Biggar Archaeology Group List of radio carbon dates

Tam Ward January 2014

The Biggar Archaeology Group (BAG) has been responsible for the commissioning of 59 radio carbon dates covering the period of 1992 to 2013. Many of the dates were grant aided while others were paid for from BAG funds, sponsors are acknowledged in appropriate entries.

The dates were all processed by the Scottish Universities Research & Reactor Centre at East Kilbride, and this list gives full details as received from SURRC, resulting in various formats over the years.

All samples dated were charcoal

The figures given in italics are the average dates

For details of each Project see www.biggararchaeology.org.uk

References	Dates per project
Biggar Common West	**4of**
Johnston D A 1997. *Biggar Common, 1987 – 93: an early prehistoric funerary and domestic landscape in Clydesdale, South Lanarkshire*. Proceedings of the Society of Antiquaries of Scotland. 127 (1997) 185 – 254.	
All other Refs are published on BAG website (above)	
Biggar Common East	**5of**
Ward T 2013 et al: Barrowman C, Finlayson B & Pelling R. *Excavations and other fieldwork on Biggar Common East end, or Carwood Hill 1992 - 1993*	
Camps Reservoir	**7of**
Ward T et al 2014(forthcoming). *The survey and excavation of a Bronze Age landscape at Camps Reservoir, near Crawford, South Lanarkshire 1992 & 1994.*	
Melbourne Farm	**9of**
Ward T 2013 et al: Barrowman C, Miller J & Kelly S. Fieldwork and excavations of pre historic date at Melbourne Farm near Elsrickle, Biggar, South Lanarkshire.	
Brownsbank Farm	**2of**
Ward, T 2000, 'Pre-History North of Biggar Project, Brownsbank Farm Excavation 2000' Biggar Museum Trust	
Burnt Mounds and Lead Smelting Project	**6of**
Ward T 2014 forthcoming. *Burnt Mound and Lead Smelting Project 1997.*	

References	Dates per project
Nether Hangingshaw Farm Ward et al 2005. *Fieldwork and excavations at Nether Hangingshaw Farm, Coulter by Biggar, South Lanarkshire. Second Interim Report 2005.* Contributions from Dr Jennifer Miller and Susan Ramsay (GUARD)	**2of**
Calla Farm Ward T 2013. *Report on a small scale excavation at Calla Farm near Carnwath*	**1of**
Carwood Farm Ward T 2013 et al. *Fieldwalking and Excavation at Carwood Farm 2007 – 2009 Interim Report*, with charcoal contribution by Dr Jennifer Miller (Northlight Heritage) February 2013	**2of**
Burnetland Farm Ward T 2012. *Mesolithic chert quarry at Burnetland Farm.*	**1of**
Daer Valley Project Ward T, 2001 *2nd Interim Report, Fieldwork & Excavations at Daer Reservoir, Clydesdale 1995, 1997 & 2000*, Biggar Museum Trust	**12of**
Howburn Farm Saville A & Ward T 2010. *Howburn Farm, Excavating Scotland's First People.* Current Archaeology, Issue 243, 18 – 23. 2010.	**1of**
Fruid Reservoir Ward T 2013. *The excavation of two unenclosed platform settlements within the Fruid Reservoir, Peeblesshire, Scottish Borders.*	**5of**
Weston Farm Ward T 2006. *Excavations at Weston Farm 2003 – 2004 Interim Report: Part of the Pre-History North of Biggar Project*	**2of**

RADIO CARBON DATE DETAILS

Biggar Common West

All Biggar Common West dates (4 of) were sponsored by Historic Scotland

Biggar Common West	**NGR: NT 000 390**		
AA-18151 (GU-4275)	Biggar Common West, FC2/PH017/Sample 8		
	(Alnus) Radiocarbon Age BP		4565 ± 70 $\delta^{13}C$=-26.6$^{0}/_{00}$
Calibrated Age Ranges			
1ó	cal BC 3372-3108, cal BP 5321-5057	*BC3240*	*BP5189*
2ó	cal BC 3510-3040, cal BP 5459-4989	*BC3275*	*BP5224*

