

# Waterlogged Wood

Appendix 1: Example wood recording sheets



## Summary

This appendix of the Waterlogged Wood guidance contains two different wood recording forms, which have been designed for recording different types of wood assemblages. The first is an example of a wood recording sheet that is most useful for recording timbers from urban contexts, based on a Museum of London Archaeology (MOLA) recording sheet. The second is an example of a wood recording sheet that is more useful for recording wood from non-urban contexts based on a Cambridge Archaeological Unit (CAU) sheet. Guidance on how to fill out each of these sheets is also included. Other organisations and specialists may have their own recording sheets.

Please refer to this document as: Historic England 2025 Waterlogged Wood. Appendix 1: Example wood recording sheets (Historic England, Swindon).

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**Front cover:** Excavation at Star Carr, Yorkshire, Milner et al. 2018, Figure 3.13. © Star Carr Project, CC BY-NC 4.0

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# 1. The Museum of London Archaeology (MOLA) timber recording sheet

Grid	Area/Trench	TIMBER	Site Code	Cor	ntext	
square(s)		HIVIDER				
1. Type			•	•		
2. Setting						
3. Orientation						
4. Cross-section/ conversion						
(See below)						
5. Condition						
6. Dimensions in m/mm						
7. Tool marks						
8. Ends (damaged/ worked etc)						
9. Joints and fixings						
10. Intentional marks						
11. Surface treatment						
12. Other comments						
13. Method and conditions						
Strategraphic matrix						
This context is						
Your interpretation/ discussion	<u> </u>					
Tour interpretation/ discussion	I					
Description of data				Disease	-4-1	l £
Provisional date		1	-1 - 4	Please ske	etch ove	eriear
Reused yes no	unknown	Initials and	date:			
Plan (tick/ number)		01 1 11				
Section/ Elevation number		Checked by	and date:			
Timber drawing number						
Photograph number		Cross Secti	on and Conve	ersion	yes	no
Structure/ wood group number		/				
Levels reduced and transfere				bark		
	vest					
Specialist recording and samp	oles	// (_	) ))	sapwood		
Species/ ID sample						
Dendro				knotty		
Ring count						
Ring width		bark /		straight		
C14		sapwoo	od . \	grained		
Acsession number			heartwood			
Initials and date		Cross Section	on and Conve	rsion		
			Initials and o	late		

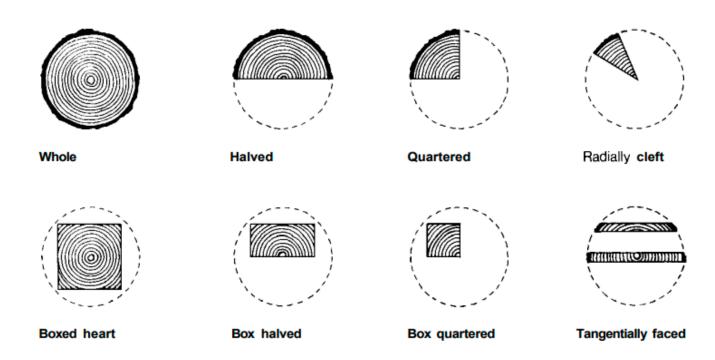


This	context is			IH:		7					
		TBM:		Nos:							
						_					
No	FS	Reduced	No	FS	Reduced	No	FS	Reduced			
INO	F5	Reduced	INO	F3	Reduced	INO	FS	Reduced			
Aditi	Draw sketch in situ/ plan/ section/ elevation Aditional isometric sketch if apropriate (show: scale, cardinal points/ north arrow, co-ordinates and dimensions)										
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#### How to complete the MOLA timber recording sheet

Adapted from Mola excavation manual.

- 1. Type: define whether the timber is a baseplate, post, brace, plank, top plate, stake etc.
- 2. **Setting:** Describe the position of the timber, whether vertical, diagonal (ie leaning) or horizontal. If diagonal, note the inclination of the timber in terms of its gradient. Note whether this is the setting of the timber as found or the assumed original setting if, for example part of a structure
- 3. **Orientation:** if the setting was diagonal or horizontal note the orientation of the timber in terms of compass bearings, eg. N-S, NW-SE.
- 4. **Cross-section/ conversion**: draw the cross section on the diagram at the bottom of the sheet and describe the method of conversion



- 5. Condition: Note whether the timber is complete; if not, whether it was broken in antiquity or recently. Also note the presence and position of any decay, as this may provide information useful when determining the contemporary water table/ tidal levels. Also note if the timber has been burnt, charred, worn, suffered insect attack etc.
- 6. Dimensions in m/mm: Record the maximum length and the breadth and depth or diameter. Sketches should be drawn on the reverse of the sheet.

  All measurements should be recorded as soon as the timber is exposed, as it will shrink radially (i.e. in width) by up to 25% thereafter regardless of how often it is sprayed. The thinner the timber the greater the shrinkage a tenon therefore will shrink more than the rest of the

timber, whereas its associated mortice will often open up on drying and be wider at the end of the excavation than at the beginning. Always state whether the length quoted excludes tenons and other features which are not normally visible until after the structure has been dismantled.

