

# 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](http://www.biggararchaeology.org.uk)

### References

#### **Biggar Common West**

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**

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**

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**

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**

Ward, T 2000, 'Pre-History North of Biggar Project, Brownsbank Farm Excavation 2000' Biggar Museum Trust

#### **Burnt Mounds and Lead Smelting Project**

Ward T 2014 forthcoming. *Burnt Mound and Lead Smelting Project 1997*.

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project

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## References

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project  
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### **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)

### **Calla Farm**

Ward T 2013. *Report on a small scale excavation at Calla Farm near Carnwath*

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### **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

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### **Burnetland Farm**

Ward T 2012. *Mesolithic chert quarry at Burnetland Farm*.

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### **Daer Valley Project**

Ward T, 2001 2<sup>nd</sup> *Interim Report, Fieldwork & Excavations at Daer Reservoir, Clydesdale 1995, 1997 & 2000*, Biggar Museum Trust

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### **Howburn Farm**

Saville A & Ward T 2010. *Howburn Farm, Excavating Scotland's First People*. Current Archaeology, Issue 243, 18 – 23. 2010.

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### **Fruid Reservoir**

Ward T 2013. *The excavation of two unenclosed platform settlements within the Fruid Reservoir, Peeblesshire, Scottish Borders*.

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### **Weston Farm**

Ward T 2006. *Excavations at Weston Farm 2003 – 2004 Interim Report: Part of the Pre-History North of Biggar Project*

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## RADIO CARBON DATE DETAILS

### Biggar Common West

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

<b>Biggar Common West AA-18151 (GU-4275)</b>	Biggar Common West, FC2/PH017/Sample 8 ( <i>Alnus</i> )	<b>NGR: NT 000 390</b> Radiocarbon Age BP	4565 ± 70 δ <sup>13</sup> C=-
26.6 <sup>0</sup> / <sub>00</sub>			
<b>Calibrated Age Ranges</b>			
1σ	cal BC 3372-3108, cal BP 5321-5057	BC3240	BP5189
2σ	cal BC 3510-3040, cal BP 5459-4989	BC3275	BP5224
<b>Biggar Common West (GU-4276)</b>	Biggar Common West, FC5 Area/Context 105 ( <i>Corylus</i> )	<b>NGR: NT 000 390</b> Radiocarbon Age BP	4880 ± 50 δ <sup>13</sup> C=- 26.2 <sup>0</sup> / <sub>00</sub>
<b>Calibrated Age Ranges</b>			
1σ	cal BC 3774-3637, cal BP 5723-5586	BC3705	BP5654
2σ	cal BC 3780-3531, cal BP 5729-5480	BC3655	BP5604
<b>Biggar Common West AA-18152 (GU-4277)</b>	Biggar Common West, FC2/F11/Sample 1 ( <i>Malus sylvestris</i> )	<b>NGR: NT 000 390</b>	<b>*Post 1950*</b> δ <sup>13</sup> C=-26.6 <sup>0</sup> / <sub>00</sub>
<b>Calibrated Age Ranges</b>			
1σ	----- n/a		-----
2σ	----- n/a		-----
<b>*AA-21244 = repeat of AA-18152 (above) and with same result*</b>			
<b>Biggar Common West AA-18153</b>	Biggar Common West ( <i>Corylus</i> )	<b>NGR: NT 000 390</b> FC 2 Area/PH104/Sample 34 Radiocarbon Age BP	4300 ± 70 δ <sup>13</sup> C=-25.9 <sup>0</sup> / <sub>00</sub>
<b>Calibrated Age Ranges</b>			
1σ	cal BC 3023-2788, cal BP 4972-4737	BC2905	BP4854
2σ	cal BC 3094-2701, cal BP 5043-4650	BC2897	BP4846

## Biggar Common East

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

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<b>Biggar Common East</b>	<b>NGR: NT 030395</b>		
<b>GU-4279</b>	Biggar Common East. ( <i>Corylus avellana</i> )	Area 2/F103/Sample 46 Radiocarbon Age BP	4990 ± 110 $\delta^{13}\text{C} = -24.6\text{‰}$

