

Appendix 1

Radiocarbon and Luminescence dates referred to in the text

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Notes

- 1) Radiocarbon dates quoted uncalibrated in the original publication have been calibrated, as have dates quoted at 1σ only. All pre 1990 dates have been recalibrated if possible – not all publications include the uncalibrated dates. The footnotes to each table indicate which dates have been calibrated and the Oxcal version used.
- 2) For GU codes up to GU-1500 the error has been multiplied by 1.4 or increased to ± 110 , whichever is the larger (Ashmore 1998; Ashmore et al 2000). Ashmore (1998) suggests pre-1982 errors from all laboratories should be treated with similar caution consequently these errors have been increased in the same way.
- 3) Some older dates are from mixed samples rather than from single entities and should therefore be treated with caution (Ashmore 1999).
- 4) Luminescence dates come from thermoluminescence (TL) and optically stimulated luminescence (OSL), with one date from photo transferred luminescence (PTTL): reference should be made to the primary source for full details. All luminescence date codes are as the primary source.
- 5) Recent research has identified an ‘old fuel’ effect in radiocarbon dating of bone apatite caused by a variable transfer of old carbon from the fuel to the bone, making calcined bone appear older than its true age (Schulting et al 2014; Snoeck et al 2014; Zazzo et al 2012). In Orkney the readily available ‘old fuel’ is peat, and the potential exists for a significant impact on the radiocarbon dates obtained from cremated human bone. Analysis of cist contents and cramp (vitrified fuel ash slag) has shown that a variety of fuels including peat were used in Orcadian Bronze Age cremation pyres, along with heather, various types of wood, turf and seaweed (Alldritt 2007; Callander 1936; Downes 2005, 113 – 17; Miller & Ramsay 2014; Photos-Jones 2007 & 2014; Photos-Jones & Hall 2014; Photos-Jones et al 2007).

Table A1.1 Radiocarbon dates from Orkney Bronze Age burial related contexts.

All dates are for human bone except where stated.

Table A1.1 Radiocarbon dates from Orkney Bronze Age burial related contexts, all dates on human bone unless stated otherwise				
Site	Context	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Blackhammer, Rousay	Ox bone, upper deposits cell 1or 2	UB-6419 3520 \pm 34	1940 – 1740	Sheridan 2005b
Blomuir, Holm, Cist 2	Cremation, ceramic urn, cist	Gra-21738 3540 \pm 60	2040 – 1690	Sheridan 2003a
Bu Farm, Rapness, Westray	Charcoal, pre-cist, cairn 1	AA-11766 2955 \pm 85	1406 – 936	Barber et al 1996, 114 – 5 ¹
	Charcoal, cairn 2	AA-11767 3205 \pm 55	1619 – 1387	
Crantit, Kirkwall	Bone apatite west cist context 70	SUERC-815 3460 \pm 45	1890 – 1680	Ballin Smith 2014, 136 – 7
	Bone apatite west cist context 71	SUERC-816 3420 \pm 50	1800 – 1600	
	Antler mattock from cist found in 1909	OxA-4607 3385 \pm 55	1780 – 1520	From cist in Cursiter 1910
Cuween, Firth	Femur, entrance passage of tomb	UB-6422 3668 \pm 36	2150 – 1930	Sheridan 2005b
Ferndale, Rendall	Cremated bone, cist 010	SUERC-2987 3555 \pm 35	2020 – 1760	Duffy 2005, 14
	Cremated bone, cist 004	SUERC-2988 3550 \pm 35	2020 – 1740	
Geroin, Harray	Bone apatite, cist	SUERC-5471 3475 \pm 35	1890 – 1692	Toolis 2004 & 2005b ²
	Charcoal from base of same cist	SUERC-5472 3385 \pm 35	1770 – 1537	

¹ Calibrated using Oxcal 4.1 with Intcal04 calibration curve

² Calibrated using Oxcal 4.1 with Intcal04 calibration curve

Table A1.1 Radiocarbon dates from Orkney Bronze Age burial related contexts, all dates on human bone unless stated otherwise				
Site	Context	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Gitterpitten, Rendall	Charcoal, cremation pit 1039	AA- 53153 2985 \pm 35	1377 – 1091	Downes 1998a & 2003a ³
	Charcoal, cremation pit 1028	AA- 53154 2550 \pm 35	804 – 544	
	Charcoal, cremation cist mound 4	AA- 53155 3315 \pm 40	1690 – 1500	
	Charcoal, cremation cist mound 2	AA- 53156 2995 \pm 40	1387 – 1117	
	Bone apatite cremation pit 1036	SUERC-841 3210 \pm 45	1608 – 1410	
	Bone apatite cremation pit 1033	SUERC-842 3440 \pm 45	1884 – 1636	
	Bone apatite cremation pit 1039	SUERC-843 3400 \pm 50	1878 – 1536	
	Bone apatite, cist 1040 mound 4	SUERC-844 3430 \pm 45	1881 – 1629	
	Bone apatite cremation pit 1029	SUERC-846 3235 \pm 45	1616 – 1424	
	Bone apatite cist 1011 mound 2	SUERC-1179 3390 \pm 50	1875 - 1531	
Holland, St. Ola	Secondary inhumation, L. femur	GU-1373 2945 \pm 110	1430 – 897	Neil 1981, 45 ⁴
	Secondary inhumation, R. femur	GU-1374 2880 \pm 110	1378 – 831	
Isbister, South Ronaldsay	Inhumation (IS 110), bone, exterior tomb	GU-1187 3250 \pm 110	1871 – 1268	Renfrew et al 1983, 62 ⁵
	Inhumation (IS 1972),bone, extramural	OxA-25579 3255 \pm 29	1620 – 1450	Lawrence & Lee-Thorp 2012 ⁶
	Inhumation (IS 2642),bone, in tomb	OxA-25622 3915 \pm 34	2487 - 2292	
	Inhumation GENSCOT02, bone, in tomb	SUERC-68632 3999 \pm 32	2581 - 2464	Armit et al 2016
	Inhumation (IS 7455), bone, in tomb, SC3	SUERC-68721 3962 \pm 29	2571 - 2348	

³ Calibrated using Oxcal 4.1 with Intcal04 calibration curve

⁴ Calibrated using Oxcal 4.1 with Intcal04 calibration curve: errors increased from \pm 60 (Ashmore 1998; Ashmore et al 2000, 45 – 6)

⁵ Calibrated using Oxcal 4.1 with Intcal04 calibration curve: original error \pm 55 increased to \pm 110 (Ashmore 1998; Ashmore et al 2000, 45– 6). This is one of 3 burials in the ‘megalithic cist’-actually a gap in the exterior tomb wall with a slab across it – see Hedges & Haigh 1983, 302

⁶ Subsequent radiocarbon date from osteoarchaeological reassessment, from same deposit as GU-1187, incompletely recovered extramural inhumation

Table A1.1 Radiocarbon dates from Orkney Bronze Age burial related contexts, all dates on human bone unless stated otherwise				
Site	Context	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Isbister (cont'd)	White tailed sea eagle bone	UB 6553 4072 \pm 39	2345 - 2051 ⁷	Sheridan 2005b
	White tailed sea eagle bone	UB-6552 4017 \pm 38	2272 - 2007 ⁸	
Kewing, Rendall	Bone apatite from cist	SUERC-817 3520 \pm 45	1960 – 1730	Ballin Smith 2014, 90
Knowes of Trotty, Harray	Cist 089 cremated bone	SUERC-7913 3380 \pm 50	1871 – 1527	Card 2005c ⁹
	Cist 089 cremated bone	SUERC-7914 3395 \pm 50	1877 - 1532	
	Cist 089 cremated bone	SUERC-7918 3330 \pm 50	1739 – 1501	
	Cist 089 cremated bone	SUERC-7919 3370 \pm 50	1864 – 1522	
	Pit 054 cremated bone	SUERC-7920 3175 \pm 50	1605 – 1316	
	Cist 055 cremated bone	SUERC-7921 3305 \pm 50	1733 – 1458	
	Pit 015 charred grain	SUERC-7922 3465 \pm 50	1917 – 1643	
	Bone apatite cist in barrow 1	GrA-32127 3625 \pm 35	2130 – 1890	
	Cremated bone cist in barrow 1	GrA-34776 3350 \pm 35	2030 – 1770	Sheridan 2007c
Knowes of Quoyscottie, Birsay	Hazel charcoal from pit cremation	UB-2161 3145 \pm 168	1872 – 942	Ashmore 2003, 44 – 5 ¹⁰ ; Hedges 1977
	Hazel charcoal cremation Kn. 1	UB-2162 2940 \pm 119	1430 – 846	
	Birch & pine charcoal, cremation ¹¹	UB-2158 2850 \pm 119	1373 – 807	
	Birch charcoal, cremation	UB-2163 2660 \pm 85	1023 – 539	

⁷ High marine signal, calibrated date quoted assumes 85% marine diet; if 75%: 2409 – 2132; if 50%: 2484 – 2231

⁸ High marine signal, calibrated date quoted assumes 85% marine diet; if 75%: 2299 - 2033; if 50%: 2456 - 2196

⁹ SUERRC dates calibrated using Oxcal 4.1 with Intcal04 calibration curve

¹⁰ Calibrated using Oxcal 4.2 with Intcal13 calibration curve; original errors increased (Ashmore 1998; Ashmore et al 2000, 45– 6).

¹¹ Caution required: not a single entity date (see Ashmore 1999)

Table A1.1 Radiocarbon dates from Orkney Bronze Age burial related contexts, all dates on human bone unless stated otherwise				
Site	Context	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Knowes of Quoyscottie (cont'd)	Cremated bone, cist, Kn. 2	Gra-21698 3350 \pm 50	1750 – 1510	Sheridan 2003a
Linga Fiold, Sandwick	Mound 7, hazel from pyre	GU-4876 3190 \pm 90	1689 – 1261	Downes 1994b, 1997b & 2005, 251-86 ¹²
	Willow, pyre from cist	GU-4877 3190 \pm 60	1617 – 1317	
	Alder, pyre below mound 7	GU-4878 3210 \pm 50	1611 – 1406	
	Hazel from cist	GU-4879 3210 \pm 80	1685 – 1312	
	Alder, mound 6, burnt dep. steatite urn	GU-4880 3380 \pm 90	1905 – 1457	
	Alder, fill steatite urn	GU-4881 3290 \pm 60	1731 – 1439	
	Alder from cremation	AA-23264 3095 \pm 45	1489 – 1221	
	Hazel, burnt dep. mound 7	AA-23265 3135 \pm 45	1501 – 1302	
	Alder, pyre, mound 5	GU-4884 3460 \pm 60	1928 – 1626	
	Oak, mound 5	AA-23266 3035 \pm 45	1412 – 1131	
	Hazel, cremation, mound 5	GU-4886 3390 \pm 60	1878 – 1528	
	Hazel & alder, cist, mound 7 ¹³	GU-4887 3030 \pm 100	1499 – 1003	
	Cremated bone-skull fragment	SUERC-8991 3665 \pm 35	2141 – 1942	NMRS HY21NE29 ¹⁴
	Cremated bone-skull fragment	SUERC-8992 3435 \pm 40	1880 – 1642	
	Cremated bone-skull fragment	SUERC-8993 3525 \pm 40	1956 – 1743	
	Cremated bone-skull fragment	SUERC-8994 3400 \pm 35	1867 – 1616	
	Cremated bone-femoral shaft	SUERC-8995 3430 \pm 40	1879 – 1637	
	Cremated bone-prox. humerus artic.	SUERC-8999 3450 \pm 35	1883 – 1683	
	Cremated bone -femur shaft	SUERC-9000 3360 \pm 35	1744 – 1534	

¹² Calibrated using Oxcal 4.1 with Intcal04 calibration curve

¹³ Caution required: not a single entity date (see Ashmore 1999)

¹⁴ SUERCC dates only calibrated using Oxcal 4.2 with Intcal13 calibration curve

Table A1.1 Radiocarbon dates from Orkney Bronze Age burial related contexts, all dates on human bone unless stated otherwise				
Site	Context	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Linga Fiold (cont'd)	Cremated bone- femur shaft	SUERC-9001 3260 \pm 35	1621 – 1450	
Lopness, Sanday	Lamb bone, in cist over inhumation	AA-51418 3320 \pm 50	1740 – 1490	Innes 2016
	Left femur female inhumation	AA-43651 3520 \pm 40	1950 - 1730	
Links of Noltland, Westray ¹⁵	Femur, crouched inhumation 9053	GU-27901 3280 \pm 30	1630 - 1460	Moore & Wilson 2011a, 38
	Femur, crouched inhumation 9054	GU-27908 3315 \pm 30	1690 - 1510	
	Inhumation	AA-43651 3520 \pm 40	1950 – 1730	
Loth Road, Sanday	Charcoal in stone box 016	SUERC-3746 3500 \pm 45	1941 – 1693	Sharman 2007a, 7 ¹⁶
	Charcoal fill of pit 042	SUERC-3759 3210 \pm 40	1606 – 1411	
	Charcoal fill of pit 042	SUERC-3760 3265 \pm 35	1623 – 1452	
	Charcoal fill of pit 050	SUERC-3747 3135 \pm 40	1497 – 1313	
	Charcoal fill of pit 054	SUERC-3748 3160 \pm 35	1505 – 1323	
Moan Farm, Harray	Femur from base of cist	AA-51369 3460 \pm 40	1890 – 1684	Jones 2003c; Richards & Stuart 1994 ¹⁷
Mousland, Stromness	Charcoal from cist	GU-3186 3400 \pm 100	1951 – 1456	Downes 1994a ¹⁸

¹⁵ Radiocarbon assays on 33 individual burials of the 65 in the main cemetery range from 2200- 1960 BC to 980 - 820 BC, with a fairly even spread of dates in between (Hazel Moore, pers. comm).

¹⁶ Calibrated using Oxcal 4.1 with Intcal04 calibration curve

¹⁷ Calibrated using Oxcal 4.1 with Intcal04 calibration curve

¹⁸ Calibrated using Oxcal 4.1 with Intcal04 calibration curve

Table A1.1 Radiocarbon dates from Orkney Bronze Age burial related contexts, all dates on human bone unless stated otherwise				
Site	Context	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Orkney (unlocated)	Cremated bone in steatite urn	Gra-21691 3240 \pm 50	1680 – 1400	Sheridan 2003a
Quandale, Rousay	Cremated bone, mound 3, steatite urn	GrA-19988 3600 \pm 50	2140 – 1770	Grant 1937; Sheridan 2002b
	Cremated bone, mound 8, steatite urn	GrA-19989 3660 \pm 50	2200 – 1880	
Quarrel Geo/Banks, S Ronaldsay	Femur, skeleton 3 in cist	SUERC-1198 3465 \pm 45	1907 – 1669	Downes 2003c & 2005, 299 ¹⁹
	Infant femur, SW corner of cist	SUERC-1199 3305 \pm 35	1681 – 1503	
	Infant femur, mid S side cist	SUERC-1200 3215 \pm 40	1607 - 1413	
Riff, Rendall	Bone apatite, cist	SUERC-840 3570 \pm 45	2033 – 1771	Downes 2003d & 2005, 298-9 ²⁰
Rousay (unlocated)	Cremated bone in steatite urn	Gra-21702 3330 \pm 50	1740 – 1500	Sheridan 2003a
Sand Fiold, Sandwick	Fire ash slag outside cist	UT-1483 4090 \pm 40	2860 – 2500	Dalland 1999, 406
	Adult bones – inhumation	UT-1484 3530 \pm 40	1990 – 1750	
	Foetal bones – inhumation	UT-1485 4100 \pm 50	2880 – 2500	
	Charcoal in W. slab trench	UT-1486 3660 \pm 50	2180 – 1900	
	Plant fibres lining cremation urn	UT-1487 3620 \pm 50	2170 – 1880	
	Plant fibres over inhumations	UT-1559 3600 \pm 60	2130 – 1780	
	Plant fibres ?associated with cremation?	UT-1560 2730 \pm 60	1000 – 800	

¹⁹ Calibrated using Oxcal 4.1 with Intcal04 calibration curve

²⁰ Calibrated using Oxcal 4.1 with Intcal04 calibration curve

Table A1.1 Radiocarbon dates from Orkney Bronze Age burial related contexts, all dates on human bone unless stated otherwise				
Site	Context	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Skara Brae, Sandwick	Skeleton 346A ²¹ above floor in house 1	OxA-26685 3579 \pm 27	2024–1832	Rick Schulting, pers. comm.
	Skeleton in main passageway		2340–1915	Thomas 2016, 93 – 4
Taversoe Tuick, Rousay	Cremated bone, cist above Neo tomb	Gra-21734 3580 \pm 60	2130 – 1740	Sheridan 2003a
Varme Dale, Rendall	Charcoal under mound 2 -? Pyre?	AA-53157 4890 \pm 40	3769 – 3635	Downes 1998b & 2003e ²²
	Charcoal under mound 2 -? Pyre?	AA-53158 4875 \pm 45	3768 – 3535	Richards, Downes et al 2016
	Bone apatite cist 2008 mound 1	SUERC-837 3125 \pm 45	1498 – 1296	
	Bone apatite cist 2007 mound 1	SUERC-839 3280 \pm 45	1678 – 1452	
Werne, Harray	Cremated bone, cist 1	Gra-21627 3750 \pm 60	2400 – 1960	Sheridan 2003a

²¹ Recovered during the 19th century excavations in the infilling sand about three feet (0.91m) above the fireplace in House 1 (Petrie 1868a, 210).

²² Calibrated using Oxcal 4.1 with Intcal04 calibration curve

Table A1.2 Orkney burnt mound radiocarbon dates.

Table A1.2 Orkney burnt mound radiocarbon dates				
Site	Context	Lab ref/uncal date BP	Cal BC at 2 σ	Reference
Beaquoy, Birsay	Trough fill secondary structure	SRR-1001 3627 \pm 110	2333 – 1691	Renfrew & Buteux 1985, 270 ¹
	Beneath 'well' secondary str.	SRR-999 2461 \pm 112	828 – 262	
Dale, Eday (Test pits only)	Burnt turf context 112	AA 48054 3505 \pm 45	1944 - 1695	Anthony 2003, 299 - 300, table 7.3 ²
	Burnt turf context 112	AA 48055 3155 \pm 50	1527 - 1290	
	Burnt turf context 112	AA 48053 3760 \pm 55	2401 - 1982	
	Burnt turf context 110	AA48057 3510 \pm 45	1951 - 1695	
	Burnt turf context 110	AA 48056 3580 \pm 45	2115 - 1772	
	Burnt turf context 107	AA 48058 3440 \pm 50	1885 - 1632	
	Peat -post date mound	GU 9796 1230 \pm 50	AD 669 - 938	
Skail, Eday (Test pits only)	Peat -post date mound	GU 9793 1280 \pm 60	AD 651 - 884	Anthony 2003, 299 - 300, table 7.3
	Peat -post date mound	GU 9794 1670 \pm 50	AD 244 - 535	
	Peat -post date mound	GU 9795 620 \pm 50	AD 1284 - 1410	

¹ Calibrated using Oxcal 4.2 with Intcal13 calibration curve; original errors increased (Ashmore 1998; Ashmore et al 2000, 45– 6). SRR-1001 is a terminus ante quem for the construction/use of the burnt mound but caution is required as the date was obtained from mixed animal bone and teeth and is not a single entity date. Both of these dates are for a secondary structure on the site, not the burnt mound itself. These dates are stratigraphically inverted: SRR-1001 should be stratigraphically later than SRR-999; but as the dates were not obtained until after the report was published they did not feature in the discussion in Hedges 1975. Either the dates are themselves unreliable or there was undetected mixing with earlier deposits on the site, which was itself badly disturbed by modern construction with a large part of the site destroyed. Neither of these dates are therefore included in the model in Chart 9.1.

² All Anthony 2003 dates calibrated using Oxcal 4.2 with Intcal13 calibration curve. 'Burnt turf' could be peat. Context 112 is at base, 110 mid & 107 at top of mound. These samples were all from test pits not from formal excavation and some uncertainty therefore exists in relationship to context; they are therefore not included in Chart 9.1; they do not however contradict a Bronze Age date for burnt mounds in general.

Table A1.2 Orkney burnt mound radiocarbon dates				
Site	Context	Lab ref/uncal date BP	Cal BC at 2 σ	Reference
Stackelbrae, Eday ³	Midden below BM -Cow bone	AA 84053 830 \pm 40	AD 1052 - 1274	Anthony 2003, 299 - 300, table 7.3
	Midden below BM -shell	GU 9789 1200 \pm 50	AD 1160 - 1280	
Liddle I, S. Ronaldsay	Peat in gully: abandonment	SRR-525 2908 \pm 110	1395 - 844	Hedges 1975 ⁴
	Trough debris: abandonment	SRR-701 2826 \pm 110	1286 - 799	
Meur, Sanday	E. compartment fill (abandonment)	SUERC-9739 2860 \pm 35	1130 – 910	Toolis 2007a
	Trough fill (abandonment)	SUERC-15578 2500 \pm 35	790 – 420	
	Well fill (abandonment)	SUERC-15579 2550 \pm 35	810 – 540	
	Use	Not known	1660 - 1508 ⁵	
	Use	Not known	1297 - 1115	
	Old ground surface pre-mound	Not known	2472 - 2299	

³ Not a 'true' burnt mound: part of a substantial medieval/post medieval settlement complex (Brend et al 2006; Brend 2008 & 2009; Wilson & Moore 1996).

⁴ Calibrated using Oxcal 4.2 with Intcal13 calibration curve; original errors increased (Ashmore 1998; Ashmore et al 2000, 45– 6)

⁵ The three dates for the use and old ground surface at Meur were obtained from the SCHARP website results from the 2015 excavation; they do not appear to have been published elsewhere and no further details are available; it is not specified if they are quoted at 1 or 2 σ .

Table A1.3 Luminescence dates for Orkney burnt mounds.

TL Mean Unit Age as given in original study, TL dates in italics are maximum age estimates and were excluded from mean unit age calculation. 'C 14' are radiocarbon dates from the same context where available, see table A1.2 for details of radiocarbon dates.

Table A1.3 Luminescence dates for Orkney burnt mounds with radiocarbon dates from the same contexts where available				
Site	Context	TL date cal BC at 1 σ	C14 Cal BC at 2 σ	Reference
Barswick, S Ronaldsay	No details given	990	N/A	Huxtable et al 1976 ¹
	No details given	340		
	No details given	260		
	No details given	950		
	No details given	320		
	No details given	410		
Beaquoy, Birsay	No details given	950	2333 - 1691	Huxtable et al 1976 ²
	No details given	770	828 - 262	
	No details given	480		
	No details given	470		
	No details given	420		
	No details given	490		
	No details given	890		
	No details given	990		

¹ Publication does not quote the errors on individual dates

² Publication does not quote the errors on individual dates

Table A1.3 Luminescence dates for Orkney burnt mounds with radiocarbon dates from the same contexts where available				
Site	Context	TL date cal BC at 1 σ	C14 Cal BC at 2 σ	Reference
Dale, Eday ³	107 - top of sequence	TL14: 780 \pm 500	1885 - 1632	Anthony 2003, 294, table 7.1 & 302
	107 - top of sequence	TL14: 960 \pm 400		
	107 - top of sequence	TL14: 1040 \pm 380		
	107 - top of sequence	TL14:1790 \pm 270		
	107 - top of sequence	TL14:1800 \pm 360		
	107 - top of sequence	TL14:1910 \pm 330		
	Mean Age of Unit TL14	1635 \pm 100		
	110 - middle of sequence	TL13:1840 \pm 270	1951 - 1695	
	<i>110 - middle of sequence</i>	<i>TL13:3000 \pm 360</i>	2115 - 1772	
	<i>110 - middle of sequence</i>	<i>TL13:3020 \pm 360</i>		
	Mean age of Unit TL13	1855 \pm 95		
	112 - base of sequence	TL12:1320 \pm 230	1944 - 1695	
	112 - base of sequence	TL12:1880 \pm 280	1527 - 1290	
	112 - base of sequence	TL12:1890 \pm 470	2401 - 1982	
	112 - base of sequence	TL12:2020 \pm 390		
	112 - base of sequence	TL12:2260 \pm 470		
	112 - base of sequence	TL12:2490 \pm 400		
	Mean Age of Unit TL12	1800 \pm 60		
	117 base of mound	TL15:1630 \pm 250	N/A	

³ Samples taken from trial trench (contexts 107, 110 & 112) and sondage (context 117). Both quartz and feldspar were used by (Anthony 2003) but problems with the feldspar signals for samples originating from the Eday beds meant that they could not be used. In samples derived from Rousay flags it was possible to use both feldspar and quartz results. Where both were used a weighted mean of the two was used in age estimates (ibid, 293 & 302). All dates with the same 'TL' number are from the same sample.

