

SOMERSET DENDROCHRONOLOGY PROJECT, PHASE 3

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In 1996 the Somerset Vernacular Building Research group started the three year 'Somerset Dendrochronology Project' (1). Phase 1 and 2 were described in SANHS Proceedings vol. 141 and this paper is concerned with phase 3, with a summary of the results of the project completed in 1999.

TYPE	HOUSE	PARISH	FELLING DATE in Centuries				OTHER FEATURES
			13th	14th	15th	16th	
BASE CRUCKS and AISLED-END TRUSSES	Garnivals Week Higher Broughton Fmh N. Cadbury Court, wing Court House Rectory Farm Barn*	MILVERTON STOKE ST MARY NORTH CADBURY LONG SUFTON ENGLISHCOMBE		1287 1267-1299 1285-1317 1328 1314-58			* aisled-end tr. * aisled-end tr. (Hall roof 1589) * aisled-end tr. raised cruck
TWO-TIER BASE CRUCKS	Bridge Farmhouse Priory of St John Kings Head Inn Bridge Farmhouse Hanam Manor, solar Abbey Barn*	BUTLEIGH WELLS WELLS BALTONSBOROUGH CHEDDAR GLASTONBURY		1305 1314/5 1318/9 1336-42 1341/2 1342-60			(re-used cr. 1263) raised crucks short princ. tr. raised cruck raised cruck raised crucks
TRUE CRUCKS	West End Fmh, Barton East Lynch Cottage Crane Farmhouse 21 Woolston Road Wick Farmhouse Yew Tree Farmhouse	WINSCOMBE SELMORTHY SOMERTON NORTH CADBURY NORTON ST PHILIP CHEW STOKE		1278/9 1315 1338 1344 1371/2 1386			apex C. saddle apex H yoke apex H yoke (+ jt. cr. 1441/2) arch-braces apex M
JOINTED CRUCKS	47, 49 Goose Street Stockland Lovell Fmh Lower Cockhill Fmh Lancin Farmhouse*	BECKINGTON FIDDINGTON CASTLE CARY WAMBROOK		1391 1404 1435		1533	arch-brace apex E arch-brace apex E
CRUCKS with SHORT FEET	Birdcombe Court, wing 20 Vicars' Close Viaduct View	WRAXALL WELLS PENSFORD				1441 1466 1512	arch-braces (* fl. joist 1349)
ARCH-BRACED COLLAR TRUSSES	the George Inn Whitestaunton Manor Tickenham Court Low Ham, Old Manor Fmh Shapwick House	NORTON ST PHILIP WHITESTAUNTON TICKENHAM HIGH HAM SHAPWICK				1431/2 1446-72 1471-76 1481 1489	* timber jetties cusped windbr's (beams) (* det. kit. 1420)
TIE/COLLAR and POST & TRUSS	23, 25 High Street 24 High Street 16, 18 High Street 31 High Street 20 High Street Lodge Farmhouse Sighborough Manor	RODE BRUTON BRUTON BRUTON BRUTON NORTON ST PHILIP SOUTH PETERBURY				1429 1430 1454 1453/4 1462 1491-1523 1585	tie/col. trusses * timber jetty * timber jetty (* beam, 1272-1304) aisled trusses tie/col. trusses tie/col. truss

Fig. 1 Medieval Somerset Roofs with Tree-Ring dates. Tree-ring analysis is carried out for the Somerset Dendrochronology Project by Dan Miles of the Oxford Dendrochronology Laboratory. Entries with stars (*) are by others.

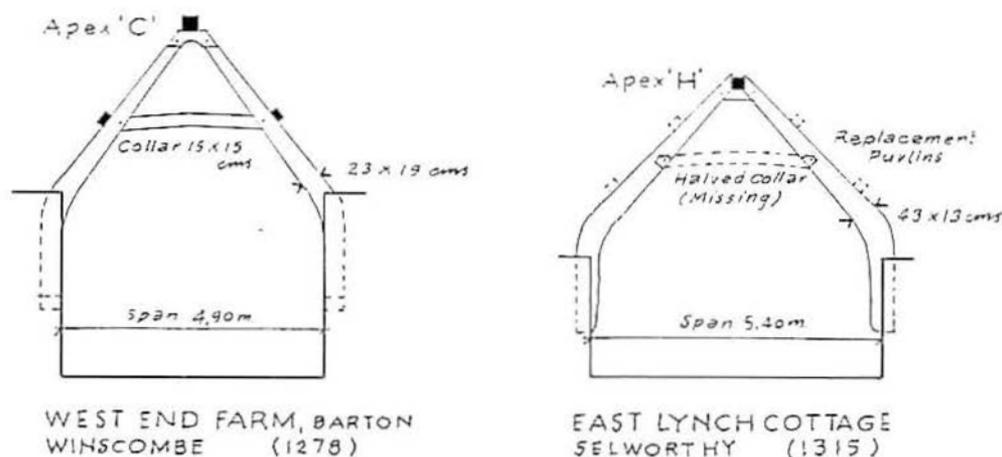


Fig 2. Two Early Crucks.