### 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

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<b>Biggar Common East</b>	<b>NGR: NT 030395</b>		
<b>AA-18154 (GU-4280)</b>	Biggar Common East. ( <i>Hordeum</i> )	Area 1/F010/Sample 11/22 Radiocarbon Age BP	4600 ± 70 $\delta^{13}\text{C} = -24.4\text{‰}$

### 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

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<b>Biggar Common East</b>	<b>NGR: NT 030395</b>		
<b>AA-18155 (GU-4281)</b>	Biggar Common East. ( <i>Hordeum</i> )	Area 1/F010/Sample 11/9 Radiocarbon Age BP	4645 ± 65 $\delta^{13}\text{C} = -24.7\text{‰}$

### 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

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<b>Biggar Common East</b>	<b>NGR: NT 030395</b>		
<b>AA-18156</b>	Biggar Common East. ( <i>Alnus</i> )	Area 1/F109/Sample 23 Radiocarbon Age BP	4275 ± 70 $\delta^{13}\text{C} = -26.4\text{‰}$

### 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

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<b>Biggar Common East</b>	<b>NGR: NT 030395</b>		
<b>AA-18157</b>	Biggar Common East. ( <i>Corylus</i> )	Area 1/F030/Sample 26 Radiocarbon Age BP	4130 ± 65 $\delta^{13}\text{C}=-26.8\text{‰}$

**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

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<b>Camps Reservoir 1992</b>	<b>NGR: NT 010 220</b>		
<b>GU-4228</b>	Camps Reservoir, Camps 92/F1/Pit1/S12 ( <i>Betula</i> )	Radiocarbon Age BP	3550 ± 60 $\delta^{13}\text{C}=-25.3\text{‰}$

**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

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<b>Camps Reservoir 1992</b>	<b>NGR: NT 010 220</b>		
<b>AA-17451</b>	Camps Reservoir, Camps 92/F1/Pit2/S22 ( <i>Betula</i> )	Radiocarbon Age BP	3390 ± 60 $\delta^{13}\text{C}=-26.8\text{‰}$

**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

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<b>Camps Reservoir 1992</b>	<b>NGR: NT 010 220</b>		
<b>GU-4230</b>	Camps Reservoir, Camps 92/F1/Pit3/S24 ( <i>Betula</i> )	Radiocarbon Age BP	3610 ± 50 $\delta^{13}\text{C}=-26.0\text{‰}$

**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

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**Camps Reservoir 1992****GU-4231**Camps Reservoir, Camps 92/Burnt mound/S58  
(*Corylus*) Radiocarbon Age BP1280 ± 60  
 $\delta^{13}\text{C} = -26.4\text{‰}$ **Calibrated Age Ranges**

1 $\sigma$	cal AD 666 - 786, cal BP 1284 – 1164	AD726	BP1224
2 $\sigma$	cal AD 650 - 890, cal BP 1300 – 1060	AD770	BP1180

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**Camps Reservoir 1994****NGR: NT 011 227****GU-4264**Camps Reservoir 1994 Area 3, F24, Context 510 Sample 12  
(*Betula*) Radiocarbon Age BP3950 ± 60  
 $\delta^{13}\text{C} = -25.1\text{‰}$ **Calibrated Age Ranges**

1 $\sigma$	cal BC 2034 - 1885, cal BP 3983 – 3834	BC1959	BP3908
2 $\sigma$	cal BC 2140 - 1771, cal BP 4089 – 3720	BC1955	BP3904

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**Camps Reservoir 1994****GU-4265**Camps Reservoir 1994 Area 3, F24, Context 504 Sample 2  
(*Betula*) Radiocarbon Age BP3560 ± 50  
 $\delta^{13}\text{C} = -25.2\text{‰}$ **Calibrated Age Ranges**