Biggar Common West	**NGR: NT 000 390**		
(GU-4276)	Biggar Common West, FC5 Area/Context 105		
	(Corylus) Radiocarbon Age BP		4880 ± 50 $\delta^{13}C$=-26.2$^{0}/_{00}$
Calibrated Age Ranges			
1ó	cal BC 3774-3637, cal BP 5723-5586	*BC3705*	*BP5654*
2ó	cal BC 3780-3531, cal BP 5729-5480	*BC3655*	*BP5604*

Biggar Common West	**NGR: NT 000 390**		
AA-18152 (GU-4277)	Biggar Common West, FC2/F11/Sample 1		
	(Malus sylvestris)		***Post 1950*** $\delta^{13}C$=-26.6$^{0}/_{00}$
Calibrated Age Ranges			
1ó	---------- n/a		---------
2ó	---------- n/a		---------

AA-21244 = repeat of AA-18152 (above) and with same result

Biggar Common West	**NGR: NT 000 390**		
AA-18153	Biggar Common West FC 2 Area/PH104/Sample 34		
	(Corylus) Radiocarbon Age BP		4300 ± 70 $\delta^{13}C$=-25.9$^{0}/_{00}$
Calibrated Age Ranges			
1ó	cal BC 3023-2788, cal BP 4972-4737	*BC2905*	*BP4854*
2ó	cal BC 3094-2701, cal BP 5043-4650	*BC2897*	*BP4846*

Biggar Common East

All Biggar Common East dates (5of) were sponsored by Historic Scotland

Biggar Common East		**NGR: NT 030395**		
GU-4279	Biggar Common East.		Area 2/F103/Sample 46	
	(Corylus avellana)	Radiocarbon Age BP		4990 ± 110
				$\delta^{13}C$=-24.6$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 3940-3661, cal BP 5889-5610		*BC3800*	*BP5749*
2ó	cal BC 4038-3533, cal BP 5987-5482		*BC3913*	*BP5734*

Note; this date was re-calibrated by SURRC in April 2013 with above result

Biggar Common East		**NGR: NT 030395**		
AA-18154 (GU-4280)	Biggar Common East.		Area 1/F010/Sample 11/22	
	(Hordeum)	Radiocarbon Age BP		4600 ± 70
				$\delta^{13}C$=-24.4$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 3496-3147, cal BP 5445-5096		*BC3321*	*BP5270*
2ó	cal BC 3609-3100, cal BP 5558-5049		*BC3354*	*BP5303*

Biggar Common East		**NGR: NT 030395**		
AA-18155 (GU-4281)	Biggar Common East.		Area 1/F010/Sample 11/9	
	(Hordeum)	Radiocarbon Age BP		4645± 65
				$\delta^{13}C$=-24.7$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 3508-3350, cal BP 5457-5299		*BC3429*	*BP5378*
2ó	cal BC 3623-3138, cal BP 5572-5087		*BC3380*	*BP5329*

Biggar Common East		**NGR: NT 030395**		
AA-18156	Biggar Common East.		Area 1/F109/Sample 23	
	(Alnus)	Radiocarbon Age BP		4275 ± 70
				$\delta^{13}C$=-26.4$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 3011-2783, cal BP 4960-4732		*BC2897*	*BP4846*
2ó	cal BC 3040-2665, cal BP 4989-4614		*BC2852*	*BP4801*

Biggar Common East		**NGR: NT 030395**		
AA-18157	Biggar Common East.		Area 1/F030/Sample 26	
	(Corylus)	Radiocarbon Age BP		4130 ± 65
				$\delta^{13}C$=-26.8$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 2879-2589, cal BP 4828-4538		*BC2734*	*BP4683*
2ó	cal BC 2900-2498, cal BP 4849-4447		*BC2699*	*BP4648*

Camps Reservoir

All of the Camps Reservoir dates (7of) were funded by Historic Scotland

Camps Reservoir 1992		**NGR: NT 010 220**		
GU-4228	Camps Reservoir, Camps 92/F1/Pit1/S12			
	(Betula)	Radiocarbon Age BP		3550 ± 60
				$\delta^{13}C$=-25.3$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 2011 - 1782, cal BP 3960 – 3731		*BC1896*	*BP3845*
2ó	cal BC 2116 - 1740, cal BP 4065 – 3689		*BC1928*	*BP3877*