- 7. **Tool marks:** Any evidence for saw, axe, adze, auger, chisel or other tool marks should be described. If possible, make a measured sketch, on the timber drawing, of any well-preserved tool mark(s). remember to do this as soon as possible, because when the timber starts to dry out and drying cracks appear the evidence for working will disappear. Such information can be used to provide rough dating for timber.
- 8. **Ends:** Describe how the ends of the timber have been worked or truncated e.g. top is damaged from machine excavator; bottom is pointed.
- 9. **Joints and fixings:** Describe any joints or fixings. Note the type, number, dimensions and whether they are, or may be, residual features from a previous use. Each type of timber joint and/or fixing should be drawn, either as part of the general timber drawing or, if particularly complex, separately at 1:1. For joint types see illustrations in guidance pages [add page numbers in here].
- 10. Intentional marks: Describe any marking-out lines, lines around joints, assembly marks, tally marks or graffiti (All these should be drawn/traced at 1:1)
- 11. Surface treatment: Note the presence of any paint or pitch, limewash, charring, moulding or carving (The profiles of all mouldings should be drawn at 1:1).
- **12. Other comments:** Note for example, colour variations, stains from fixings or impressions from other timbers.
- 13. Method and conditions: Note whether the description was made before or after excavation of the timber, whether the timber was retained for detailed recording, and the general conditions on site at the time the weather, the light, if it was a watching brief etc. Also state whether the timber has dried or become distorted before recording took place.

#### Stratigraphic Matrix

Particularly on waterfront sites it is often the case that individual timbers will have stratigraphic relationships with several other timbers. Additional above and below context boxes should be added if needed.

#### Your interpretation/ discussion

The individual timber needs to be described as well as its function within a larger structure. It is important to describe any stratigraphic relationships e.g. what it is cut into or sealed by. If the timber has been reused describe its previous function. A timber specialist will often

be able to provisionally date timber structures from their design and construction methods in the absence of associated finds. This is particularly useful with stakes or piles which are driven into a deposit from an unknown level due to modern horizontal truncation.

#### Structure / wood group number

It is often useful or necessary to be able to refer to a timber structure by a structure or wood group number on site. However often due to the logistics of excavating structures in various phases it is possible that a structure may be made up of various phases of construction that will become evident only after full excavation or even during post excavation analysis. Therefore, a Structure/ wood group number can be assigned on site but then voided if needed during post-excavation assessment prior to assigning parent contexts, sub groups, groups, land uses etc.

# 2. The Cambridge Archaeological Unit (CAU) wood recording sheet

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WOOD GROUP NU	MBER:		ASSOCIATIONS:					PLA	NE/ORIEN	NTATION:
LENGTH (MM):		MAX. E	BREADTH:		MIN. BREADTH:		MAX. THICKNES	S:	М	IN. THICKNESS:
DIA LONG AXIS:		DIA SH	ORT AXIS:		ORIGINAL DIA:		DIMENSION NOT	ES:		
CONDITION: 0 1 2 3	3 4 5	CONDI	TION/DAMAGE NOT	ES:						
ENDS:										
CHARRED?: Y/N	CHARR	ING NO	TES:							
ELEMENT: P W (H/S	S) E B	SPECIE	S:	(	GROWING IN-SITU: Y/N	TYPE	OF WOOD:			
GROWTH MORPHO	DLOGY:				'					
COPPICING EVIDE	NCE: Y/	N CO	PPICING NOTES:							
WOODWORKING E	VIDENC	E: Y/N	TYPE OF WOOD\	VOR	KING EVIDENCE:		CON	VERSIO	ON:	
WOODWORKING N	OTES:						'			
TOOLMARKS: Y/N	TOOL	MARK	NOTES:							
WEAR EVIDENCE:	Y/N \	WEAR N	NOTES:							
NOTES (INCLUDE I	UNCTIO	ON/PHA	SING):					CF	ROSS-SEC	CTION:
										•
BHOTOGDADU NO	e.			CE	NABHIC NOS:					
PHOTOGRAPH NO	S:			GF	RAPHIC NOS:			RETAI	NED: Y/N	TO BE DRAWN: Y/N
TO BE PHOTOGRA	PHED: `	Y/N T	O BE CONSERVED	: Y/N	ID SAMPLE TAKEN Y	'N	DENDRO SAMPLE	TAKEN	1: Y/N	C14 SAMPLE TAKEN Y/N
SAMPLE NOTES:							INITIA	ALS:		DATE:



NOTES CONTINUED:	