1 $\sigma$	cal BC 2011 - 1828, cal BP 3960 – 3777	BC1919	BP3868
2 $\sigma$	cal BC 2098 - 1760, cal BP 4047 – 3709	BC1929	BP3878

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**Camps Reservoir 1994****GU-4266**Camps Reservoir 1994 Area 3, F24, Context 519 Sample 17  
(*Betula*) Radiocarbon Age BP3510 ± 50  
 $\delta^{13}\text{C} = -25.1\text{‰}$ **Calibrated Age Ranges**

1 $\sigma$	cal BC 1910 - 1759, cal BP 3859 – 3708	BC1834	BP3783
2 $\sigma$	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

<b>Melbourne Farm AA-36877(GU-8783)</b>	<b>2000</b> Melbourne Farm: Sample No 007, Area 2, F5 ( <i>Corylus</i> )	<b>NGR: NT 086 437</b> Radiocarbon Age BP	3985± 45 $\delta^{13}\text{C}=-22.2\text{‰}$
<b>Calibrated Age Ranges</b>			
1ó	cal BC 2569-2464, cal BP 4518-4413	BC2516	BP4465
2ó	cal BC 2618-2350, cal BP 4567-4299	BC2484	BP4433
<b>Melbourne Farm AA-36878(GU-8784)</b>	<b>2000</b> Melbourne Farm: Sample No 015, Area 3, F2 Lower North ( <i>Corylus</i> )	<b>NGR: NT 086 437</b> Radiocarbon Age BP	4160± 45 $\delta^{13}\text{C}=-26.5\text{‰}$
<b>Calibrated Age Ranges</b>			
1ó	cal BC 2877-2624, cal BP 4826-4573	BC2750	BP4699
2ó	cal BC 2883-2579, cal BP 4832-4528	BC2731	BP4680
<b>Melbourne Farm AA-36879(GU-8785)</b>	<b>2000</b> Melbourne Farm: Sample No 038, Area 3, F19 east ( <i>Corylus</i> )	<b>NGR: NT 086 437</b> Radiocarbon Age BP	4010± 45 $\delta^{13}\text{C}=-25.3\text{‰}$
<b>Calibrated Age Ranges</b>			
1ó	cal BC 2577-2469, cal BP 4526-4418	BC2423	BP4472
2ó	cal BC 2826-2458, cal BP 4775-4407	BC2642	BP4591
<b>Melbourne Farm AA-36880(GU-8786)</b>	<b>2000</b> Melbourne Farm: Sample No 055, Area 5, F4 ( <i>Corylus</i> )	<b>NGR: NT 086 437</b> Radiocarbon Age BP	4465± 45 $\delta^{13}\text{C}=-23.8\text{‰}$
<b>Calibrated Age Ranges</b>			
1ó	cal BC 3332-3028, cal BP 5281-4977	BC3280	BP5129
2ó	cal BC 3351-2923, cal BP 5300-4872	BC3137	BP5086
<b>Melbourne Farm AA-36881(GU-8787)</b>	<b>2000</b> Melbourne Farm: Sample No 062, Area 6, F1 ( <i>Corylus</i> )	<b>NGR: NT 086 437</b> Radiocarbon Age BP	4650± 45 $\delta^{13}\text{C}=-25.5\text{‰}$
<b>Calibrated Age Ranges</b>			
1ó	cal BC 3505-3364, cal BP 5454-5313	BC3434	BP5383
2ó	cal BC 3623-3351, cal BP 5572-5300	BC3487	BP5436