Camps Reservoir 1992				
AA-17451	Camps Reservoir, Camps 92/F1/Pit2/S22			
	(Betula)	Radiocarbon Age BP		3390 ± 60
				$\delta^{13}C$=-26.8$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 1750 - 1627, cal BP 3699 – 3576		*BC1688*	*BP3637*
2ó	cal BC 1880 - 1520, cal BP 3829 – 3469		*BC1700*	*BP3649*

Camps Reservoir 1992				
GU-4230	Camps Reservoir, Camps 92/F1/Pit3/S24			
	(Betula)	Radiocarbon Age BP		3610 ± 50
				$\delta^{13}C$=-26.0$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 2037 - 1905, cal BP 3986 – 3854		*BC1971*	*BP3920*
2ó	cal BC 2140 - 1827, cal BP 4089 – 3776		*BC1983*	*BP3932*

Camps Reservoir 1992				
GU-4231	Camps Reservoir, Camps 92/Burnt mound/S58			
	(Corylus)	Radiocarbon Age BP		1280 ± 60
				$\delta^{13}C$=-26.4$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal AD 666 - 786, cal BP 1284 – 1164		*AD726*	*BP1224*
2ó	cal AD 650 - 890, cal BP 1300 – 1060		*AD770*	*BP1180*

Camps Reservoir 1994		**NGR: NT 011 227**		
GU-4264	Camps Reservoir 1994 Area 3, F24, Context 510 Sample 12			
	(Betula)	Radiocarbon Age BP		3950 ± 60
				$\delta^{13}C$=-25.1$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 2034 - 1885, cal BP 3983 – 3834		*BC1959*	*BP3908*
2ó	cal BC 2140 - 1771, cal BP 4089 – 3720		*BC1955*	*BP3904*

Camps Reservoir 1994				
GU-4265	Camps Reservoir 1994 Area 3, F24, Context 504 Sample 2			
	(Betula)	Radiocarbon Age BP		3560 ± 50
				$\delta^{13}C$=-25.2$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 2011 - 1828, cal BP 3960 – 3777		*BC1919*	*BP3868*
2ó	cal BC 2098 - 1760, cal BP 4047 – 3709		*BC1929*	*BP3878*

Camps Reservoir 1994				
GU-4266	Camps Reservoir 1994 Area 3, F24, Context 519 Sample 17			
	(Betula)	Radiocarbon Age BP		3510 ± 50
				$\delta^{13}C$=-25.1$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 1910 - 1759, cal BP 3859 – 3708		*BC1834*	*BP3783*
2ó	cal BC 2013 - 1703, cal BP 3962 – 3652		*BC1858*	*BP3807*

Melbourne Farm

Melbourne dates were sponsored by the Society of Antiquaries of Scotland and Biggar Archaeology Group

Melbourne Farm	**2000**	**NGR: NT 086 437**		
AA-36877(GU-8783)	Melbourne Farm: Sample No 007, Area 2, F5			
	(Corylus)	Radiocarbon Age BP		3985± 45
				$\delta^{13}C$=-22.2$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 2569-2464, cal BP 4518-4413		*BC2516*	*BP4465*
2ó	cal BC 2618-2350, cal BP 4567-4299		*BC2484*	*BP4433*

Melbourne Farm	**2000**	**NGR: NT 086 437**		
AA-36878(GU-8784)	Melbourne Farm: Sample No 015, Area 3, F2 Lower North			
	(Corylus)	Radiocarbon Age BP		4160± 45
				$\delta^{13}C$=-26.5$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 2877-2624, cal BP 4826-4573		*BC2750*	*BP4699*
2ó	cal BC 2883-2579, cal BP 4832-4528		*BC2731*	*BP4680*

Melbourne Farm	**2000**	**NGR: NT 086 437**		
AA-36879(GU-8785)	Melbourne Farm: Sample No 038, Area 3, F19 east			
	(Corylus)	Radiocarbon Age BP		4010± 45
				$\delta^{13}C$=-25.3$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 2577-2469, cal BP 4526-4418		*BC2423*	*BP4472*
2ó	cal BC 2826-2458, cal BP 4775-4407		*BC2642*	*BP4591*

