

Appendix 1— Radiocarbon dates from excavated archaeological sites described in these proceedings

Notes

1. Radiocarbon ages are quoted in conventional years BP (before AD 1950) and the errors for these dates are expressed at the one sigma (68% probability) level of confidence.
2. Calibrated date ranges are equivalent to the probable calendrical age of the sample material and are expressed at one sigma (68% probability) and two sigma (95% probability) levels of confidence.
3. Dates obtained from BetaAnalytic in Florida (Beta lab code) and from University College Dublin (UCD lab code) were calibrated using the IntCal98 calibration programme (Stuiver *et al.* 1998). Dates from Queen’s University, Belfast (UB lab code) were calibrated using the University of Washington calibration programme (Stuiver and Reimer 1986). Dates from the Oxford Radiocarbon Accelerator Unit (OxA lab code) were calibrated using the OxCal programme (Bronk Ramsey 2002).

Chapter 2 (M MacDonagh)—Multi-period excavations on the N4 Sligo Inner Relief Road

<i>Lab Code</i>	<i>Site</i>	<i>Sample/context</i>	<i>Yrs BP</i>	<i>Calibrated date ranges</i>
Beta 194432	Caltragh Bronze Age structures	Charcoal (<i>Alnus glutinosa</i>) from pit fill	3220 ± 80	1540–1410 BC one sigma 1680–1320 BC two sigma
Beta 194433	Caltragh Bronze Age structures	Charcoal (Pomoideae) from entrance to hut	3140 ± 70	1490–1380 BC one sigma 1530–1260 BC two sigma
Beta 194434	Caltragh Bronze Age structures	Charcoal (<i>Salix</i> and <i>Alnus glutinosa</i>) from fill of hut ditch	3210 ± 40	1520–1430 BC one sigma 1530–1410 BC two sigma
Beta 194435	Caltragh Bronze Age structures	Charcoal (<i>Corylus avellana</i>) from lower pit fill	3350 ± 110	1750–1510 BC one sigma 1910–1410 BC two sigma
Beta 197656	Caltragh Bronze Age cremation	Charcoal (<i>Alnus</i>)	3500 ± 80	1890–1680 BC one sigma 1960–1540 BC two sigma
Beta 197658	Caltragh Bronze Age cremation	Charcoal (<i>Alnus</i>)	3230 ± 60	1530–1430 BC one sigma 1630–1400 BC two sigma
UCD 0239	Caltragh <i>filacht fiadh</i> overlying Neolithic wall	Charcoal (unident.) from burnt mound material	3260 ± 45	1602–1460 BC one sigma 1680–1430 BC two sigma

<i>Lab Code</i>	<i>Site</i>	<i>Sample/context</i>	<i>Yrs BP</i>	<i>Calibrated date ranges</i>
UCD 0240	Caltragh <i>fulacht fiadh</i> overlying Neolithic wall	Charcoal (unident.) from burnt mound material	3315 ± 50	1682–1521 BC one sigma 1737–1459 BC two sigma
UCD 0247	Caltragh cremation	Charcoal (unident.)	4540 ± 50	3361–3039 BC one sigma 3491–3039 BC two sigma
Beta 186486	Magheraboy causewayed enclosure	Charred hazelnut shell (<i>Corylus avellana</i>)	5150 ± 110	4040–3800 BC one sigma 4240–3700 BC two sigma
Beta 196298	Magheraboy causewayed enclosure	Cereal grain (unident.)	4660 ± 40	3510–3370 BC one sigma 3500–3380 BC two sigma
Beta 196299	Magheraboy causewayed enclosure	Wheat (<i>Triticum</i> sp) grain from enclosure	4650 ± 40	3510–3370 BC one sigma 3620–3360 BC two sigma
Beta 199984	Magheraboy causewayed enclosure	Bone (unident.) from enclosure	5160 ± 60	3990–3950 BC one sigma 4050–3800 BC two sigma
Beta 186485	Magheraboy Iron Age structure	Charcoal (unident.)	2160 ± 60	350–80 BC one sigma 370–30 BC two sigma
Beta 197650	Magheraboy medieval enclosure	Barley (<i>Hordeum</i> sp) grains from ditch fill	1170 ± 40	AD 790–900 one sigma AD 770–980 two sigma
Beta 197651	Magheraboy medieval enclosure	Barley (<i>Hordeum</i> sp) grains from ditch fill	1240 ± 40	AD 710–860 one sigma AD 680–890 two sigma
Beta 197652	Magheraboy medieval enclosure	Charcoal (<i>Corylus avellana</i>) from lower fill of pit	1130 ± 70	AD 810–990 one sigma AD 720–1020 two sigma
Beta 197654	Magheraboy medieval enclosure	Charcoal (<i>Fraxinus</i>) from enclosure	1340 ± 80	AD 640–770 one sigma AD 570–880 two sigma
Beta 199778	Tonafortes henge	Charcoal from lower ditch fill	3840 ± 50	2400–2210 BC one sigma 2460–2140 BC two sigma
Beta 196297	<i>Fulacht fiadh</i> near Tonafortes henge	Charcoal (<i>prunus</i>) from burnt mound	3810 ± 40	2300–2200 BC one sigma 2400–2140 BC two sigma