<b>Melbourne Farm AA-36882(GU-8788)</b>	<b>2000</b> Melbourne Farm: Sample No 067, Area 6, F4 Lower ( <i>Corylus</i> )	<b>NGR: NT 086 437</b> Radiocarbon Age BP	4630± 45 $\delta^{13}\text{C}=-26.5\text{‰}$
<b>Calibrated Age Ranges</b>			
1 $\sigma$	cal BC 3500-3358, cal BP 5449-5307	BC3429	BP5378
2 $\sigma$	cal BC 3519-3144, cal BP 5468-5093	BC3331	BP5280
<b>Melbourne Farm AA-36876(GU-8782)</b>	<b>2000</b> Melbourne Farm: Sample No 003, Area 2, F1 East Lower ( <i>Corylus</i> )	<b>NGR: NT 086 437</b> Radiocarbon Age BP	3945± 65 $\delta^{13}\text{C}=-25.3\text{‰}$
<b>Calibrated Age Ranges</b>			
1 $\sigma$	cal BC 2558-2346, cal BP 4508-4296	BC2452	BP4402
2 $\sigma$	cal BC 2618-2207, cal BP 4568-4157	BC2412	BP4362
<b>Melbourne Farm AA-36890(GU-8808)</b>	<b>2000</b> Melbourne Farm: Sample No 111, Area 4, 92E/84N ( <i>Corylus</i> )	<b>NGR: NT 086 437</b> Radiocarbon Age BP	4390± 45 $\delta^{13}\text{C}=-25.0\text{‰}$
<b>Calibrated Age Ranges</b>			
1 $\sigma$	cal BC 3088-2918, cal BP 5037-4867	BC3003	BP4952
2 $\sigma$	cal BC 3306-2900, cal BP 5255-4849	BC3103	BP5052
<b>Melbourne Farm AA-36891(GU-8809)</b>	<b>2000</b> Melbourne Farm: Sample No 100, Area 4, F100 ( <i>Corylus</i> )	<b>NGR: NT 086 437</b> Radiocarbon Age BP	4360± 45 $\delta^{13}\text{C}=-25.1\text{‰}$
<b>Calibrated Age Ranges</b>			
1 $\sigma$	cal BC 3077-2908, cal BP 5026-4857	BC2992	BP4941
2 $\sigma$	cal BC 3096-2886, cal BP 5054-4835	BC2991	BP4944



## Brownsbank Farm

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<b>Brownsbank Farm</b> <b>AA-42171(GU-9302)</b>	<b>2001</b> Brownsbank Farm: Trench No 1/F1 ( <i>Corylus</i> )	<b>NGR: NT 0765 4280</b> Radiocarbon Age BP	4960± 45 $\delta^{13}\text{C}=-25.9\text{‰}$
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### 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

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<b>Brownsbank Farm</b> <b>AA-42173(GU-9303)</b>	<b>2001</b> Brownsbank Farm: Trench No 1/F2 ( <i>Corylus</i> )	<b>NGR: NT 0765 4280</b> Radiocarbon Age BP	4865± 45 $\delta^{13}\text{C}=-26.2\text{‰}$
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### 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