Fig. 1 shows the up-dated list of tree-ring dated medieval roofs, arranged in chronological order, showing a sequence, overlap or coincidence of the various types of roof structure.

In phase 3 a further eleven houses were tree-ring dated and are listed here. Fifty-seven houses were included in the whole project, of which thirty-two were successfully sampled; another six were sampled but failed to date. The remaining sixteen were found to have unsuitable timbers. The majority of samples are from cruck roofs which extend over a date range from the 13th to the 16th centuries and cover most of the county (fig. 3).

Base Crucks, including *Two-Tier Crucks* were discussed in SANHS Proc. vol. 141 and the last stage of the Project has added only one more example in that category, another mid-14th century building (the Solar wing of Hanam Manor, Cheddar with a small cusped two-tier cruck, 1341/2).

True Cruck dates have now been taken back by three earlier examples: West End Farmhouse, Barton, Winscombe, at the western end of the Mendips, 1278/9; East Lynch Cottage, Selworthy, in West Somerset, 1315, (fig. 2); and Crane Farmhouse, Somerton, 1338. The earliest cruck is the most refined and all three have early apexes (types C and H).

Comparing the tree-ring dates of *Base Crucks* with *True Crucks*, both types go back to the late 13th century. *True Crucks* start 9 years earlier than the *Base Crucks*—not a wide enough difference to help the debate on the earliest form of cruck, although logically it seems that base crucks should be a development of true crucks, base crucks being introduced to cope with wider spans without recourse to posts and aisles.

Comparing the date of *True* and *Jointed Crucks* we find that, to our surprise, the date ranges of the two types do not overlap. The earliest jointed cruck at no 47, 49 Goose Street, Beckington (1391) is over 100 years later than the first true cruck (1278) and the latest jointed cruck (1533) is about 150 years later than the last true cruck sampled (1386). The chart (fig. 1) should be read with caution in this regard as a great number of jointed crucks have been found to be of Elm or fast-growing Oak and remain undated; any further successful sampling may show some overlap between true and jointed crucks. Jointed crucks do, however, overlap with the next three types. The maps (fig. 2) show the distribution of the various types sampled, together with unsuccessful examples, notably in the Vale of Taunton and West Somerset. At Stockland Lovell Farmhouse, Fiddington, a massive jointed cruck roof, which was heavily smoke blackened, dated to 1404.

