

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 Beta Analytic in Florida (Beta lab code) were calibrated using the IntCal98 calibration programme (Stuiver et al. 1998). Dates obtained from Waikato Laboratory, New Zealand (Wk lab code), were calibrated using the OxCal v.3.10 calibration programme (Bronk Ramsey 2005) in the case of sites on the N2 Finglas–Ashbourne road scheme (chapters 4 and 8) and using the IntCal04 calibration programme (Reimer et al. 2004) in the case of Monanny, Co. Monaghan. Dates obtained from Queen’s University, Belfast (UB lab code), were calibrated using the CALIB 5.0.2 calibration programme (Stuiver et al. 2005). Dates obtained from the Oxford Radiocarbon Accelerator Unit (OxA lab code) were calibrated using the OxCal v.3.5 calibration programme (Bronk Ramsey 2000).

<i>Lab Code</i>	<i>Site</i>	<i>Sample/context</i>	<i>Yrs BP</i>	<i>Calibrated date ranges</i>
Chapter 2 (F Walsh)—Neolithic Monanny, Co. Monaghan				
Wk-17338	Monanny 1	Oak (<i>Quercus</i> sp) charcoal from burnt post in west wall of House A	5037 ± 40	3950–3830 BC one sigma 3960–3710 BC two sigma
Wk-17339	Monanny 1	Blackthorn (<i>Prunus spinosa</i>) and ash (<i>Fraxinus excelsior</i>) charcoal from Bronze Age pit	2705 ± 58	900–805 BC one sigma 1000–790 BC two sigma
Wk-17340	Monanny 1	Blackthorn (<i>Prunus spinosa</i>), apple/pear (Pomoideae) and hazel (<i>Corylus avellana</i>) charcoal from early medieval cereal-drying kiln	1512 ± 39	AD 530–610 one sigma AD 430–640 two sigma
Wk-17341	Monanny 1	Oak (<i>Quercus</i> sp) charcoal from internal wall of House B	5048 ± 40	3950–3790 BC one sigma 3960–3760 BC two sigma

Settlement, Industry and Ritual

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Wk-17342	Monanny 1	Oak (<i>Quercus</i> sp) charcoal from burnt timber in south wall of House B	5082 ± 64	3880–3790 BC one sigma 3990–3700 BC two sigma
Wk-17343	Monanny 1	Oak (<i>Quercus</i> sp) charcoal from burnt post in south wall of House C	5043 ± 43	3950–3830 BC one sigma 3960–3710 BC two sigma
Wk-17344	Monanny 1	Oak (<i>Quercus</i> sp) charcoal from burnt post at north-west corner of House C	4991 ± 47	3800–3700 BC one sigma 3950–3650 BC two sigma
Wk-17345	Monanny 1	Oak (<i>Quercus</i> sp) plank at base of trough of burnt mound	3221 ± 122	1670–1380 BC one sigma 1900–1100 BC two sigma
Wk-17347	Monanny 1	Oat (<i>Avena</i> sp) grain from early medieval cereal-drying kiln	1546 ± 35	AD 430–490 one sigma AD 420–600 two sigma
Wk-17348	Monanny 1	Medieval skeleton, 5 g of femur	761 ± 33	AD 1225–1280 one sigma AD 1215–1290 two sigma

Chapter 3 (D Murphy & S Rathbone)—Early medieval watermill at Killoteran, Co. Waterford

Beta-191530	Killoteran 9	Yew (<i>Taxus</i>) post from upper dam	1530 ± 60	AD 440–610 one sigma AD 410–650 two sigma
Beta-191531	Killoteran 9	Oak (<i>Quercus</i>) plank from upper dam	1600 ± 60	AD 400–540 one sigma AD 340–600 two sigma

Chapter 4 (M FitzGerald)—Archaeological discoveries on the N2, Counties Meath & Dublin

Wk-15499	Muckerstown, Site 13b	Willow (<i>Salix</i>) artefact from large waterlogged pit/well	2990 ± 40	1520–1310 BC one sigma 1600–1210 BC two sigma
Wk-16279	Muckerstown, Site 13b	Ash (<i>Fraxinus</i>) charcoal from a stone-lined industrial feature	2175 ± 38	360–170 BC one sigma 380–110 BC two sigma
Wk-16280	Muckerstown, Site 13b	Hazel (<i>Corylus</i>) charcoal from drainage feature	1146 ± 52	AD 780–980 one sigma AD 770–1020 two sigma
Wk-16281	Muckerstown, Site 13b	Blackthorn (<i>Prunus spinosa</i>) charcoal from small bowl-shaped pit	1055 ± 68	AD 890–1030 one sigma AD 810–1160 two sigma
Wk-16818	Muckerstown, Site 13b	Brushwood panel of hazel (<i>Corylus</i>) from large waterlogged pit/well	2990 ± 40	1310–1130 BC one sigma 1390–1080 BC two sigma
Wk-16282	Baltrasna, Site 14	Ash (<i>Fraxinus</i>) charcoal from pit	3733 ± 40	2200–2040 BC one sigma 2290–2020 BC two sigma