#### Guidance for use of the Cambridge Archaeological Unit wood recording sheet

**Table 1:** Guidance to the completion of the fields on the Cambridge Archaeological Unit (CAU) wood recording sheet.

Wood number         Unique number given to piece of wood.           Context number         Context number.           Feature         Feature number.           Area/Trench         Relevant additional location information as appropriate, site grid easting and north may also be added here if used.           Number assigned to a group of wood within a context or feature with shared morphol characteristics, shared woodworking characteristics or shared use (e.g. a scatter of woodchips or the weavers of a wattle panel), use if relevant/helpful. In general, woo should not be grouped across contexts, as they are unlikely to be part of the same depositional event. Exceptions include a stake alignment where each stake/stakeho treated as a context but it would be appropriate and useful to group the stakes as a vertical association to other wood, finds, contexts and/or features not indicated by numbers already supplied, where applicable. For example, where wood is found in association with masonry. The reverse of the sheet can be used to sketch the location the wood, if required.           Plane of wood, i.e. if it is positioned vertically (V), horizontally (H) or angled (D) should always be given, degrees of angle can be given if this level of detail is appropriate (eight in structural remains). Cardinal or intercardinal orientation of horizontal or angled we in structural remains). Cardinal or intercardinal orientation of horizontal or angled we in structural remains). Cardinal or intercardinal orientation of horizontal or angled we in structural remains).	Field	Field description
Context number  Feature  Feature number.  Relevant additional location information as appropriate, site grid easting and north may also be added here if used.  Number assigned to a group of wood within a context or feature with shared morphol characteristics, shared woodworking characteristics or shared use (e.g. a scatter of woodchips or the weavers of a wattle panel), use if relevant/helpful. In general, woo should not be grouped across contexts, as they are unlikely to be part of the same depositional event. Exceptions include a stake alignment where each stake/stakeho treated as a context but it would be appropriate and useful to group the stakes as a wattle panel.  Spatial association to other wood, finds, contexts and/or features not indicated by numbers already supplied, where applicable. For example, where wood is found in association with masonry. The reverse of the sheet can be used to sketch the location the wood, if required.  Plane of wood, i.e. if it is positioned vertically (V), horizontally (H) or angled (D) should always be given, degrees of angle can be given if this level of detail is appropriate (eight structural remains). Cardinal or intercardinal orientation of horizontal or angled we in structural remains).	Event number	County/Unitary Authority issued number for archaeological intervention or site code.
Feature Feature number.  Relevant additional location information as appropriate, site grid easting and north may also be added here if used.  Number assigned to a group of wood within a context or feature with shared morphol characteristics, shared woodworking characteristics or shared use (e.g. a scatter of woodchips or the weavers of a wattle panel), use if relevant/helpful. In general, woo should not be grouped across contexts, as they are unlikely to be part of the same depositional event. Exceptions include a stake alignment where each stake/stakeho treated as a context but it would be appropriate and useful to group the stakes as a verticated as a context but it would be appropriate and useful to group the stakes as a verticated as a context but it would be appropriate and useful to group the stakes as a verticated by numbers already supplied, where applicable. For example, where wood is found in association with masonry. The reverse of the sheet can be used to sketch the location the wood, if required.  Plane of wood, i.e. if it is positioned vertically (V), horizontally (H) or angled (D) should always be given, degrees of angle can be given if this level of detail is appropriate (eight in structural remains). Cardinal or intercardinal orientation of horizontal or angled we have the same of the structural remains.	Nood number	Unique number given to piece of wood.
Area/Trench  Relevant additional location information as appropriate, site grid easting and north may also be added here if used.  Number assigned to a group of wood within a context or feature with shared morphol characteristics, shared woodworking characteristics or shared use (e.g. a scatter of woodchips or the weavers of a wattle panel), use if relevant/helpful. In general, woo should not be grouped across contexts, as they are unlikely to be part of the same depositional event. Exceptions include a stake alignment where each stake/stakeho treated as a context but it would be appropriate and useful to group the stakes as a vertical state of the same deposition with masonity. The reverse of the sheet can be used to sketch the location the wood, if required.  Plane of wood, i.e. if it is positioned vertically (V), horizontally (H) or angled (D) should always be given, degrees of angle can be given if this level of detail is appropriate (eight structural remains). Cardinal or intercardinal orientation of horizontal or angled to a group the stakes.	Context number	Context number.
Area/Trench  may also be added here if used.  Number assigned to a group of wood within a context or feature with shared morphol characteristics, shared woodworking characteristics or shared use (e.g. a scatter of woodchips or the weavers of a wattle panel), use if relevant/helpful. In general, woo should not be grouped across contexts, as they are unlikely to be part of the same depositional event. Exceptions include a stake alignment where each stake/stakeho treated as a context but it would be appropriate and useful to group the stakes as a vertical association to other wood, finds, contexts and/or features not indicated by numbers already supplied, where applicable. For example, where wood is found in association with masonry. The reverse of the sheet can be used to sketch the location the wood, if required.  Plane of wood, i.e. if it is positioned vertically (V), horizontally (H) or angled (D) should always be given, degrees of angle can be given if this level of detail is appropriate (eight structural remains). Cardinal or intercardinal orientation of horizontal or angled to the structural remains.	eature	Feature number.
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always be given, degrees of angle can be given if this level of detail is appropriate (e	Associations	numbers already supplied, where applicable. For example, where wood is found in association with masonry. The reverse of the sheet can be used to sketch the location of
should be given if this level of detail is appropriate (e.g. in a structured deposit or in	Plane/orientation	Plane of wood, i.e. if it is positioned vertically (V), horizontally (H) or angled (D) should always be given, degrees of angle can be given if this level of detail is appropriate (e.g. in structural remains). Cardinal or intercardinal orientation of horizontal or angled wood should be given if this level of detail is appropriate (e.g. in a structured deposit or in structural remains). The reverse of the sheet can be used to sketch the location of the wood, if required.