Table A1.3 Luminescence dates for Orkney burnt mounds with radiocarbon dates from the same contexts where available				
Site	Context	TL date cal BC at 1 σ	C14 Cal BC at 2 σ	Reference
Dale (continued)	117 base of mound	TL15:1810 \pm 230		
	<i>117 base of mound</i>	<i>TL15:2360 \pm 260</i>		
	Mean Age of Unit TL15	1720 \pm 170		
Fan Knowe, Sandwick	No details given	900	N/A	Huxtable et al 1976 ⁴
	No details given	450		
	No details given	230		
	No details given	1040		
	No details given	430		
	No details given	600		
Fersness, Eday ⁵	Small mound	TL3: 2900 \pm 300	N/A	Anthony 2003, 295, table 7.1 & 307
	Large mound	TL3: 2430 \pm 270		
	Large mound	TL4: 1820 \pm 370		
Graemeshall, Holm	No details given	1180	N/A	Huxtable et al 1976 ⁶
	No details given	1160		
	No details given	1300		
	No details given	1050		
	No details given	1040		
	No details given	1060		

⁴ Publication does not quote the errors on individual dates.

⁵ Badly damaged may be one large mound originally, all samples taken from 0.30m deep sample holes cut into mound.

⁶ Publication does not quote the errors on individual dates.

Table A1.3 Luminescence dates for Orkney burnt mounds with radiocarbon dates from the same contexts where available				
Site	Context	TL date cal BC at 1 σ	C14 Cal BC at 2 σ	Reference
Knoll of Merrigarth, Eday ⁷	Small mound	TL8: 1270 \pm 360	N/A	Anthony 2003,294, table 7.1 & 305
	Small mound	TL8: 1720 \pm 360		
	Large mound	TL7: 2130 \pm 250		
	Large mound	TL7: 3150 \pm 280		
Knowe of Scorn, Birsay	No details given	220	N/A	Huxtable et al 1976 ⁸
	No details given	520		
	No details given	510		
	No details given	410		
Liddle I, S Ronaldsay	2 points in exposed section	1910 \pm 590		Anthony 2003, 294, table 7.1
	No details given	540	1395 - 844	Huxtable et al 1976 ⁹
	No details given	810	1286 - 799	
	No details given	930		
	No details given	990		
	No details given	1270		
	No details given	590		
	No details given	400		
	No details given	330		

⁷ Badly plough damaged, smaller mound may be redeposited material from main mound. All samples taken from 0.30m deep sample holes cut into mound. All dates with the same 'TL' number are from the same sample.

⁸ Publication does not quote the errors on individual dates.

⁹ Publication does not quote the errors on individual dates.

Table A1.3 Luminescence dates for Orkney burnt mounds with radiocarbon dates from the same contexts where available				
Site	Context	TL date cal BC at 1 σ	C14 Cal BC at 2 σ	Reference
Liddle II, S Ronaldsay	No details given	300	N/A	Huxtable et al 1976 ¹⁰
	No details given	120		
	No details given	340		
	No details given	900		
	No details given	800		
Skaill, Eday ¹¹	Top of mound (ETS)	TL3: 610 \pm 130	N/A	Anthony 2003, 294, table 7.1 & 304
	Top of mound(ETS)	TL3: 1890 \pm 340		
	Above mound (ETS)	TL1: 970 \pm 290		
	Base of mound (ETS) ¹²	TL2: 1310 \pm 290		
	<i>Crest of mound</i>	<i>TL6: 2530 \pm 310</i>		
	Deturfed area	TL5: 930 \pm 150		
Stackelbrae, Eday	Eroding coastal section	480 \pm 720	AD 1052 - 1274 ¹³	Anthony 2003, 294, table 7.1 & 306 - 7
	Eroding coastal section		AD 687 - 965	
Stenaquoy, Eday ¹⁴	Surface collection	TL1: 1860 \pm 320	N/A	Anthony 2003, 295, table 7.1 & 308
	Surface collection	TL2: 1330 \pm 220		

¹⁰ Publication does not quote the errors on individual dates.

¹¹ Samples taken from an excavated trench (ETS), an exposure at the crest of the mound and a surface sample from a deturfed area of the mound. All dates with the same 'TL' number are from the same sample.

¹² Sample from sand lens interspersed with BM material.

¹³ The radiocarbon dates provide a terminus post quem for the burnt mound, from a midden layer below it. Wilson & Moore (1996) interpreted the burnt stone as a medieval industrial deposit rather than as a true burnt mound, this has now been confirmed by excavation (see Brend 2008 & 2009).

¹⁴ All samples are from surface collection of scattered burnt stones from a ploughed out burnt mound in a field under crop.

Table A1.3 Luminescence dates for Orkney burnt mounds with radiocarbon dates from the same contexts where available				
Site	Context	TL date cal BC at 1 σ	C14 Cal BC at 2 σ	Reference
Stenaquoy (continued)	Surface collection	TL2: 1700 \pm 290		
Warness, Eday	Eroding coastal section	TL11: 3140 \pm 430	N/A	Anthony 2003, 294, table 7.1 & 306
	Eroding coastal section	TL10: 3550 \pm 510		

Table A1.4 Shetland burnt mound radiocarbon dates.

Table A1.4 Shetland burnt mound radiocarbon dates				
Site	Context	Lab ref/uncal date BP	Cal BC at 2 σ	Reference
Cruester, Bressay	Peat - phase 1 ¹	GU 9791 4040 \pm 50	2860 - 2460	Anthony 2003, 299-300, table 7.3; Ashmore 2014 ²
	Ericaceae - phase 3 hearth cell	AA 49614 3220 \pm 35	1600 - 1410	
	Ericaceae - phase 3 hearth cell	AA 49615 3040 \pm 35	1410 - 1130	
	Ericaceae - phase 3 hearth cell	AA 49617 3145 \pm 35	1520 - 1310	
	Ericaceae - phase 3 hearth cell	AA 49616 3055 \pm 35	1420 - 1210	
	Hordeum v- phase 3 hearth cell	AA 52539 2810 \pm 40	1070 - 830	
	Hordeum v - phase 3	AA 52537 2960 \pm 35	1320 - 1040	
	Hordeum v - phase 3	AA 52536 3055 \pm 40	1420 - 1130	
	Hordeum v - phase 3	AA 52538 2980 \pm 35	1380 - 1050	
	Hordeum sp - phase 4	AA 52535 175 \pm 35	AD 1650 - 1960	
Houlls, East Burra	Peat below burnt mound	GU 9792 6740 \pm 60	5736 - 5547	Anthony 2003, 300, table 7.3 ³
Tangwick, Northmavine	charred barley grain -early site use	OxA 8195 3390 \pm 55	1880 – 1520	Moore & Wilson 1999b
	charred iris rhizome-Middle phase	OxA 8196 2815 \pm 40	1100 – 850	
	peat below mound	GU9790 4860 \pm 60	3781 - 3520	Anthony 2003, 300, table 7.3 ⁴
Tougs, West Burra	Wood in structure adj. to burnt mound	GU-1110 3525 \pm 110	2196 – 1565	Hedges 1986 ⁵ ; HU33SE3 & HU33SE60
	Wood in structure adj. to burnt mound	GU-1111 3610 \pm 110	2291 – 1686	
	Oval house (associated with above)	GU-1112 2970 \pm 385	2278 - 229	

¹ This date is the Terminus Post Quem for the site

²Some dates obtained by Anthony but all quoted at 2 σ by Ashmore

³ Calibrated using Oxcal 4.2 with Intcal13 calibration curve

⁴ Calibrated using Oxcal 4.2 with Intcal13 calibration curve

⁵ Calibrated using Oxcal 4.2 with Intcal13 calibration curve; original errors increased (Ashmore 1998; Ashmore et al 2000, 45– 6). Calibrated dates quoted in Hedges 1986, uncalibrated dates from Canmore entries.

Table A1.5 Luminescence dates for Shetland burnt mounds.

For TL dates prefixed by 'TL' and a number, all dates with the same number are from the same sample. TL Mean Unit Age as given in original study. 'C 14 Cal BC at 2 σ ' are radiocarbon dates from same context if available, refer to Table A1.4 for details of radiocarbon dates

Table A1.5 Luminescence dates for Shetland burnt mounds				
Site	Context	TL date cal BC at 1 σ	C14 Cal BC at 2 σ	Reference
Cruester, Bressay	Phase 2 early burnt mound activity	TL1: 1690 \pm 540	N/A	Anthony 2003, 295, table 7.2
	Phase 2 early burnt mound activity	TL1: 2180 \pm 210	N/A	Ashmore 2014, Moore & Wilson 2014a
	Phase 2 early burnt mound activity	TL1: 1420 \pm 170	N/A	
	Phase 2 early burnt mound activity	TL4: 1430 \pm 190	N/A	
	Phase 2 early burnt mound activity	TL4: 1490 \pm 220	N/A	
	Phase 2 early burnt mound activity	TL8: 2600 \pm 240	N/A	
	Phase 2 early burnt mound activity	TL8: 1770 \pm 390	N/A	
	Phase 2 early burnt mound activity	TL8: 1760 \pm 460	N/A	
	Phase 2 early burnt mound activity	TL9: 2500 \pm 260	N/A	
	Phase 3 structure-hearth cell	TL5: 1070 \pm 190	1600 - 1410 ¹	
	Phase 3 structure-hearth cell	TL5: 1500 \pm 190	1410 - 1130	
	Phase 3 structure-hearth cell	TL6: 1150 \pm 190	1520 - 1310	
	Phase 3 structure-hearth cell	TL6: 1320 \pm 280	1420 - 1210	
	Phase 3 structure-hearth cell	TL13: 2020 \pm 180	1070 - 830	
	Phase 3 structure-hearth cell	TL15: 1610 \pm 490		
	Phase 3 structure-hearth cell	TL15: 1180 \pm 140		
	Phase 3 structure-hearth cell	TL17: 1890 \pm 280		
	Phase 3 structure-hearth cell	TL17: 1560 \pm 260		

¹ All the radiocarbon dates for Cruester come from phase 3 contexts. The radiocarbon dates from the hearth cell were not obtained from the same contexts that provided the TL dates. See Table A1.1 for the other phase 3 radiocarbon dates.

Table A1.5 Luminescence dates for Shetland burnt mounds				
Site	Context	TL date cal BC at 1 σ	C14 Cal BC at 2 σ	Reference
Cruester (continued)	Phase 3 structure-hearth cell	TL19: 1390 \pm 160		
	Probable redeposited material	TL2: 1810 \pm 180		
	Probable redeposited material	TL11: 1760 \pm 350		
	Probable redeposited material	TL11: 1300 \pm 650		
	Probable redeposited material	TL11: 2800 \pm 900		
Houlls, East Burra	Eroding coastal section	TL1: 1670 \pm 260	N/A	Anthony 2003, 295, table 7.2
	Eroding coastal section	TL1: 1840 \pm 1010	5736 - 5547 ²	
	Eroding coastal section	TL1: 2880 \pm 580		
	Eroding coastal section	TL1: 1950 \pm 450		
	Sample trench 0.30m deep	TL2: 2890 \pm 340		
	Eroding coastal section	TL3: 1400 \pm 340		
	Eroding coastal section	TL3: 1050 \pm 1360		
	Eroding coastal section	TL4: 1590 \pm 220		
	Eroding coastal section	TL4: 2530 \pm 390		
Loch of Garths, Nesting	Sample trench: section base	TL1: 410 \pm 170		Anthony 2003, 295, table 7.2
	Sample trench: near section base	TL2: 1390 \pm 160		
	Sample trench: near section base	TL2: 2100 \pm 320		
	Sample trench: near section base	TL2: 450 \pm 110		
	Sample trench: near section base	TL2: 870 \pm 140		
	Sample trench: near section base	TL2: 1080 \pm 130		

² Radiocarbon date is for peat below mound

Table A1.6 Scottish burnt mound radiocarbon dates.
(Including the only luminescence dates for these burnt mounds, at Lady Glassary Wood)

Table A1.6 Scottish burnt mound radiocarbon dates				
Site	Context	Lab ref/uncal date BP	Cal BC at 2 σ	Reference
Auld Taggart, Galloway	AT2, Mound 2: charcoal	GU-2416 890 \pm 50	AD 1020 – 1250 ¹	Russell-White 1990
	AT4, mound 3: hearth	GU-2413 950 \pm 50	AD 990 – 1210 ²	
	AT4, mound 3: charcoal in BM	GU-2414 800 \pm 50	AD 1160 – 1280	
	AT4, mound 3: beneath BM	GU-2417 890 \pm 50	AD 1020 – 1250	
Beechwood Farm, Inverness	Trough - oak side panel	AA-39811 3575 \pm 50	2110 – 1751	Cressey & Strachan 2003, 200
	Trough – oak base panel	AA-39811 3760 \pm 80	2460 – 1942	
	Trough fill - charcoal	GU-11147 3660 \pm 45	2150 – 1890	
Blairhill Burn, Amiesfield, Dumfries	Burnt mound 1	Beta 74586 3300 \pm 60	1736 - 1447	Strachan et al 1998 ³
	Burnt mound 2 - top	Beta 73548 3000 \pm 80	1426 - 1012	
	Burnt mound 2 - base	Beta 73547 3060 \pm 90	1505 - 1049	
Borichill Mor, Islay	Mound 19	GU-1465 3695 \pm 60	2290 – 1930	Barber & Russell-White 1990b

¹ AT2: this site was badly damaged and subject to flooding and waterlogging and the excavation consisted of a small trial trench: possible contamination? The radiocarbon date was obtained from mixed species charcoal.

² AT4: this site was badly damaged and subject to flooding with loosely packed stones: possible contamination? The radiocarbon date was obtained from mixed species charcoal.

³ Calibrated using Oxcal 4.2 with Intcal13 calibration curve

Table A1.6 Scottish burnt mound radiocarbon dates				
Site	Context	Lab ref/uncal date BP	Cal BC at 2 σ	Reference
Cleuchbrae, Annandale	Birch stake near trough	OxA-8800 2885 \pm 45	1210 - 933	Duncan 1999 ⁴
	Hazel charcoal above trough	OxA-8801 3115 \pm 40	1494 - 1269	
	Oak plank from trough	OxA-8832 3055 \pm 45	1427 - 1135	
	Hazel charcoal below oak trough	OxA-8833 3380 \pm 40	1858 - 1535	
Ceann Nan Clachan, North Uist	Structure 2 cut into BM	OxA-9831 2469 \pm 37	770 - 410	Armit & Braby 2002 ⁵
	Structure 2 cut into BM	OxA-9969 2475 \pm 50	780 - 400	
	Structure 2 cut into BM	OxA-9970 2360 \pm 50	800 - 200	
	Structure 2 cut into BM	OxA-9985 2450 \pm 34	770 - 400	
Craggie Basin, Kildonan	K28, Mound 29	GU-2483 1030 \pm 50	AD 890 – 1151	Barber 1990b
				Barber & Russell-White 1990b
Cruise Burn, Galloway	Cruise 1, mound 4:charcoal	GU-2411 3540 \pm 50	2030 – 1750	Russell-White 1990
Daer Reservoir, Crawford	Alder	AA-30356 3915 \pm 55	2568 - 2209	Ward 1995, 1997 & 1998 ⁶
Dervaird, Galloway	Oak plank sample 1	GU-2331 3160 \pm 50	1520 – 1320	Russell-White 1990
	Oak plank sample 2	GU-2330 3230 \pm 50	1630 – 1420	
Gabsnout Burn, Galloway	Mound 6: charcoal	GU-2415 2950 \pm 100	1430 – 900	Russell-White 1990

⁴ Calibrated using Oxcal 4.2 with Intcal13 calibration curve

⁵ All the dates are from a later structure and provide only a terminus ante quem for the formation of the burnt mound

⁶ Calibrated using Oxcal 4.2 with Intcal13 calibration curve

Table A1.6 Scottish burnt mound radiocarbon dates				
Site	Context	Lab ref/uncal date BP	Cal BC at 2 σ	Reference
Gallow Hill, Strathclyde	Trough 2 Betula charcoal	GU-9801 3125 \pm 40	1500 – 1260	Donnelly & MacGregor 2005, 62, table 5
	Trough 3 Betula charcoal	GU-9803 3100 \pm 35	1440 – 1260	
	Trough 4 Betula charcoal	GU-9804 3250 \pm 40	1630 – 1420	
	Trough 5 Betula charcoal	GU-9802 3815 \pm 40	2460 – 2130	
	Trough 6 Betula charcoal	GU-9800 3940 \pm 40	2570 – 2340	
	Burnt mound Betula charcoal	GU-9805 3380 \pm 40	1770 – 1520	
Girvan, Strathclyde	Burnt mound 1 Alnus	SUERC-2906 3290 \pm 35	1690 - 1460	Banks et al 2008, 34, table 2
	Burnt mound 1 Alnus	SUERC-2907 3230 \pm 40	1610 - 1410	
	Burnt mound 2 Alnus	SUERC-2919 3540 \pm 35	1960 - 1740	
	Burnt mound 3 Corylus	SUERC-2918 3790 \pm 35	2305 – 2050	
	Burnt mound 4 Corylus	SUERC-2917 3800 \pm 35	2400 – 2130	
	Burnt mound 5 Alnus	SUERC-2920 3650 \pm 35	2140 – 1910	
	Burnt mound 6 Alnus	SUERC-2915 3580 \pm 35	2040 – 1770	
Hopeterrick, Manor Valley, S. Lanark	Burnt mound 2 birch	AA-30358 3650 \pm 55	2196 - 1889	Ward 1999a & b ⁷
	Burnt mound 3 birch	AA-30360 3850 \pm 55	2469 - 2146	
Kilearnan, Sutherland	Site 15 post abandonment	GU-1915 510 \pm 60	AD 1299 – 1469	McIntyre 1998
	Site 15 charcoal base central pit	GU-1912 2660 \pm 95	1010 – 540	
	Site 15 charcoal	GU-1913 2750 \pm 80	1100 – 800	
	Site15 charcoal central pit	GU-1914 2815 \pm 60	1158 – 830	

⁷ Calibrated using Oxcal 4.2 with Intcal13 calibration curve

Table A1.6 Scottish burnt mound radiocarbon dates				
Site	Context	Lab ref/uncal date BP	Cal BC at 2 σ	Reference
Killearnan (continued)	Site 15 charcoal	GU-1921 2820 \pm 85	1260 – 810	
Lady Glassary Wood, Kilmartin Glen ⁸	Charcoal from base of burnt mound ⁹	GU-7865 4030 \pm 60	2864 - 2350	Abernethy 1998; Anthony et al 2001
	TL date for burnt mound	N/A	3320 – 2160	
	OSL date for burnt mound	N/A	3410 – 2170	
	PTTL date for burnt mound	N/A	5590 – 1130	
	Weighted mean of above	N/A	3164 – 2444	
Kirkhill Farm, Dumfries & Galloway	Charcoal near trough	GU-3859 4240 \pm 90	3091 - 2575	Pollard 1993; NMRS NY19SW59 ¹⁰
	Charcoal matrix of mound	GU-4189 4280 \pm 50	3082 - 2698	
	Charcoal low down in mound	GU-4191 2250 \pm 50	2904 - 2631	
	Charcoal matrix of mound	GU-4192 4300 \pm 60	3097 - 2698	
	Charcoal upper fill of trough	GU-4193 4150 \pm 50	2881 - 2581	
Lairg Project, Sutherland	Site 14 base of mound	GU-2820 2990 \pm 50	1405 - 1065	McCullagh & Tipping 1998, 72 - 7
	Site 776 top of mound	GU-2819 3160 \pm 60	1595 - 1310	
	Burnt mound 1 top of mound	GU-2821 2830 \pm 50	1155 - 865	

⁸ Radiocarbon date calibrated using Oxcal 4.2 with Intcal13 calibration curve (quoted calibrated in Anthony et al 2001, but appears to be an incorrect calibration). Combined luminescence dates and weighted mean of luminescence dates as quoted in Anthony et al 2001 (i.e. 2 σ not applicable): the individual sample dates that were combined to produce the dates quoted are not given.

⁹ The context of this sample is not clear in the report, the date may be for the old ground surface. The burnt mound is described as a spread of burnt and fire cracked stones in a small pit.

¹⁰ Calibrated using Oxcal 4.2 with Intcal13 calibration curve

Table A1.6 Scottish burnt mound radiocarbon dates				
Site	Context	Lab ref/uncal date BP	Cal BC at 2 σ	Reference
Lairg Project (continued)	Burnt mound 1 middle of mound	GU-3136 3020 \pm 50	1420 - 1135	
	Burnt mound 1 base of mound	GU-3135 3120 \pm 90	1615 - 1165	
	Burnt mound 2 highest point	GU-2822 2780 \pm 50	2030 - 1695	
	Burnt mound 2 main fabric	GU-3134 3180 \pm 50	1585 - 1320	
	Burnt mound 2 central pit	GU-3133 3520 \pm 60	2030 - 1695	
Machrie, Arran	Mound 8, site 24/02 (1)	GU-1566 3825 \pm 65	2470 – 2045	Lehane 1990a ¹¹
	Mound 8, site 24/02 (2)	GU-1569 3800 \pm 65	2460 – 2039	
	Mound 9, site 24/53	GU-1576 3860 \pm 65	2560 – 2140	
	Mound 10, site 24/54	GU-1568 3405 \pm 65	1890 – 1530	
Muirhead, Annandale	Fill of trough 1, context 18	GU-3853 2960 \pm 70	1395 - 980	Banks 1999 ¹² , 26
	Fill of trough 2, context 13	GU-3854 2920 \pm 70	1373 - 920	
Stair Lodge, Galloway	Mound 5: charcoal	GU-2412 3680 \pm 50	2200 – 1930	Russell-White 1990 ¹³
Stoneyburn Farm, Crawford	S burnt mound trough deposit	AA-12589 3725 \pm 65	2339 – 1939	Banks 1999, 19 ¹⁴
	N burnt mound, mound matrix	AA-12590 3240 \pm 70	1688 – 1394	
	N burnt mound trough deposit	AA-12591 3615 \pm 65	2194 - 1773	

¹¹ Calibrated using Oxcal 4.1 with Intcal04 calibration curve

¹² Calibrated using Oxcal 4.2 with Intcal13 calibration curve

¹³ Calibrated using Oxcal 4.1 with Intcal04 calibration curve

¹⁴ Calibrated using Oxcal 4.2 with Intcal13 calibration curve

Table A1.7 Radiocarbon dates for sites in Crawford, Lanark.

Burnt mounds, burial & settlement sites excavated in advance of the M74 construction.

All recalibrated/calibrated from original reference using Oxcal 4.1 with Intcal04 calibration curve for consistency

Table A1.7 Radiocarbon dates for sites in Crawford, Lanark				
Site	Context	Lab Ref/Uncal date BP	Cal BC at 2 σ	Reference
Stoneyburn Farm, Crawford, Lanark	Cremation pit below cairn 004	GU-3259 3360 \pm 50	1768 - 1517	Banks 1995, 299 – 302
	Cremation pit below cairn 003	GU-3260 3450 \pm 50	1891 – 1634	
	Pit below cairn 002	GU-3261 4530 \pm 70	3500 – 2944	
Stoneyburn Farm, Crawford, Lanark	S burnt mound trough deposit	AA-12589 3725 \pm 65	2339 – 1939	Banks 1999, 19 ¹
	N burnt mound, mound matrix	AA-12590 3240 \pm 70	1688 – 1394	
	N burnt mound trough deposit	AA-12591 3615 \pm 65	2194 - 1773	
Lintshie Gutter, Crawford, Lanark	Platform 13, hearth fill	GU-3198 3550 \pm 130	2280 – 1534	Terry 1995, 42
	Platform 1, pit fill	GU-3199 3360 \pm 120	1958 – 1409	
	Platform 5, ring-groove fill	GU-3200 3430 \pm 90	1961 – 1513	
	Platform 5, oven fill	GU-3202 3200 \pm 50	1609 – 1393	
	Platform 8, ring-groove fill	GU-3203 3930 \pm 60	2576 – 2209	

¹ Calibrated using Oxcal 4.1 with Intcal04 calibration curve

Table A1.8 Irish burnt mound dates to 1990.

All from Brindley et al 1990; all quoted uncalibrated and calibrated using Oxcal 4.1 with Intcal04 calibration curve. Sites in italics were not considered proven fulachta fiadh by the authors.