Melbourne Farm	**2000**	**NGR: NT 086 437**		
AA-36880(GU-8786)	Melbourne Farm: Sample No 055, Area 5, F4			
	(Corylus)	Radiocarbon Age BP		4465± 45
				$\delta^{13}C$=-23.8$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 3332-3028, cal BP 5281-4977		*BC3280*	*BP5129*
2ó	cal BC 3351-2923, cal BP 5300-4872		*BC3137*	*BP5086*

Melbourne Farm	**2000**	**NGR: NT 086 437**		
AA-36881(GU-8787)	Melbourne Farm: Sample No 062, Area 6, F1			
	(Corylus)	Radiocarbon Age BP		4650± 45
				$\delta^{13}C$=-25.5$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 3505-3364, cal BP 5454-5313		*BC3434*	*BP5383*
2ó	cal BC 3623-3351, cal BP 5572-5300		*BC3487*	*BP5436*

Melbourne Farm	**2000**	**NGR: NT 086 437**		
AA-36882(GU-8788)	Melbourne Farm: Sample No 067, Area 6, F4 Lower			
	(Corylus)	Radiocarbon Age BP		4630± 45
				$\delta^{13}C$=-26.5$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 3500-3358, cal BP 5449-5307		*BC3429*	*BP5378*
2ó	cal BC 3519-3144, cal BP 5468-5093		*BC3331*	*BP5280*

Melbourne Farm	**2000**	**NGR: NT 086 437**		
AA-36876(GU-8782)	Melbourne Farm: Sample No 003, Area 2, F1 East Lower			
	(Corylus)	Radiocarbon Age BP		3945± 65
				$\delta^{13}C$=-25.3$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 2558-2346, cal BP 4508-4296		*BC2452*	*BP4402*
2ó	cal BC 2618-2207, cal BP 4568-4157		*BC2412*	*BP4362*

Melbourne Farm	**2000**	**NGR: NT 086 437**		
AA-36890(GU-8808)	Melbourne Farm: Sample No 111, Area 4, 92E/84N			
	(Corylus)	Radiocarbon Age BP		4390± 45
				$\delta^{13}C$=-25.0$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 3088-2918, cal BP 5037-4867		*BC3003*	*BP4952*
2ó	cal BC 3306-2900, cal BP 5255-4849		*BC3103*	*BP5052*

Melbourne Farm	**2000**	**NGR: NT 086 437**		
AA-36891(GU-8809)	Melbourne Farm: Sample No 100, Area 4, F100			
	(Corylus)	Radiocarbon Age BP		4360± 45
				$\delta^{13}C$=-25.1$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 3077-2908, cal BP 5026-4857		*BC2992*	*BP4941*
2ó	cal BC 3096-2886, cal BP 5054-4835		*BC2991*	*BP4944*

Brownsbank Farm

Brownsbank Farm	**2001**	**NGR: NT 0765 4280**		
AA-42171(GU-9302)	Brownsbank Farm: Trench No 1/F1			
	(Corylus)	Radiocarbon Age BP		4960± 45
				$\delta^{13}C$=-25.9$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 3780 - 3664, cal BP 5733 – 5613		*BC3722*	*BP5673*
2ó	cal BC 3911 - 3649, cal BP 5860 – 5598		*BC3780*	*BP5729*

Brownsbank Farm	**2001**	**NGR: NT 0765 4280**		
AA-42173(GU-9303)	Brownsbank Farm: Trench No 1/F2			
	(Corylus)	Radiocarbon Age BP		4865± 45
				$\delta^{13}C$=-26.2$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 3692 - 3639, cal BP 5641 – 5588		*BC3665*	*BP5614*
2ó	cal BC 3709 - 3538, cal BP 5658 – 5487		*BC3623*	*BP5572*

Burnt Mound & Lead Smelting Project

All dates (6of) in this project were jointly funded by: Council for British Archaeology, Lanark & District Archaeological Society, Peeblesshire Archaeological Society and Biggar Archaeology Group

Glenkip	**2001**	**NGR: NS 864 183**		
AA-43412(GU-9386)	Glenkip Lead Smelting: Glenkip Sample No 021			
	(Alnus)	Radiocarbon Age BP		1005± 45
				$\delta^{13}C$=-27.4$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal AD 996 - 1034, cal BP 954 – 916		*AD1015*	*BP935*
2ó	cal AD 905 - 1158, cal BP 1045 – 792		*AD1031*	*BP918*