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Wk-16284	Baltrasna, Site 17/18	Blackthorn (<i>Prunus spinosa</i>) charcoal from large pit	2288 ± 35	400–230 BC one sigma 410–200 BC two sigma
Wk-16286	Baltrasna, Site 17/18	Ash (<i>Fraxinus</i>) charcoal from pit	2900 ± 47	1200–1000 BC one sigma 1260–930 BC two sigma
Wk-16287	Baltrasna, Site 17/18	Alder (<i>Alnus</i>) vessel or mether	663 ± 36	AD 1280–1390 one sigma AD 1270–1400 two sigma
Wk-16288	Harlockstown, Site 19	Alder (<i>Alnus</i>) charcoal from circular enclosure ditch	3515 ± 45	1900–1760 BC one sigma 1960–1690 BC two sigma
Wk-16289	Harlockstown, Site 19	Blackthorn (<i>Prunus spinosa</i>) from small barrow	2057 ± 40	160 BC–AD 120 one sigma 180 BC–AD 30 two sigma
Wk-16290	Harlockstown, Site 19	Human bone (right fibula diaphysis fragment) from articulated burial inside circular enclosure	3599 ± 36	2020–1900 BC one sigma 2120–1870 BC two sigma
Wk-16311	Ballybin/Killegland, Site 22	Alder (<i>Alnus</i>) charcoal layer of kiln	2016 ± 39	60 BC–AD 50 one sigma 160 BC–AD 700 two sigma
Wk-16313	Cookstown, Site 25	Oak (<i>Quercus</i>) and blackthorn (<i>Prunus spinosa</i>) charcoal from fill of inner ring-ditch from a complex of two concentric ring-ditches	2148 ± 47	360–100 BC one sigma 360–50 BC two sigma
Wk-16314	Cookstown, Site 25	Blackthorn (<i>Prunus spinosa</i>) charcoal from fill of inner ring-ditch from a complex of two concentric ring-ditches	2192 ± 40	360–190 BC one sigma 390–160 BC two sigma
Wk-16316	Rath, Site 27	Ash (<i>Fraxinus</i>) vessel from large waterlogged pit	2203 ± 36	360–200 BC one sigma 380–180 BC two sigma
Wk-16317	Rath, Site 27	Oak (<i>Quercus</i>) charcoal from ring-ditch containing faience beads	2353 ± 41	510–380 BC one sigma 740–360 BC two sigma
Wk-16320	Rath, Site 27	Alder (<i>Alnus</i>) charcoal from large waterlogged pit	2190 ± 35	360–190 BC one sigma 380–160 BC two sigma
Wk-16824	Rath, Site 27	Ash (<i>Fraxinus</i>) vessel from large waterlogged pit	2217 ± 36	370–200 BC one sigma 390–190 BC two sigma