Table A1.8 Irish Burnt Mound dates to 1990		
Site	Lab Ref/Uncal date BP	Cal BC at 2 σ
Fahee South, Co. Clare	GrN-11437 3050 \pm 35	1414 – 1213
Teeronea, Co. Clare	GrN-15968 3310 \pm 35	1683 - 1509
Ballynoe West, Site 1, Co. Cork	GrN-11803 3850 \pm 30	2459 - 2206
Ballynoe West, Site 2, Co. Cork	UB-2626 2705 \pm 70	1023 – 771
Clashroe, Co. Cork	GrN-13877 3490 \pm 35	1907 – 1696
	GrN-13878 3370 \pm 35	1746 – 1536
Drombeg, Co. Cork ¹	GrN-14718 2460 \pm 50	762 - 411
	GrN-14719 2740 \pm 50	999 – 808
Dromnea, Co. Cork	GrN-12915 3090 \pm 35	1432 – 1269
Kilcor South, Co. Cork	GrN-14255 3185 \pm 30	1512 – 1411
Killeens, Site 1, Co. Cork ²	GrN-11438 3115 \pm 35	1491 – 1298
	GrN-14254 2830 \pm 50	1187 – 843
Killeens, Site 2, Co. Cork ³	GrN-15885 3250 \pm 25	1608 – 1453
Coarha More, Co. Kerry	I-14083 3250 \pm 100	1858 – 1301
Lyracrumpane, Co. Kerry	GrN-12831 2540 \pm 35	801 – 541
Rath More, Co. Kerry	GrN-14185 3260 \pm 160	1950 – 1127
Catstown, Site 1, Co. Kilkenny	HAR-1367 2440 \pm 70	766 – 401
Slatt Lower, Co. Laois	GrN-14722 3500 \pm 35	1922 – 1740

¹ These are new dates to replace those quoted in Fahy 1960

² These are new dates to replace those quoted in O’Kelly 1954

³ These are new dates to replace those quoted in O’Kelly 1954

Table A1.8 Irish Burnt Mound dates to 1990		
Site	Lab Ref/Uncal date BP	Cal BC at 2 σ
Ballylin, Ardagh, Co. Limerick	GrN-13153 3400 \pm 60	1880 – 1532
Cloghaclocka, Co. Limerick	GrN-15404 ⁴ 4560 \pm 25	3485 – 3110
Raheen, Co. Limerick	GrN-13686 3605 \pm 40	2130 - 1829
	GrN-15392 3555 \pm 50	2026 – 1753
Cashel Upper, Co. Mayo	GrN-15494 3310 \pm 40	1688 – 1500
Lack West, Co. Mayo	GrN-15495 2780 \pm 50	1051 – 816
Curraghtarsna, Co. Tipperary	GrN-12618 3120 \pm 35	1492 – 1306
Ballyremon Commons, Co. Wicklow	GrN-12617 3410 \pm 40	1877 – 1613
<i>Fofannybane, Co. Down</i>	GrN-14723 1050 \pm 50	AD 883 - 1151
<i>Bray, Imlagh, Co. Kerry</i>	I-13751 3160 \pm 90	1663 - 1135
<i>Cool West, Co. Kerry</i>	I-13912 3400 \pm 90	1932 – 1497
<i>Catstown, Site 2, Co. Kerry</i>	HAR-1369 760 \pm 60	AD 1059 - 1389
<i>Ballycahane lower, Co. Limerick</i>	GrN-14903 7880 \pm 60	7029 - 6604
	GrN-14505 ⁵ 6025 \pm 45	5036 – 4798

⁴ GrN-15404 may be subject of lab mix-up - caution

⁵ Possible contamination of GrN-14505 - may be too young

Table A1.9 Radiocarbon dates for Irish M3 motorway burnt mound sites.

Table A1.9 Radiocarbon dates for Irish M3 motorway burnt mound sites			
Site	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Contract 1			
Bennetstown 1	Beta-231935 3260 \pm 40	1620 – 1440	Elliott & Ginn 2008a
Bennetstown 2	Beta-231938 3850 \pm 60	2461 – 2205	Elliott & Ginn 2008b
Bracetown 1	QUB-7049 Not quoted	2135 – 1908	Clarke 2008a
	QUB-7050 Not quoted	1387 – 1129	
Drumree 1	Beta-241268 3580 \pm 40	2130 – 1773	Schweitzer 2008a
Johnstown 1	Beta-241274 2270 \pm 40	401 – 206	Elder & Ginn 2009
Leshamstown 1	Beta-231943 3620 \pm 40	2131 – 1886	Schweitzer 2008b
	Beat-231944 3520 \pm 50	2010 – 1696	
Raynestown 2	Beta-241285 3780 \pm 40	2343 – 2041	Elder 2008
Contract 2			
Ballinter 2	Beta-237583 4110 \pm 50	2875 – 2500	Linnane 2008a
Berrilstown 2	Beta-246985 3740 \pm 40	2285 – 2035	Rathbone 2008a
Blundelstown 2/3	Beta-247045 4010 \pm 40	2832 – 2462	Cagney & Ginn 2008
Clowanstown 1 ¹	Beta-246988 4710 \pm 40	3633 – 3372	Mossop & Mossop 2009
	Beta-246989 4800 \pm 40	3658 – 3384	
	Beta-246991 4900 \pm 40	3770 – 3637	
	Beta-246992 4960 \pm 40	3909 – 3651	
	Beta-246993 4990 \pm 40	3941 – 3660	
	Beta-246055 5060 \pm 40	3963 – 3767	
	Beta-246995 4990 \pm 40	3941 – 3660	
	Beta-246996 5070 \pm 40	3964 – 3778	
Clowanstown 2	Beta-241288 3960 \pm 40	2576 – 2341	Mossop 2008
	Beta-241289 3770 \pm 60	2457 – 2026	

¹ Interpreted as possible ritual deposition of burnt stone rather than 'pure' burnt mound, but shows a Neolithic tradition of employing burnt stone

Table A1.9 Radiocarbon dates for Irish M3 motorway burnt mound sites			
Site	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Clowanstown 2 (continued)	Beta-241290 3760 \pm 60	2457 – 2026	
	Beta-241291 4570 \pm 40	3496 – 3130	
	Beta-241293 970 \pm 60	AD 937 - 1213	
Cooksland 2	Beta-237581 3410 \pm 40	1877 – 1613	Linnane 2008b
Roestown 1	Beta-241302 3790 \pm 40	2402 – 2045	Cagney & Ginn 2009
	Beta-241303 3830 \pm 40	2460 – 2147	
Contract 3			
Ardbraccan 1	Beta-247111 2730 \pm 40	975 – 806	Mossop & Ruddle 2009
	Beta-247112 2870 \pm 40	1193 – 922	
	Beta-247113 3890 \pm 40	2474 – 2210	
	Beta-247114 3880 \pm 40	2471 – 2209	
	Beta-247115 3850 \pm 40	2461 – 2205	
	Beta-247116 2950 \pm 40	1299 – 1026	
Ardbraccan 2	Beta-247117 3210 \pm 40	1606 - 1411	Mossop et al 2009
	Beta-247118 3080 \pm 40	1435 – 1223	
	Beta-247119 3190 \pm 40	1601 – 1392	
Boyerstown 2	Beta-241315 2880 \pm 40	1200 – 930	Clarke 2008b
	Beta-241316 2870 \pm 40	1190 – 920	
Boyerstown 5	Beta-241319 3550 \pm 40	2110 – 1760	Clarke 2008c
Boyerstown 7	Beta-241321 3750 \pm 40	2287 – 2035	Clarke 2008d
Boyerstown 8	Beta-241322 4050 \pm 40	2840 – 2480	Clarke 2008e
	Beta-241323 4010 \pm 40	2620 – 2460	
Gainstown 1	Beta-247095 3530 \pm 40	1963 – 1745	Linnane 2008c
	Beta-247096 4020 \pm 40	2833 – 2466	
Gainstown 2	Beta-247097 3520 \pm 40	1952 – 1742	Connell 2009
	Beta-247098 3930 \pm 40	2566 – 2294	
	Beta-247099 3920 \pm 40	2562 – 2290	
Kennastown 1	Beta-247077 3320 \pm 40	1727 – 1503	Wiggins et al 2009
	Beta-247078 2860 \pm 40	1191 – 914	
	Beta-247079 2810 \pm 40	1110 – 843	
	Beta-247080 3870 \pm 40	2468 – 2208	

Table A1.9 Radiocarbon dates for Irish M3 motorway burnt mound sites			
Site	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Kennastown 2	Beta-247081 3700 \pm 40	2203 – 1973	Wiggins et al 2009
	Beta-247082 3790 \pm 40	2402 – 2045	
	Beta-247083 4060 \pm 40	2852 – 2476	
Kennastown 3	Beta-241085 3890 \pm 40	2474 – 2210	Wiggins et al 2008
Philpotstown 1	Beta-247091 3220 \pm 40	1608 – 1417	Martin 2009a
	Beta-237330 3620 \pm 40	2131 – 1886	
Townparks 2	Beta-237331 3800 \pm 40	2456 – 2059	Martin 2009b
	Beta-237332 3790 \pm 40	2402 – 2045	
	Beta-237333 3780 \pm 40	2343 – 2041	
Williamstown/Bawn 1	Beta-247086 3860 \pm 40	2465 – 2206	Wiggins 2009
Williamstown/Bawn 2	Beta-247088 3070 \pm 40	1431 – 1216	Martin 2009c
Contract 5			
Calliaghstown 2	Beta-247132 2930 \pm 40	1266 – 1009	Reilly & Ginn 2008
	Beta-247133 2730 \pm 40	957 – 806	
Derver 5	Beta-247194 3330 \pm 40	1734 – 1717	Gallagher 2008
	Beta-247195 1960 \pm 40	43 BC – AD 126	
Pottlebane 3	Not quoted	3770 – 3647	Linnane 2008c

Table A1.10 Radiocarbon dates for English burnt mound sites.

Table A1.10 Radiocarbon dates for English burnt mound sites			
Site	Uncalibrated date BP	Cal BC at 2 σ	Reference
Bournville, Cob Lane, Birm	Birm-1087 3140 \pm 100	1631 - 1126	Barfield & Hodder 1989 ¹
Bournville Yachting Pool, Birm	Birm-697 2960 \pm 140	1496 - 841	Barfield & Hodder 1989
Harborne, Ridge Acre	Birm-799 3970 \pm 100	2865 - 2200	Barfield & Hodder 1989
Merritts Brook 2	Birm-800 3070 \pm 100	1530 - 1022	Barfield & Hodder 1989
Moseley Bog	Birm-1114 2830 \pm 80	1212 - 827	Barfield & Hodder 1989
Moseley, Highbury Park	Birm-1099 2975 \pm 80	1414 - 980	Barfield & Hodder 1989
Police station, Cob Lane	Birm-1149 3290 \pm 60	1730 - 1438	Barfield & Hodder 1989
Sandwell Park Ref.SV6 1380	Birm-1268 3070 \pm 160	1685 - 911	Barfield & Hodder 1989
Sharmer Farm, Leamington	Birm-344 2950 \pm 100	1415 - 914	Barfield & Hodder 1989
	Birm-371 2990 \pm 100	1442 - 934	
Woodlands Park	Birm-1211 3020 \pm 50	1409 - 1122	Barfield & Hodder 1989
Bestwall Quarry, Dorset	GrA-23594 3025 \pm 45	1420 – 1120	Bayliss et al 2007, 2
Birstall Watermead, Leics ²	GrA-23689 3850 \pm 40	2470 – 2150	Bayliss et al 2007, 34 – 9
	GrA-23700 3835 \pm 40	2470 – 2140	
	GrA-23745 4100 \pm 40	2880 – 2490 ³	
	GrA-24516 3850 \pm 50	2470 – 2140	
	GrA-24519 3890 \pm 50	2550 – 2200	
	GrA-24520 3700 \pm 50	2280 – 1940	
	GU-5983 3890 \pm 50	2550 – 2200	
	GU-5984 3800 \pm 50	2460 – 2040	
	GU-5985 3890 \pm 50	2550 – 2200	
	GU-5986 3940 \pm 100	2860 – 2140	
	GU-5987 3870 \pm 50	2480 – 2150	
	GU-5988 3880 \pm 50	2480 – 2200	
	GU-5994 3640 \pm 50	2200 – 1880	

¹ All dates from Barfield & Hodder 1989 are calibrated using Oxcal 4.2 with Intcal13 calibration curve

² All these dates are from one burnt mound & trough

³ This date is the terminus post quem for the burnt mound

Table A1.10 Radiocarbon dates for English burnt mound sites			
Site	Uncalibrated date BP	Cal BC at 2 σ	Reference
Birstall Watermead, Leics	GU-5995 3730 \pm 50	2290 – 1970	Bayliss et al 2007, 34 – 9
	OxA-12573 3877 \pm 34	2470 – 2200	
	OxA-12585 3971 \pm 34	2580 – 2400	
	OxA-12644 4039 \pm 31	2840 – 2470	
	OxA-12957 3725 \pm 34	2270 – 2020	
	OxA-12958 3765 \pm 34	2290 – 2040	
	OxA-12959 3913 \pm 36	2490 – 2290	
	OxA-12998 4039 \pm 31	2840 – 2470	
Burlescombe, Devon ⁴	OxA-15983 3122 \pm 31	1450 – 1310	Bayliss et al 2008, 43 – 5
	SUERC-10148 3070 \pm 35	1430 – 1220	
	SUERC-10149 3100 \pm 35	1440 – 1290	
	SUERC-10150 3195 \pm 35	1530 – 1410	
	SUERC-10151 3225 \pm 35	1610 – 1420	
	SUERC-10152 3115 \pm 35	1450 – 1300	
	SUERC-10153 3140 \pm 35	1500 – 1310	
	SUERC-10154 3280 \pm 35	1640 – 1450	
	SUERC-10158 3315 \pm 35	1690 – 1500	
	SUERC-10159 3245 \pm 40	1620 – 1430	
	SUERC-10160 3220 \pm 35	1610 – 1420	
Willington Quarry, Derbs ⁵ .	OxA-15111 3610 \pm 29	2040 – 1880	Bayliss et al 2008, 173 – 7
	OxA-15112 3721 \pm 30	2210 – 2020	
	OxA-15113 3754 \pm 28	2280 – 2040	
	OxA-15114 3695 \pm 29	2200 – 1970	
	OxA-15115 3649 \pm 33	2140 – 1920	
	SUERC-7598 3775 \pm 35	2300 – 2040	
	SUERC-7602 3690 \pm 35	2200 – 1960	
	SUERC-7604 3740 \pm 35	2280 – 2030	
	SUERC-7909 3780 \pm 50	2430 – 2030	
Piglegged Row, Walderton	SUERC-28772 3165 \pm 35	1520 - 1380	Dunkin 2012, appendix 6
Grange Farm, Earnley	SUERC-32292 2880 \pm 30	1200 - 930	Dunkin 2012, appendix 6
	SUERC-32288 2890 \pm 30	1210 - 970	
Bilsham, W Sussex	SUERC-25610 3645 \pm 40	2140 - 1910 ⁶	Dunkin 2012, appendix 6

⁴ There are 2 burnt mounds on this site

⁵ All these dates are from one burnt mound & trough

⁶ Terminus post quem for the burnt mound

Table A1.10 Radiocarbon dates for English burnt mound sites			
Site	Uncalibrated date BP	Cal BC at 2 σ	Reference
Bilsham (continued)	SUERC-25609 3760 \pm 4	2300 - 2030 ⁷	Dunkin 2012, appendix 6
	SUERC-25942 3305 \pm 50	1740 -1450	

⁷ Terminus post quem for the burnt mound

Table A1.11 Radiocarbon dates for Welsh burnt mound sites.
All calibrated using Oxcal 4.1 with Intcal04 calibration curve.

Table A1.11 Radiocarbon dates for Welsh burnt mound sites			
Site	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Carne A, Fishguard ¹	CAR-292 3790 \pm 70	2460 – 2036	James 1986
Carne B, Fishguard ²	CAR-496 3400 \pm 70	1884 – 1528	
	CAR-498 3205 \pm 70	1662 – 1315	
	CAR-589 3960 \pm 70	2835 – 2208	
	CAR-591 3710 \pm 70	2333 – 1901	
Fulin Felbrook, Ceredigion ³	CAR-469 3875 \pm 70	2565 – 2141	Williams et al 1987
Dan-y-Coed, Llawhaden ⁴	CAR-705 2080 \pm 65	354 – 61	Williams 1990
Morfa Mawr, Aberaeron ⁵	CAR-458 1180 \pm 60	AD 690 – 983	Williams 1990
Stackpole Warren, Pemb ⁶ .	CAR-845 2770 \pm 60	1109 – 806	Williams 1990
	CAR-843 2710 \pm 70	1026 – 776	
	CAR-102 2055 \pm 60	344 – 72	
	CAR-103 2235 \pm 60	403 – 165	
Troedrhiwgwinau, Card. ⁷	CAR-1046 3270 \pm 70	1733 – 1416	Williams 1990
Graeanog, Clynnog ⁸	CAR-713 3660 \pm 70	2280 – 1786	Kelly 1992
	CAR-714 3890 \pm 70	2569 – 2146	
	CAR-715 3740 \pm 70	2433 – 1945	
	CAR-716 2740 \pm 60	1019 – 799	
	CAR-717 2740 \pm 70	1108 – 793	
	CAR-718 2800 \pm 60	1121 – 824	
	CAR-719 2790 \pm 70	1129 – 806	
	CAR-720 2690 \pm 70	1017 – 672	

¹ Carbonised material from flotation dated: caution - not a single entity date (see Ashmore 1999)

² Carbonised material from flotation dated: caution - not a single entity date (see Ashmore 1999)

³ Charcoal from flotation dated: caution - not a single entity date (see Ashmore 1999)

⁴ No details of dated material

⁵ No details of dated material

⁶ No details of dated material

⁷ No details of dated material

⁸ Bulk charcoal not identified to species dated: caution - not a single entity date (see Ashmore 1999)

Table A1.12 Radiocarbon dates and phasing at St. Boniface Church, Papa Westray, Orkney.

Notes: (1) 'c' after the laboratory number indicates that the date has been corrected for marine influence.
 (2) Caution required: the majority of these dates are not single entity samples (see Ashmore 1999)

Sample	Phase/Description	Lab ref/ uncal date BP	Cal BC/AD at 2 σ
cattle	1: early funerary activity	AA-9561 4240 \pm 60	3020 - 2700 BC
N/A	2: Earliest settlement	N/A	N/A
cattle, pig	3: Windblown sand	AA-9560 3175 \pm 60	1610 - 1320 BC
cattle, deer	4: 2nd millennium BC settlement	AA-9562 3100 \pm 85	1535 - 1115 BC
limpets	5: unenclosed roundhouse settlement ¹	AA-9563c 3080 \pm 50	970 - 790 BC
winkles	5: unenclosed roundhouse settlement	GU-3271c 2850 \pm 50	800 - 390 BC
limpets	5: unenclosed roundhouse settlement	GU-3059c 2830 \pm 50	800 - 390 BC
limpets	5: unenclosed roundhouse settlement	GU-3273c 2790 \pm 50	770 - 375 BC
limpets	5: unenclosed roundhouse settlement	GU-3268c 2740 \pm 50	625 - 190 BC
limpets	5: unenclosed roundhouse settlement	GU-3060c 2740 \pm 50	625 - 190 BC
limpets	6.1: Enclosed roundhouse settlement ²	GU-3058c 2620 \pm 50	405 - 100 BC
limpets	6.1: Enclosed roundhouse settlement	GU-3062c 2590 \pm 50	400 - 70 BC
winkles	6.1: Enclosed roundhouse settlement	GU-3274c 2570 \pm 50	400 - 50 BC
winkles	6.1: Enclosed roundhouse settlement	GU-3275c 2490 \pm 50	340 BC - AD 75
limpets	6.1: Enclosed roundhouse settlement	GU-3061c 2460 \pm 50	235 BC - AD 115
limpets	6.1: Enclosed roundhouse /secondary enclosure	GU-3279c 2340 \pm 50	70 BC - AD 220
limpets	6.1: Enclosed roundhouse /secondary enclosure	GU-3278c 2330 \pm 50	50 BC - AD 235
cattle, sheep	6.3: abandonment of enclosure	AA-9565 2115 \pm 60	360 BC - AD 15

¹ The modelling of the radiocarbon dates indicated that the unenclosed roundhouse was Early Iron Age (Dalland 1998).

² i.e. the broch tower: 'roundhouse' was deliberately used in the report as a neutral term (see Lowe 1998, 200 – 2).

Table A1.12 Radiocarbon dates and phasing at St. Boniface Church, Papa Westray, Orkney, from Lowe 1998, 97, table 4			
Sample	Phase/Description	Lab ref/ uncal date BP	Cal BC/AD at 2 σ
limpets	6.3: abandonment of enclosure	GU-3280c 2430 \pm 50	190 BC - AD 120
limpets	6.3: abandonment of enclosure	GU-3282c 2250 \pm 50	AD 25 - AD 330
limpets	6.3: abandonment of enclosure	GU-3277c 2350 \pm 50	85 BC - AD 210
cattle, pig, sheep, deer	6.3: abandonment of enclosure	AA-9564 1815 \pm 60	AD 80 - 365
cattle, pig, sheep	7: Late Iron Age deposits	GU-3063 1570 \pm 90	AD 285 - 870
cattle, pig, sheep	7: Late Iron Age deposits	GU-3065 1370 \pm 90	AD 520 - 870
limpets	7: Late Iron Age deposits	GU-3064c 1700 \pm 50	AD 620 - 880
cattle, sheep	8: Farm mound/final structures area 2	GU-3067 920 \pm 60	AD 990 - 1240
limpets	8: Farm mound/final structures area 2	GU-3066c 1330 \pm 50	AD 990 - 1255
limpets	8: Farm mound/final structures area 2	GU-3069c 1270 \pm 70	AD 1010 - 1280

Table A1.13 Radiocarbon dates from Tofts Ness, Sanday, Orkney.

Table A1.13 Radiocarbon dates from Tofts Ness, Sanday, Orkney				
Sample	Phase/Description	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Bone collagen (<i>bos</i>)	Phase 1: area A, surface within ash midden	GU2209 4430 \pm 70	3350 – 2910	Ambers 2007
Bone collagen (<i>bos</i>)	Phase 1: area A, primary midden	GU2210 4480 \pm 70	3360 – 2920	
Bone collagen (<i>bos</i>)	Phase 1.3: area A, primary midden	GU2205 4270 \pm 50	3030 – 2680 ¹	
Bone collagen (<i>bos</i>)	Phase 1.3: area A, primary midden	GU2366 4350 \pm 90	3350 – 2700	
Bone collagen (<i>bos</i>)	Phase 1.3: area A, primary midden	GU2367 4220 \pm 50	2920 – 2620	
Bone collagen (<i>bos</i>)	Phase 1.3: area A, primary midden	GU2368 4020 \pm 70	2900 – 2300	
Bone collagen (<i>bos</i>)	Phase 1.3: area A, primary midden	GU2369 4240 \pm 80	3030 - 2580	
Bone collagen (<i>bos</i>)	Phase 2: area A, primary midden	GU2105 3650 \pm 50	2200 – 1880 ²	
Bone collagen (<i>bos</i>)	Phase 2: area A, primary midden	GU2206 4160 \pm 90	2920 – 2490	
Bone collagen (<i>bos</i>)	Phase 2: area A, primary midden	GU2362 4230 \pm 90	3100 – 2500	
Bone collagen (<i>bos</i>)	Phase 2: area B, primary midden	GU2364 3550 \pm 90	2140 – 1640	
Bone collagen (<i>bos</i>)	Phase 3: area B, midden infilling Structure 2	GU2104 3270 \pm 50	1690 – 1430	
Bone collagen (<i>bos</i>)	Phase 3: area B, primary midden	GU2361 3390 \pm 60	1880 – 1520	
Bone collagen (<i>bos</i>)	Phase 3: area B, primary midden	GU2363 3380 \pm 70	1880 – 1510	
Peat	Phase 6: area C, thin peat layer	GU2544 2470 \pm 50	770 – 410	
Wood	Phase 6.3: area C, floor deposit from Structure 5 ³	GU2183 2990 \pm 100	1450 – 900	
Bone collagen (<i>bos</i>)	Phase 6.4: area C, midden material butting the rebuilt annex wall	GU2208 2470 \pm 50	770 – 410	
Bone collagen (<i>bos</i>)	Phase 6.4: area C, from secondary wall core structure 5	GU2207 2510 \pm 140	1000 – 200	

¹ 3030 – 2850 or 2820 – 2680 cal BC

² 2200 – 2180 or 2150 – 1880 cal BC

³ There is likely to be an age offset with this wood, it is appreciably earlier than the other determinations for this phase (Ambers 2007, 145). Structure 5 is the EIA roundhouse at Tofts Ness.

