

Ancient Monuments Laboratory
Report 26/92

WOOD IDENTIFICATION FOR 5 MEDIEVAL
OBJECTS FROM THE MUSEUM OF LONDON

Wendy Carruthers

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Summary

Four chess pieces and a spatula from excavations in London were submitted to the Ancient Monuments Laboratory for wood identification. The chess pieces were made from yew, cf. field maple and box, and the spatula was made from yew. This report lists the main anatomical criteria which led to these identifications.

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The five wooden objects consisted of four chess pieces and a spatula. All had previously been conserved at the MOL, the majority by PEG replacement but one chess piece (<2891>) had been freeze-dried.

Identifications were made by taking sections by hand from selected areas of the objects using a double-edged razor blade. The thin sections were softened in Industrial Methylated Spirits and mounted on slides in glycerol. Both dissecting and high-power microscopes were used for the sectioning and identification. Schweingruber (1978) and the author's own reference collection were used for comparative purposes.

Great care was taken not to visibly mark the objects, and this caused some difficulties in the case of the objects that possessed no broken surfaces. Although three different orientations of section are usually required for an identification to be certain (see Schweingruber, 1978), this was not possible for the two roundwood chess pieces without visibly marking them. Fortunately, sufficient characters were observed in the two sections to make positive identifications.

RESULTS

i. Chess piece - Site: CUS 73I, Context: 12, <157>, Lab No.3057

Object taken from roundwood of at least c.30 years old. Some very slow growth observed in outer rings.

a) Transverse section:

Coniferous wood with no obvious resin canals. Fairly sharp transition to latewood.

b) Tangential section:

Ray height c.4-11 cells. Fairly distinct spiral thickenings observed.

c) Radial section:

Not possible.

ID : Taxus baccata L. (yew)

Yew is a native tree of well-drained limestone and chalk, often growing in beech or oak woodland. The wood is very hard, dense and close-grained. It is valued for turning and carving, as well as for bows, furniture, barrel-hoops, mallets etc.

2. Chess piece - Site: TL 74, Context: 2467

Object cut from a larger timber, growth-rings indistinct.

a) Transverse section:

Dicotyledon wood, diffuse porous with sparsely scattered solitary pores.

b) Tangential section:

Multiseriate rays of 2-4 cells width, mostly 3.

c) Radial section:

Rays homogeneous. Very fine spiral thickenings just visible in places.

ID : cf. Acer campestre L. (field maple), but possibly subfamily Pomoideae (includes apple, pear, hawthorn and Sorbus sp.)

All of these taxa are native trees of woods, hedgerows and scrub. Being similar in anatomical characters, they are also similar in their working properties. They are fine-grained and compact and are valued for turning. They have often been used for handles, engraving (apple), printing blocks (pear), bowls (maple) etc.

3. Chess piece - Site: BIG 82, Context: 4342, <2891>

[Freeze-dried]

Object cut from a larger timber. Growth-rings indistinct.

a) Transverse section:

Dicotyledon wood, diffuse porous. Very small, scattered, solitary pores. Indistinct boundary of growth ring.

b) Tangential section:

Mainly biseriate rays, some uniseriate.

c) Radial section:

Heterogeneous rays. No scalariform perforation plates observed, but these are delicate and may have been affected by the conservation method.

ID : Buxus sempervirens L. (box)

This is a native tree of woods and scrub on chalk and limestone in southern

England. It is a very hard, dense, close-grained wood that is highly valued for turning, carving and engraving, printing blocks, spindles, inlay etc.

4. Chess piece - Site: BIG 82, Context: 2278, <2288>

Object from roundwood of at least 24 years old.

a) Transverse section:

Dicotyledon wood, diffuse porous. Very small, scattered, solitary pores.

b) Tangential section:

Primarily biseriate. Rays heterogeneous.

c) Radial section:

Not possible.

ID : Buxus sempervirens L. (box)

As above.

5. Spatula - from Pageant display, AD 1350-1400.

Object presumably carved from fairly large timber - not possible to examine large section through growth-rings but appeared to be fairly straight (i.e. large diameter and therefore large timber).

a) Transverse section:

Coniferous wood, no resin canals seen in the very small section it was possible to cut. Seemed to be quite a sharp transition to latewood.

b) Tangential section:

Ray height c.6-13 cells.

c) Radial section:

Very distinct spiral thickenings visible.

ID : Taxus baccata L. (yew)

As above.

REFERENCES

Schweingruber, Fritz.H. (1978) Microscopic Wood Anatomy. Swiss Federal
Institute of Forestry Research. CH-8903, Birmensdorf.