Settlement, Industry and Ritual

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Chapter 5 (A Lennon)—Ringfort at Leggetsrath West, Co. Kilkenny				
Beta-205166	Leggetsrath West	Animal bone from inner ditch of ringfort	1350 ± 60	AD 650–700 one sigma AD 610–780 two sigma
Beta-205167	Leggetsrath West	Charred materials from later cereal-drying kiln	900 ± 70	AD 1030–1220 one sigma AD 1000–1270 two sigma
Beta-205168	Leggetsrath West	Charred materials from outer ditch of ringfort	1180 ± 60	AD 780–960 one sigma AD 690–990 two sigma
Beta-205169	Leggetsrath West	Charred materials from earlier cereal-drying kiln	1100 ± 60	AD 890–1000 one sigma AD 790–1030 two sigma
Chapter 7 (F Coyne)—‘Plectrum-shaped’ enclosure at Newtown, Co. Limerick				
Beta-182313	Newtown A	Holly (<i>Ilex</i>) charcoal from slot-trench of figure-of-eight building	1150 ± 70	AD 785–980 one sigma AD 700–1015 two sigma
Beta-182314	Newtown A	Oak (<i>Quercus</i>) charcoal from central post-hole of figure-of-eight building	970 ± 120	AD 980–1205 one sigma AD 795–1280 two sigma
Beta-182317	Newtown A	Blackthorn (<i>Prunus</i> spp) charcoal from base of enclosure ditch	1090 ± 60	AD 890–1005 one sigma AD 795–1030 two sigma
Beta-182323	Newtown A	Blackthorn (<i>Prunus</i> spp) from upper fill of enclosure ditch	840 ± 90	AD 1050–1095 one sigma AD 1010–1300 two sigma
Chapter 8 (M Seaver)—Early medieval settlement at Raystown, Co. Meath				
Wk-16294	Raystown, Site 21	Oak (<i>Quercus</i>) charcoal in scorched pit	1284 ± 40	AD 670–770 one sigma AD 650–860 two sigma
Wk-16295	Raystown, Site 21	Oak (<i>Quercus</i>) charcoal from backfill of Northern Mill 2	938 ± 32	AD 1030–1160 one sigma AD 1020–1170 two sigma
Wk-16296	Raystown, Site 21	Blackthorn (<i>Prunus spinosa</i>) charcoal from fill of hearth/kiln	1151 ± 35	AD 780–970 one sigma AD 770–980 two sigma
Wk-16300	Raystown, Site 21	Burnt oak (<i>Quercus</i>) in feature within southern mill complex	1188 ± 37	AD 770–890 one sigma AD 710–970 two sigma
Wk-16302	Raystown, Site 21	Blackthorn (<i>Prunus spinosa</i>) and hazel (<i>Corylus</i>) charcoal from fill of pit cut by souterrain	1249 ± 53	AD 680–860 one sigma AD 660–890 two sigma

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Wk-16306	Raystown, Site 21	Human bone from articulated burial within ring-ditch	1528 ± 33	AD 440–590 one sigma AD 430–610 two sigma
Wk-16307	Raystown, Site 21	Human bone from articulated burial within ring-ditch	1334 ± 34	AD 650–770 one sigma AD 640–780 two sigma
Wk-16308	Raystown, Site 21	Human bone from articulated burial cutting ring-ditch	1412 ± 34	AD 610–655 one sigma AD 575–665 two sigma
Wk-16309	Raystown, Site 21	Human bone from articulated burial cutting ring-ditch, with blue glass bead	1130 ± 35	AD 885–975 one sigma AD 780–990 two sigma
Wk-16310	Raystown, Site 21	Human bone from articulated burial outside ring-ditch	1195 ± 34	AD 770–880 one sigma AD 700–950 two sigma
Wk-16819	Raystown, Site 21	Human bone from unusual north-south flexed burial	1574 ± 35	AD 430–540 one sigma AD 410–570 two sigma
Wk-16820a	Raystown, Site 21	Human bone from burial south of ring-ditch	1363 ± 36	AD 640–685 one sigma AD 600–770 two sigma
Wk-16820b	Raystown, Site 21	Human bone from burial south of ring-ditch	1312 ± 38	AD 660–770 one sigma AD 660–780 two sigma
Wk-16821	Raystown, Site 21	Human bone from burial south of ring-ditch	1425 ± 33	AD 605–650 one sigma AD 570–660 two sigma
Wk-16822	Raystown, Site 21	Human bone from burial cutting ring-ditch	1510 ± 34	AD 530–610 one sigma AD 430–640 two sigma
Wk-16823	Raystown, Site 21	Human bone from articulated burial within ring-ditch	1647 ± 33	AD 340–435 one sigma AD 260–540 two sigma
Wk-16825	Raystown, Site 21	Human bone from articulated burial within ring-ditch	1537 ± 34	AD 430–580 one sigma AD 430–600 two sigma
Wk-16826a	Raystown, Site 21	Human bone from articulated burial within ring-ditch	1451 ± 35	AD 580–645 one sigma AD 550–660 two sigma
Wk-16826b	Raystown, Site 21	Human bone from articulated burial within ring-ditch	1482 ± 35	AD 550–615 one sigma AD 460–650 two sigma
Wk-16827	Raystown, Site 21	Human bone from articulated burial within ring-ditch	1491 ± 35	AD 540–610 one sigma AD 440–650 two sigma
Wk-16828	Raystown, Site 21	Human bone from articulated burial within ring-ditch, associated with knife	1496 ± 36	AD 540–610 one sigma AD 440–650 two sigma