Table A1.13 Radiocarbon dates from Tofts Ness, Sanday, Orkney				
Sample	Phase/Description	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Bulk soil sample	Buried soil, mound 11: 36-41cm	SRR-5256 2665 \pm 40	900 – 790	
Bulk soil sample	Buried soil, mound 11: 55-60cm	SRR-5247 3140 \pm 40	1520 – 1310	
Bulk soil sample	Buried soil, mound 4: 30-33cm	SRR-5244 2260 \pm 45	400 – 200	
Bulk soil sample	Buried soil, mound 4: 50-53cm	SRR5245 2980 \pm 60	1390 – 1010	
Bulk soil sample	Buried soil, mound 8/1: 36-41cm (Area X)	SRR5242 1755 \pm 45	130 – 400 AD	
Bulk soil sample	Buried soil, mound 8/1: 108-113cm (Area X)	SRR5243 3440 \pm 90	1980 – 1520	
Bulk soil sample	Buried soil, mound 8/2: 59-64cm (Area Y)	SRR5248 2880 \pm 40	1220 – 920	
Bulk soil sample	Buried soil, mound 8/2:78-83cm (Area Y)	SRR5249 3360 \pm 45	1740 – 1520	

Table A1.14 Radiocarbon dates for miscellaneous Orkney sites.

Table A1.14 Radiocarbon dates for miscellaneous Orkney sites				
Site	Context	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Braes of Ha' Breck	Beaker pottery in quarry backfill	SUERC-37960 3780 \pm 35	2340 – 2040	Sheridan 2013, 56; Thomas 2010 & 2011
Crossiecrown, Firth ¹	Central hearth [018] house 1	AA-51372 3895 \pm 40	2470 – 2140	Griffiths 2016, 262; Jones 2003a & 2005d
	Floor deposit [012] house 1	AA-51373 3830 \pm 40	2480 – 2210	
	[480] Abandonment house 1 (CG)	AA-51381 3535 \pm 40	1980 – 1740	
	Midden layer 1 trench 3	SUERC-4852 4100 \pm 35	2870 – 2500	
	Midden layer 2	SUERC-4853 4155 \pm 40	2890 – 2580	
	Lower midden trench 3 (CG)	SUERC-4857 4315 \pm 35	3020 – 2880	
	Lower midden trench 3	SUERC-4858 4405 \pm 40	3270 – 2910	
Cuween, Firth	Dog bone from lower fill of chamber	SUERCC-4847 \pm 35	2620 - 2466	Sheridan 2005a ²
	Dog bone from lower fill of chamber	SUERCC-4848 \pm 40	2576 - 2345	
	Dog bone from lower fill of chamber	SUERCC-4849 \pm 40	2637 – 2467	
Groatsetter, St. Andrews	Yew wood sword	OxA-6779 2710 \pm 50	953 – 798	Sheridan et al 2002, 59 ³
Howe, Harray	Crouched inhumation in cist	AA-53167 4255 \pm 70	3083 – 2624	Downes 2003b ⁴

¹ All from charcoal except (CG) = charred grain. Jones (2003a) describes the context [480] of AA-51381 as a compact ash & clay layer in house 2; the published report (Card et al 2016, 191 – 3; Griffiths 2016, 262) describes [480] as outside area of houses but associated with collapse deposit of house 1.

² Calibrated using Oxcal 4.2 with Intcal13 calibration curve; note that SUERCC-4849 calibrates to 2834 – 2467 at 95.4% but to 2637 – 2467 at 91.5%

³ Calibrated using Oxcal 4.2 with Intcal13 calibration curve

⁴ Calibrated using Oxcal 4.1 with Intcal04 calibration curve

Table A1.14 Radiocarbon dates for miscellaneous Orkney sites				
Site	Context	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Links of Noltland ⁵ ,	<i>Bos</i> - Secondary plough soil	GU-1429 4215 \pm 110	3100 - 2450	Moore & Wilson 2011a, 38 - 9
Westray	<i>Bos</i> - Secondary plough soil	GU-1428 4140 \pm 110	3050 - 2350	
	<i>Bos</i> - midden around articulated deer	GU-1431 3950 \pm 110	2900 - 2100	
	<i>Cervus elaphus</i> - deer butchery site ⁶	GU-1432 3722 \pm 110	2500 - 1750	
	<i>Bos</i>	GU-1430 3860 \pm 110	2650 - 1950	
	<i>Cervus elaphus</i>	GU-1690 3760 \pm 85	2500 - 1950	
	<i>Cervus elaphus</i> (Grobust building ⁷)	GU-1692 3850 \pm 65	2490 - 2130	
	Ovricaprid	GU-1694 4040 \pm 80	2900 - 2300	
	<i>Cervus elaphus</i> (Grobust building)	GU-1695 3750 \pm 100	2500 - 1850	
	<i>Bos</i>	GU-1696 4270 \pm 75	3100 - 2600	
	<i>Bos</i>	GU-1697 4360 \pm 125	3400 - 2600	
	Cow phalange, context 7302, Area 5 ⁸	GU-27899 4030 \pm 30	2630 - 2470	
	Sheep vertebra context 7302, Area 5	GU-27890 4105 \pm 30	2870 - 2570	
	Cow calcaneus, context 9016, Area 5	GU-27902 4070 \pm 30	2860 - 2490	
	Sheep vertebra context 9009, Area 5	GU-27903 4185 \pm 30	2890 - 2660	
	Sheep metapodial, context 9011, Area 5	GU-27904 3635 \pm 30	2130 - 1900 ⁹	

⁵ Lab codes up to GU-1697 are from D V Clarke's 1970s excavation, some of the dates were from mixed animal bone and these have been discarded (see Ashmore 1999). Only some of the early dates were published (Renfrew & Buteux 1985, 65) but all the dates from Clarke's excavation are now published (calibrated with increased errors) in Moore & Wilson (2011a, 38 – 9). More recent dates and modelling are now available for the Neolithic phases of the Links of Noltland (Marshall et al 2016).

⁶ Underlying the 'Beaker occupation' context (Renfrew & Buteux 1985, 65).

⁷ Location of samples to Grobust building from Moore & Wilson (2011a, 38 – 9).

⁸ Area 5 is the main concentration of Neolithic buildings and midden from the recent excavations

⁹ Problematic date – this is stratigraphically earlier than all the other Area 5 dates and there is at present no explanation for this discrepancy; (Moore & Wilson 2011a, 38 – 9).

Table A1.14 Radiocarbon dates for miscellaneous Orkney sites				
Site	Context	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Long Howe, St. Andrews	Charred hazelnut assoc. microliths	SUERC-15587 7900 \pm 35	7024 - 6647 ¹⁰	Wickham-Jones & Downes 2007
Nessbreck, Corrigall ¹¹	Context 13 external gully	SUERC-22445 3445 \pm 35	1890 - 1660	Daniel Lee ORCA pers comm
	context 31 external pit	SUERC-22449 3490 \pm 35	1910 - 1690	
	context 47 external pit	SUERC-22450 3520 \pm 35	1940 - 1740	
	context 72 internal primary floor surface	SUERC-22451 3480 \pm 35	1900 - 1690	
	context 78 internal floor surface	SUERC-22452 3505 \pm 35	1930 - 1740	
	context 87 blocking entrance passageway	SUERC-22453 3150 \pm 35	1500 - 1310	
Point of Buckquoy, Birsay ¹²	Mixed animal bone, mainly red deer	GU-1557 3895 \pm 60	2565 - 2201	Morris 1989, 80, 91 & 102
	Mixed red deer bone & antler	GU-1640 3570 \pm 75	2135 - 1699	
	Carbonised barley	GU-1222 3260 \pm 252	2201 - 915	
	Mixed animal bone, mainly red deer	GU-1556 3260 \pm 90	1753 - 1303	
Quanterness Tomb, St Ola	Human bone, inhumation, Pit C cut into floor	UBA-18424 4115 \pm 29	2865 - 2577	Schulting et al 2010
	Human bone, inhumation, Pit C cut into floor	UPta-1606 4139 \pm 60	2884 – 2500	
Round Howe, Tankerness	Context 15, Tr. Z ditch charred barley	GU-15634 3005 \pm 35	1380 - 1120	Nick Card ORCA pers comm

¹⁰ Calibrated using Oxcal 4.2 with Intcal 13 calibration curve; originally quoted at 6820 – 6660BC which is the 1 σ date

¹¹ All dates obtained on single charred Hordeum grains

¹² Calibrated using Oxcal 4.2 with Intcal13 calibration curve; original error on GU-1222 increased, caution required as the mixed animal bone dates are not from single entities (Ashmore 1998 & 1999; Ashmore et al 2000, 45– 6).

Table A1.14 Radiocarbon dates for miscellaneous Orkney sites				
Site	Context	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Rising Tides Project:				
(1) Echna Loch, Burray	Closure of marine embayment	Beta 241126 3950 \pm 40	2570 - 2340	Wickham-Jones et al 2008
(2) Voy, Stenness	Change to marine/brackish	Beta 242127 3090 \pm 40	1440 - 1270	
Sebay, St Andrews	Bovid hair in steatite urn, cremation	GrA-30980 1870 \pm 40	AD 50 - 240	Sheridan 2006 ¹³
Stromness	Bone apatite, in steatite urn/cist	Gra-24015 1585 \pm 40	AD 300 - 600	Sheridan 2003a
		GrA-24198 1620 \pm 40	AD 340 - 540	Sheridan 2004c ¹⁴
Skaill Bay, Sandwick	Antler-articulated red deer –butchery site	SUERCC-4851 3775 \pm 35	2310 – 2030	Richards et al 2015, 96
	Antler-articulated red deer – butchery site	SUERC-4850 3825 \pm 35	2460 – 2140	
Skaill, Deerness ¹⁵	Charcoal: top cliff section	OxA-1437 3150 \pm 70	1609 - 1232	Limbrey 1997
	Burnt animal bone: base cliff section	OxA-1716 3520 \pm 70	2032 - 1682	
Smerquoy, St. Ola	Charcoal, lower occupation layer (22) in house	SUERC-49682 4518 \pm 29	3360 – 3090	Griffiths 2016, 262
	Hordeum, fill (45) small pit at rear of house	SUERC-49688 3637 \pm 32	2140 – 1910	
	Charcoal, fill (45) small pit at rear of house	SUERC-49687 3533 \pm 29	1950 – 1760	
	Charcoal, foundation deposit (15)	SUERC-49684 4527 \pm 29	3370 – 3090	
	Cereal/grass grains x 2, foundation deposit (15)	SUERC-49683 4546 \pm 29	3370 – 3100	

¹³ Thought to be a (possibly calf skin) bag used to contain the cremation within the urn

¹⁴ Redating of Sheridan 2003a to confirm unexpectedly early date: steatite urn with cremated bone, cattle hide cover, in cist in mound

¹⁵ Calibrated using Oxcal 4.2 with Intacl13 calibration curve, dates from ard marked ploughsoil exposed in cliff section, thought to be the same as underlying all sites at Skaill but not physically or stratigraphically related to any of the sites.

Table A1.14 Radiocarbon dates for miscellaneous Orkney sites				
Site	Context	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Smerquoy (continued).	Cereal grains x 2, upper occupation (27) in house	SUERC-49685 3651 \pm 29	2140 – 1940	
	Charcoal, upper occupation (27) in house	SUERC-49686 3689 \pm 27	2200 – 1980	
White Moss, Shapinsay	Wooden ox-yoke	Ox-A 4507 3115 \pm 60	1516 – 1263	Hedges et al 1995, 424

Table A1.15 Radiocarbon dates for Orkney environmental cores.
 All calibrated using Oxcal 4.1 with Intcal04 calibration curve where possible

Table A1.15 Radiocarbon dates for Orkney environmental cores			
Site	Uncalibrated BP date unless stated	Cal BC at 2 σ	Reference
Lesliedale Moss	SRR-506 3826 \pm 65	2470 – 2051	Davidson et al 1976
	SRR-507 3371 \pm 45	1767 – 1527	
Maeshowe Ditch North	SRR-505 4133 \pm 65	2888 – 2499	Davidson et al 1976
Maeshowe Ditch South	SRR-521 1235 \pm 40	AD 681 – 885	Jones 1979
	SRR-522 1683 \pm 45	AD 240 – 529	
	SRR-523 2880 \pm 45	1212 – 926	
	SRR-524 3446 \pm 50	1889 – 1632	
Maeshowe platform slope	SRR-504 3662 \pm 45	2196 – 1917	Jones 1979
Ring of Brodgar	SRR-502 2207 \pm 60	395 – 111	Jones 1979
	SRR-503 2323 \pm 45	536 – 209	
Glims Moss	SRR-973 2145 \pm 65 cal BP	260 – 130	Keatinge & Dickson 1979 ¹
	SRR-974 2090 \pm 60 cal BP	200 – 80	
	SRR-975 2886 \pm 65 cal BP	1001 – 871	
	Birmingham-634a 2690 \pm 500 cal BP	1240 – 240	
	Birmingham-634b 2960 \pm 110 cal BP	1120 – 900	

¹ All dates in Keatinge & Dickson 1979 are only quoted as calibrated BP so are not recalibrated here

Table A1.15 Radiocarbon dates for Orkney environmental cores			
Site	Uncalibrated BP date unless stated	Cal BC at 2 σ	Reference
Glims Moss (continued)	Birmingham-635 4200 \pm 160 cal BP	2410 – 2090	Keatinge & Dickson 1979 ²
	SRR-976 5681 \pm 55 cal BP	3786 – 3676	
Mid Hill	SRR-981 Base of peat 3422 \pm 45 cal BP	1517 – 1427	Keatinge & Dickson 1979
Burn of Rusht	SRR-982 Base of peat 3355 \pm 45 cal BP	1450 – 1360	Keatinge & Dickson 1979
Braes of Aglath	SRR-983 Base of peat 2919 \pm 45 cal BP	1014 – 924	Keatinge & Dickson 1979
Keith's peat bank Hoy	GU-3213 6450 \pm 80	5607 – 5230	Blackford et al 1996
	GU-3214 5560 \pm 90	4649 – 4235	
	GU-3215 4750 \pm 100	3766 – 3144	
Whaness Burn, Hoy	SUERC-17751 3415 \pm 38	1875 – 1618	Farrell 2009, 185; Farrell & Bunting 2008
	SUERC-17752 1214 \pm 38	AD 687 – 893	
	SUERC-17753 987 \pm 38	AD 989 – 1155	
Hobbister A, Orphir	SUERC-19832 6205 \pm 35	5296 – 5052	Farrell 2009, 242
	SUERC-22859 3820 \pm 30	2454 – 2144	
	SUERC-19831 3005 \pm 35	1381 – 1129	
	SUERC-22858 1550 \pm 30	AD 426 – 578	

² All dates in Keatinge & Dickson 1979 are only quoted as calibrated BP so are not recalibrated here

Table A1.15 Radiocarbon dates for Orkney environmental cores			
Site	Uncalibrated BP date unless stated	Cal BC at 2 σ	Reference
Hobbister B, Orphir	SUERC-19837 3920 \pm 35	2549 – 2293	Farrell 2009, 243
	SUERC-22864 3340 \pm 30	1728 – 1529	
	SUERC-19833 2205 \pm 35	382 – 186	
	SUERCC-22860 1230 \pm 35	AD 687 – 885	
Blows Moss, S Ronaldsay	SUERCC-17185 6402 \pm 39	5469 – 5318	Farrell 2009, 317
	SUERCC-17816 4864 \pm 38	3710 – 3532	
	SUERCC-17187 3238 \pm 37	1607 – 1434	

Table A1.16 Radiocarbon dates for miscellaneous Shetland Sites.

Table A1.16 Radiocarbon dates for miscellaneous Shetland sites				
Site	Context	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Bayanne, Yell	Phase 1	OxA-9900 3417 \pm 38	1880 - 1610	Moore & Wilson 2014b, 89
	Phase 2A	OxA-9899 2936 \pm 35	1260 - 1010	
	Phase 2A	OxA-9951 3216 \pm 37	1600 - 1400	
	Phase 2A	OxA-9902 3126 \pm 36	1500 - 1260	
	Phase 2A	OxA-9901 3015 \pm 40	1400 - 1120	
	Phase 2A	OxA-9896 2689 \pm 35	910 - 790 ¹	
	Phase2B	OxA-9898 2300 \pm 38	410 - 200	
	Phase2B	OxA-9897 2752 \pm 37	1000 - 820	
	Phase2B	OxA-9895 2980 \pm 34	1380 - 1050	
	Phase 3	OxA-9928 1875 \pm 60	0 - AD 330	
	Phase 5	OxA-9894 1704 \pm 34	AD 250 - 420	
Benie Hoose		GrA-29373 3360 \pm 40	1740 - 1520	Calder 1961; Sheridan 2005b & 2012b, 27
East Shore, Dunrossness	Pre broch midden	AA-11692 3161 \pm 71	1620 - 1268	Carter et al 1995
Jarlshof	011 Upper midden	GU-12914 3260 \pm 35	1620 - 1440	Dockrill & Bond 2009 ²
	017 Lower midden	GU-12915 3370 \pm 35	1750 - 1530	
	019 Lower midden under 017	GU-12916 3455 \pm 35	1880 - 1680	
Ness of Gruting	Carbonised barley cache	AAR-15646 3736 \pm 35	2280 - 2030	Barcham 1980; Sheridan 2012b, 18
		AAR-15647 3668 \pm 35	2190 - 1950	
		GrN-6168 3710 \pm 55	2290 - 1950	

¹ There are some inconsistencies in the phasing quoted in the report: this date is supposedly stratigraphically earlier than OxA-9895

² All dates are from charred barley from the re-excavation of midden deposits first identified by Childe (1938).l

Table A1.16 Radiocarbon dates for miscellaneous Shetland sites				
Site	Context	Lab ref/ uncal date BP	Cal BC at 2 σ	Reference
Ness of Gruting		BM-441 3514 \pm 120	2200 - 1530	Sheridan 2012b, 18
		Combined dates	2200 - 1980	
Scord of Brouster ³	Kerb cairn primary phase	CAR-242 4220 \pm 75	3011 - 2578	Whittle et al 1986, 37
	House 1, phase 1, pre house	CAR-243 4095 \pm 70	2876 - 2488	
	House 1, phase 1, pre house	CAR-244 4460 \pm 70	3351 - 2927	
	House 1, phase 1, pre house	CAR-245 4345 \pm 85	3339 - 2709	
	House 1 construction	CAR-246 4145 \pm 70	2894 - 2499	
	House 1, phase 2a	HAR-2413 4170 \pm 80	2913 - 2497	
	House 1, phase 2a	CAR-247 4130 \pm 80	2892 - 2491	
	House 1, phase 2b	CAR-248 3665 \pm 75	2287 - 1785	
	House 2, phase 1	CAR-249 4495 \pm 75	3370 - 2927	
	House 2, phase 1	CAR-250 4455 \pm 70	3348 - 2927	
	House 2, phase 1	CAR-251 4540 \pm 65	3499 - 3025	
	House 2, construction	CAR-252 4390 \pm 80	3338 - 2891	
	House 2, phase 2	CAR-253 5050 \pm 85	4032 - 3656	
	House 3, phase 1	CAR-477 3310 \pm 60	1740 - 1454	
	House 3, phase 1	CAR-479 3420 \pm 70	1890 - 1536	
Sumburgh ⁴	Carbonised wood	GU-1006 3629 \pm 110	2335 - 1692	Downes & Lamb 2000b, 10
	Carbonised rope	GU-1015 3535 \pm 214	2488 - 1398	
Tougs, West Burra ⁵	Oval house	GU-1112 2970 \pm 385	2278 - 229	Hedges 1986

³ Calibrated using Oxcal 4.1 with Intcal04 calibration curve. All from mixed charcoal except CAR-477 & 479 from charred barley, dating should be reviewed for House 2 since the finds largely consist of domestic Beaker (Sheridan 2012b); it may be residual charcoal from the old ground surface.

⁴ Calibrated using Oxcal 4.2 with Intcal13 calibration curve; original errors increased (Ashmore 1998; Ashmore et al 2000, 45–6).

⁵ Calibrated using Oxcal 4.2 with Intcal13 calibration curve; original errors increased (Ashmore 1998; Ashmore et al 2000, 45–6).

Appendix 2 Metalwork, moulds, gold, jet and amber

Contents

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Catalogue of Bronze Age Metalwork and Moulds from Orkney

(1) Flanders Moss, Wasbister, Rousay

NMRS number: HY32NE35

Description: EBA Flat dagger

Find spot: Peat bog

Reference: Coles 1969, 90; Cursiter 1908

Notes:

(a) Flanders Moss is in Westness not Wasbister: the finder lived at Innister Farm in Wasbister, and was cutting peat at Flanders Moss (Cursiter 1908, 74).

(b) The Flanders Moss dagger is of Masterton type, (now Series 2E Masterton), and is one of only 13 examples in Britain (Gerloff 1975, 58 – 63; Needham 2004, 226 – 31; Needham, Bray et al 2015, 24).

(2) Heathery Howes, Holm

NMRS number: HY40NE8

Description: EBA Midrib dagger

Find spot: Peat bog

Reference: Coles 1969, 90; Cursiter 1887, 340

Notes:

(a) There is a double entry for this dagger on NMRS: Holm, HY40SE18 'dagger, bronze', unlocated, reference Cursiter 1887, 340.

(b) The Heathery Howes dagger is either an Armorico-British A (Winterbourne Stoke type) or a Series 3B Raunds type (Gerloff 1975, 70 – 2; Needham, Bray et al 2015, 23 – 4). It was originally classified by Gerloff (1975, 70 – 2) as related to the Armorico-British A (Winterbourne Stoke type), although it only has four hilt rivets, not the six usually expected. It was excluded from Needham & Woodward's (2008, 8 – 9) distribution of this type since it was not a classic example. In Needham, Bray et al's (2015, 24) revised classification of Early Bronze Age daggers, the Class 3A Winterbourne Stoke type is defined as a butt-riveted lenticular section blade with six rivets;

the class 3B Raunds type is the same but with 2 – 4 rivets. Needham, Bray et al (ibid) do not discuss the Heathery Howes dagger, but it fits their criteria for class 3B Raunds type. In either case it is of a type found in rich burials in southern England and the Wessex area.

(3) Orkney

NMRS number: N/A

Description: EBA Axe

Find spot: unknown

Reference: Coles 1969, 84; Cochran Patrick 1880, 96

Notes:

(a) Cochran Patrick (1880, 96) exhibited this axe at a meeting of the Society of Antiquaries of Scotland along with a number of items from his personal collection or loaned by friend. Current whereabouts unknown; this was recorded but not seen by Coles (1969, 84). This axe was not included in Schmidt & Burgess (1981).

(b) Elsewhere in Britain such axes are commonly found deposited as part of a hoard, and may, less often, be found in watery locations, but are very rarely found in graves (Cowie 2004; Needham 1988; Schmidt & Burgess 1981, 14 – 18).

(4) Orkney?

NMRS number: HY31SW65

Description: EBA Axe type Bc

Find spot: unknown.

Reference: Anon 1909, 9; Coles 1969, 86

Notes:

(a) Appears in a list of purchases for the museum of the Society of Antiquaries of Scotland and the provenance is given as 'locality unknown, but probably from Orkney': possibly purchased as part of an Orkney collection since it is included in a list of other finds that are provenanced to Orkney (Anon 1909, 9).

(b) Included in Schmidt & Burgess 1981 (no. 289, 51), where it is described as a corroded and very rough unclassified flat axe.

(c) As note 3(a) above.

(5) Orkney?

NMRS number: HY41NE14

Description; EBA Flat axe

Find spot: unknown.

Reference: Balfour Castle collection

Notes:

(a) I have seen this axe in the private collection at Balfour Castle, where it is simply labelled '*a Saxon axe*': there are no further details of its provenance. It may be from Orkney, since the first David Balfour of that ilk was a keen collector who donated a number of finds from both the sale of the Kirkwall Museum (Anon 1864a, 15 – 18) and his Orkney estate to the Museum of Antiquities.

(b) Not included in Schmidt & Burgess 1981.

(c) As note 3(a) above

(6) Laughton's Knowe, Holm

NMRS number: HY40SE1

Description: MBA Razor class I

Find spot: Cist

Reference: Coles 1964, 121; Piggott 1947

Notes:

(a) This razor accompanied a cremation in a cist. This location is typical for the type, which are found most commonly with cremations and not in hoards (Coles 1964, 120, 148 – 9; Piggott 1946). At the time of Coles' (1964) inventory no dating evidence was available but their associations with Cordoned and Collared Urns was noted. Dates are now available for both these urn types. In Scotland, Cordoned Urns date from around the 19th – 16th centuries cal BC, whilst Collared Urns were in use from c.2000 – 1600/1500 cal BC, with a tight grouping in the 1900 – 1600 cal BC range (Sheridan

2007a, 164 – 9). Neither of these urn types are known from Orkney, with steatite urns used instead (Section 5.2.5), but this razor may well be Early Bronze Age on the basis of the associations in the rest of Scotland.