Lour	**2001**	**NGR: NT 181 349**		
AA-43413(GU-9387)	Lour 'Upper' Lead Smelting Site: Lour Sample No 022			
	(Alnus)	Radiocarbon Age BP		1075± 45
				$\delta^{13}C$=-26.6$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal AD 999 - 1017, cal BP 1051 – 933		*AD1008*	*BP992*
2ó	cal AD 888 - 1024, cal BP 1062 – 926		*AD956*	*BP994*

Manor Valley	**2001**	**NGR: NT 1900 3240**		
AA-30357	**Ma**nor Valley, Posso Millburn Lead Smelting Site, Sample 013			
	(Betula)	Radiocarbon Age BP		1000± 50
				$\delta^{13}C$=-27.4$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal AD 990-1035, cal BP 960-915		*AD1012*	*BP937*
2ó	cal AD 960-1160, cal BP 990-790		*AD1060*	*BP890*

Manor Valley	**2001**	**NGR: NT 2163 3438**		
AA-30358	**Ma**nor Valley, Hopeterrick Burnt Mound No 2, sample 005			
	(Betula)	Radiocarbon Age BP		3650± 55
				$\delta^{13}C$=-23.8$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 2134-1951, cal BP 4083-3900		*BC2042*	*BP3991*
2ó	cal BC 2196-1890, cal BP 4145-3839		*BC2043*	*BP3992*

Manor Valley	**2001**	**NGR: NT 230 350**		
AA-30359	**Ma**nor Valley, Hundleshope Lead Smelting Site, Sample 017			
	(Betula)	Radiocarbon Age BP		980± 50
				$\delta^{13}C$=-26.7$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal AD 1007-1113, cal BP 943-837		*AD1060*	*BP890*
2ó	cal AD 970-1170, cal BP 980-780		*AD1070*	*BP880*

Manor Valley	**2001**	**NGR: NT 2154 3445**		
AA-30360	**Ma**nor Valley, Hopeterrick Burnt Mound No 3, sample 006			
	(Betula)	Radiocarbon Age BP		3850± 55
				$\delta^{13}C$=-25.8$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 2459-2207, cal BP 4408-4156		*BC2333*	*BP4282*
2ó	cal BC 2470-2142, cal BP 4419-4091		*BC2306*	*BP4255*

Nether Hangingshaw

Nether Hangingshaw	**2004**	**NGR: NT 00311 33123**		
SUERC-3553 (GU 12112)	Nether Hangingshaw	Trench 1	Feature 1	
	(Corylus)	Radiocarbon Age BP		4615± 35
				$\delta^{13}C$=-27.6$^{0}/_{00}$
Calibrated Age Ranges				
68.2% probability				
	3500BC (42.5%)	3450 cal BC		*BC3475*
	3380BC (25.7%)	3350 cal BC		*BC3365*
95.4% probability				
	3520BC (61.3%)	3400 cal BC		*BC3460*
	3390BC (30.8%)	3330 cal BC		*BC3360*
	3210BC (1.5%)	3190 cal BC		*BC3200*
	3160BC (1.8%)	3130 cal BC		*BC3145*

Nether Hangingshaw	**2004**	**NGR: NT 00311 33123**		
SUERC-3555 (GU 12113)	Nether Hangingshaw	Trench 1	Feature 20	
	(Corylus)(Nutshell)	Radiocarbon Age BP		4780± 40
				$\delta^{13}C$=-25.4$^{0}/_{00}$
Calibrated Age Ranges				
68.2% probability				
	3640BC (11.4%)	3620 cal BC		*BC3630*
	3600BC (56.8%)	3520 cal BC		*BC3560*
95.4% probability				
	3650BC (87.5%)	3500 cal BC		*BC3575*
	3430BC (7.9%)	3380 cal BC		*BC3405*