Length (mm)	Length of piece (mm).
Max. breadth	Maximum breadth of piece (mm). Applicable to converted wood/wood with an
Max. Breadth	incomplete cross-section.
Min. breadth	Minimum breadth of piece (mm). Applicable to converted wood/wood with an incomplete
Will. Breadth	cross-section.
Max. thickness	Maximum thickness of piece (mm). Applicable to converted wood/wood with an
Max. tilickiless	incomplete cross-section.
Min. thickness	Minimum thickness of piece (mm). Applicable to converted wood/wood with an
Will. tillckiless	incomplete cross-section.
Dia long axis	Maximum diameter measurement (mm). Applicable to roundwood (i.e. unconverted
Dia long axis	wood with a complete cross-section).
	Diameter short axis measurement (mm), i.e. diameter measurement at 90 degrees to
Dia short axis	'long axis measurement', measured at same point as long axis measurement. Applicable
	to roundwood (i.e. unconverted wood with a complete cross-section).
Original dia	Original diameter of parent log (mm). Applicable to damaged or converted wood where
Original dia	original diameter is reconstructable.
Dimension notes	Additional notes on dimensions such as notable variations in size, additional dimensions
Difficusion notes	given here if appropriate.

Field	Field description
Condition	Condition score indicated by circled number, see Table 2 for guidance on condition scoring using the Taylor Scale.
Condition notes	Condition notes including information on pre, peri and post depositional transformations and peri or post excavation transformations. Level of detail required may depend on character of assemblage and research questions; detailed notes may not be necessary for unworked/simply worked pieces especially where wood group recording indicates the condition of the group as a whole.
Ends	Description of the ends of the piece noting where they have been worked or truncated, e.g. top has been truncated by machine excavator, bottom is worked. Detail of working should be given in Woodworking notes, below.
Charred? Y/N	Charring: Y=Yes; N=No
Charring notes	Description of the extent (surface coverage) and severity (depth) of charring. The char grading scale given Table 3 can be used to categorise severity of char. Level of detail required may depend on character of assemblage and research questions; detailed notes may not be required for isolated/unworked/simply worked pieces.
Element: P W (H/S) E B	Presence of cross-sectional elements of wood anatomy indicated by circling: P = pith present; W = wood (xylem) present; H = macroscopically differentiable heartwood present; S = macroscopically differentiable sapwood present; E = bark edge present (i.e. xylem to bark boundary); B = bark present. See Figure 1a.
Species	Taxonomic identification if available, if unknown leave blank.
Growing in situ?	Evidence of having grown <i>in-situ</i> : Y=Yes; N=No
Type of wood	Wood type, as given in Table 4.
Growth morphology	Notes on straightness and/or regularity or otherwise of whole stem or of grain of converted wood, presence and distribution of knots or side branches, ring count and pattern in ring growth, and other aspects of morphology as applicable. Level of detail required may depend on character of assemblage and research questions; detailed notes may not be necessary for unworked/simply worked pieces especially where wood group recording indicates the morphology of the group as a whole.
Coppicing evidence	Evidence of coppicing: Y=Yes; N=No
Coppicing notes	Notes on coppicing, pollarding or other woodland management evidence.
Woodworking evidence	Evidence of woodworking present: Y=Yes; N=No
Woodwork type	Type(s) of woodworking present, if known, e.g. trimming (TR), splitting (SP). Multiple types may be in evidence on a single piece. Codes for common types of woodworking evidence can be used to abbreviate this data, see Table 5.
Conversion	Conversion type, as defined in Figure 2