(7) Netherhouse, Firth

NMRS number: HY31NE16

Description: MBA Spearhead, class D

Find spot: Peat bog

Reference: Coles 1964, 143; (Coles 1960, 79); Marwick 1949, 239

Notes:

(a) The Netherhouse spearhead was first listed in Coles (1960, 79) as LBA, but reclassified in Coles (1964, 143) as MBA in line with his reclassification of looped and socketed spearheads between the publication of his 1960 and 1964 corpora (Coles 1964, 106 – 111).

(b) is of a type with a wide-ranging distribution in Scotland and is also common in southern Britain (Coles 1964, 108 – 9).

(8) Ditch Park Moss, Tankerness

NMRS number: HY40NE18

Description: MBA Rapier

Find spot: Peat bog

Reference: Cursiter 1887, 340; O'Connor & Cowie 1995, 358-9.

Notes:

(a) Now lost

(b) significantly extends the distribution of such rapiers northwards, since most finds come from southern Scotland (O'Connor & Cowie 1995, 345). The majority (over 85%) of rapiers from the British Isles have been found in wet contexts, particularly rivers; and as single finds rather than in hoards (Burgess & Gerloff 1981, 1 & 5).

(9) Orkney?

NMRS number: HY31SW66

Description: MBA Palstave Haddington type

Find spot: unknown.

Reference: Anon 1909, 9; Coles 1964, 140

Notes:

(a) Appears in a list of purchases for the museum of the Society of Antiquaries of Scotland and the provenance is given as 'locality unknown, but probably from Orkney': possibly purchased as part of an Orkney collection since it is included in a list of other finds that are provenanced to Orkney (Anon 1909, 9).

(b) Schmidt & Burgess (1981, no. 837, 141) list it as an unclassified low-flanged broad bladed type.

(c) As with other types of Bronze Age axe these are usually found in hoards or as single finds but not in graves (Schmidt & Burgess 1981, 14 – 18).

(10) Skail, Deerness

NMRS number: HY50NE21

Description: LBA socketed knife Thorndon type

Find spot: Settlement

Reference: Porter 1997, 103

Notes:

(a) Thorndon type socketed knives seem to originate in southern England (Coles 1960, 46). This type is part of the Ewart Park metalworking phase, and a Thorndon type knife from Nore Hill, Surrey has an associated radiocarbon date of 1020 – 820 cal BC (Needham et al 1997, 64 & 72). There are very few from Scotland, (there were only seven Thorndon types known from elsewhere in Scotland when surveyed by Coles (1960) with a scatter up the east coast that may reflect the route taken from the south (Coles 1960, 46).

(11) Little Crofty, St. Andrews

NMRS number: HY50NW16

Description: LBA Socketed knife Thorndon type

Find spot: Cist

Reference: Coles 1960, 87; Cursiter 1887, 341

Notes:

(a) as note 10 (a) above

(12) Quoykea Moss, St Andrews (Hoard)

NMRS number: HY50SW3

Description: (i) LBA socketed knife Thorndon type

(ii) LBA razor - bifid or maple leaf class II

Find spot: Peat bog

Reference: Callander 1922, 356-8; Coles 1960, 87, 88, 123; Piggott 1946, 140

Notes:

(a) as note 10 (a) above

(b) Class II or bifid razors are generally found in hoards, with few isolated finds, most of which are from rivers (Coles 1964, 120, 148 – 9; Piggott 1946). The largest concentration of class II razors is found in the Thames Valley and Wessex in southern England (Piggott 1946, 126). An early form of a class II razor comes from the Glentool, Kircudbright hoard (Coles 1964, 121) which is Middle Bronze Age (see Table 7.2 above), but Late Bronze Age examples continue into the Ewart Park phase e.g. at Flag Fen (Coombs 2001, 265). Since the Quoykea Moss razor is associated with a Ewart park phase Thorndon type socketed knife it is more likely to be a late example, although it may have been an heirloom piece.

(13) Orkney

NMRS number: HY31SW67

Description: LBA socketed axe facet

Find spot: unknown.

Reference: Coles 1960, 71; Hunterian GLAHM A94

Notes:

(a) HY31SW67 is part of the Cursiter collection at the Hunterian museum provenanced only to 'Orkney'. See no. (14) below – this may be a double entry for HY50NW19.

(14) Tankerness?

NMRS number: HY50NW19

Description: LBA socketed axe facet

Find spot: unknown.

Reference: Coles 1960, 71; Cursiter 1887, 342

Notes:

(a) Cursiter (1887, 342) published HY50NW19 & stated '*there are reasons for believing it was found in Tankerness*'. When Coles (1960, 71) published HY50NW19 he did not include a collection reference, indicating that he had not seen a physical axe. There is no other record and no local knowledge of a second axe find (Anne Brundle pers. comm.). I strongly suspect therefore that HY50NW19 and HY31SW67 (no. 14 above) are the same axe.

(15) Hobbister, Orphir

NMRS number: HY30NE50

Description: LBA socketed axe

Find spot: Peat bog

Reference: Cowie & O'Connor 2006

Notes:

(a) Of a type whose closest parallels lie in Ireland (Cowie & O'Connor 2006).

Moulds

There are some deposits of both lead and copper ores in Orkney, which have been mined on a small scale in historical times, but there is no evidence of their prehistoric exploitation and no local source of tin (Mykura 1976, 118-19). The evidence for Bronze Age metalworking in Orkney is limited to the two stone moulds listed below.

(1) Orkney?

NMRS number: N/A

Description: Part of steatite half mould MBA flanged axe

Find spot: unknown.

Reference: Anon 1909, 10; Coles 1960, 89; 1964, 147

Notes:

(a) Appears in a list of purchases for the museum of the Society of Antiquaries of Scotland as 'locality unknown, but probably from Orkney': possibly purchased as part of an Orkney collection since it is included in a list of other finds that are provenanced to Orkney (Anon 1909, 9).

(b) This mould is listed twice by Coles; first as a LBA palstave mould (Coles 1960, 89), then as a MBA flanged axe mould (Coles 1964, 147).

(2) Near Little Crofty, St Andrews

NMRS number: N/A

Description: Stone mould (now lost)

Find spot: Surface find

Reference: Cursiter 1887, 343

Notes:

(a) Cursiter exhibited a stone mould picked up near the Little Crofty cist but does not describe or illustrate it. It is not currently catalogued in the Cursiter collection at the Hunterian Museum (Malcolm Chapman, Head of Collections Management, Hunterian Museum, pers. comm.).

Table A2.1 Summary of Orkney Copper alloy artefacts and moulds

Table A2.1 Copper alloy artefacts and moulds from Orkney, numbers refer to the catalogue above.				
Site Location	NMRS no	Description	Find Site	References
(1) Flanders Moss, Wasbister, Rousay	HY32NE35	EBA Flat dagger	Peat bog	Coles 1969, 90; Cursiter 1908
(2) Heathery Howes, Holm	HY40NE8	EBA Midrib dagger	Peat bog	Coles 1969, 90; Cursiter 1887, 340
(3) Orkney	N/A	EBA Axe	?	Cochran Patrick 1880, 96; Coles 1969, 84
(4) Orkney?	HY31SW65	EBA Axe type Bc	?	Anon 1909, 9; Coles 1969, 86
(5) Orkney?	HY41NE14	EBA Flat axe	?	Balfour Castle collection
(6) Laughton's Knowe, Holm	HY40SE1	MBA Razor class I	Cist	Coles 1964, 121; Piggott 1947
(7) Netherhouse, Firth	HY31NE16	MBA Spearhead, class D	Peat bog	Coles 1964, 143; (Coles 1960, 79); Marwick 1949, 239
(8) Ditch Park Moss, Tankerness	HY40NE18	MBA Rapier (now lost)	Peat bog	Cursiter 1887, 340; O'Connor & Cowie 1995, 358-9;
(9) Orkney?	HY31SW66	MBA Palstave Haddington type	?	Anon 1909, 9; Coles 1964, 140;
(10) Skaill, Deerness	HY50NE21	LBA socketed knife Thorndon type	Settlement	Porter 1997, 103
(11) Little Crofty, St. Andrews	HY50NW16	LBA Socketed knife Thorndon type	Cist	Coles 1960, 87; Cursiter 1887, 341
(12) Quoykea Moss, St Andrews (Hoard)	HY50SW3	(1) LBA socketed knife Thorndon type	Peat bog	Callander 1922, 356-8; Coles 1960, 87, 88, 123;
		(2) LBA razor - bifid or maple leaf class II		
(13) Orkney (same as HY50NW19?)	HY31SW67	LBA socketed axe facet	?	Coles 1960, 71; Hunterian GLAHM A94
(14) Tankerness? (same as HY31SW67?)	HY50NW19	LBA socketed axe: double entry	?	Coles 1960, 71; Cursiter 1887, 342
(15) Hobbister, Orphir	HY30NE50	LBA socketed axe	Peat bog	Cowie & O'Connor 2006, 121

Table A2.1 Copper alloy artefacts and moulds from Orkney, numbers refer to the catalogue above.				
Site Location	NMRS no	Description	Find Site	References
Moulds				
(1) Orkney?	N/A	Part of steatite half mould MBA flanged axe?		Anon 1909, 10; Coles 1960, 89 & 1964, 147
(2) Near Little Crofty, St Andrews	N/A	Stone mould (now lost)	Surface find	Cursiter 1887, 343
Miscellaneous:				
Saverough, Birsay & 'Birsay' ¹ ???	N/A	2 Spearheads 'Iron or bronze'	Surface find	Coles 1960, 79; Farrer 1862b, 601 - 2
North Ettit, Rendall ² ?	N/A	Nail headed round pin, decorated	Digging	Rendall 1937, appendix C, 55 - 6
Muckquoy, Redland	N/A	Fragment of bronze bangle ³	Excavation	Richards & Jones, R. 2016, 14

1 Saever Howe is Pictich/Norse (Hedges 1083b). These spearheads are now lost and are not Bronze Age: one '*picked up by child*' and is the 'exact counterpart' of one found '*many years previously sticking in a skull*' (Farrer 1862b, 601 – 2)

2 Not illustrated, current location unknown, found c.17.4m SE of farmhouse; described only as similar to Bronze Age examples in the British Museum but no further details. Possibly more likely to be Viking/Norse?

3 No specialist report has yet been published on this bangle, which may be Late Bronze Age/Early Iron Age (see Section 7.12.4.)

Table A2.2 Shetland Copper alloy artefacts and moulds

Table A2. Copper alloy artefacts and moulds from Shetland				
Site Location	NMRS no	Description	Find Site	References
Nordhouse, Northmavine ¹	HU 37 SE 5	MBA Tang dagger	?	Coles 1969, 91, 94; Anon 1876b, 471
Lunnasting, Nesting	HU46SE4	MBA Spearhead class 3 ²	?	Coles 1964, 144; Anon 1885, 139
Housegord	N/T	MBA razor	'with urn'	Coles 1964, 149
Midbrake	N/T	MBA blade	Barrow with cremation	Coles 1964, 149; Anon 1868, 425
Shetland	HU45NE31	LBA Socketed axe rib	?	Coles 1960, 73;
Shetland	HU45NE30	LBA Socketed axe Import: Breton type	?	Coles 1960, 52 & 73
Jarlshof	HU30NE1.00	LBA Tanged knife	Excavation	Coles 1960, 87; Curle 1933, 95
Jarlshof	HU30NE1.00	Over 300 pieces of clay LBA Moulds:	Excavation	Coles 1960, 89; Curle 1933, 112-25
		A minimum of 8 socketed axe moulds		
		A minimum of 7 sword moulds		
		Socketed tool mould possibly gouge		
		Curved blade mould		
		Pin mould		

¹ Despite its inclusion in Coles' (1969) list of EBA metalwork, this is in fact MBA: there are no metal artefacts in Shetland that pre-date 1500 BC (Sheridan 2013, 63)

² The Lunnasting spearhead was first listed in Coles (1960, 81) as LBA, but reclassified in Coles (1964, 144) as MBA in line with his reclassification of looped and socketed spearheads between the publication of his 1960 and 1964 corpora (Coles 1964, 106 – 111).

Table A2. Copper alloy artefacts and moulds from Shetland				
Site Location	NMRS no	Description	Find Site	References
Jarlishof (continued)		Discoid object mould	Excavation	Coles 1960, 89; Curle 1933, 112-25
		Stone mould for casting a bronze rod		
		Stone mould for casting a bronze strip		

Table A2.3 The revised Scottish chronologies relating to metalwork types

(The period ranges defined in Coles (1969, 1 & 75) were:

- Early Bronze Age c.1800-1500 BC
- Middle Bronze Age c.1500-900 BC
- Late Bronze Age c.900-600 BC)

Table A2.3 Reproduced from ScARF 2012b, table 2.	
Summary chronology and associated artefact types for Scotland (based on Needham et al 2010 (table 1) and Needham 1996 Fig 3 for the Southern British Bronze Age).	
Period	Metalwork assemblage
1. Copper 2450-2200 BC	Copper axes etc
Early Beaker pottery , Copper axes, halberds, knives, sheet gold.	
2. EBA 2200-1950 BC	Migdale> Colleonard
Beaker/Food Vessel/Vase Urns Copper alloy flat axes, flat daggers, halberds, copper alloy and gold ornaments. Knowes of Trotty Barrow 1. Rameldry dagger grave. Finglenny>Migdale>Colleonard hoards.	
3. EBA 1950-1750 BC	Bunrannoch
Beaker/Food Vessel/Urns Raised-edge and decorated axes, Armorico-British daggers. ?Barnhill dagger grave. Bunrannoch hoard.	
4. EBA 1750-1550 BC	Gavel Moss
Collared/Cordoned Urns Long-flanged axes, Arreton daggers, tanged spearheads. Gavel Moss hoard.	
5. MBA 1550-1150 BC	Caverton>Glentrool>Mugdrum
Bucket Urns Short-flanged axes, few palstaves, Group I-III dirks and rapiers, few imported swords, e.g. Mugdrum, looped spearheads. Glentrool hoard.	
6. LBA 1150-950 BC	Poldar Moss
Bucket Urns Palstaves, earliest socketed axes, Group IV dirks and rapiers, looped spearheads, few gold ornaments, cauldrons, few imported swords, e.g. Poldar Moss.	
7. LBA 950-800 BC	St Andrews
Bucket Urns/'Flat-rimmed ware'. Various socketed axes, Ewart Park swords, spearheads, sheet-metal vessels and shields, copper alloy and gold ornaments. Many hoards, e.g. St Andrews. Earliest iron, if only ring from Balmanashar hoard.	
EIA 800-600 BC	Poolewe
'Flat-rimmed ware' Sompting axes, Gündlingen swords. Poolewe hoard.	

Table A2.4 Bronze Age Jet & Jet-Like Material from Orkney

Table A2.7 Bronze Age Jet & jet-Like material from Orkney				
Site Location	NMRS no	Description	Find Site	References
Millhouse, Sandwick, Orkney	HY21NW15	c. 400 jet beads (lost)	Cist	Clouston W 1927a, 133-5; Cuthbert 1995, 33;
(Exact location uncertain)				Low 1879, intro; Lysaght 1972, 288 & 1974, 223
Tankerness Moss, Orkney	HY50NW48	Trapezoidal jet plate	Peat bog	Kirkness 1935
Isbister, S. Ronaldsay, Orkney	ND48SE1	Jet Belt ring & V bored button: albertite	Chambered tomb	Davidson & Henshall 1989, 79; Hedges 1983a, 250;
				Sheridan & Davis 2002, 816, ScARF 2012b, 81-2
Walls, Orkney ¹	N/A	Ring segment	?	Anon 1914, 370

¹ Appears in a list of donations to the National Museum (Anon 1914, 370) but with no further details.

Table A2.5 Bronze Age Gold from Orkney

Table A2.8 Bronze Age Gold from Scottish Islands				
Site	NMRS No.	Description	Find site	Reference
Knowes of Trotty, Orkney	HY31NW42	4 discs; 3 further fragments	Cist	Card, Downes et al 2006; Petrie 1860; Taylor 1980, 94
'Westray', Orkney ¹	N/A	'gold ring encircling thighbone'	Burial	Goudie 1915, 147; Taylor 1980, 94; Wilson 1863, vol 1, 472

¹ Now lost and known only from George Low's Tour of Westray in 1778 (Goudie 1915, 147) and published as possibly Bronze Age by Taylor (1980). The majority of the other graves described by Low in this area appear to have had Viking style grave goods, but some graves may possibly have been Bronze Age (see Section 3.3.1).

Table A2.6 Bronze Age Amber from Orkney

Table A2.9 Bronze Age Amber from Orkney				
Site	NMRS No.	Description	Find site	References
Knowes of Trotty, Harray	HY31NW42	27 items originally, of which 9 are now lost	Cist	Anon 1860a; Petrie 1860
		Items from a spacer plate necklace:		Sheridan et al 2003, 177–178
		(1) fragment of terminal plate		
		(2) incomplete spacer plate, broken into 3 fragments		
		3) 2 beads		
		Dress accessories:		
		(1) 10 flat prismatic V-bored objects (possibly 8 more lost)		
		(2) 2 complete hook shaped objects, obliquely top perforated		
		(3) 2 fragments from probably two further hook shaped objects		
		Extra items found during 2005 re excavation:		Card, Downes, et al 2006
		(1) 5 prismatic beads		
		(2) spacer plate		
		(3) unspecified fragment		
Skaill, Deerness, Orkney		1 discoid bead	Settlement	Buteux 1997c, 25; Porter 1997, 109

Appendix 3

Enclosures, sub-peat dykes and treb dykes in Orkney

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Table A3.1 Enclosures, sub-peat dykes and nearby sites in Orkney

Table A3.1 Enclosures, sub-peat dykes and nearby sites or features in Orkney				
NMRS No.	Site	Description	References	Associated with?
HY20SW4	Burn of Quoys	Enclosure, structure	Lamb 1989, 13, no. 11 (Whaness Burn B)	
HY20SW14	Burn of Quoys	Enclosure	Lamb 1989, 13, no. 12 (Whaness Burn C)	
HY20SW15	Burn of Quoys	Enclosure, house sites	Lamb 1989, 13, no. 10 (Whaness Burn A)	
HY20SW16	Whaness Burn	Enclosure	Lamb 1989, 13, no. 13 (Whaness Burn D)	
HY20SW17	Whaness Burn	Sub peat dyke, mound	Lamb 1989, 13, no. 22 (Whaness Burn E)	
HY20SW18	Whaness Burn	Enclosure	Lamb 1989, 13, no. 14 (Whaness Burn F)	
HY22SW8	Vestra Fiold	Enclosure	RCAMS 1946, vol. II, 269, no. 728; Thomas 1852, 117	
HY30NE53	Hobbister, Orphir	Sub peat dykes & structure	Cowie & O'Connor 2006; Sharman 2007c	Socketed axe
HY41NE22	Helliar Holm	Sub peat dyke	Lamb 1987, 18, no. 68	
HY42NE1	Skirmie Clett	Enclosure	RCAMS 1946, vol. II, 239 - 40, no. 620, figs. 337 - 39	
HY42SE3	Galt Ness, Shapinsay	Sub peat dyke	Lamb 1987, 13, no. 31	HY42SE4 & HY42SE6
HY42SE4	Loadberry, Shapinsay	Sub peat dyke	Lamb 1987, 13, no. 32	HY42SE3 & HY42SE6
HY42SE6	Boat of Bredibir, Shapinsay	Sub peat dyke	Lamb 1987, 13, no. 34	HY42SE3 & HY42SE4
HY45SE131	Mad Geo, Papa Westray	Sub peat dyke	Lamb 1990	
HY53NE7	Linkertaing, Eday	Chambered tomb	Davidson & Henshall 1989, 141, ORK 35	HY53NE8 & HY53NE13
HY53NE8	Linkataing, Eday	Roundhouse	Lamb 1984, 13, no. 33; Sharman 2007b	HY53NE7 & HY53NE13
HY53NE9	Vinquoy Hill, Eday	Chambered tomb	Davidson & Henshall 1989, 168 - 9, ORK 53	HY53SE7
HY53NE13	Linkataing, Eday	Sub peat dyke	Lamb 1984, 14, no. 39; RCAMS 1946, vol. II, 63, no. 234	HY53NE7 & HY53NE8
HY53NE14	Fold of Setter	Enclosure	RCAMS 1946, vol. II, 63, no. 235; Lamb 1984, 16, no. 57	

Table A3.1 Enclosures, sub-peat dykes and nearby sites or features in Orkney				
NMRS No.	Site	Description	References	Associated with?
HY53NE30	Noup Hill, Eday	Sub peat dyke	Lamb 1984, 14, no. 42	HY53NE32
HY53NE15	Adjoining Stone of Setter	Enclosure	Lamb 1984, 17, no. 60; RCAMS 1946, vol. II, 63 - 4, no. 236	
HY53NE31	Mill Hill, Eday	Sub peat dyke	Lamb 1984, 14, no. 40	
HY53NE32	Noup Hill, Eday	Sub peat dyke, Enclosure	Lamb 1984, 14, no. 41	HY53NE30
HY53NE36	Calf of Eday	Enclosure	Lamb 1984, 19, no. 73	HY53NE37
HY53NE37	Calf of Eday	Sub peat dykes	Lamb 1984, 19, no. 72	HY53NE36
HY53NE65	Vinquoy Hill, Eday	Sub peat dyke	Lamb & Ritchie 1985	HY53NE9
HY53SE7	Eday Manse	Chambered tomb	Davidson & Henshall 1989, 117 - 8, ORK 16	HY53SE17
HY53SE17	Den Trango, Eday	Sub peat dyke	Anon 1862, 186; Lamb 1984, 14, no. 43	HY53SE7
HY53SE19	Mussetter, Eday	Sub peat dyke	Lamb 1984, 39, no. 230	
HY62NW69	Linga Holm	Sub peat dyke	Lamb 1986b	
ND38NW6	Cantick Head, South Walls	Sub peat dyke	Lamb 1989, 19, no. 54	ND38NW20 Hesti Geo
None	Vinquoy hill, Eday ¹	Sub peat dyke	Fowler 1987, 1	HY53SE7 & HY53NE9?
None	Overabist, Birsay	Sub peat dykes	Spence 1915, 91 - 4	Burnt mound & settlement?
None	Hoxa, South Ronaldsay	Sub peat dykes	Thomas 1852, 122	ND49SW2, SW11 & SW12?
None	Staney Knowe, Yesnaby	Sub peat dykes	Moore 2013, 101 – 3	

¹ Not closely located, chance find by peat cutter not reported or recorded at the time.