Chapter 3 (J Hughes)—Neolithic structures in Granny, County Kilkenny

UB 6313	Granny (Site 27)	Charcoal from sub-circular pit (C27211) associated with burnt mound	3843 ± 36	2453–2281 BC one sigma 2461–2148 BC two sigma
UB 6314	Granny (Site 27)	Charcoal from isolated shallow pit (C272230)	3982 ± 36	2573–2466 BC one sigma 2587–2458 BC two sigma
UB 6415	Granny (Site 27)	Charcoal from post-hole (C27314) in Structure 2	5054 ± 38	3954–3787 BC one sigma 3977–3728 BC two sigma

Chapter 4 (E Cotter)—Bronze Age settlement at Ballybrowney, County Cork

<i>Lab Code</i>	<i>Site</i>	<i>Sample/context</i>	<i>Yrs BP</i>	<i>Calibrated date ranges</i>
Beta 201045	Ballybrowney 1	Enclosure 1—post-hole fill (C319) at entrance to enclosure	3480 ± 60	1890–1720 BC one sigma 1940–1650 BC two sigma
Beta 201050	Ballybrowney 1	Enclosure 1—central post-hole fill (C604) in Structure E	3360 ± 50	1700–1600 BC one sigma 1750–1520 BC two sigma
Beta 201047	Ballybrowney 1	Enclosure 2—upper fill (C505) of outer ditch	3400 ± 40	1740–1650 BC one sigma 1760–1610 BC two sigma
Beta 201048	Ballybrowney 1	Enclosure 2—upper fill (C514) of inner ditch	2820 ± 60	1030–900 BC one sigma 1130–830 BC two sigma
Beta 201049	Ballybrowney 1	Enclosure 2—post-hole fill (C532) within the enclosure 3020 ± 70	1390–1140 BC one sigma	1420–1030 BC two sigma
Beta 201051	Ballybrowney 1	Enclosure 3—fill of slot trench (C720)	3330 ± 40	1670–1530 BC one sigma 1700–1520 BC two sigma
Beta 201044	Ballybrowney 1	Enclosure 4—fill of cremation pit (C204)	2730+/-100	990–800 BC one sigma 1120–780 BC two sigma
Beta 201052	Ballybrowney 1	Enclosure 4—burnt layer (C990) at base of ditch	1800 ± 40	AD 150–250 one sigma AD 120–340 two sigma
Beta 203724	Ballybrowney 1	Enclosure 4—ditch fill (C936) overlying basal burnt deposit	1330 ± 70	AD 650–770 one sigma AD 610–870 two sigma
Beta 201042	Ballybrowney 1	Structure A—basal fill (C61) of pit	2780 ± 40	970–880 BC one sigma 1010–830 BC two sigma
Beta 201046	Ballybrowney 1	Structure C—slot trench fill (C450)	3910 ± 70	2480–2290 BC one sigma 2580–2200 BC two sigma
Beta 201043	Ballybrowney 1	Fill of kiln (C123)	1340 ± 50	AD 650–700 one sigma AD 630–780 two sigma

Chapter 6 (M Seaver)—Multi-period excavations in Glebe and Laughanstown, County Dublin

OxA 12802	Laughanstown (Site 35D), Bronze Age enclosure	Charcoal (<i>Corylus avellana</i>) from hearth underlying stone bank	932 ± 27	AD 1030–1160 one sigma AD 1020–1190 two sigma
OxA 12811	Laughanstown (Site 35D), Bronze Age enclosure	Charcoal (<i>Corylus avellana</i>) from a post-hole fill	3847 ± 35	2400–2200 BC one sigma 2460–2200 BC two sigma
OxA 12812	Laughanstown (Site 35D), Bronze Age enclosure	Charcoal (<i>Quercus</i> sp) from pit in centre of enclosure	2890 ± 35	1130–1000 BC one sigma 1220–930 BC two sigma