Calla Farm

Calla Farm	**2013**	**NGR: NT 00700 49053**	
SUERC-45150 (GU 29845)	Calla Farm	NGR:	
	(Corylus)	Radiocarbon Age BP	4698± 26
			$\delta^{13}C$=-25.4$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	3619 (4.3%) 3611 cal BC		*BC3615*
	3521 (17.0%) 3498 cal BC		*BC3509*
	3449 (2.0%) 3445 cal BC		*BC3447*
	3439 (44.9%) 3378 cal BC		*BC3408*
95.4% probability			
	3628 (13.4%) 3590 cal BC		*BC3609*
	3528 (21.3%) 3492 cal BC		*BC3510*
	3470 (60.6%) 3373 cal BC		*BC3421*

Carwood Farm

Carwood Farm	**2013**	**NGR: NT 03075 40116**	
SUERC-45151 (GU 29846)	Carwood Farm	F6	
	(Corylus)	Radiocarbon Age BP	4792± 26
			$\delta^{13}C$=-26.1$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	3638 (8.8%) 3631 cal BC		*BC3634*
	3579 (59.4%) 3534 cal BC		*BC3556*
95.4% probability			
	3643 (16.1%) 3622 cal BC		*BC3632*
	3604 (79.3%) 3523 cal BC		*BC3563*

Carwood Farm	**2013**	**NGR: NT 03075 40116**	
SUERC-45152 (GU 29847)	Carwood Farm	F1 North Lower	
	(Corylus)	Radiocarbon Age BP	4416± 26
			$\delta^{13}C$=-26.5$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	3095 (59.4%) 3011 cal BC		*BC3953*
	2978 (6.7%) 2961 cal BC		*BC2969*
95.4% probability			
	3309 (0.5%) 3301 cal BC		*BC3305*
	3265 (5%) 3241 cal BC		*BC3253*
	3106 (89.9%) 2921 cal BC		*BC3013*

Burnetland Farm

Burnetland Farm	**2008**	**NGR: NT 03075 40116**	
SUERC-17876 (GU 16473)	Burnetland Hill	Trench 1	Basal North End
	(Corylus)	Radiocarbon Age BP	5220± 35
			$\delta^{13}C$=-27.6$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	4045BC (68.2%) 3975BC		*BC4010*
95.4% probability			
	4230BC (3.5%) 4200BC		*BC4215*
	4170BC (6.7%) 4120BC		*BC4145*
	4080BC (85.2%) 3960BC		*BC4020*

Daer Valley

Three of the twelve dates from Daer Valley project were funded by the Society of Antiquaries of Scotland and three were sponsored by Ian Paterson of BAG.

Daer Valley	**1995**	**NGR: NS 9860 0827**		
AA-30354	Daer Reservoir: Site No 1			
	(Pomoideae)	Radiocarbon Age BP		9075± 80
				$\delta^{13}C$=-26.7$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 8095 (8080)		BC 8026	*BC8060*
2ó	cal BC 8333 (8080)		BC 7962	*BC8147*

Daer Valley	**1995**	**NGR: NS 9842 0802**		
AA-30355	Daer Reservoir: Site No 2		Feature 1/ Sample 005 base	
	(Betula)	Radiocarbon Age BP		8055± 75
				$\delta^{13}C$=-25.1$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 7044 (7030)		BC 6779	*BC6911*
2ó	cal BC 7255 (7030)		BC 6754	*BC7004*

Daer Valley	**1995**	**NGR: NS 9853 0839**		
AA-30356	Daer Reservoir: Part of Site 124, Burnt Mound deposit			Sample 012
	(Alnus)	Radiocarbon Age BP		3915± 55
				$\delta^{13}C$=-26.9$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 2484-2342, cal BP 4433-4291		*BC2413*	*BP4362*
2ó	cal BC 2575-2210, cal BP 4524-4159		*BC2392*	*BP4342*

Daer Valley	**2001**	**NGR: NS 986 083**		
AA-43004 GU-9356	Daer Reservoir Site No 3, Sample 002			
	(Corylus)	Radiocarbon Age BP		5355± 45
				$\delta^{13}C$=-25.9$^{0}/_{00}$
Calibrated Age Ranges				
1ó	cal BC 4318-4050, cal BP 6267-5999		*BC4184*	*BP6133*
2ó	cal BC 4331-4042, cal BP 6280-5991		*BC4185*	*BP6135*