Table A3.2 Orkney Treb Dykes

Table A3.2 Possible Orkney treb dykes.			
NMRS No.	Site	Comments	References
HY21NW68	Brough Burn, Sandwick (?)	Recorded as post-med head dyke (Canmore: aerial photo)	Moore 2013, 160 – 2
HY33SE 45	Skatequoy, Rousay	Treb dyke	Lamb 1982, 24, no. 90
HY43SW 31	Garsnie Geo, Rousay	Treb dyke	Lamb 1982, 24, no. 89
HY43SW 32	Green Gairsty, Rousay	Treb dyke	Lamb 1982, 24, no. 91
HY43SW 64	Bigland, Rousay	Treb dyke: ploughed out	Lamb 1986a
HY44NW 39	Burn of Finchaley, Westray	Treb dyke: appears to be marked on Mackenzie 1750	Lamb 1983b, 34, no. 127
HY44NW 40	South of Our Ness, Westray	Treb dyke	Lamb 1983b, 34, no. 128
HY45SE 36	The Gairsty, Papa Westray	Treb dyke	Lamb 1983b, 17, no. 25
HY52NW 4	Dyke End, Eday	Treb dyke: 90m length	Lamb 1984, 13, no. 37
HY53SW 7	Fersness, Eday	Possibly hill-dyke remnants?	Lamb 1984, 13, no. 38
HY62NE 19	North Strenzie, Stronsay	Known from report - unlocated	Lamb 1984, 27, no. 134; Marwick 1927b, 65
HY62SE26	Kirbuster, Graverend, Stronsay	Treb dyke: old hill dyke uses same line	Lamb 1984, 26, no. 133; Marwick 1927b, 63 & 77
HY62SE 31	Burgh Head, Stronsay	May be a 19 th century dyke	Lamb 1984, 26, no. 132
HY63NW 3	The Knowes, Sanday	Treb dyke	Lamb 1980b, 21, no. 121; Marwick 1923a, 22
HY63SW 20	Spur Ness, Sanday	Enclosure(s), treb dyke	Lamb 1980b, 21, no. 122
HY63NW 41	South Howar, Sanday	Treb dyke	Lamb 1980b, 21, no.
HY63NW 43	Nebister, Sanday	Treb dyke	Lamb 1981a
HY64SE 57	Geramount, Sanday	Cropmarks: Enclosure, treb dyke(s)/?henge/avenue?	Braby 1996
HY64SE 48	West Thrave, Sanday	Treb dyke	Lamb 1980b, 21, no. 125
HY63NW 37	Whupland Hill, Sanday	Treb dyke	Lamb 1980b, 21, no. 126

Table A3.2 Possible Orkney treb dykes.			
NMRS No.	Site	Comments	References
HY64SE 49	Broughstun, Sanday	Known from report - unlocated	Lamb 1980b, 21, no. 119; Marwick 1923a, 22
HY64SW 6	Fea Hill, Sanday	Treb dyke	Lamb 1980b, 21, no. 120
HY74SE 19	Lopness, Thrave, Sanday	Known from report - unlocated	Lamb 1980b, 21, no. 123; Marwick 1923a, 22
HY74SW 21	The Trows Buil, Garbo, Sanday	Known from report - unlocated	Lamb 1980b, 21, no 124; Marwick 1923a, 22
HY74SW 40	Howar, Sanday	50m length of sandy bank –not treb?	Lamb 1985
HY75SE 26	Muckle Gairsty, North Ronaldsay	Treb dyke	Lamb 1980b, 22, no. 128
HY75SE 33	Matches Dyke, North Ronaldsay	Treb dyke	Lamb 1980b, 21, no. 127
HY63NW82	Spaney Geo, Sanday	Treb dyke	Lamb 1981b

Appendix 4

Land and Survey Information

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Table A4.1 Dates of Division of the Orkney Commons where known..... 1

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Table A4.1 Dates of Division of the Orkney Commons where known

Table 4.1 Date of Division of the Orkney Commons where known				
Parish	Division date	Acres divided	Comments	Reference
Birsay	1856	12659		Spence 1981, 92
Cross, Burness & Lady	1850-74?		Completed by 1874 probably much earlier	O'Dell 1939, 235; Traill 1845, 144
Deerness	by 1841?			Smellie 1845, 190
Eday	pre 1841			Rintoul 1845, 160
Evie	Post 1841		Evie undivided 1841	Pitcairn 1845, 197
Rendall	c.1841		Rendall about to be divided 1841	
Firth	post 1841		Arranged by Scarth of Binscarth soon after 1841	Malcolm 1845, 68; Pringle 1874, 49
Harray	1855	5294		Thomson 1981a, 84
Holm	Post 1842	4767	1828 Graemeshall estate planked, undivided 1842	Smith 1845, 221
Hoy & Graemsay	Post 1841		1841: 'No recent improvements'	Hamilton 1845, 41
Kirkwall & St. Ola	c.1850-60		Undivided in 1841; completed by c. 1860	Logie 1845, 7; O'Dell 1939, 213
North Ronaldsay	1832		Island squared and commons divided same time	White 1845, 108-9
Orphir	1802-23	8312	12500 acres shared with Stenness	Anderson 1845, 14 & 25; Thomson 1981a, 82
Papa Westray	1844-48		Squared: 500 acres of North Hill remained common	Armit 1845, 118; Rendall 2002, 5 & 25
Rousay & Egilsay	1826	7500	Common grazings persisted till 1880	Ritchie 1845, 84; Thomson 1981a, 84
Sandwick	Post 1841	5202	Run-rig divided (i.e. planked) 1841 but not Commons	Clouston 1845, 59-60
Shapinsay	1831 – 44			Thomson 1981a, 83
South Ronaldsay Burray	?1844		c.570 acres hill reclaimed 1844 - 1848	O'Dell 1939, 241
St. Andrews	Post 1841		Most land still run-rig and commons undivided 1841	Smellie 1845, 184-5
Stenness	1802 - 15	6250	'Trifling' improvement by 1841	Malcolm 1845, 68; Thomson 1981a, 82
Stromness	by 1865?	5387	Undivided in 1841	Learmonth 1845, 30; O'Dell 1939, 219-20
Stronsay	1841-72		Undivided in 1841, mostly done by 1872	O'Dell 1939, 230; Rintoul 1845, 160
Walls & Flotta	Post 1841		Undivided 1841	Weir 1845, 76
Westray	1860-70	15145	Figure is for undivided commons in 1841	Armit 1845,128; O'Dell 1939, 236

Table A4.2 Original Object Name Books of the Ordnance Survey: Orkney

Each entry is hyperlinked if viewing electronically to the source:

<http://www.scotlandspplaces.gov.uk/digital-volumes/ordnance-survey-name-books>

Original Object Name Books of the Ordnance Survey covering Orkney		
ONB Reference	ONB Volume	Parish Covered
OS1/23/1	Orkney, Volume 01	Birsay
OS1/23/2	Orkney, Volume 02	Cross and Burness, Lady
OS1/23/3	Orkney, Volume 03	Deerness
OS1/23/4	Orkney, Volume 04	Eday
OS1/23/5	Orkney, Volume 05	Evie
OS1/23/6	Orkney, Volume 06	Firth
OS1/23/7	Orkney, Volume 07	Flotta
OS1/23/8	Orkney, Volume 08	Harray
OS1/23/9	Orkney, Volume 09	Holm
OS1/23/10	Orkney, Volume 10	Hoy and Graemsay
OS1/23/11	Orkney, Volume 11	Hoy, Graemsay and Walls
OS1/23/12	Orkney, Volume 12	Kirkwall and St Ola
OS1/23/13	Orkney, Volume 13	North Ronaldsay
OS1/23/14	Orkney, Volume 14	Orphir
OS1/23/15	Orkney, Volume 15	Rendall
OS1/23/16	Orkney, Volume 16	Rousay
OS1/23/17	Orkney, Volume 17	Sandwick
OS1/23/18	Orkney, Volume 18	Shapinsay
OS1/23/19	Orkney, Volume 19	South Ronaldsay
OS1/23/20	Orkney, Volume 20	South Ronaldsay
OS1/23/21	Orkney, Volume 21	Stenness
OS1/23/22	Orkney, Volume 22	Stromness
OS1/23/23	Orkney, Volume 23	St Andrews
OS1/23/24	Orkney, Volume 24	Stronsay
OS1/23/25	Orkney, Volume 25	Walls
OS1/23/26	Orkney, Volume 26	Westray

Appendix 5

Solid and Superficial Geology and Climate records

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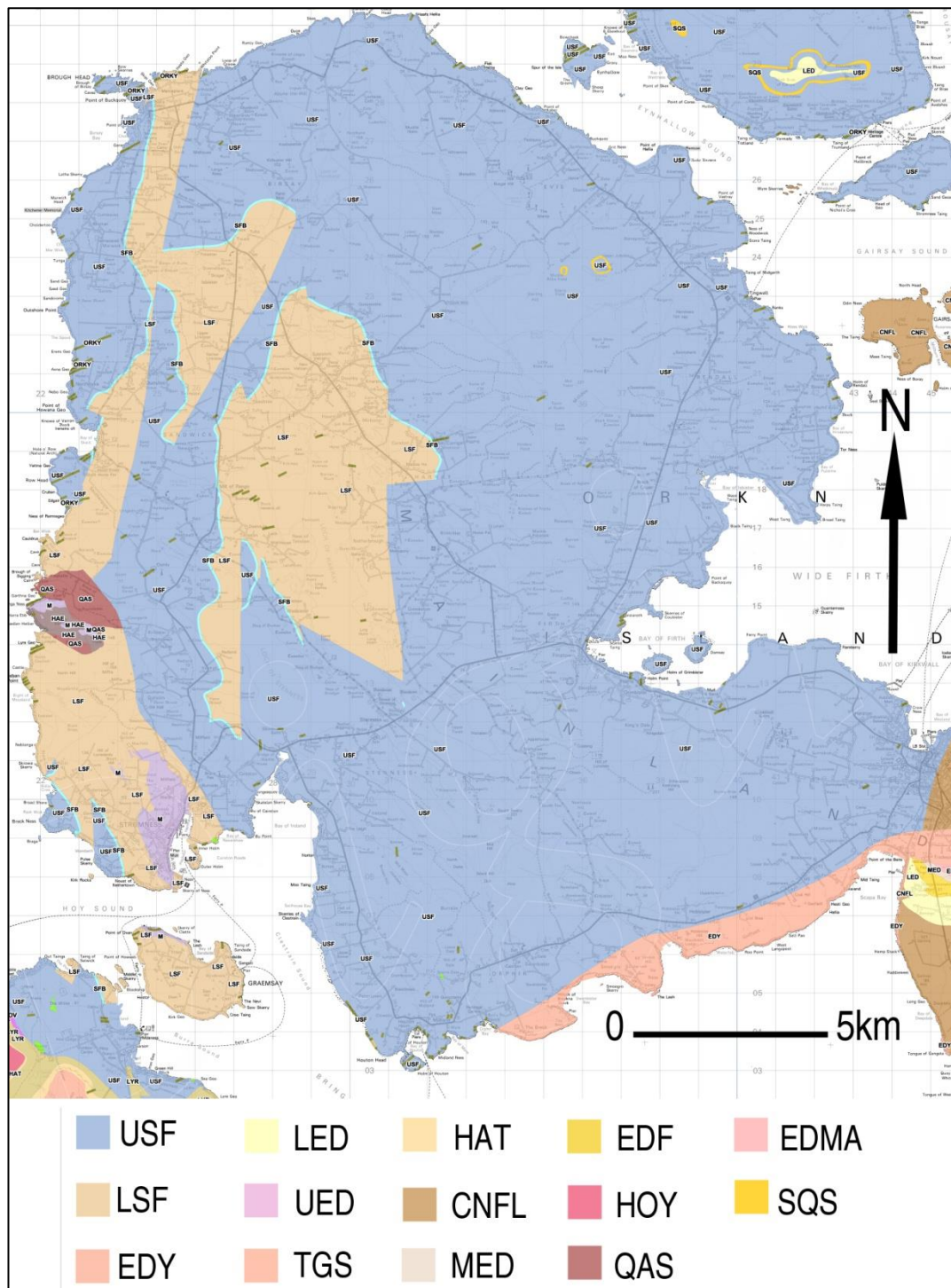
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Solid and Superficial Deposits Key to Figures A5.1 – A5.12

Key to the major Solid and Superficial deposits shown in Figures 2.1 - 2.12	
Code	Solid Deposits Description
CNFL	Caithness Flagstone Group
EDF	Eday Flagstone Formation
EDMA	Eday Marl Formation
EDY	Eday Group
HAT	Haist Pebbly Sandstone Member
HOY	Hoy Sandstone Formation
LED	Lower Eday Sandstone Member
LSF	Lower Stromness Flagstone Formation
MED	Middle Eday Sandstone Formation
QAS	Qui Ayre Sandstone Formation
SQS	Sacquoy Sandstone Member
TGS	Trowie Glen Sandstone Member
UED	Upper Eday Sandstone Formation
USF	Upper Stromness Flagstone Formation
	Superficial Deposits Description (over 1m thick only shown)
ALV	Alluvium
BSA	Blown Sand
MBD	Marine Beach Deposits
PEAT	Peat
STOB	Storm Beach Deposits
TILLD	Till, Devensian

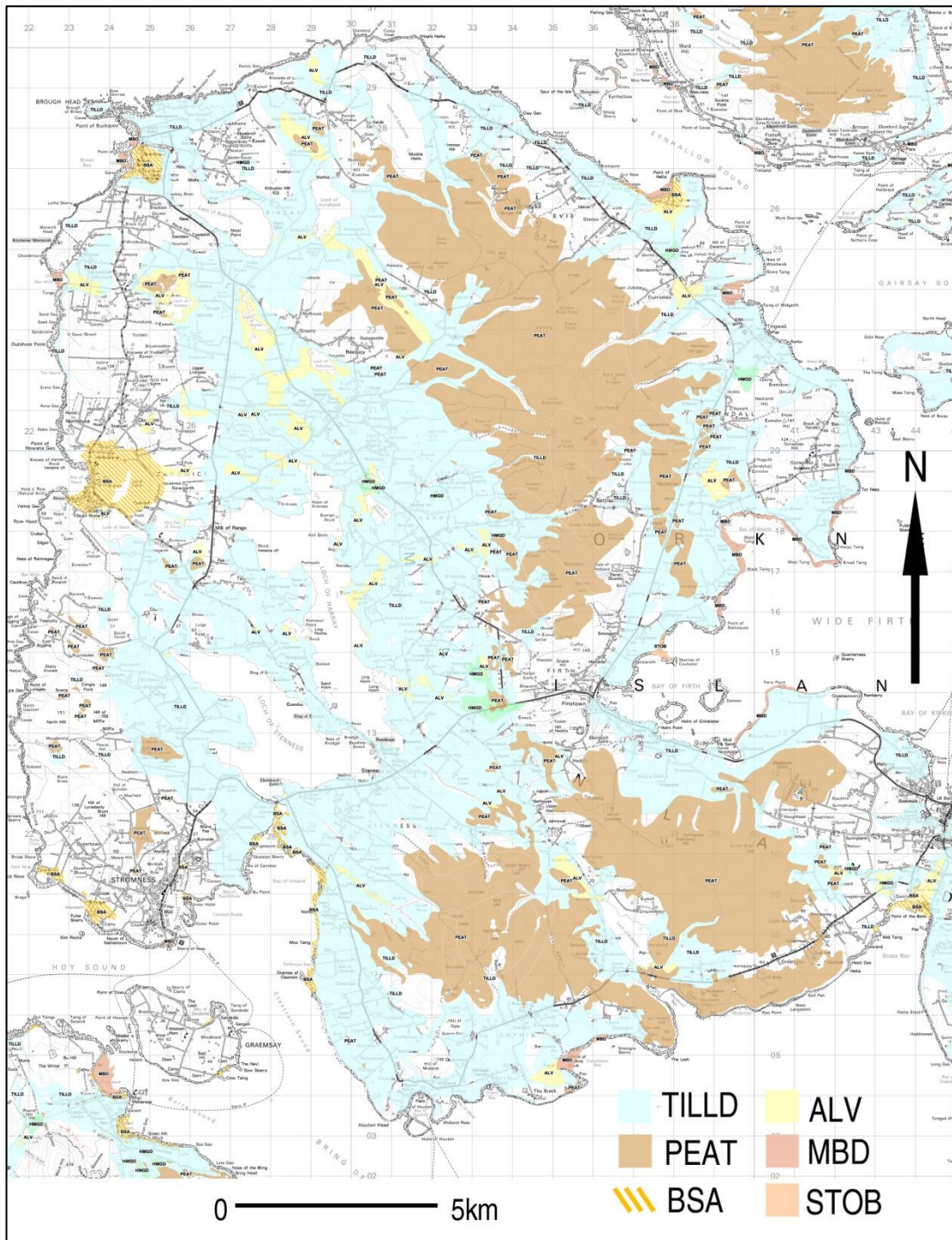
The drift deposits shown in Figures A5.2, A5.4, A5.6, A5.8, A5.10 & A5.12 are from the British Geological Survey 1:50 000 scale digital geological map of Britain, which only shows drift deposits over one metre deep since: ‘1m represents the minimum thickness that can be portrayed on a map due to the limitations of the map scale and the width of a sharp pencil (a 0.1mm wide pencil line represents an on-ground width of 1m on a typical survey fieldslip)’ (Lawley & Garcia-Bajo 2010, 5). The bare areas on these maps are not in reality areas of barren rock, merely of shallow drift deposits. The detailed soil surveys (Macaulay Institute 1981a, b & c) are only available in AO format paper map for copyright reasons.



Geological Map Data © NERC 2013

Figure A5.1 Major components of the West Mainland's solid geology.

(Source: British Geological Survey 1:50 000 scale digital geological map of Britain: DiGMapGB-50).



Geological Map Data © NERC 2013

Figure A5.2 Major components of the West Mainland’s superficial (drift) geology.

Superficial deposits shown only where depth of deposit exceeds 1m.

(Source: British Geological Survey 1:50 000 scale digital geological map of Britain: DiGMapGB-50).

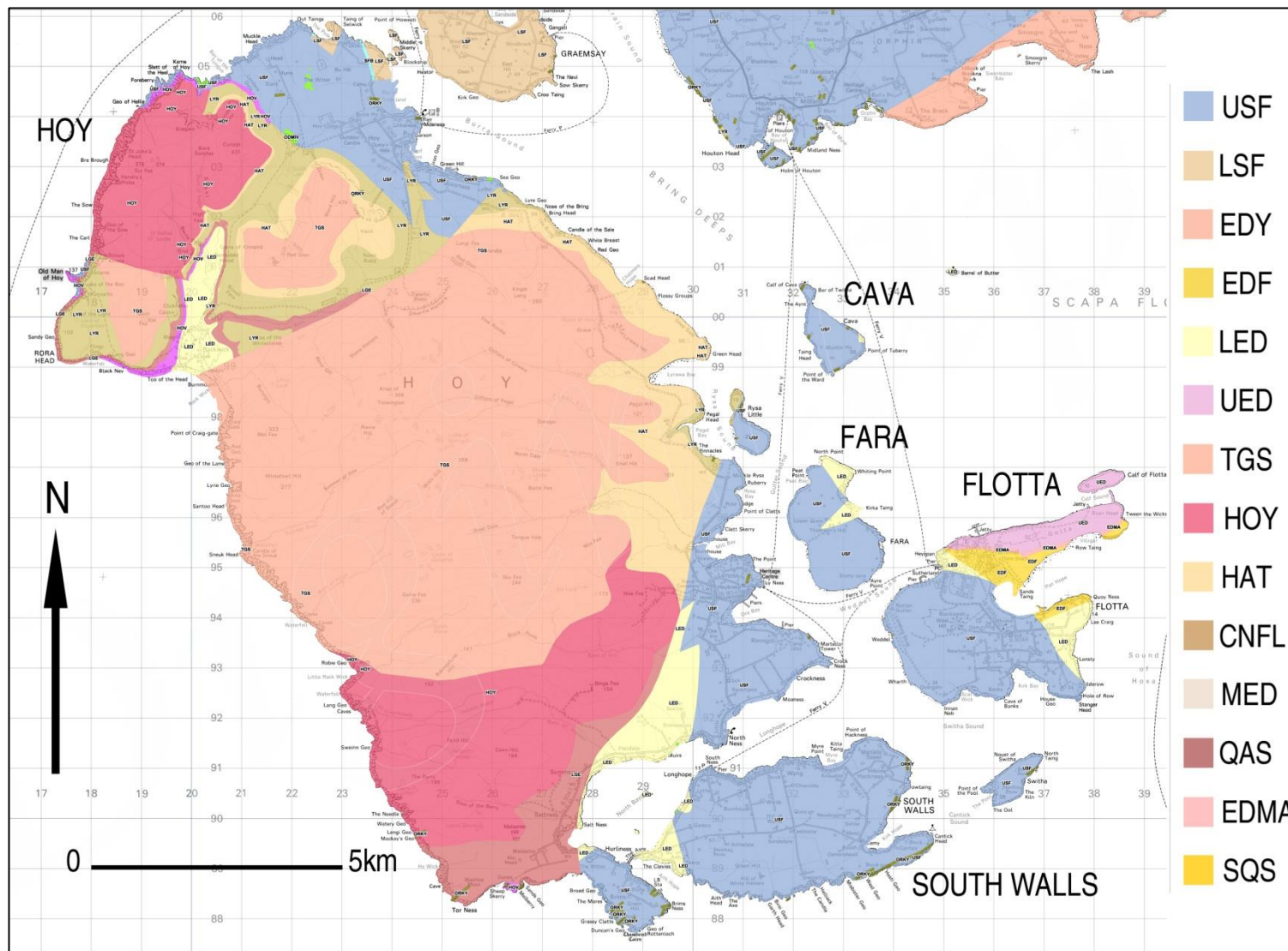


Figure A5.3 Major components of the solid geology of Hoy, South Walls and small islands.

(Source: British Geological Survey 1:50 000 scale digital geological map of Britain: DiGMapGB-50).

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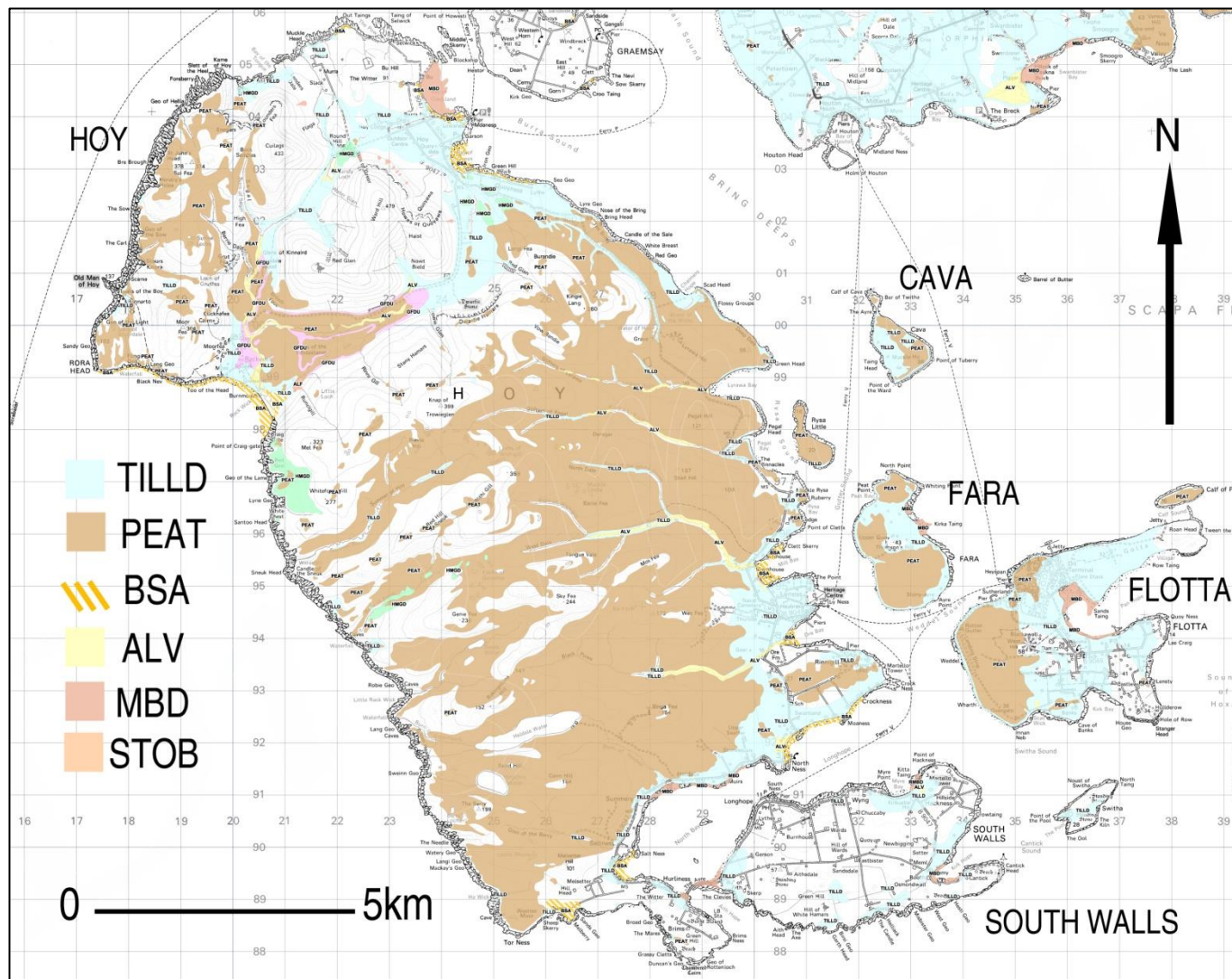
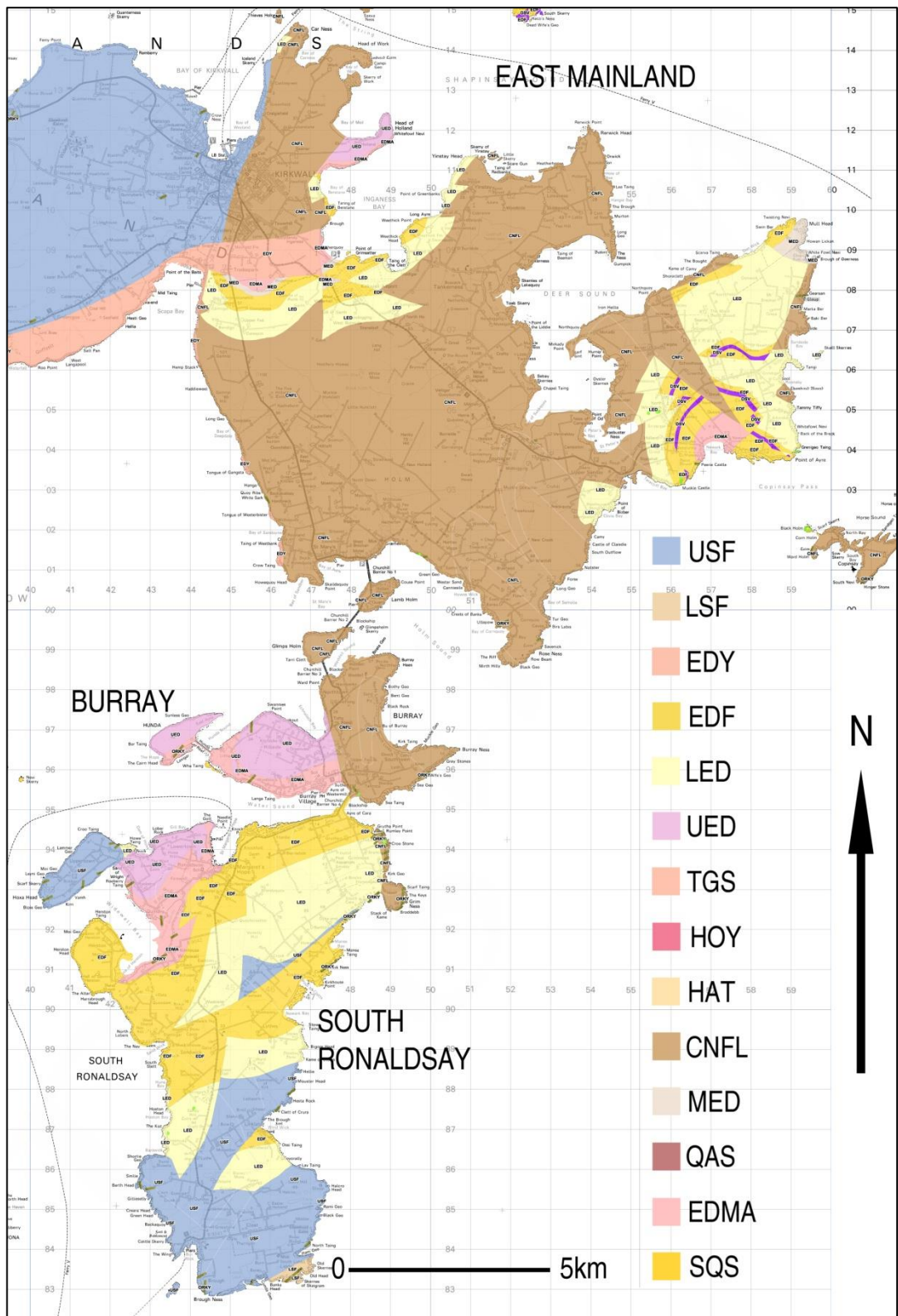


Figure A5.4 Major components of the superficial (drift) geology of Hoy, South Walls and small islands.