Field	Field description
Woodworking notes	Notes describing woodworking evidence. These should include (as appropriate/if known): details of conversion not indicated by 'conversion type', e.g. inner/pithward face split, outer face hewn; details of method of conversion, e.g. notch-and-split; details of any additional woodworking on faces/edges of timbers or on outer of roundwood, e.g. facet from side-branch or knot removal; details of woodworking to ends, e.g. one end trimmed from two directions at a moderate angle to a wedge-shaped end (see Figure 3 for classification of trimmed ends and Coles and Orme (1985) for additional terminology describing roundwood woodworking); description of joints with additional measurements as appropriate; description of finishing or markings.  Where woodworking is complex and/or varied it may be useful to cross-reference this description with, or give this description as, annotations on a measured drawing.
Tool marks	Evidence of tool marks present: Y=Yes; N=No
Tool marks notes	Notes and comments on the type, characteristics and distribution of tool marks including stopmarks. Measurements of maximum facet length (MFL) and maximum facet width (MFW) should be included here, with indication of whether they refer to working across the whole item or to a specific area of working in that item.
Wear evidence	Wear evidence present: Y=Yes; N=No. Wear refers specifically to pre-depositional use wear and not to decay or weathering, which should be described under Condition notes.
Wear notes	Notes on wear.
Notes (include function/ phasing)	Notes on wood function and phasing if available. A sketch indicating key aspects of piece may be appropriate if working/form is complex. Where a piece is retained in fragments, a sketch indicating how the individually labelled parts fit together is essential. The notes box may be used to contain additional information on any of the fields above, with additional space available overleaf.
Cross-section	Drawing of the dominant cross-section of the piece (if cross-section varies substantially along length, additional drawings may be added in the notes section).
Photo nos	Identifying numbers of photographs of piece.
Graphics nos	Identifying numbers of plans, sections or illustrations of piece.
Retained: Y/N	Piece retained after primary recording: Y=Yes; N=No
To be drawn: Y/N	Piece to be drawn: Y=Yes; N=No. If unknown or undecided, leave blank.
To be photographed: Y/N	Piece to be photographed: Y=Yes; N=No. If unknown or undecided, leave blank.
To be conserved: Y/N	Piece to be conserved: Y=Yes; N=No. If unknown or undecided, leave blank.
ID sample taken: Y/N	Sampled for identification: Y=Yes; N=No. ID sample is typically a full diameter slice (if available), c. 50mm thick, taken at or near the maximum diameter/breadth. If the piece is initially retained whole for further work, this field should be left blank to allow future completion.
Dendro sample taken: Y/N	Sampled for dendrochronological analysis: Y=Yes; N=No. Dendro sample is typically a full diameter or radial slice (if available), c. 50mm thick, taken at a location where the maximum ring sequence is available, away from irregular grain associated with knots or branches. If the piece is initially retained whole for further work, this field should be left blank to allow future completion.

Field	Field description
<sup>14</sup> C sample taken:	Sampled for radiocarbon dating: Y=Yes; N=No. 14C sample is typically a small sample of
•	the outermost rings of the piece. If the piece is initially retained whole for further work,
Y/N	this field should be left blank to allow future completion.
	Notes on sample, e.g. estimated ring count, location of sample if differing from above,
Complementes	number of rings in <sup>14</sup> C sample, if known. NB full diameter or radial slices taken for
Sample notes	identification or dendrochronology may also double as samples for other forms of
	scientific dating such as wiggle match dating using multiple radiocarbon dates
Initials	Initials of recorder.
Date	Date record completed.

**Table 2:** Taylor Scale for assessing condition (state of preservation) and analytical potential of waterlogged wood through visual and physical inspection (grading system devised by M. Taylor (Van de Noort *et al.* 1995, tab. 15.1), modified by M. Bamforth and I. Robinson Zeki, see the main document, Section 4.2.1).

State of preservation	Woodworking analysis	Conservation	Wood studies	Species identification	Scien dati	
-	-	-	-	-	Dendro	<sup>14</sup> C
5 excellent	+	+	+	+	+	+
4 good	+	+	+	+	+	+
3 moderate	+/-	+	+/-	+	+	+
2 poor	+/-	-	+/-	+/-	+/-	+/-
1 very poor	-	-	-	+/-	-	+/-
0 non-viable	-	-	-	-	-	-

#### Key

- 5 All original woodworking evidence is present, clearly visible and well presented appears 'as new'.
- 4 Primary and/or secondary conversion is clear, as is fine detail such as tool facets and additional tool signatures or stopmarks. Use/wear is apparent, if present.
- 3 Primary and/or secondary conversion is clear, if present. Tool facets are visible if present but will not preserve fine detail. Can be sampled for species identification and scientific dating, if appropriate, and is likely to provide viable data.
- 2 The basic form of this material is visible (for example, roundwood, debris and so on). Conversion may be apparent, but clear faceting is not visible. Can be sampled for species identification and scientific dating, if appropriate, and may provide useful results
- 1 The material is so degraded as to not be able to see its form. A piece of the item may be in a suitable condition to allow species identification.
- **0** Material that is barely recognisable as wood typically occurs as 'dust', as a 'smudge' or as a 'shadow'. Is not an entity that could be picked up and bagged.

**Table 3:** Grading system for archaeological charred wood (after Harrison with Robinson Zeki 2024, tab. 32.02).

Superficial	<10% of the timber's thickness appears to be charred, and the bark or grain surface appears blackened but otherwise little altered by burning.
Minor	c.10–25% of the timber's thickness appears charred, with minor signs of thermal alteration or burning to surface (loss of finished face, small cracks).
Major	c.25–75% of timber's thickness appears charred, square 'alligator char' pattern or burning seen to deform the face(s) of the timber, with deep cracks penetrating almost to the core of the piece.
Total	c.75–100% carbonised, with significant destruction to high surface area elements (worked joints/sockets, terminal ends), cubes of charcoal dropping and spreading from the element, on lifting element is light and fragile as a consequence of structural damage by burning.