<b>Glenkip</b> <b>AA-43412(GU-9386)</b>	<b>2001</b> Glenkip Lead Smelting: Glenkip Sample No 021 ( <i>Alnus</i> )	<b>NGR: NS 864 183</b> Radiocarbon Age BP	1005± 45 $\delta^{13}\text{C}=-27.4^{0}/_{00}$
<b>Calibrated Age Ranges</b>			
1ó	cal AD 996 - 1034, cal BP 954 – 916	<i>AD1015</i>	<i>BP935</i>
2ó	cal AD 905 - 1158, cal BP 1045 – 792	<i>AD1031</i>	<i>BP918</i>
<b>Lour</b> <b>AA-43413(GU-9387)</b>	<b>2001</b> Lour 'Upper' Lead Smelting Site: Lour Sample No 022 ( <i>Alnus</i> )	<b>NGR: NT 181 349</b> Radiocarbon Age BP	1075± 45 $\delta^{13}\text{C}=-26.6^{0}/_{00}$
<b>Calibrated Age Ranges</b>			
1ó	cal AD 999 - 1017, cal BP 1051 – 933	<i>AD1008</i>	<i>BP992</i>
2ó	cal AD 888 - 1024, cal BP 1062 – 926	<i>AD956</i>	<i>BP994</i>
<b>Manor Valley</b> <b>AA-30357</b>	<b>2001</b> Manor Valley, Posso Millburn Lead Smelting Site, Sample 013 ( <i>Betula</i> )	<b>NGR: NT 1900 3240</b> Radiocarbon Age BP	1000± 50 $\delta^{13}\text{C}=-27.4^{0}/_{00}$
<b>Calibrated Age Ranges</b>			
1ó	cal AD 990-1035, cal BP 960-915	<i>AD1012</i>	<i>BP937</i>
2ó	cal AD 960-1160, cal BP 990-790	<i>AD1060</i>	<i>BP890</i>
<b>Manor Valley</b> <b>AA-30358</b>	<b>2001</b> Manor Valley, Hopeterrick Burnt Mound No 2, sample 005 ( <i>Betula</i> )	<b>NGR: NT 2163 3438</b> Radiocarbon Age BP	3650± 55 $\delta^{13}\text{C}=-23.8^{0}/_{00}$
<b>Calibrated Age Ranges</b>			
1ó	cal BC 2134-1951, cal BP 4083-3900	<i>BC2042</i>	<i>BP3991</i>
2ó	cal BC 2196-1890, cal BP 4145-3839	<i>BC2043</i>	<i>BP3992</i>

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<b>Manor Valley</b> <b>AA-30359</b>	<b>2001</b> Manor Valley, Hundleshope Lead Smelting Site, Sample 017 ( <i>Betula</i> )	<b>NGR: NT 230 350</b> Radiocarbon Age BP	980± 50 $\delta^{13}\text{C}=-26.7\text{‰}$
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**Calibrated Age Ranges**

<b>1<math>\sigma</math></b>	cal AD 1007-1113, cal BP 943-837	<i>AD1060</i>	<i>BP890</i>
<b>2<math>\sigma</math></b>	cal AD 970-1170, cal BP 980-780	<i>AD1070</i>	<i>BP880</i>

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<b>Manor Valley</b> <b>AA-30360</b>	<b>2001</b> Manor Valley, Hopeterrick Burnt Mound No 3, sample 006 ( <i>Betula</i> )	<b>NGR: NT 2154 3445</b> Radiocarbon Age BP	3850± 55 $\delta^{13}\text{C}=-25.8\text{‰}$
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**Calibrated Age Ranges**

<b>1<math>\sigma</math></b>	cal BC 2459-2207, cal BP 4408-4156	<i>BC2333</i>	<i>BP4282</i>
<b>2<math>\sigma</math></b>	cal BC 2470-2142, cal BP 4419-4091	<i>BC2306</i>	<i>BP4255</i>

## Nether Hangingshaw

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<b>Nether Hangingshaw</b> <b>SUERC-3553 (GU 12112)</b>	<b>2004</b> Nether Hangingshaw ( <i>Corylus</i> )	<b>NGR: NT 00311 33123</b> Trench 1 Radiocarbon Age BP	Feature 1 4615± 35 $\delta^{13}\text{C}=-27.6^{0}/_{00}$
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### Calibrated Age Ranges

68.2% probability

3500BC (42.5%)	3450 cal BC	<i>BC3475</i>
3380BC (25.7%)	3350 cal BC	<i>BC3365</i>

95.4% probability

3520BC (61.3%)	3400 cal BC	<i>BC3460</i>
3390BC (30.8%)	3330 cal BC	<i>BC3360</i>
3210BC (1.5%)	3190 cal BC	<i>BC3200</i>
3160BC (1.8%)	3130 cal BC	<i>BC3145</i>

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<b>Nether Hangingshaw</b> <b>SUERC-3555 (GU 12113)</b>	<b>2004</b> Nether Hangingshaw ( <i>Corylus</i> )( <i>Nutshell</i> )	<b>NGR: NT 00311 33123</b> Trench 1 Radiocarbon Age BP	Feature 20 4780± 40 $\delta^{13}\text{C}=-25.4^{0}/_{00}$
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### Calibrated Age Ranges