Daer Valley	**2002**	**NGR: NS 9860 0827**	
AA-47770 (GU 9755)	Daer Reservoir: Site No 1/F7		
	(Corylus)	Radiocarbon Age BP	6850± 60
			$\delta^{13}C$=-24.9$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	5840BC (2.9%)	5820BC	*BC5839*
	5810BC (56.9%)	5700BC	*BC 5755*
	5690BC (8.4%)	5660BC	*BC5675*
95.4% probability			
	5880BC (95.4%)	5630BC	*BC5755*

Daer Valley	**2004**	**NGR: NS 95399 09000**	
SUERC-3556 (GU 12114)	Daer Site No 33		Context 159
	(Corylus)	Radiocarbon Age BP	4735± 35
			$\delta^{13}C$=-28.6$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	3640BC (37.7%)	3560BC	*BC3600*
	3540BC (14.5%)	3500BC	*BC3520*
	3420BC (16.0%)	3380BC	*BC3400*
95.4% probability			
	3640BC (67.3%)	3490BC	*BC3565*
	3460BC (28.1%)	3370BC	*BC3415*

Daer Valley	**2004**	**NGR: NS 95098 08776**	
SUERC-3557 (GU 12115)	Daer Site No 31	Trench 5c base	
	(Betula)	Radiocarbon Age BP	3245± 35
			$\delta^{13}C$=-27.3$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	1600BC (10.8%)	1560BC	*BC1580*
	1530BC (57.4%)	1440BC	*BC1485*
95.4% probability			
	1620BC (95.4%)	1430BC	*BC1525*

Daer Valley	**2004**	**NGR: NS 95098 08776**	
SUERC-3558 (GU 12116)	Daer Site No 31	Trench 4 base	
	(Betula)	Radiocarbon Age BP	2815± 35
			$\delta^{13}C$=-26.7$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	1005BC (68.2%)	915BC	*BC960*
95.4% probability			
	1070BC (90.1%)	890BC	*BC980*
	880BC (5.3%)	830BC	*BC855*

Daer Valley	**2005**	**NGR: NS 95292 10319**	
SUERC-6829 (GU 13035R)	Daer Site No 84	Feature No 6 East	
	(Corylus)	Radiocarbon Age BP	5390± 35
			$\delta^{13}C$=-25.6$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	4330BC (36.8%)	4280BC	*BC4305*
	4275BC (31.4%)	4230BC	*BC4252*
95.4% probability			
	4340BC (76.3%)	4220BC	*BC4280*
	4210BC (11.7%)	4160BC	*BC4185*
	4130BC (7.4%)	4070BC	*BC4100*

Daer Valley	**2005**	**NGR: NS 95196 10295**	
SUERC-6463(GU 13036)	Daer Site No 85	Feature No 2	
	(Corylus)	Radiocarbon Age BP	4930± 35
			$\delta^{13}C$=-25.7$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	3760BC (10.3%)	3740BC	*BC3750*
	3720BC (57.9%)	3650BC	*BC3685*
95.4% probability			
	3780BC (95.4%)	3640BC	*BC3710*

Daer Valley	**2013**	**NGR: NS 95930 10167**	
SUERC-47420 (GU 30927)	Daer Site No 94	Feature No 3	
	(Betula)	Radiocarbon Age BP	4721± 28
			$\delta^{13}C$=-27$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	3627 (25.5%)	3591 cal BC	*BC3609*
	3527 (12.0%)	3509 cal BC	*BC3518*
	3426 (30.6%)	3382 cal BC	*BC3404*
95.4% probability			
	3633 (35.9%)	3559 cal BC	*BC3596*
	3537 (20.5%)	3497 cal BC	*BC3517*
	3456 (39.1%)	3377 cal BC	*BC3416*

Daer Valley	**2013**	**NGR: NS 95930 10167**	
SUERC-47421 (GU 30928)	Daer Site No 94	Feature No 7	
	(Corylus)	Radiocarbon Age BP	4764± 26
			$\delta^{13}C$=-26.4$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	3633 (7.4%)	3625 cal BC	*BC3629*
	3601 (46.1%)	3554 cal BC	*BC3577*
	3540 (14.6%)	3525 cal BC	*BC3532*
95.4% probability			
	3640 (93.4%)	3517 cal BC	*BC3578*
	3396 (2.0%)	3386 cal BC	*BC3391*

