SHACKERLEY MOUND - TREE-RING ANALYSIS

By Jennifer Hillam (Jan 1984)

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Appendix - ring width data. First line - site name; second line - sample number; third line - number of rings; fourth and subsequent lines - ring widths in 0.1mm (25 to a line).	5

no.	no. of rings	sapwood rings	average width(mm)	sketch	maximum dimensions(cm)
114/115A*	22	÷	> 5		19 x 5
114/115B	58	-	3.00		17 x 3
114/1150*	12	-	> 5		11 x 5
114/115D	58	-	2.84		16 x 3
115.i*	37	-	>5		19 x 3
115.ii	40	-	4.51		19 x 3
115.iii	110	-	1.17		13 x 4
162A*	24	-	>5		13 x 5
162B	68	17	2.26		19 x 8
191.i	+82	33	1.21		24 x 6
191.ii	139	7	1.51		21 x 7
191.iii	158	-	1.50		29 x 10
moat 2.i	41	-	4.08		17 x 4
moat 2.ii	53		2.49		15 x 3
moat 2.iii	ž* 29	-	> 5	WIII A	17 x 3

trench 250* 28

c.4

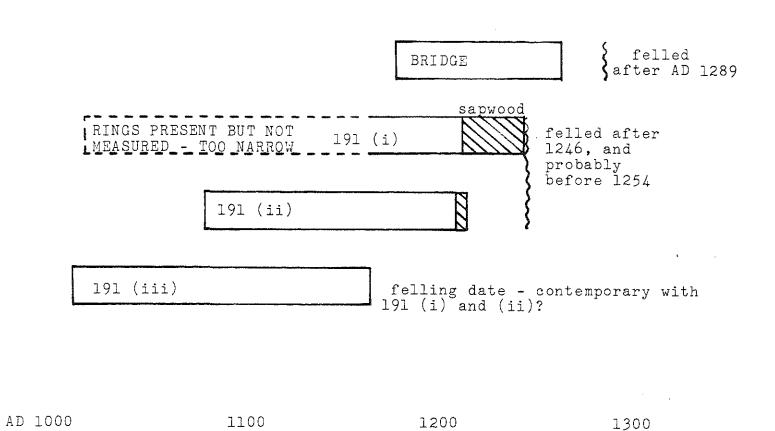


11 x 11

All samples are oak (Quercus) except for the worked timber from trench 250 which is elm (<u>Ulmus</u>). Samples marked with asterisks had insufficient rings for tree-ring dating. Sketches are not drawn to scale.

sample no.	date	comments
114/115A	-	22 very wide rings - widths not measured
114/115B	-	fairly wide rings - no reliable crossdating found
114/115C	-	12 very wide rings - not measured
114/115D	-	no reliable crossdating
115.i	-	37 very wide rings - not measured
115.ii	-	insufficient rings
115.iii	-	110 narrow rings - difficult to measure the widths accurately
162A	-	. 24 very wide rings - not measured
162B	?	tentative date in late 15th century
191.i (<u>c</u> 101	5)1165 - 1246	outer 82 rings measured but inner $\underline{c}.150$ rings too narrow to be measured accurately
191.ii	1078-1216	191.i and 191.ii felled after 1246 and probably before 1254
191.iii	1008-1165	probably contemporary with 191.i and 191.ii
2nd moat i	~	41 wide rings, no crossdating
2nd moat ii	-	53 " "
2nd moat iii	-	29 very wide rings - not measured
trench 250	-	elm, 28 wide rings, not measured
bridge	1179-1266	sample from Alan Wharton; felled after \underline{c} .1289

Fig 1: Bar diagram showing relative positions of the dated ring sequences.



