

DATING OLD WELSH HOUSES PROJECT

DENDROCHRONOLOGY RESULTS

GRONANT, Llanfachraeth, near Holyhead, Anglesey.

consisted of two phases of construction, one in each of two buildings later conjoined. In the first building sampled very little sapwood was available on the timbers, although many had substantial ring counts. Five timbers from the main hall range were sampled, one with over 200 rings. Three timbers from this range dated, and produced a felling date of *circa* 1618-19 or shortly thereafter. It is not possible to give a more accurate date due to the sapwood rings in the last two decades being so narrow as to be almost unmeasurable, and the readings taken were not considered to be reliable. Dendro-provenancing has shown that timbers have originated from both Wales and Ireland.

To the south-east, in the lower kitchen range of the second building, an axial beam and mantel beam were the only timbers available for sampling. The axial beam had a last measured date of 1538, which included 23 rings of sapwood. This was thought to have been complete on sampling, but inspection under the microscope revealed that most of the end surface of the core had been shaved during conversion, therefore a felling date of *circa* 1540 is give for this timber. The mantel beam had a last measured ring date of 1519, which included 9 rings of sapwood, giving a felling date range of 1524-54, which is consistent with the axial beam. These two timbers matched best with north Welsh chronologies.

Table 1: Summary of Tree-Ring Dating 2010

GRONANT, LLANFACHRAETH, HOLYHEAD, ANGLESEY

Sample number & type	Timber and position	Dates AD spanning	H/S bdry	Sapwood complement	No of rings	Mean width mm	Std devn mm	Mean sens mm	Felling seasons and dates/date ranges (AD)
Main range									
angc1	c East principal rafter S truss	1506-1590	1578	12	85	1.22	0.61	0.165	1592-1622 (Welsh)
angc2	c West principal rafter S truss	-		H/S	109	1.09	0.25	0.187	
angc3a1	c East principal rafter 2 nd truss from S	1405-1589	1580	9	185	1.00	0.38	0.209	
angc3a2	c ditto	-		29C	29	0.46	0.14	0.269	c. 1618/19 (Irish)
angc3b ¹	c ditto	1476-1587		13C+20CNM	112	0.94	0.43	0.239	
angc3c	c ditto	1475-1579			105	0.91	0.25	0.224	
* angc3	Mean of angc3a1 + angc3b + angc3c	1405-1589			185	1.01	0.38	0.206	c. 1618/19 (Irish)
angc4	c West principal rafter 2 nd truss from S	-		33¼C	99	0.88	0.42	0.206	
* angc5	c West V-strut 2 nd truss from S	1442-1573	1573	H/S	132	0.76	0.20	0.204	1590-1630 (Irish)
South-east wing									
angc11 ²	c Axial beam, kitchen	1427-1538	1515	23 ?C	*112	1.28	0.84	0.248	<i>Circa</i> 1540 (Welsh)
angc12	c Mantel beam, kitchen	1441-1519	1510	9	79	2.09	1.04	0.256	1524-54 (Welsh)
* = ANGC Site Master (Irish)		1405-1589			185	0.90	0.29	0.182	

¹ Last 20 rings of sapwood unreliable and not included in measured sequence

² Sapwood unreliable, bark edge questionable

Key: *, †, § = sample included in site-master; c = core; mc = micro-core; s = slice/section; g = graticule; p = photograph; ¼C, ½C, C = bark edge present, partial or complete ring:

¼C = spring (last partial ring not measured), ½C = summer/autumn (last partial ring not measured), or C = winter felling (ring measured); H/S bdry = heartwood/sapwood

boundary - last heartwood ring date; std devn = standard deviation; mean sens = mean sensitivity. Sapwood estimate of 14-44 used for North Wales and 17-57 for Irish timbers (Hillam 1987)

GRONANT, LLANFACHRAETH SH 327 851 A large complexe of unit-system type. The earliest range is a storeyed house of hearth-passage type with post-and-panel passage partition, moulded ceiling beams, and a diagonally-set chimney. This is the only house of hearth-passage plan-type identified on the island and of interestingly early date. House II is a modernised and later storeyed house of direct-entry 'Snowdonian' type with end-chimneys. The link between these two houses probably dates from the early C19th. Partial survey in the NMRW.