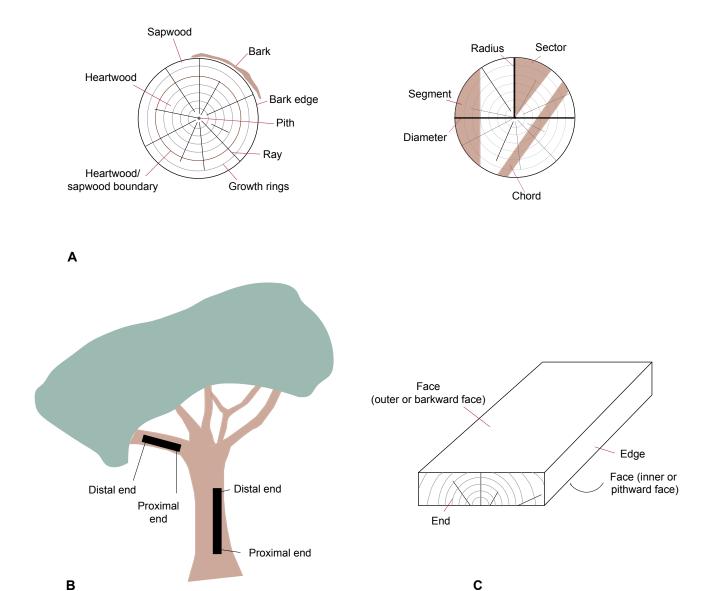
**Table 4:** Wood type classification. Definitions draw on earlier classifications: (Orme & Coles 1983; Coles & Orme 1985; Brunning & O'Sullivan 1997; Taylor 1998; 2001; Bamforth et al. 2018; Robinson Zeki et al. 2024).

Wood type		Definition
Worked	Artefacts (ART)	Worked wooden objects that are portable and designed for a specific non- structural function. When compared to non-artefactual worked wood, these objects often demonstrate a greater level of woodworking complexity, a higher level of woodworking skill, increased attention to 'finish', and/or the use of different woodworking techniques. They may show distinct use-wear. All items in this category will be classified as worked.
	Timber (TIM)	Wood converted (deliberately shaped) from an in-the-round log or branch into a piece with an angular cross-section. In this classification, timber is used to refer to converted wood of any size. Timber can be divided into two groups: fully converted timber and more simply modified roundwood.
	Fully converted timber (FCT)	Wood converted (deliberately shaped) by splitting, sawing, axing, adzing or other means into an angular cross-section. It is distinguished from modified roundwood by there being little or none of the original outer left intact. All items in this category will be classified as worked.
	Modified roundwood timber (MRW)	Wood converted (deliberately shaped) by splitting, sawing, axing, adzing or other means into an angular cross-section where a substantial amount of the outer surface remains intact (conversion of this type can often be expressed as a radial fraction: e.g. a half, third or quarter split). All items in this category will be classified as worked.
	Timber debris (TD)	Fragments of timber (converted wood). Items in this group are often by- products of the timber working process or fragments from larger timbers (the distinction between these two interpretations may not always be apparent). They are generally of angular cross-section, and will sometimes feature facets from trimming or other evidence of tooling associated with the conversion process. They may include portions of the original outer. As their angular cross-section has been determined to be the productof the woodworking process, all items in this category are classified as worked.
	Worked roundwood (WRW)	Wood which occurs in an unconverted form, in-the-round, often with the bark still attached and which features evidence of woodworking at some point or points along its length. Roundwood can include wood of any diameter, from thick trunk- or stemwood, through branch- or limb-wood to crooked twigs or straight wands. All items in this category will be classified as worked.
	Roundwood debris (RD)	Fragments of worked roundwood, where the full cross-section is no longer intact, but there is clear evidence that the fragment originated as a byproduct of working roundwood, and does not represent a product (converted timber). Items in this group are generally offcuts from the woodworking process. All items in this category are classified as worked.