<i>Lab Code</i>	<i>Site</i>	<i>Sample/context</i>	<i>Yrs BP</i>	<i>Calibrated date ranges</i>
OxA 12813	Laughanstown (Site 35D), Bronze Age enclosure	Charcoal (Pomoideae) from pit fill	3210 ± 50	1520–1425 BC one sigma 1610–1390 BC two sigma
OxA 12753	Laughanstown (Site 37F), kiln disturbing Bronze Age cairn with cremation	Charcoal (Pomoideae) from kiln	1462 ± 29	AD 560–645 one sigma AD 540–650 two sigma
OxA 12797	Laughanstown (Site 37F), cremation in pit	Cremated human bone	3770 ± 90	2340–2030 BC one sigma 2500–1950 BC two sigma
OxA 12770	Laughanstown (Site 38), Bronze Age cremation in pot	Cremated human bone	2745 ± 29	910–830 BC one sigma 980–820 BC two sigma
OxA 12754	Laughanstown (Site 40), Bronze Age settlement	Cereal (unident.) from post-hole	2700 ± 31	900–810 BC one sigma 905–800 BC two sigma
OxA 12755	Laughanstown (Site 40), Bronze Age settlement	Charcoal (<i>Quercus</i> sp) from post-hole fill	2934 ± 31	1260–1040 BC one sigma 1260–1010 BC two sigma
OxA 12756	Laughanstown (Site 40), Bronze Age settlement	Charcoal (<i>Ulmus</i>) from post-hole fill	2765 ± 31	970–830 BC one sigma 1000–820 BC two sigma
OxA 12757	Laughanstown (Site 40), early medieval settlement	Charcoal (<i>Corylus avellana</i>) from pit fill	1050 ± 27	AD 982–1019 one sigma AD 890–1030 two sigma
OxA 12814	Laughanstown (Site 42), kilns and possible granary structure	Charcoal (Pomoideae) from structure	1473 ± 32	AD 560–640 one sigma AD 530–650 two sigma
OxA 12815	Laughanstown (Site 42), Bronze Age pot in pit	Charcoal (<i>Corylus avellana</i>) from fill of pot	2550 ± 36	800–560 BC one sigma 810–520 BC two sigma
OxA 12816	Laughanstown (Site 42), kiln	Cereal seeds (<i>Avena</i> sp) from kiln	1460 ± 32	AD 560–645 one sigma AD 540–660 two sigma
OxA 12749	Laughanstown (Site 78), burnt mounds and Bronze Age settlement	Charcoal (<i>Alnus glutinosa</i>) from rectangular trough of burnt mound	2724 ± 30	900–830 BC one sigma 920–810 BC two sigma
OxA 12750	Laughanstown (Site 78), burnt mounds and Bronze Age settlement	Charcoal (<i>Alnus glutinosa</i>) from burnt mound	3647 ± 34	2120–1940 BC one sigma 2140–1910 BC two sigma
OxA 12751	Laughanstown (Site 78), burnt mounds and Bronze Age settlement	Charcoal (<i>Alnus glutinosa</i>) from occupation spread	3341 ± 31	1690–1530 BC one sigma 1690–1520 BC two sigma
OxA 12752	Laughanstown (Site 78), burnt mounds and Bronze Age settlement	Charcoal (<i>Alnus glutinosa</i>) from circular trough under burnt mound	3641 ± 31	2110–1940 BC one sigma 2140–1890 BC two sigma

<i>Lab Code</i>	<i>Site</i>	<i>Sample/context</i>	<i>Yrs BP</i>	<i>Calibrated date ranges</i>
OxA 12774	Laughanstown (Site 78), burnt mounds and Bronze Age settlement	Cremated human bone from pit close to burnt mound	3259 ± 29	1610–1450 BC one sigma 1620–1440 BC two sigma
OxA 12889	Laughanstown (Site 78), burnt mounds and Bronze Age settlement	Charcoal (<i>Alnus glutinosa</i>) from waterhole at burnt mound site	2991 ± 34	1300–1130 BC one sigma 1380–1120 BC two sigma
OxA 12718	Glebe (Site 43), ringfort	Charcoal (<i>Prunus?</i>) from hearth	1263 ± 26	AD 690–780 one sigma AD 670–860 two sigma
OxA 12719	Glebe (Site 43), ringfort	Charcoal (Poimoidae) from post-hole fill	1321 ± 27	AD 660–765 one sigma AD 650–770 two sigma
OxA 12720	Glebe (Site 43), ringfort	Charcoal (Poimoidae) from occupation deposit under the bank	1244 ± 27	AD 690–860 one sigma AD 680–870 two sigma