68.2% probability

3640BC (11.4%)	3620 cal BC	<i>BC3630</i>
3600BC (56.8%)	3520 cal BC	<i>BC3560</i>

95.4% probability

3650BC (87.5%)	3500 cal BC	<i>BC3575</i>
3430BC (7.9%)	3380 cal BC	<i>BC3405</i>

## Calla Farm

<b>Calla Farm</b> <b>SUERC-45150 (GU 29845)</b>	<b>2013</b> Calla Farm ( <i>Corylus</i> )	<b>NGR: NT 00700 49053</b> NGR: Radiocarbon Age BP	4698± 26 $\delta^{13}\text{C}=-25.4\text{‰}$
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### 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

<b>Carwood Farm</b> <b>SUERC-45151 (GU 29846)</b>	<b>2013</b> Carwood Farm ( <i>Corylus</i> )	<b>NGR: NT 03075 40116</b> F6 Radiocarbon Age BP	4792± 26 $\delta^{13}\text{C}=-26.1\text{‰}$
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### 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

<b>Carwood Farm</b> <b>SUERC-45152 (GU 29847)</b>	<b>2013</b> Carwood Farm ( <i>Corylus</i> )	<b>NGR: NT 03075 40116</b> F1 North Lower Radiocarbon Age BP	4416± 26 $\delta^{13}\text{C}=-26.5\text{‰}$
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### 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

<b>Burnetland Farm</b> <b>SUERC-17876 (GU 16473)</b>	<b>2008</b> Burnetland Hill ( <i>Corylus</i> )	<b>NGR: NT 03075 40116</b> Trench 1 Radiocarbon Age BP	Basal North End 5220± 35 $\delta^{13}\text{C}=-27.6^{0}/_{00}$
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### 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.

<b>Daer Valley</b> <b>AA-30354</b>	<b>1995</b> Daer Reservoir: Site No 1 ( <i>Pomoideae</i> )	<b>NGR: NS 9860 0827</b> Radiocarbon Age BP	9075± 80 $\delta^{13}\text{C}=-26.7^{0}/_{00}$
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### Calibrated Age Ranges

1ó cal BC 8095 (8080) BC 8026 BC8060  
2ó cal BC 8333 (8080) BC 7962 BC8147

<b>Daer Valley</b> <b>AA-30355</b>	<b>1995</b> Daer Reservoir: Site No 2 ( <i>Betula</i> )	<b>NGR: NS 9842 0802</b> Feature 1/ Sample 005 base Radiocarbon Age BP	8055± 75 $\delta^{13}\text{C}=-25.1^{0}/_{00}$
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### Calibrated Age Ranges

1ó cal BC 7044 (7030) BC 6779 BC6911  
2ó cal BC 7255 (7030) BC 6754 BC7004

<b>Daer Valley</b> <b>AA-30356</b>	<b>1995</b> Daer Reservoir: Part of Site 124, Burnt Mound deposit ( <i>Alnus</i> )	<b>NGR: NS 9853 0839</b> Radiocarbon Age BP	Sample 012 3915± 55 $\delta^{13}\text{C}=-26.9^{0}/_{00}$
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### 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

