Manual Museum of London Archaeology Service ***(https://behindthetrowel.wordpress.com/wp-content/uploads/2018/04/molasmanual94.pdf)*** , Third edition, [73–87]

Wooden artefacts

- Earwood, C 1993 Domestic Wooden Artefacts in Britain and Ireland from Neolithic to Viking times ***(https://doi.org/10.5949/liverpool/9780859893893.001.0001)***. Exeter: University of Exeter Press.

- Morris, CA 2000 'Craft, Industry and Everyday Life: Wood and Woodworking in Anglo-Scandinavian and Medieval York ***(https://www.collections.yorkarchaeologicaltrust.co.uk/files/original/74502/GB2837-PUB-AY-17-13_Wood-and-Woodworking-in-Anglo-Scandinavian-and-Medieval-York_C-A-Morris_web.pdf)*** ', in (ed.) PV Addyman **The Archaeology of York: The Small Finds** Volume 17, Fasc. 13, 2073–2452. Published for the York Archaeological Trust by the Council for British Archaeology.

3) Historic England research reports

Historic England produces reports publishing results of research carried out both internally by in-house specialists and that commissioned to external specialists. You will be able to find reports relevant to wood and charcoal analysis using the keyword search facility on the research reports homepage ***(https://historicengland.org.uk/research/results/reports/)***.

Historic England also produces regional reviews on specialist subjects, of which the wood/charcoal ones are:

- Northern England ***(https://historicengland.org.uk/research/results/reports/68-2010)*** (Huntley 2010)

- Southern England ***(https://historicengland.org.uk/research/results/reports/75-2002)*** (Smith 2002)

- Midland Region ***(https://historicengland.org.uk/research/results/reports/23-2001)*** (Murphy 2001)

4) Wood identification training courses

Below is a list of some wood identification courses available. Note that inclusion here is not necessarily an indication of endorsement by Historic England – interested parties will have to make their own enquiries and form their own opinions.

- Wood Identification course ***(https://www.kew.org/science/training-and-education/continuing-professional-development/wood-identification)***
  , Kew, UK

- International Course on Wood Anatomy & Tree-Ring Ecology ***(https://www.wsl.ch/en/about-wsl/organisation/research-units/forest-and-soil-ecology/dendrosciences/trainingschools/)***
  , Switzerland

- 1st International Training School on Wood Identification ***(https://historicengland.org.uk/content/docs/research/1st-int-training-school-wood-identification-oct23/)***
  , Romania

- 9th International Training School: Quantitative Wood Anatomy Using ROXAS ***(https://sites.google.com/view/csaa2/qwa)***, Italy

5) Relevant conferences and meetings

- Anthraco2026, Thessaloniki, Greece – 9th International Anthracology Meeting – details will become available in due course.

- Anthraco2023 ***(https://anthraco2023.weebly.com/)***, Porto, Portugal – 8th International Anthracology Meeting

- Anthraco2019 ***(https://www.sciencedirect.com/journal/quaternary-international/vol/593/suppl/C)***, Liverpool, UK – 7th International Anthracology Meeting

- Anthraco2015 ***(https://www.sciencedirect.com/journal/quaternary-international/vol/463/part/PB)***, Freiburg, Germany – 6th International Anthracology Meeting

- Anthraco2011 ***(https://www.sapac.es/charcoal/saguntum/extra11/se11.pdf)***, Valencia, Spain – 5th International Anthracology Meeting

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Back to top