Howburn Farm

Howburn Farm	**2008**	**NGR: NT 08209 43629**	
SUERC-17872(GU 16472)	Howburn Farm	F3 base	
	(Betula)	Radiocarbon Age BP	1855± 35
			$\delta^{13}C$=-26.3$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	90AD (2.7%)	110AD	*AD100*
	120AD (65.5%)	220AD	*AD170*
95.4% probability			
	70AD (95.4%)	240AD	*AD155*
	70AD (95.4%)	240AD	*AD155*

Fruid Reservoir

Fruid Reservoir	**2008**	**NGR: NT 0867 1990**	
SUERC-17870 (GU 16470)	Fruid Reservoir	F80/S69	
	(Corylus)	Radiocarbon Age BP	3100± 35
			$\delta^{13}C$=-25.3$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	1430 (46.1%) 1370 cal BC		*BC1400*
	1350 (22.1%) 1310 cal BC		*BC1330*
95.4% probability			
	1440 (95.4%) 1260 cal BC		*BC1350*

Fruid Reservoir	**2008**	**NGR: NT 0867 1990**	
SUERC-17871 (GU 16471)	Fruid Reservoir	F6/S90	
	(Betula)	Radiocarbon Age BP	3150± 35
			$\delta^{13}C$=-24.3$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	1490 (7.0%) 1475 cal BC		*BC1482*
	1455 (61.2%) 1395 cal BC		*BC1425*
95.4% probability			
	1500 (91.4%) 1370 cal BC		*BC1435*
	1340 (4.0%) 1310 cal BC		*BC1325*

Fruid Reservoir	**2013**	**NGR: NT 0867 1990**	
SUERC-47422 (GU 30929)	Fruid Reservoir	Feature No 46	
	(Betula)	Radiocarbon Age BP	3169± 29
			$\delta^{13}C$=-28.3$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	1492 (13.5%) 1479 cal BC		*BC1485*
	1457 (54.7%) 1417 cal BC		*BC1437*
95.4% probability			
	1501 (95.4%) 1400 cal BC		*BC1450*

Fruid Reservoir	**2013**	**NGR: NT 0867 1990**	
SUERC-47423 (GU 30930)	Fruid Reservoir	Feature No 81	Sample 106
	(Corylus)	Radiocarbon Age BP	3196± 29
			$\delta^{13}C$=-28.1$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	1495 (68.2%) 1440 cal BC		*BC1467*
95.4% probability			
	1517 (95.4%) 1418 cal BC		*BC1467*

Fruid Reservoir	**2013**	**NGR: NT 0867 1990**	
SUERC-47424 (GU 30931)	Fruid Reservoir	Feature No 85	Sample 139
	(Corylus)	Radiocarbon Age BP	3125± 26
			$\delta^{13}C$=-28.4$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	1435 (68.2%) 1387 cal BC		*BC1411*
95.4% probability			
	1487 (0.3%) 1485 cal BC		*BC1486*
	1453 (83.0%) 1370 cal BC		*BC1411*
	1349 (12.1%) 1316 cal BC		*BC1332*

Weston Farm

Weston Farm	**2004**	**NGR: NT 03476 4611**	
SUERC-3562 (GU 12117)	Weston Farm	Trench No 5	Feature 1
	(Corylus)(Nutshell)	Radiocarbon Age BP	6035± 40
			$\delta^{13}C$=-24.5$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	4990BC (4.1%) 4970BC		*BC4980*
	4960BC (61.0%) 4840BC		*BC4900*
	4820BC (3.1%) 4810BC		*BC4820*
95.4% probability			
	5050BC (95.4%) 4800BC		*BC4925*

Weston Farm	**2005**	**NGR: NT 03476 4611**	
SUERC-6467 (GU 13037)	Weston Farm	Trench No 1	Feature 6
	(Corylus)	Radiocarbon Age BP	7920± 40
			$\delta^{13}C$=-26.1$^{0}/_{00}$
Calibrated Age Ranges			
68.2% probability			
	7000BC (6.0%) 6970BC		*Average 6985BC*
	6920BC (7.8%) 6880BC		*Average 6900BC*
	6830BC (54.4%) 6680BC		*Average 6755BC*
95.4% probability			
	7030BC (95.4%) 6650BC		*Average 6840BC*