<b>Daer Valley</b> <b>AA-43004 GU-9356</b>	<b>2001</b> Daer Reservoir Site No 3, Sample 002 ( <i>Corylus</i> )	<b>NGR: NS 986 083</b> Radiocarbon Age BP	5355± 45 $\delta^{13}\text{C}=-25.9^{0}/_{00}$
<b>Calibrated Age Ranges</b>			
1ó	cal BC 4318-4050, cal BP 6267-5999	BC4184	BP6133
2ó	cal BC 4331-4042, cal BP 6280-5991	BC4185	BP6135
<b>Daer Valley</b> <b>AA-47770 (GU 9755)</b>	<b>2002</b> Daer Reservoir: Site No 1/F7 ( <i>Corylus</i> )	<b>NGR: NS 9860 0827</b> Radiocarbon Age BP	6850± 60 $\delta^{13}\text{C}=-24.9^{0}/_{00}$
<b>Calibrated Age Ranges</b>			
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
<b>Daer Valley</b> <b>SUERC-3556 (GU 12114)</b>	<b>2004</b> Daer Site No 33 ( <i>Corylus</i> )	<b>NGR: NS 95399 09000</b> Radiocarbon Age BP	Context 159 4735± 35 $\delta^{13}\text{C}=-28.6^{0}/_{00}$
<b>Calibrated Age Ranges</b>			
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
<b>Daer Valley</b> <b>SUERC-3557 (GU 12115)</b>	<b>2004</b> Daer Site No 31 ( <i>Betula</i> )	<b>NGR: NS 95098 08776</b> Trench 5c base Radiocarbon Age BP	3245± 35 $\delta^{13}\text{C}=-27.3^{0}/_{00}$
<b>Calibrated Age Ranges</b>			
68.2% probability	1600BC (10.8%) 1560BC		BC1580
	1530BC (57.4%) 1440BC		BC1485
95.4% probability	1620BC (95.4%) 1430BC		BC1525

<b>Daer Valley</b> <b>SUERC-3558 (GU 12116)</b>	<b>2004</b> Daer Site No 31 ( <i>Betula</i> )	<b>NGR: NS 95098 08776</b> Trench 4 base Radiocarbon Age BP	2815± 35 $\delta^{13}\text{C}=-26.7\text{‰}$
<b>Calibrated Age Ranges</b>			
68.2% probability	1005BC (68.2%)	915BC	BC960
95.4% probability	1070BC (90.1%) 880BC (5.3%)	890BC 830BC	BC980 BC855
<b>Daer Valley</b> <b>SUERC-6829 (GU 13035R)</b>	<b>2005</b> Daer Site No 84 ( <i>Corylus</i> )	<b>NGR: NS 95292 10319</b> Feature No 6 East Radiocarbon Age BP	5390± 35 $\delta^{13}\text{C}=-25.6\text{‰}$
<b>Calibrated Age Ranges</b>			
68.2% probability	4330BC (36.8%) 4275BC (31.4%)	4280BC 4230BC	BC4305 BC4252
95.4% probability	4340BC (76.3%) 4210BC (11.7%) 4130BC (7.4%)	4220BC 4160BC 4070BC	BC4280 BC4185 BC4100
<b>Daer Valley</b> <b>SUERC-6463(GU 13036)</b>	<b>2005</b> Daer Site No 85 ( <i>Corylus</i> )	<b>NGR: NS 95196 10295</b> Feature No 2 Radiocarbon Age BP	4930± 35 $\delta^{13}\text{C}=-25.7\text{‰}$
<b>Calibrated Age Ranges</b>			
68.2% probability	3760BC (10.3%) 3720BC (57.9%)	3740BC 3650BC	BC3750 BC3685
95.4% probability	3780BC (95.4%)	3640BC	BC3710



<b>Daer Valley</b> <b>SUERC-47420 (GU 30927)</b>	<b>2013</b> Daer Site No 94 ( <i>Betula</i> )	<b>NGR: NS 95930 10167</b> Feature No 3 Radiocarbon Age BP	4721± 28 $\delta^{13}\text{C}=-27^0/_{00}$
<b>Calibrated Age Ranges</b>			
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

<b>Daer Valley</b> <b>SUERC-47421 (GU 30928)</b>	<b>2013</b> Daer Site No 94 ( <i>Corylus</i> )	<b>NGR: NS 95930 10167</b> Feature No 7 Radiocarbon Age BP	4764± 26 $\delta^{13}\text{C}=-26.4^0/_{00}$
<b>Calibrated Age Ranges</b>			
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