Wood type		Definition
Worked	Woodchips (WC)	Small off-cuts of wood and/or bark derived from a single blow with an axe/ adze (i.e. each chip represents the by-product of a blow which created a single facet). Woodchips can be generated from the working of both roundwood and timber. All items in this category are classified as worked.
	Worked bark (WB)	Detached pieces of bark (external tissue of a tree), which occur separated from the wood of the tree and which feature evidence of evidence of woodworking. Where bark is removed by a single blow of an axe, it is counted as a type of woodchip. All items in this category will be classified as worked.
	Worked root (WRO)	Tree root, <i>in situ</i> or redeposited, with evidence of woodworking, usually as a result of felling. All items in this category will be classified as worked.
	Worked stump (WST)	Tree stump (base of trunk) with part or all of the root system present.  Evidence of human activity causing felling present. Where substantial amount of the trunk is also present, class as a Felled tree (see below) May be in situ or redeposited.
	Felled tree (FTR)	All or substantial length of a tree trunk which may have roots or limbs attached with evidence of human activity causing felling. May be <i>in situ</i> or redeposited.
Unworked	Unworked roundwood (URW)	Wood which occurs in an unconverted form, in-the-round, often with the bark still attached with no evidence of woodworking present. This can include wood of any diameter, from trunk- or stem-wood, through branch- or limbwood to crooked twigs or straight wands.
	Debris (DEB)	Fragments of unworked wood where the full-cross section is incomplete but there is no surviving evidence that this transformation was the result of human action. This category can include items of all sizes. The irregularity of their surviving form may be the product natural forces prior to deposition (for e.g. fracture of falling branches), partial burning of the exterior prior to deposition, mechanical damage during excavation and storage, or be due to decay, before, during or after the period of deposition.
	Bark (UB)	Detached pieces of bark (external tissue of a tree), which occur separated from the wood of the tree and which feature no evidence of woodworking.
	Root (ROO)	Tree root, typically with sinuous growth, may occur <i>in situ</i> , often as part of a larger root mass, stump or stool, or can occur <i>ex situ</i> , as redeposited waste.
	Stump (STU)	Tree stump (base of trunk) with part or all of the root system present. May be in situ or redeposited. No evidence of human activity causing felling.
	Tree (TRE)	All or a substantial length of a tree trunk which may have roots or limbs attached. No evidence of human activity causing felling. May be <i>in situ</i> or redeposited.

**Table 5:** Woodworking type codes. Codes listed are for commonly encountered woodworking evidence in non-urban contexts.

Code	Woodworking type	Description
CV	Carved	Carved to shape, potentially with a range of tools – tooling may be indistinct.
НО	Hole	Hole intentionally cut into wood, not thought to be part of a joint.
HE	Hewn	Face or edge of timber converted/cut to shape with axe or adze.
JO	Joint	Modification for joining discrete wood elements. Type of joint should be given in woodworking notes.
NO	Notch	Notch intentionally cut into wood, not thought to be part of a joint.
SP	Split	Converted from 'in the round' by means of controlled splitting.
SW	Sawn	Converted or cut to length with saw.
ТО	Torn	Modified by controlled/intentional tearing, may be hard to establish with certainty.
TR	Trimmed	Cut to length, or to a point, or to remove a side-branch with a bladed tool (often an axe) in a manner which leaves an identifiable facet.
TT	Trimmed and torn	Incompletely trimmed cut, with tearing used to complete fibre separation
TW	Twisted	Modified by rotational twisting.
WH	Whittled	Modified by knife or small bladed tool



**Figure 1:** A) Wood anatomy and terms for describing parts of roundwood in cross-section; B) terms to describe orientation of roundwood or timber relative to the growth of the tree; C) terms to describe parts of a timber. Image: I. Robinson Zeki & C. Walton, © Cambridge Archaeological Unit (NB For the purpose of the description of tangential conversion, the term chord (which properly refers to a line bisecting a circle) is used to describe the portion of circle between two chords).

#### Unconverted/ whole log conversion:

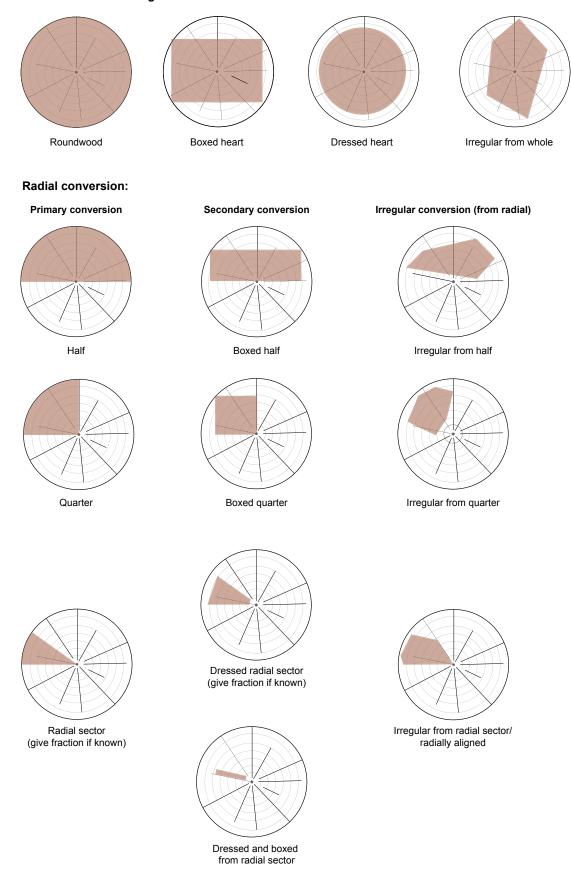
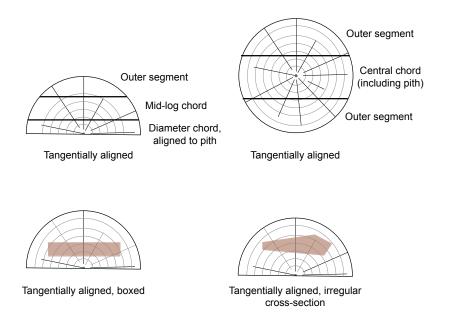


Figure 2a: Timber conversion

Image: I. Robinson Zeki & C. Walton, © Cambridge Archaeological Unit, adapted from Morris (2000, fig. 973) and Spence (1994, fig. 32).