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10 14 17 18 16 10 11 16 15 13 16 18 11 17 16 13 20 26 20 23 26 24 27 21 28
  <u>39 46 44 41 40 40 33 27 44 23 30 30 25 33 45 35 26 25 20 23 34 28 32 32 41</u>
 <del>31 38 35 37 35 26 21 19 23 18 17 24 22</del>
 SHACKERLEY
 114/55
 <sup>^</sup>58
  48 52
        37 32 45 37 44 31 37 45 35 30 31 38 41 38 28 31 48 40 33 28 27 34
  <u> 27 37 36 35 24 25 26 27 25 19 25 20 22 19 19 17 21 22 20 21 25 25 27 18 25 </u>
 19 21 27 31 30 28 22 30
 SHACKERLEY
 114/5D
  38
  31 21 26 19 13 19 20 28 36 20 13 20 11 8 8 6 7 5 4 6 5 8 10 14 10
   <u>5 19 16 18 20 8 17 25 28 33 31 27 29 26 49 34 31 56 76 62 45 71 61 60 42</u>
 29 43 77 49 35 46 57 66
 SHACKERLEY
 115.1
  40
  30 33 34 30 20 34 39 34 40 41 36 30 21 40 43 38 46 69 43 37 34 33 54 54 49
 <u>53 59 54 77 50 67 62 51 54 49 55 45 41 47 77</u>
 SHACKERLEY
 115.3
 110
    <u>20 17 15 35 37 31 19 22 31 31 24 36 46 31 37 24 33 29 29 19 21 24 19 16</u>
  <del>16 12 10 14 10 9 11 9 13 8 8 10 11 8 14 11 9 12 7 5 3 4 5 3 5</del>
     <u>4 4 4 5 5 6 6 4 6 7 5 5 5 5 6 6 5 6 4 7 10</u>
  912768961161185668578855
 4 6 8 9
SHACKERLEY
             __7__9_7__6_7__7_
 162B
 68
 19 19 24 18 23 32 30 29 28 23 21 18 30 41 24 33 23 35 20 26 23 36 23 15 9
  SHACKERLEY
 191.1
 72
       8 9 10 10 11 10 12 8 8 8 7 10 15 10 9 14 8 7 11 8 10 6 8
13 13 10 13 15 10 12 13 13 16 12 14 13 15 14 7 14 9 14 16 11 13 11
 11 14 12 13 11 13 13 9 10 12 13 15 16 17 16 18 12 18 16 14 16 14 19 14 17 20 12 15 14 12 12 10
SHACKERLY
191.2
139
       6 6 5 7 10 15 12 6 6 9 6 9 8 13 9 12 10 7 10
 16 11
 11 6 7 13 11 13 4 5 10 12 7 8 10 11 9 6 6 13 20 18 22 19 16 9 8 10 8 11 14 12 13 15 14 8 12 13 10 12 8 6 6 10 10 12 8 15 6 11
                               9 7 9 14 18 23 29 30 39 29 37 16 14 28 22
 11 12
        8 10 11 12
                   9 12 11 10
26 45 23 16 16 10 11 18 17 16 14 12 18 28 14 23 13 25 35 32 31 24 34 30 24
 28 18 27 33 24 22 30 28 17 17 27 28 25 33
SHACKERLEY
191.3
155
       28 23 28 27 22 19 15 12 17 13 14 16 21 24 22 13 23 23 16 17 20 23 19 11 12 15 20 18 18 15 15 11 15 19 13 18 11 13 10 14 18 14 14 23 15 15
       13 13 11
                            16 12 13
    18
                10 15
                      11
                         12
                                     11 10
                                            9
                                              11
                                                 14 14
                                                       12
                                                          10 13
                                                                11 10
                                                                         11
11 11 13 11
              8
                    8
                         9 10 13 11 8 10 8 6 5 8
                                                          7 8 5 6
                      6
                                                       7
                 - 6
              7
           8
                - 6
                    8
                      7
                         6
                             -6 10 12 17 22 16 20 23 28 22 27 15 19 25 31 25
 24 22 24 14 13 17 14 19 23 17 12 14 19 15 22 19 19 17 15 20 17 21 16 14 16
 20 22 26 22 19 18 13 12
SHACKERLEY
2MOAT.1
 41
 <u>37 40 48 50 43 58 51 42 54 52 59 56 37 39 49 37 47 48 30 54 39 49 28 33 33</u>
 <u>44 29 34 32 36 39 36 46 35 40 40 29 35 22 29 31</u>
SHACKERLEY
ZMOAT.2
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53