<b>Howburn Farm</b> <b>SUERC-17872(GU 16472)</b>	<b>2008</b> Howburn Farm ( <i>Betula</i> )	<b>NGR: NT 08209 43629</b> F3 base Radiocarbon Age BP	1855± 35 $\delta^{13}\text{C}=-26.3^0/_{00}$
<b>Calibrated Age Ranges</b>			
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

<b>Fruid Reservoir</b> <b>SUERC-17870 (GU 16470)</b>	<b>2008</b> Fruid Reservoir ( <i>Corylus</i> )	<b>NGR: NT 0867 1990</b> F80/S69 Radiocarbon Age BP	3100± 35 $\delta^{13}\text{C}=-25.3^{0}/_{00}$
<b>Calibrated Age Ranges</b>			
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
<b>Fruid Reservoir</b> <b>SUERC-17871 (GU 16471)</b>	<b>2008</b> Fruid Reservoir ( <i>Betula</i> )	<b>NGR: NT 0867 1990</b> F6/S90 Radiocarbon Age BP	3150± 35 $\delta^{13}\text{C}=-24.3^{0}/_{00}$
<b>Calibrated Age Ranges</b>			
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
<b>Fruid Reservoir</b> <b>SUERC-47422 (GU 30929)</b>	<b>2013</b> Fruid Reservoir ( <i>Betula</i> )	<b>NGR: NT 0867 1990</b> Feature No 46 Radiocarbon Age BP	3169± 29 $\delta^{13}\text{C}=-28.3^{0}/_{00}$
<b>Calibrated Age Ranges</b>			
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

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<b>Fruid Reservoir</b> <b>SUERC-47423 (GU 30930)</b>	<b>2013</b> Fruid Reservoir ( <i>Corylus</i> )	<b>NGR: NT 0867 1990</b> Feature No 81 Radiocarbon Age BP	Sample 106 3196± 29 $\delta^{13}\text{C}=-28.1\text{‰}$
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**Calibrated Age Ranges**  
68.2% probability

1495 (68.2%) 1440 cal BC *BC1467*

95.4% probability

1517 (95.4%) 1418 cal BC *BC1467*

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<b>Fruid Reservoir</b> <b>SUERC-47424 (GU 30931)</b>	<b>2013</b> Fruid Reservoir ( <i>Corylus</i> )	<b>NGR: NT 0867 1990</b> Feature No 85 Radiocarbon Age BP	Sample 139 3125± 26 $\delta^{13}\text{C}=-28.4\text{‰}$
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**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

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<b>Weston Farm</b> <b>SUERC-3562 (GU 12117)</b>	<b>2004</b> Weston Farm ( <i>Corylus</i> )( <i>Nutshell</i> )	<b>NGR: NT 03476 4611</b> Trench No 5 Radiocarbon Age BP	Feature 1 6035± 40 $\delta^{13}\text{C}=-24.5^{0}/_{00}$
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### Calibrated Age Ranges

68.2% probability

4990BC (4.1%)	4970BC	<i>BC4980</i>
4960BC (61.0%)	4840BC	<i>BC4900</i>
4820BC (3.1%)	4810BC	<i>BC4820</i>

95.4% probability

5050BC (95.4%)	4800BC	<i>BC4925</i>
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<b>Weston Farm</b> <b>SUERC-6467 (GU 13037)</b>	<b>2005</b> Weston Farm ( <i>Corylus</i> )	<b>NGR: NT 03476 4611</b> Trench No 1 Radiocarbon Age BP	Feature 6 7920± 40 $\delta^{13}\text{C}=-26.1^{0}/_{00}$
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### Calibrated Age Ranges

68.2% probability

7000BC (6.0%)	6970BC	<i>Average 6985BC</i>
6920BC (7.8%)	6880BC	<i>Average 6900BC</i>
6830BC (54.4%)	6680BC	<i>Average 6755BC</i>

95.4% probability

7030BC (95.4%)	6650BC	<i>Average 6840BC</i>
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