Superficial deposits shown only where depth of deposit exceeds 1m.

(Source: British Geological Survey 1:50 000 scale digital geological map of Britain: DiGMapGB-50).

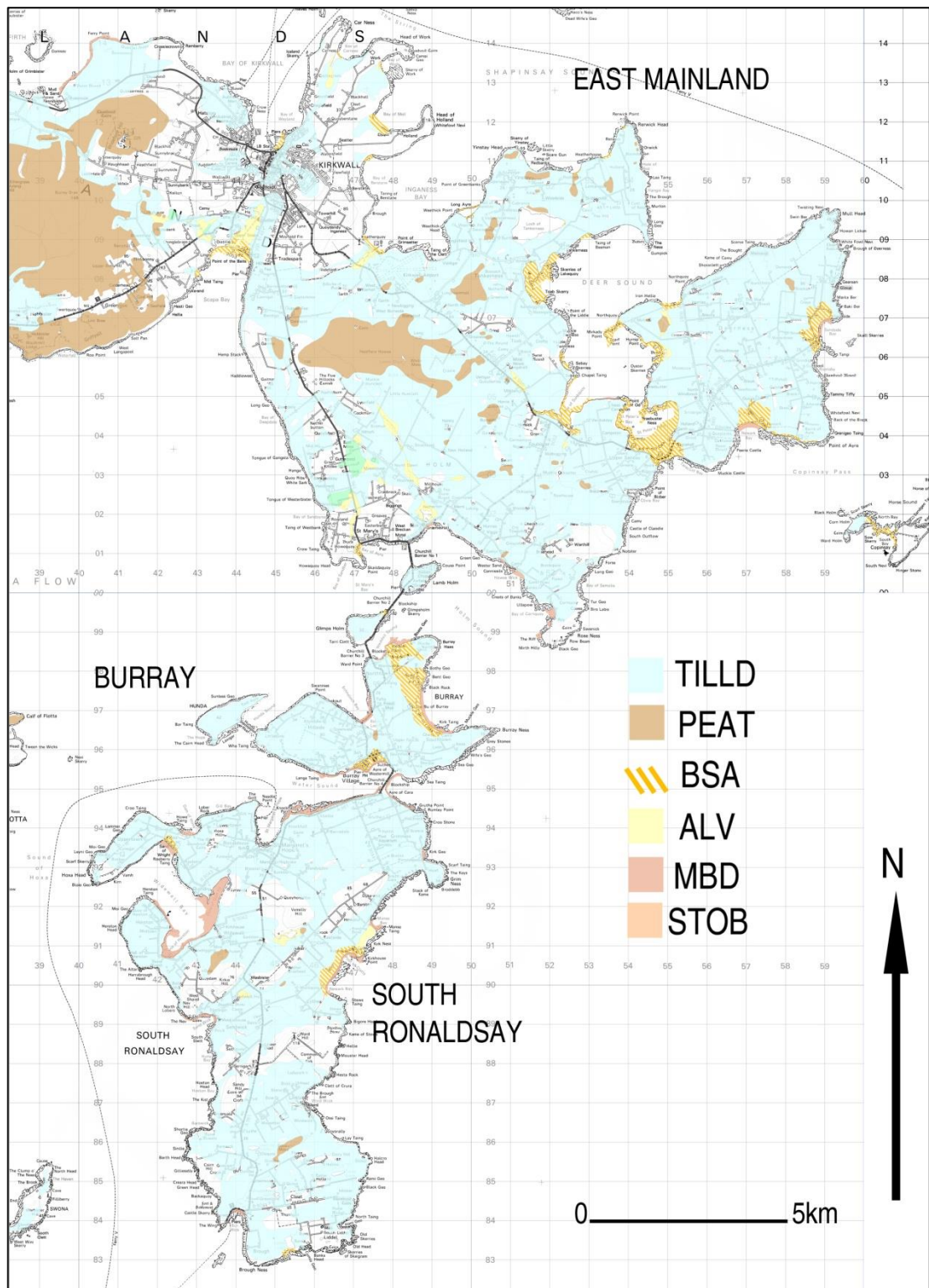
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Figure A5.5 Major components of the solid geology of the East Mainland, Burray and South Ronaldsay.

(Source: British Geological Survey 1:50 000 scale digital geological map of Britain: DiGMapGB-50).

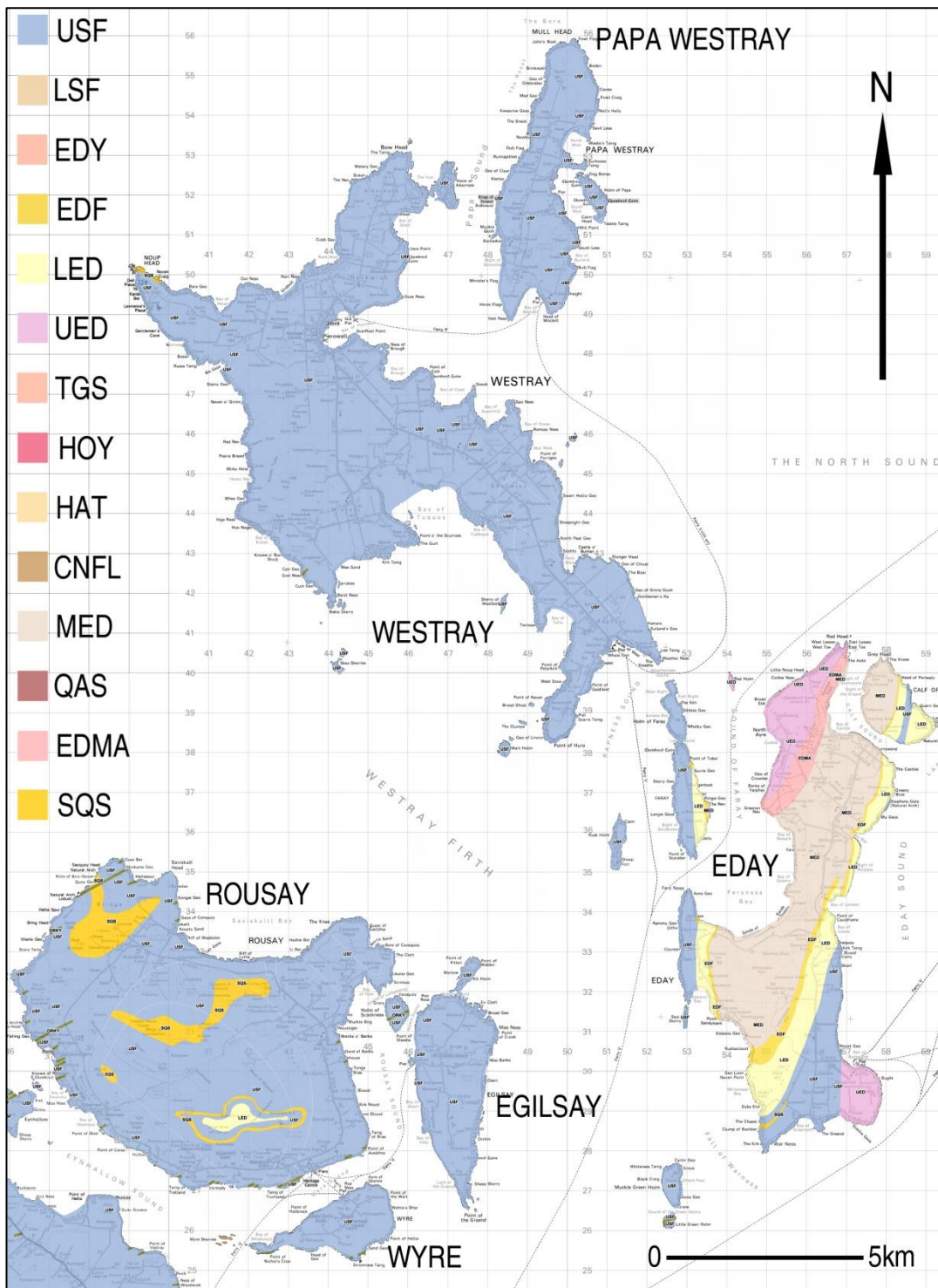


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Figure A5.6 Major components of the superficial (drift) geology of the East Mainland, Burray and South Ronaldsay.

Superficial deposits shown only where depth of deposit exceeds 1m.

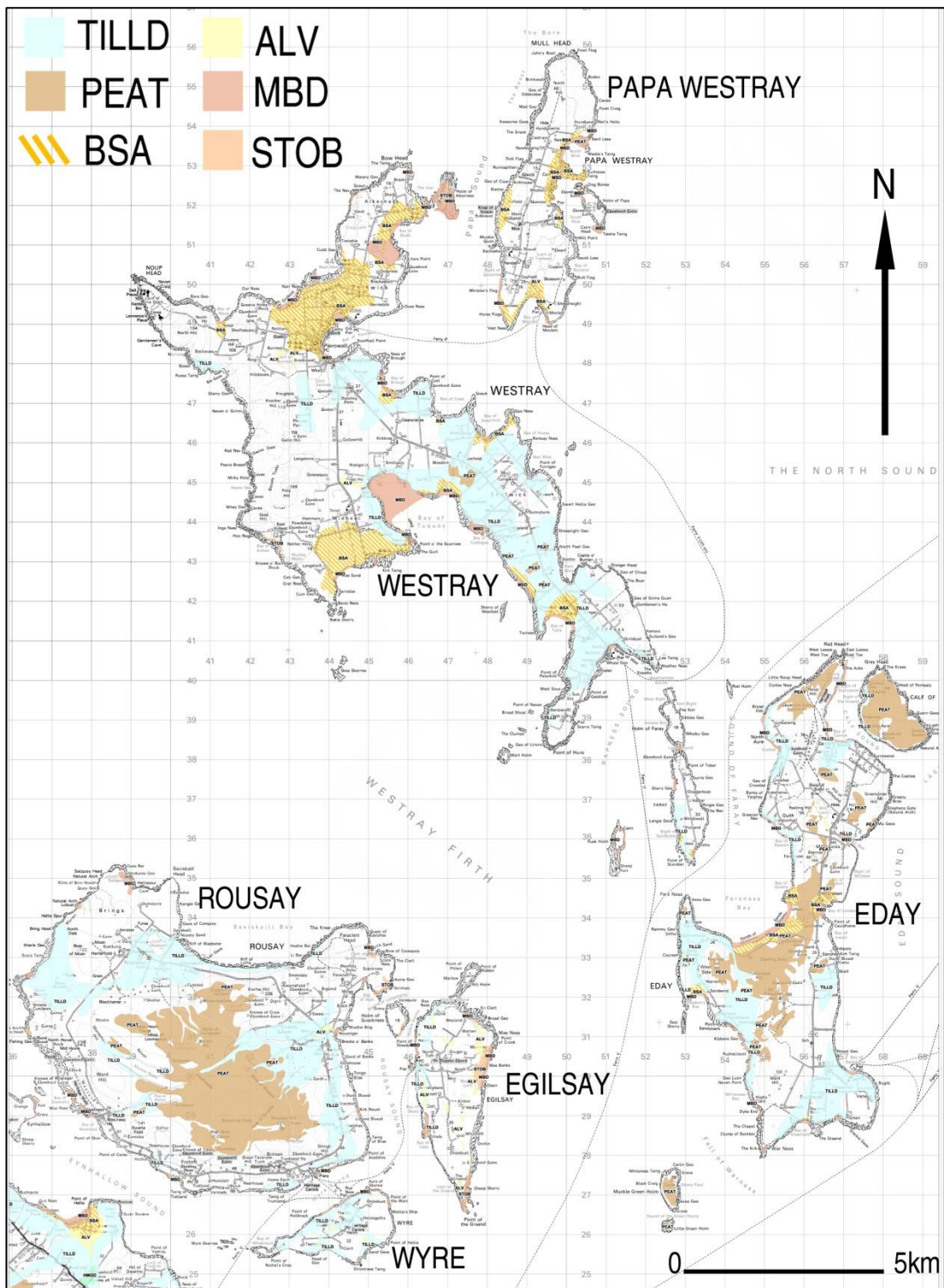
(Source: British Geological Survey 1:50 000 scale digital geological map of Britain: DiGMapGB-50).



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Figure A5.7 Major components of the solid geology of Rousay, Westray, Papa Westray and Eday.

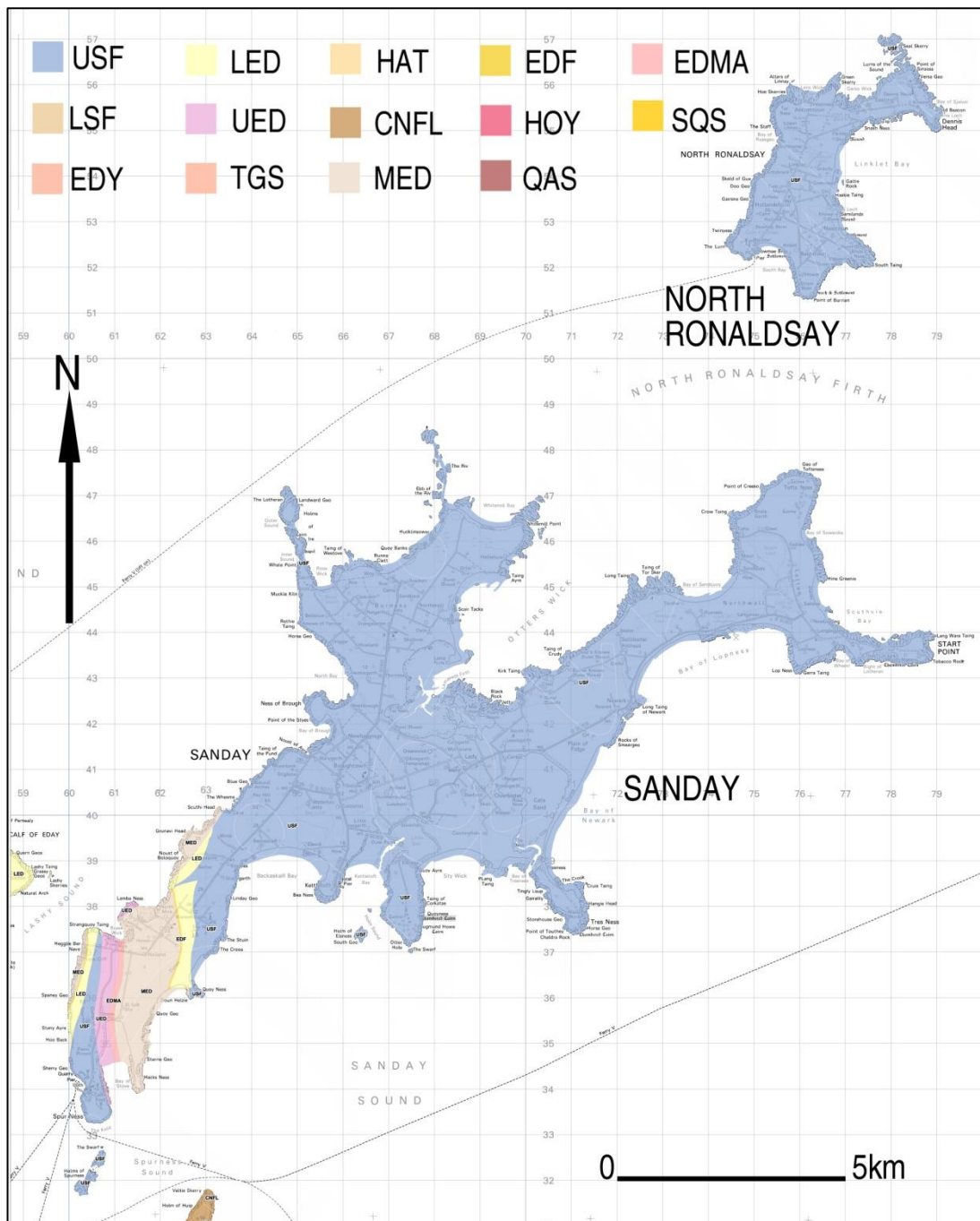
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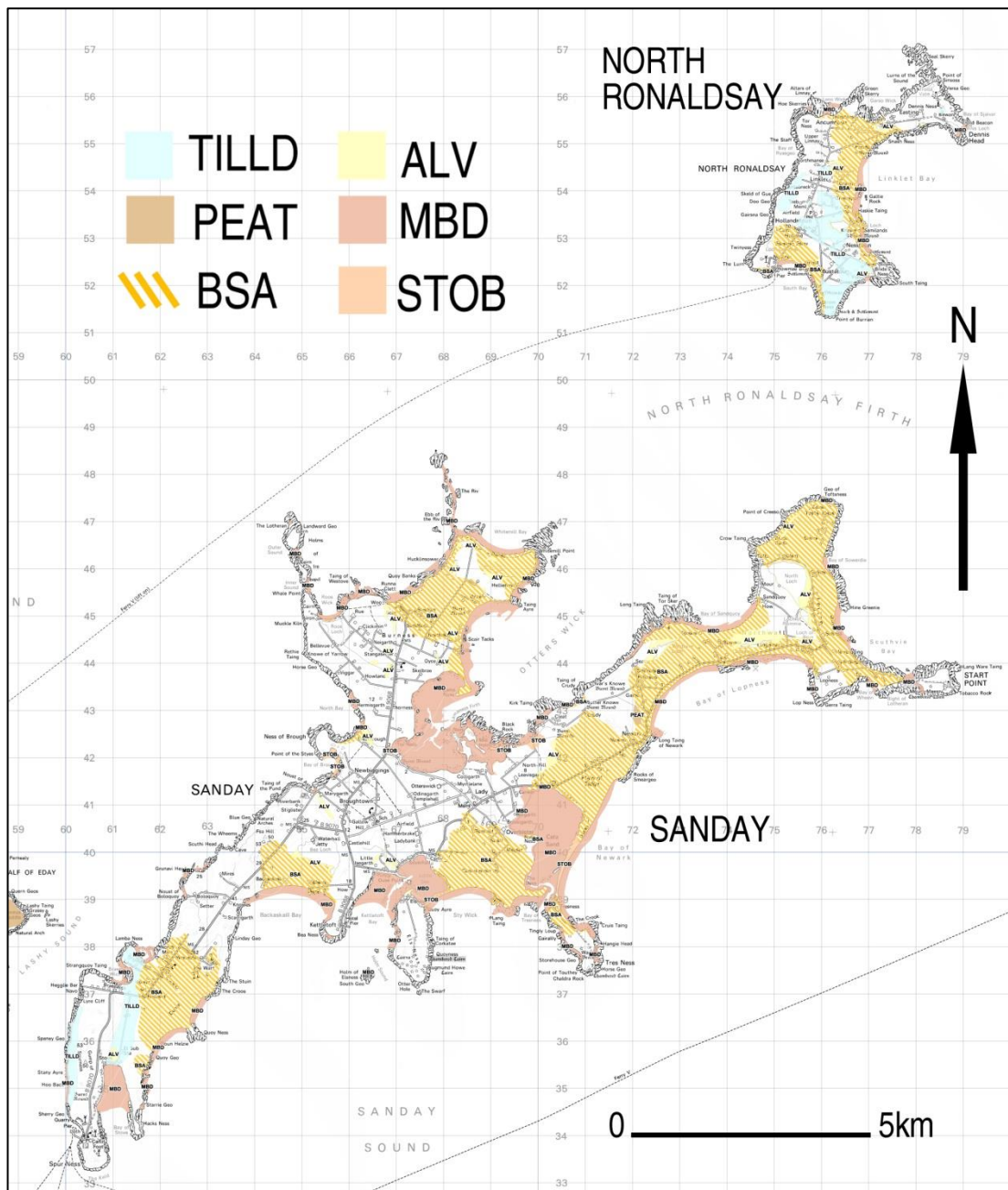
Figure A5.8 Major components of the superficial (drift) geology of Rousay, Westray, Papa Westray and Eday. Superficial deposits shown only where depth of deposit exceeds 1m.

(Source: British Geological Survey 1:50 000 scale digital geological map of Britain: DiGMapGB-50).



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Figure A5.9 Major components of the solid geology of North Ronaldsay and Sanday.
 (Source: British Geological Survey 1:50 000 scale digital geological map of Britain: DiGMapGB-50).



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Figure A5.10 Major components of the superficial (drift) geology of North Ronaldsay and Sanday. Superficial deposits shown only where depth of deposit exceeds 1m.

(Source: British Geological Survey 1:50 000 scale digital geological map of Britain: DiGMapGB-50).