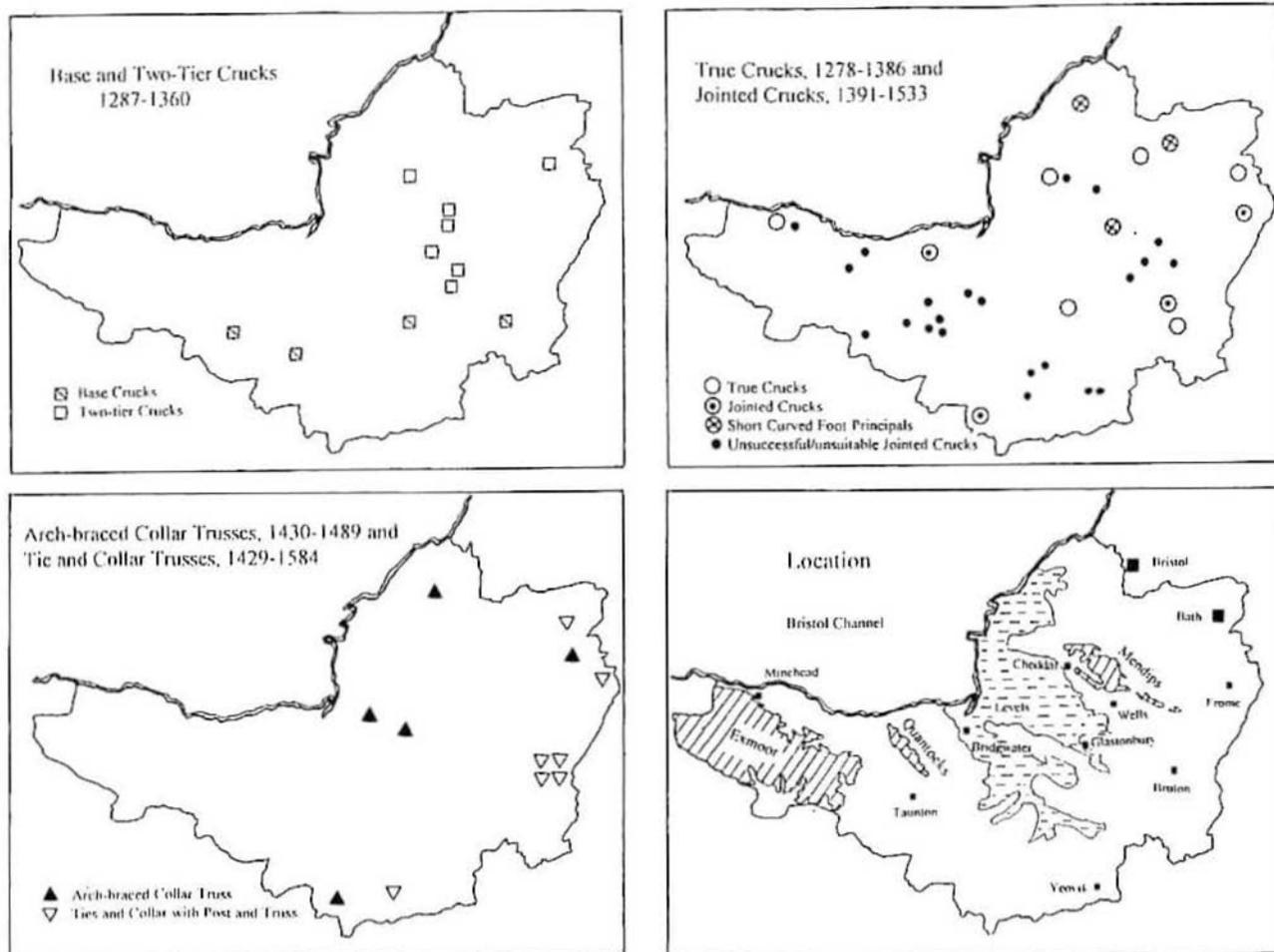


Fig. 3 Distribution Maps. Dendrochronology Project 1996-1999.

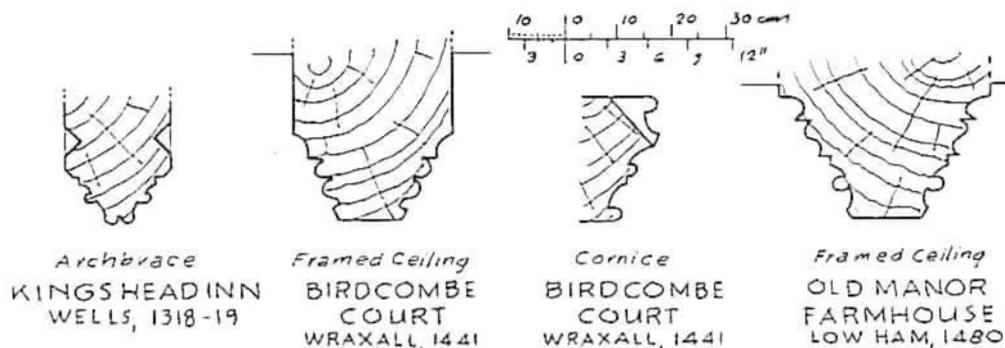


Fig 4. Mouldings.

The three examples of *Crucks with Short Feet* all fall into the late 15th and very early 16th centuries and run concurrently with the Arch-braced Collar Trusses which they so closely resemble. The Wing roof at Birdcombe Court, Wraxall, with decorative cusped windbraces, tree-ring dated to 1441. The type is difficult to recognise, the foot of the cruck being at eaves level, not easily seen, and is rare in Somerset. Our samples come right at the end of the Cruck period, covering the date range of 1441-1512.

Arch-braced Collar Trusses, as distinct from crucks, have a short range of about 60 years. This is the commonest type of high status roof in Somerset and appears to be restricted to the 15th century. Included are some highly decorative examples with cusped arch and wind-braces, features also seen in some of the two-tier crucks dated about 80 years earlier. These roofs were illustrated in *Medieval Somerset Roofs* (2).