Settlement, Industry and Ritual

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Wk-17907	Raystown, Site 21	Single oat grain from cereal-drying kiln	1575 ± 30	AD 430–540 one sigma AD 410–560 two sigma
Wk-17908	Raystown, Site 21	Single wheat grain from cereal-drying kiln	1428 ± 30	AD 605–650 one sigma AD 570–660 two sigma
Wk-17909	Raystown, Site 21	Cereal from drying kiln containing unusual burial	1607 ± 37	AD 410–540 one sigma AD 380–550 two sigma
Wk-17910	Raystown, Site 21	Single barley grain from subrectangular enclosure	1295 ± 36	AD 665–770 one sigma AD 650–780 two sigma
Wk-17918	Raystown, Site 21	Human bone from articulated burial	1586 ± 32	AD 420–540 one sigma AD 400–550 two sigma
Wk-17919	Raystown, Site 21	Human bone from articulated burial	1531 ± 31	AD 430–580 one sigma AD 430–600 two sigma
Wk-17920	Raystown, Site 21	Human bone from articulated burial	1524 ± 31	AD 460–600 one sigma AD 430–610 two sigma
Wk-17921	Raystown, Site 21	Human bone from articulated burial	1448 ± 35	AD 590–645 one sigma AD 550–660 two sigma
Wk-17922	Raystown, Site 21	Human bone from articulated burial	1598 ± 36	AD 410–540 one sigma AD 390–550 two sigma
UB-6521	Raystown, Site 21	Oak (<i>Quercus</i>) timber from Southern Mill 1	1279 ± 32	AD 681–770 one sigma AD 660–782 two sigma
UB-6522	Raystown, Site 21	Oak (<i>Quercus</i>) timber from Southern Mill 4	1315 ± 35	AD 659–765 one sigma AD 653–772 two sigma
UB-6523	Raystown, Site 21	Oak (<i>Quercus</i>) timber from Southern Mill 5	1206 ± 35	AD 777–874 one sigma AD 691–935 two sigma
UB-6524	Raystown, Site 21	Oak (<i>Quercus</i>) timber from Northern Mill 2	1096 ± 35	AD 896–988 one sigma AD 887–1017 two sigma

Chapter 9 (J Nolan)—Children's burial ground at Tonybaun, Co. Mayo

OxA-13119	Tonybaun	Bone (Skeleton 58) from children's burial ground	254 ± 29	AD 1535–1794 one sigma AD 1522–1947 two sigma
OxA-13120	Tonybaun	Bone (Skeleton 288) from children's burial ground	345 ± 29	AD 1490–1629 one sigma AD 1475–1638 two sigma

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OxA-13121	Tonybaun	Bone (Skeleton 386) from children's burial ground	312 ± 28	AD 1521–1640 one sigma AD 1489–1647 two sigma
OxA-13122	Tonybaun	Bone (Skeleton 515) from children's burial ground	248 ± 35	AD 1533–1945 one sigma AD 1521–1948 two sigma
OxA-13123	Tonybaun	Bone (Skeleton 517) from children's burial ground	255 ± 32	AD 1531–1795 one sigma AD 1520–1948 two sigma
OxA-13124	Tonybaun	Bone (Skeleton 1141) from children's burial ground	159 ± 30	AD 1670–1949 one sigma AD 1664–1951 two sigma
OxA-13228	Tonybaun	Bone (Skeleton 1166) from children's burial ground	205 ± 25	AD 1656–1946 one sigma AD 1650–1948 two sigma
UB-6763	Tonybaun	Ash (<i>Fraxinus</i>) and willow (<i>Ilex</i>) charcoal from pit fill of furnace pit F66	2045 ± 33	98 BC–AD 1 one sigma 166 BC–AD 25 two sigma
UB-6764	Tonybaun	Oak (<i>Quercus</i>) and willow (<i>Ilex</i>) charcoal from lazy bed furrows	1483 ± 34	AD 551–613 one sigma AD 467–648 two sigma
UB-6765	Tonybaun	Oak (<i>Quercus</i>) charcoal from fill of furnace pit F214	2309 ± 35	405–363 BC one sigma 477–210 BC two sigma
UB-6766	Tonybaun	Willow (<i>Ilex</i>) and hazel (<i>Corylus</i>) charcoal from activity layer underlying burials from children's burial ground	1176 ± 33	AD 780–891 one sigma AD 772–969 two sigma
UB-6767	Tonybaun	Willow (<i>Ilex</i>) and hazel (<i>Corylus</i>) charcoal from metalworking residue underlying burials from children's burial ground	1107 ± 32	AD 895–979 one sigma AD 882–1015 two sigma