Chapter 10 (L Fibiger)—Medieval cemetery at Johnstown, County Meath

<i>Lab Code</i>	<i>Site</i>	<i>Sample/context</i>	<i>Yrs BP</i>	<i>Calibrated date ranges</i>
Beta 178194	Johnstown	Burial 25	1320 ± 50	AD 580–700 two sigma
Beta 184702	Johnstown	Burial 26	1030 ± 40	AD 880–1010 two sigma
Beta 177959	Johnstown	Burial 33	1400 ± 70	AD 430–680 two sigma
Beta 184704	Johnstown	Burial 34	1170 ± 40	AD 680–890 two sigma
Beta 180650	Johnstown	Burial 42	1350 ± 60	AD 545–700 two sigma
Beta 180651	Johnstown	Burial 68	200 ± 40	AD 1500–1665 two sigma
Beta 178197	Johnstown	Burial 110	1500 ± 70	AD 370–640 two sigma
Beta 178196	Johnstown	Burial 118	710 ± 50	AD 1170–1290 two sigma
Beta 184704	Johnstown	Burial 128	1170 ± 40	AD 680–890 two sigma
Beta 178195	Johnstown	Burial 129 (charnel)	1500 ± 70	AD 370–640 two sigma
Beta 184703	Johnstown	Burial 142	690 ± 40	AD 1190–1290 two sigma
Beta 184611	Johnstown	Burial 145	650 ± 40	AD 1230–1300 two sigma
Beta 184704	Johnstown	Burial 166	1200 ± 70	AD 650–900 two sigma
Beta 180652	Johnstown	Burial 196	600 ± 60	AD 1225–1410 two sigma
Beta 178189	Johnstown	Burial 219	1400 ± 50	AD 530–660 two sigma
Beta 184612	Johnstown	Burial 222	550 ± 40	AD 1290–1410 two sigma
Beta 184613	Johnstown	Burial 249	1140 ± 60	AD 680–980 two sigma
Beta 180653	Johnstown	Burial 269	840 ± 70	AD 990–1255 two sigma
Beta 178199	Johnstown	Burial 280	730 ± 50	AD 1060–1280 two sigma

<i>Lab Code</i>	<i>Site</i>	<i>Sample/context</i>	<i>Yrs BP</i>	<i>Calibrated date ranges</i>
Beta 184612	Johnstown	Burial 295	490 ± 60	AD 1290–1440 two sigma
Beta 184615	Johnstown	Burial 370	650 ± 40	AD 1230–1300 two sigma
Beta 178201	Johnstown	Burial 485	700 ± 60	AD 1160–1300 two sigma
Chapter 11 (R. O'Brien & I Russell)—Hiberno-Scandinavian Woodstown 6, County Waterford				
Beta 183142	Woodstown 6	Charcoal from fill (F757) of pit (F1288)	1040 ± 60	AD 885–1150 two sigma
Beta 183143	Woodstown 6	Fill (F798) of oval-shaped pit (pit F1263)	1190 ± 60	AD 690–990 two sigma
Beta 194062	Woodstown 6	Deposit of burnt stones (F1214) sealing pit/ditch (F1467)	1110 ± 40	AD 870–1010 two sigma
Beta 194063	Woodstown 6	Later fill (F2353) of enclosure ditch (F2174), sealing smithing hearth (F2370, F2330)	1380 ± 40	AD 620–690 two sigma
Beta 194064	Woodstown 6	Fill (F1046) of pit (F1495)	1140 ± 40	AD 790–990 two sigma
Beta 194065	Woodstown 6	A primary fill (F2173) of the enclosure ditch (F2174), sealed by smithing hearth (F2370, F2330)	1590 ± 40	AD 400–560 two sigma
Beta 194066	Woodstown 6	Fill (F2370) of smithing hearth (F2330) within fills of enclosure ditch	1540 ± 40	AD 420–620 two sigma
Beta 194067	Woodstown 6	Fill (F888) of post-hole (F1387)	1260 ± 50	AD 660–890 two sigma
Beta 194068	Woodstown 6	Fill (F1115) of hearth/kiln (F1465)	1130 ± 60	AD 770–1020 two sigma
Beta 194069	Woodstown 6	Fill (F1466) of pit/ditch (F1467), sealed by burnt stone deposit (F1214)	1210 ± 60	AD 680–980 two sigma
Beta 195833	Woodstown 6	Wood from TCD Borehole No. 1 in wetland	3440 ± 40	1880–1650 BC two sigma
Beta 195834	Woodstown 6	Wood from TCD Borehole No. 1 in wetland	4300 ± 50	3020–2870 BC two sigma
Beta 197002	Woodstown 6	Alder root from Trench No. 1A in wetland	3810 ± 40	AD 2400–2140 two sigma

<i>Lab Code</i>	<i>Site</i>	<i>Sample/context</i>	<i>Yrs BP</i>	<i>Calibrated date ranges</i>
Beta 197003	Woodstown 6	Alder wood from Trench No. 2 in wetland	1230 ± 40	AD 690– 890 two sigma
Beta 197004	Woodstown 6	Alder root from Trench No. 2 in wetland	2760 ± 100	1190–790 BC two sigma
Beta 197005	Woodstown 6	Oak wood from Trench No. 3 in Wetland	2110 ± 80	380 BC–AD 60 two sigma