Any attempt to recognise a date sequence for individual features in the design of roof trusses (with the exception of apex types), has been limited by the small number of samples dated. Some floor beams have however been sampled; one early cellar beam (1272-1304) in Bruton and several 15th century moulded beams which may help to date mouldings elsewhere (fig. 4).

Samples of *Post and Truss Roofs* and *Tie and Collar Trusses* have been mostly taken from town houses in Bruton (3) where the range of dates is very narrow, 1430 to 1462. Post & Truss frames combine roof trusses and cross partitions with jettied timber fronts, a feature of many town houses. One other group has been dated to 1429 at Rode—again a woollen cloth producing town in NE Somerset. A rural house, Lodge Farmhouse, Norton St Philip, has its early timber frame dated to 1491-1523.

The last building dated in the Project was no 20 Vicars' Close, Wells, a well-known street which is known to have been built (at least in part) in the mid 14th century (fig. 5). Here, as expected, a first floor joist dated to 1349, but, contrary to previous opinion, the roof proved not to have been contemporary, but dated to 1466, a century later than the floor. As this is thought to be a roof of 'crucks with short feet', which, according to our chart, should have fallen in the 15th century, the outcome was welcome. It shows that the roofs in the Close, similar in all the houses, were indeed replaced by Bishop Beckington when he re-built the chimneys in their elaborate 15th century form.

Our programme of dendrochronology in Somerset, the samples nearly all taken from medieval roofs, has been a rewarding study if only because, with the help and knowledge of our Dendrochronologists, we feel we know our buildings better. The findings have proved to be a little earlier than had been expected, particularly in the early roofs. This information

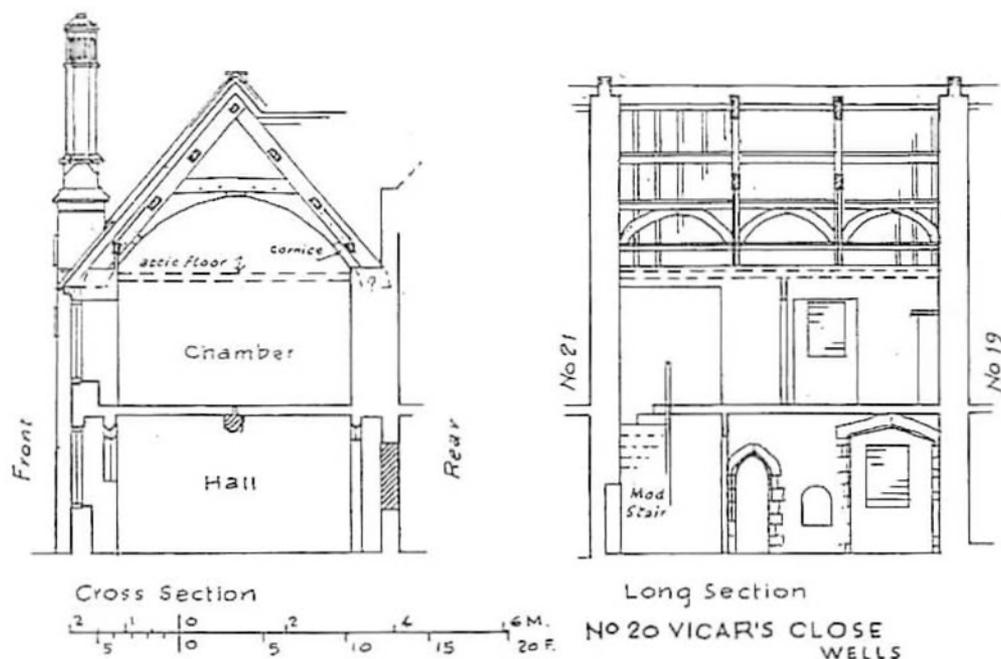


Fig 5. Vicars' Close, Wells.

will help us date more confidently in the future, although we do anticipate wider date-ranges for the various roof types if further sampling is ever undertaken.

1. The Somerset Dendrochronology Project: co-ordinator, John T. Dallimore; dendrochronologists, Daniel Miles and Michael Worthington of the Oxford Dendrochronology Laboratory. General funding for phase 3 was generously provided by the CBA (Challenge Funding), the Royal Archaeological Institute, Marc Fitch Fund, Mendip District Council and SANHS (Maltwood).
2. SANHS Proceedings vol. 141, 1998.
3. SANHS Proceedings vol. 140, 1997.

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