#### **Tangential conversion:**



#### **Uncertain conversion:**

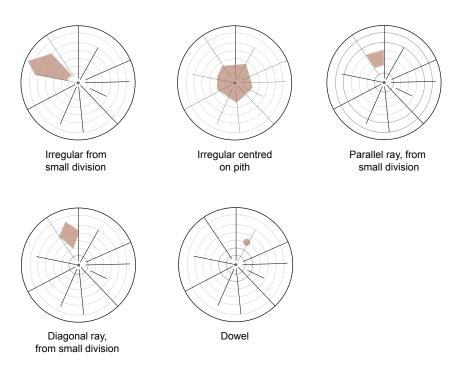
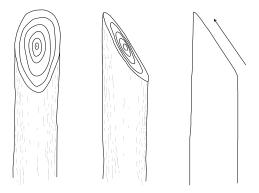


Figure 2b: Timber conversion

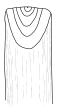
Image: I. Robinson Zeki & C. Walton, © Cambridge Archaeological Unit, adapted from Morris (2000, fig. 973) and Spence (1994, fig. 32).

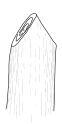
#### A.

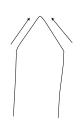


#### Chisel-shaped end

One end trimmed from one direction to a chisel-shaped end

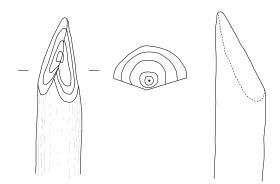






#### Wedge-shaped end

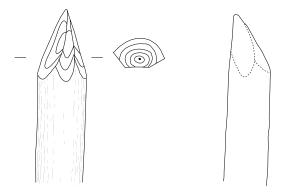
One end trimmed from two directions to a wedge-shaped end



#### Three-sided variant point

One end trimmed from two directions to a variant point.

The untouched side of the stem creates the third side of the point; the tip is very asymmetrical



#### Four-sided variant point

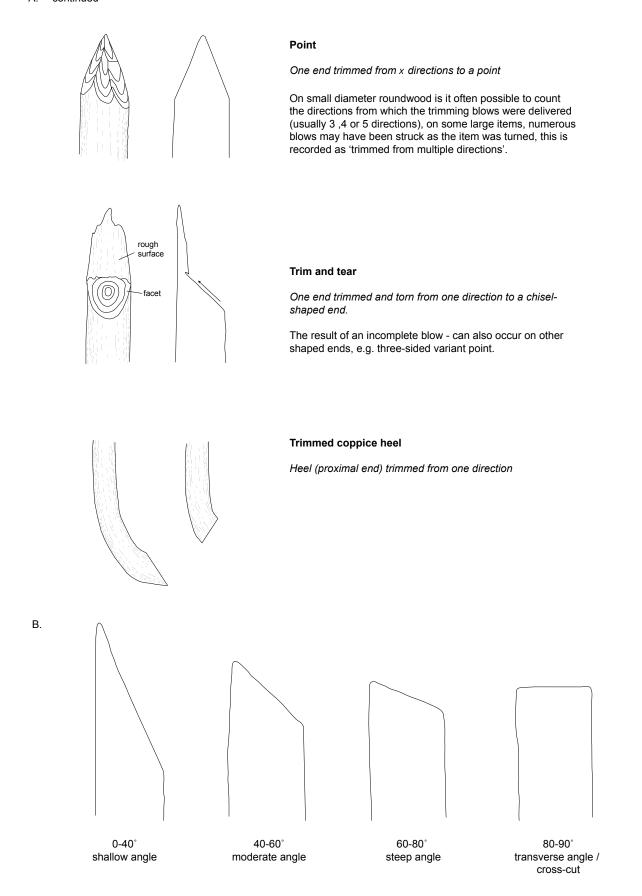
One end trimmed from three directions to a variant point.

The untouched side of the stem creates the forth side of the point; tip very asymmetrical

(Five+ sided variant points are possible, if one side is left untouched)

Figure 3a: Worked roundwood ends: A) types of worked end; B) angles of cut.

Image: I. Robinson Zeki & C. Walton, © Cambridge Archaeological Unit, following classification by Coles and Orme (1985).



**Figure 3b:** Worked roundwood ends: A) types of worked end; B) angles of cut. Image: I. Robinson Zeki & C. Walton, © Cambridge Archaeological Unit, following classification by Coles and Orme (1985).

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