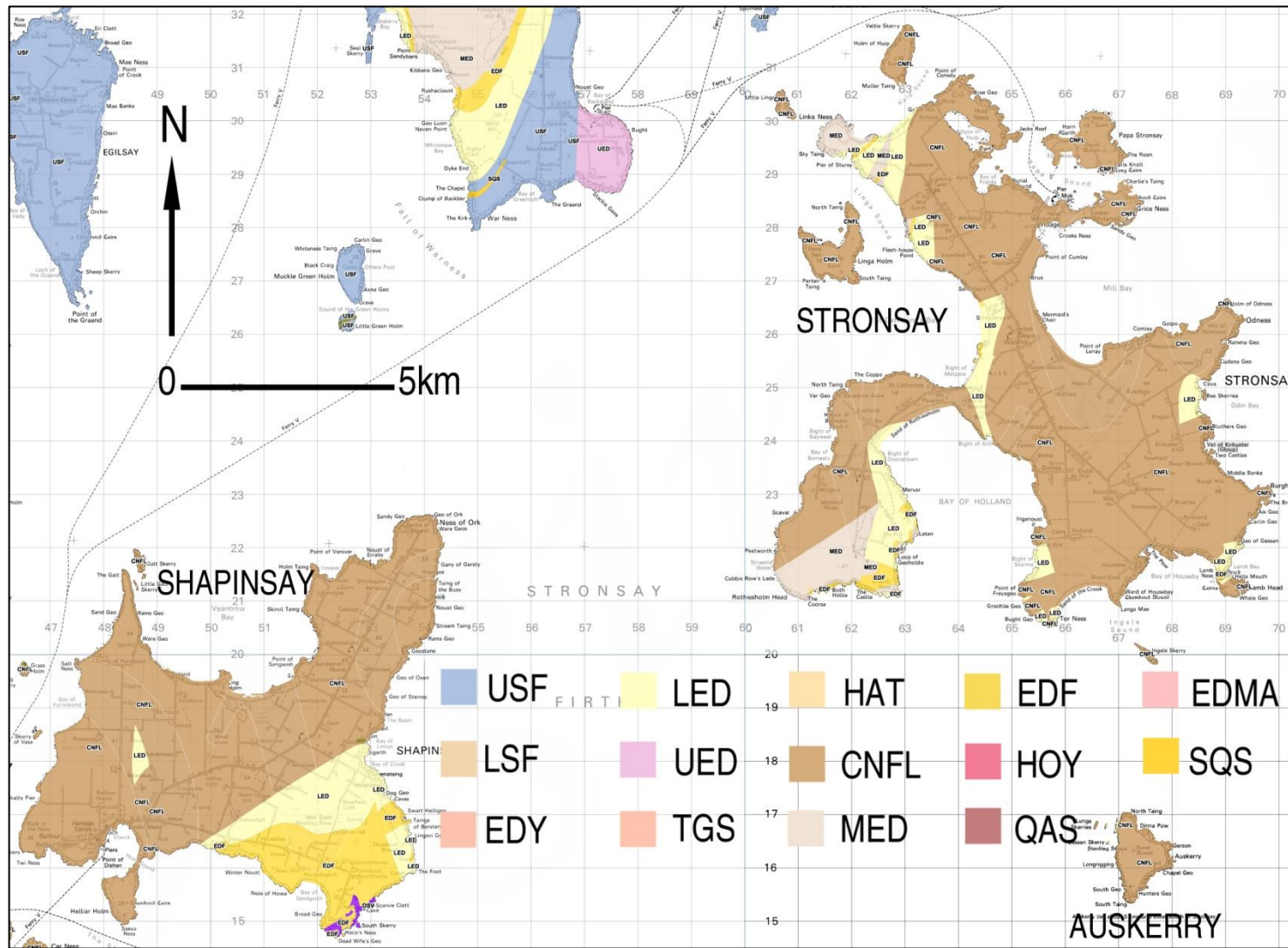


Figure A5.11
Major components of the solid geology of Shapinsay, Stronsay and Gairsay.
(Source: British Geological Survey 1:50 000 scale digital geological map of Britain: DiGMapGB-50).

Geological Map
Data © NERC 2013

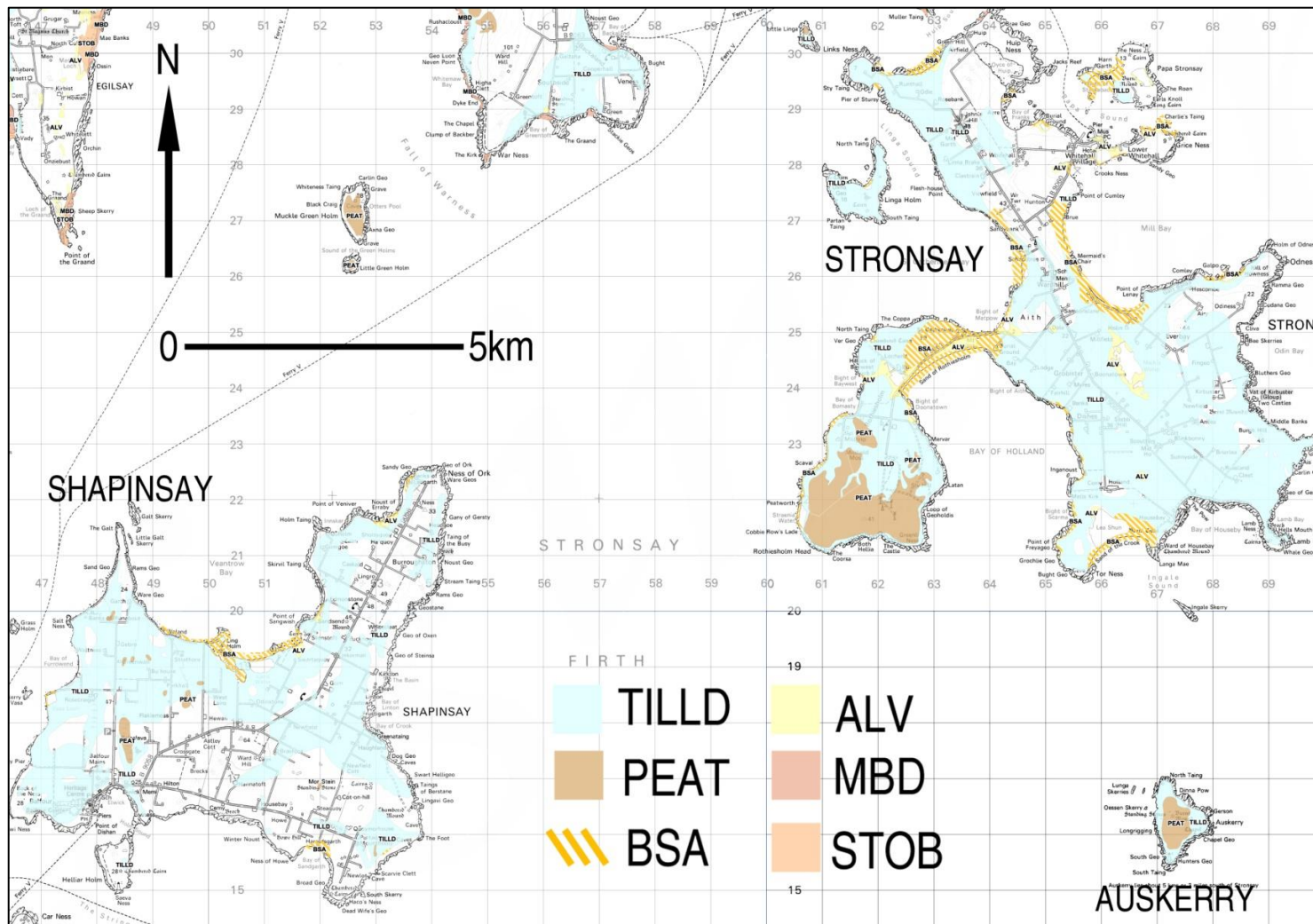


Figure A5.12
Major components of the superficial (drift) geology of Shapinsay, Stronsay and Gairsay. Superficial deposits shown only where depth of deposit exceeds 1m.

(Source: British Geological Survey 1:50 000 scale digital geological map of Britain: DiGMapGB-50).

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Figure A5.13 Monthly rainfall totals for the Hundland, Birsay weather station.

Figure A5.13 Monthly rainfall totals in mm for Hundland, Birsay weather station										
Month/Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	133.3	49	181.1	208.8	67.2	65.1	69.6	149	110.9	164.8
February	76	56.8	111.1	71.2	114.3	52.4	67	87.2	51.8	102
March	96.9	70.1	80	112.8	107.5	75.5	61.7	45	41.9	61.4
April	62.7	101.8	57.1	83.4	48.2	56.5	46.5	87.7	78	66
May	49.3	57.9	83.7	7.4	71.3	56.9	103.6	64.3	52.7	56.1
June	56.2	35	16	80.9	33.7	19.5	54.6	53	47.5	62.2
July	50.4	27.4	137.3	38.3	50.6	90.9	21.9	33.2	47.2	60.7
August	96.8	48.7	91.5	53.1	86	45.9	108.5	86.6	62.7	138.5
September	123.6	47.5	130	54.5	104.6	106.3	89.5	130.5	111.6	65.3
October	108.1	244.5	85.3	154.2	174.8	103.8	93.7	108	150.8	174.5
November	97.6	135.3	118.9	103.5	185	114	82.6	106.2	196.7	124.9
December	83.4	121	102	133.4	67.4	71	169.8	171.7	149.8	187.8
Yearly total	1034	995	1194	1101	1111	856	969	1122	1101	1264

Figure A5.14 Monthly rainfall totals for the Kirkwall weather station.

Figure A5.14 Monthly rainfall totals in mm for Kirkwall weather station										
Month	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	137.6	57.2	160.8	187	49.2	63.6	85.4	177.8	96.4	135.8
February	79.4	49.2	100.8	83.8	86	68.4	79.8	84.4	62.6	81.2
March	104	66.6	74.4	102.7	91.8	73.2	72.4	46.4	43.8	69.6
April	62.2	90	52.3	78	49.7	61	35.6	81.6	73	48
May	59.2	43.2	73.1	9	51.9	57.6	100.4	41.8	51	44.4
June	70.2	37.6	19.2	82.4	40.4	19.2	57.8	47.4	38.6	44.8
July	47.2	17.8	119	47.6	60.4	68	17.8	35.2	44	46
August	100.4	53.6	91.8	54.2	95.4	31.6	125.8	98.4	74.6	127.8
September	104.2	65.8	115.6	63.2	104.8	115.2	100.6	131.2	116.6	65.6
October	94.6	278.6	93.2	152.4	173.4	90.4	98.6	99.6	142	148
November	97.2	149.2	136.3	103.5 ¹	170.6	90.4	75.6	92.6	179.4	99.2
December	93.4	104.8	91.2	112.6	72.2	70.3	167.4	148	123.6	210.2
Yearly total	1050	1014	1128	1076	1046	809	1017	1084	1047	1121

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¹ November 2008 missing from the Kirkwall data set, completed by the addition of the Hundland figure for same month.

Table A5.15 Environmental Evidence for climatic deterioration c.2250 cal BC
Also known as the 4.2ka event

Table A5.15 Environmental Evidence for climatic deterioration c.2250 cal BC; also known as the 4.2ka event		
Location	Event	Reference
Red sea	Pronounced dry event in brine sediments	Arz et al 2006
2 Irish and 1 Northern England bogs	Wet shift at 2 of the 3 bogs studied	Barber et al 2003
Atlantic Ocean	Ice raft detritus long way south	Bond et al 1997; Bond et al 2001
Mid continental North America	Severe centennial scale drought	Booth et al 2005
Southern Spain	Drying event	Carrion 2002
Europe	ACCROTELM project - wet & cold	Chambers et al 2010
Andes, S America	Ice core - mega drought	Davis & Thompson 2006
Central western Italy	Drought	Drysdale et al 2006
Northern China	Drought and collapse of Neolithic cultures	Fengghui & Zhaodong 2012
African tropics	Major drying event	Gasse 2000
West Asia, East & West Africa	Pronounced dry periods	Gasse & Van Campo 1994
British Columbia	Glacier advance (one of several)	Harvey et al 2012
Walton Moss, Cumbria	Wet shift	Hughes et al 2000
SE France - SE Spain coastal regions	Increasing dryness & shift to Mediterranean climate	Jalut et al 2000
Northern Fennoscandinavia	Distinct cooling episodes	Korhola et al 2000
Arctic Russia	Cooling from 4200 BP onwards	Laing & Smol 2003
Temple Hill Moss SE Scotland	Wet shift	Langdon et al 2003
Western Mediterranean	Sudden deforestation - aridity	Magri & Parra 2002
Mid European lakes	Wet shifts	Magny 2004
Italy, Albania & W Med	Lake levels fluctuate: 2 wetter periods bracket dry period	Magny, Peyron et al 2009
N England & NE Jutland bogs	Wiggle matched C14 dates: major wet shift	Mauquoy et al 2008

Table A5.15 Environmental Evidence for climatic deterioration c.2250 cal BC; also known as the 4.2ka event		
Location	Event	Reference
Speleothem SW Eire, Crag Cave	Cooling event	McDermott et al 2001
Western Canada	Glacial advance	Menounos et al 2008
Co Cork, SW Eire	Wet shift - pine decline	Mighall et al 2004
Western Mediterranean	Abrupt shift to arid/steppe conditions & erosion	Pantaléon et al 2003
Lough Neagh, N. Ireland	Flooding and increasing wetness	Plunkett et al 2004
Nile Delta	Drought, decrease vegetation, increased erosion	Stanley et al 2003
Indus valley & South Asia	Drought - monsoon variation	Staubwasser et al 2003
Kilimanjaro	Drought - decreasing ice cover	Thompson et al 2002
Burnfoothill Moss SE Scotland	Wet shift	Tipping 1995
West Asia & Egypt	Meta-analysis - major drought in region	Weiss 1997
N. Mesopotamia Akkadian	Drought	Weiss et al 1993
Central Plian, China	Drought & collapse of Neolithic cultures	Wenxiang & Tungsheng 2004
Lake Holzmaar, Germany	Increased rainfall/cooler temperature peaks	Zolitschka & Negendank 1997

Table A5.16 Environmental Evidence for climatic deterioration c.850 cal BC
Also known as the 2.8ka event

Table A5.16 Environmental Evidence for climatic deterioration c.850 cal BC; also known as the 2.8ka event		
Location	Event	Reference
Germany & Denmark bogs	Wet shift	Barber et al 2004
Netherlands bogs	Some cores showed marked wet shift	Blaauw et al 2004
Atlantic Ocean	Ice raft detritus	Bond et al 1997
S America peat bog	Dry spell	Chambers et al 2007
Europe	ACCROTELM project: wet and cold shift	Chambers et al 2010
Worldwide	Meta-analysis of BSW ² climatic evidence	Charman et al 2009
Seven sites in Scotland	Wet shift	Langdon & Barber 2005
France	Wetter - high lake levels	Magny, Peyron et al 2009
European bogs	Wiggle matched C14 dates: major wet shift	Mauquoy et al 2004
N England & NE Jutland bogs	Wiggle matched C14 dates: major wet shift	Mauquoy et al 2008
Giant Mountains, Czech Republic	Wetter & cooler	Speranza et al 2002
Cameroon	Abrupt change to drought conditions	Reynaud-Farrera et al 1997
N Ireland bog	Wet shift	Swindles et al 2007a
N Ireland bogs x 3	Marked wet shift	Swindles et al 2007b
Netherlands bogs	Marked wet shift	Van Geel et al 1996
Netherlands bogs	Wiggle matched C14 dates: major wet shift	Van Geel et al 1998
S Central Andes, Chile	Massive glacier advance	Van Geel et al 2000

² Bog surface wetness

Appendix 6

Hillforts and promontory forts.

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Notes

The following tables are intended to be illustrative rather than exhaustive. Only excavated sites are listed as these lists are intended for comparative dating purposes.

Key to tables below	
Abbreviation	Key
-	No dating evidence recovered from excavation
NFD	Site not published, no further details available
NEO	Neolithic
(E/L) BA	(Early/Late) Bronze Age
(E/L) IA	(Early/Late) Iron Age
RMN	Roman
?	possibly

Table A 6.1 Examples of UK Mainland hillforts with Bronze Age components

Table A6.1 Examples of UK Mainland hillforts with Bronze Age components	
Site	Reference
Breiddin, Wales	Musson et al 1991
Burnswark Hill	Jobey 1978
Crickley Hill, Gloucestershire	Dixon 1994; Dixon et al 2011
Eildon Hill North, Borders	Owen 1992
Eston Nab, Cleveland	Vyner 1988
Ham Hill, Somerset	Brittain et al 2013; Slater et al 2012
Hambledon Hill, Dorset	Healy et al 2011; Mercer & Healy 2008
Norton Fitzwarren, Somerset	Ellis 1989
Cadbury Castle, Somerset	Barrett, Freeman et al 2000
Rams Hill, Oxfordshire	Needham & Ambers 1994
Nottingham Hill, Gloucestershire	Hall & Gingell 1974
Boltby Scar, Yorkshire	Powlesland 2011
Traprain Law, East Lothian	Armit et al 2005; Burley 1956; Cree & Curle 1922; Curle 1915; Curle & Cree 1921
East Linton, East Lothian	Haselgrove 2009

Table A6.2 Irish multivallate hillforts dating to late 2nd/early 1st millennium BC

Table A6.2 Irish multivallate hillforts dating to late 2nd/early 1st millennium BC	
Site	Reference
Cashell, Co. Cork	O'Brien 2008
Dún Aonghasa, Co. Galway	Cottar 2012
Haughey's Fort, Co. Armagh	Boreland 1996; Mallory et al 1996; Neill 1996; Murphy & McCormick 1996
Mooghaun, Co. Clare	Grogan 1999
Rathgall, Co. Wicklow	Becker 2010; Raftery 1970, 1971, 1973 & 2004

Table A6.3 Excavated English Promontory Forts

(Data for unpublished sites obtained from Pastscape, January 2012)

Table A6.3 English promontory forts		
Site	Period	Reference
Little Down North Stoke	-	Not published
Burlledge Hillfort West Harptree	IA?	ApSimon 1957
Hengistbury Head Bournemouth	BA/IA	Cunliffe 1987
Double Dykes Bournemouth	BA?	Cunliffe 1987
Castlesteads Bury	IA	Fletcher 1992 cited in Smith et al 2010
Fleam Dyke Fen Ditton	-	Fox & Palmer 1923
Sandy Lodge Promontory Fort Sandy	IA	Dyer 1971
Sharpenhoe Clappers Streatley	IA	Dix 1983
Maiden Castle Bickerton	IA	Jope 1986; Taylor 1981; Varley 1935 & 1936
Kelsborrow Castle Delamere	-	Coombs 1988
Mon. No. 71527 Frodsham	-	Forde-Johnston 1962; Garner 2009
Oakmere Camp Oakmere	-	Forde-Johnston 1962
Clifton Down City Of Bristol	-	Scarth 1873
Trevelgue Head Newquay (Cliff Castle)	BA/IA	Nowakowski & Quennell 2011
Penhale Point Perranzabuloe	IA	Smith 1988
Maen Castle Sennen	LBA/EIA	Crofts 1955; Patchett 1955
The Rumps St. Minver Highlands	IA	Brooks 1974
Trereen Dinas Zennor (Cliff Castle)	IA	Gordon 1940
Maiden Castle Durham	-	Jarrett 1965
Eaton Camp Eaton Bishop	-	Bond 1985
Mon. No. 13954 Waterhead	IA	Simpson & Richmond 1934
Markland Grips Elmton	IA	Lane 1969
Mon. No. 441090 Thurlestone	IA	Griffith & Reed 1998
Embury Beacon Hartland	IA	Jeffries 1974
Mon. No. 444130 Okehampton Hamlets	-	Brailsford 1938
Lydney Camp Lydney	IA/RMN	Wheeler & Wheeler 1932
Tallard's Marsh Earthworks Tidenham	-	Fox & Phillips 1931
Leckhampton Hill Shurdington	IA	Burrow et al 1926
Hamble Common Hamble-Le-Rice	-	Not published
Gorley Hill Hyde	-	Sumner 1917, 47 - 59; Wright 1953, 125
Regulbium Herne Bay	IA/RMN	Philp 2005
Portfield Camp Whalley	LBA	Blundell & Longworth 1967
Stokeleigh Camp Long Ashton	IA	Everton 1975; Haldane 1966 & 75
Tynemouth Priory And Castle	IA	Jobey 1967
Mon. No. 57324 Kilburn High And Low	NFD	Not published
Mon. No. 79906 Scarborough	BA/IA	Buglass & Brigham 2008, site SC30
Mon. No. 19145 Chollerton	IA/RMN	Hall 1885, Hogg 1942

Table A6.3 English promontory forts		
Site	Period	Reference
Mon. No. 73547 Salford	IA/RMN	Nevell 1998
Philpots Camp West Hoathly	-	Hannah 1932
Winklebury Camp Berwick St. John	IA	Pitt Rivers 1888, 233 - 53
Olivers Castle Bromham	BA/IA	Cunnington 1907
Wick Ball Camp Dinton	IA?	Not published
Mon. No. 115937 Kempsey	IA?	O'Neill 1956
Kemerton Camp Kemerton	IA	Hencken 1938
Mon. No. 57324 Kilburn High And Low	NFD	Not published

Table A6.4 Excavated Welsh promontory forts

(Data for unpublished sites obtained from Coflein, January 2013)

Table A6.4 Excavated Welsh promontory forts			
NPRW no.	Site	Period	Reference
309491	Berry Hill Wood, Inland	-	Murphy & Mytum 2007
305331	Black Point Rath	-	Phillips 1897
301302	Burry Holms	IA/RMN	Walker 2000 & 2001
308623	Carew Castle	IA/RMN	Gerrard 1990
94989	Castell Henllys	IA/RMN	Mytum 1985, 1986, 1989 & 1991
402703	Cwm Gloyne, Western	IA/RMN	Mytum & Webster 2001
95060	Dale Point Pembrokeshire	BA/IA/RMN	Benson & Williams 1987
301326	Deborah's Hole Camp	IA/RMN	Williams 1939
301244	Great Castle Head	IA/RMN	Crane 1999
94210	Porth-Y-Rhaw	IA/RMN	Crane 1998
94974	St David's Head Camp	BA??/IA/RMN	Baring Gould 1899; Murphy 2001
276035	Tower Point Rath	BA?/IA/RMN?	Wainwright 1971
93864	Twyn-Y-Parc	IA/RMN?	Not published, some finds survive

Table A6.5 Excavated Mainland Scotland Promontory Forts

Table A6.5 Excavated Mainland Scotland Promontory Forts			
NMRS no.	Site name	Date	Reference
NJ16NW 1	Burghead	IA/(?BA?)	Edwards & Ralston 1978; Small 1969
NJ86NW 1	Cullykhan	IA	Greig 1971; Grieg & Cairns 1967
NJ76SW 7	Dillyminnen	-	Hunter 1868
NO64NE 8	West Mains Of Ethie	IA	Wilson 1980
NB14NE 3	Lewis, Gob A' Chuthail	-	Burgess & Gilmour 1995
NB03SW 21	Lewis, Gob Eirer	Norse?	Burgess et al 1996; Church et al 1998
NJ46NE 8	Portknockie, Green Castle	IA	Edwards & Ralston 1978, 208 - 9
NX43NW 8	Carghidown Castle	IA	Toolis 2007b
NS69SE 12	Leckie	IA	Mackie 1982 & 1987
NT67NE 141.00	Dunbar, Castle Park	IA/RMN	Perry 2000
NT68SW 30	Auldhame	-	Hindmarch 2005
NX43NE 8	Isle Head Isle of Whithorn	-	Radford 1957
NO64SE4	Castle Rock, Auchmithie	-	Ralston 1986
NJ86SE17	Dundarg	-	Fojut & Love 1983

Table A6.6 Shetland Promontory Forts

Table A6.6 Shetland promontory forts (Lamb 1980a & Canmore)			
NMRS no.	Site name	Grid reference	Parish
HP40SE 1	Yell, Burgi Geos	HP 4781 0338	YELL
HP40SE 3	Yell, Eegittle	HP 477 038	YELL
HP51SE 1	Unst, Flubersgerdie	HP 5712 1249	UNST
HP60SW 27	Unst, Brough Taing	HP 633 049	UNST
HU15NE 29	Papa Stour, Tounafiele	HU 1700 5910	WALLS & SANDNESS
HU15SE8	Burrier Head	HU 1690 5145	WALLS & SANDNESS
HU15SE 10	Weinnia Ness	HU 1720 5334	WALLS & SANDNESS
HU15SE 49	Mu Ness	HU 1682 5242	WALLS & SANDNESS
HU15SE56	Weinnia Ness	HU 1698 5340	WALLS & SANDNESS
HU24NW300	Vine Geo, East Ward, Vaila	HU 2397 4556	WALLS & SANDNESS
HU24NW301	Green Head, East Ward, Vaila	HU 2419 4579	WALLS & SANDNESS
HU24SE 57	Lambigart	HU 2850 4210	SANDSTING
HU25NW 2	Bay Of Garth	HU 2165 5822	WALLS & SANDNESS
HU27NE55	Head Of Grevasand	HU 2691 7597	NORTHMAVINE
HU28NE2	The Faither	HU 2570 8591	NORTHMAVINE
HU30NE 2	Ness Of Burgi	HU 3878 0839	DUNROSSNESS
HU30NE 5	Tonga, Scatness	HU 3889 0879	DUNROSSNESS
HU38NE 41	Norther Geo	HU 3797 8994	NORTHMAVINE
HU40NW 1	Sumburgh Head	HU 4077 0803	DUNROSSNESS
HU41SW 1	Lambhoga Head	HU 4079 1395	DUNROSSNESS
HU43NW 5	Broch of Burland	HU 4455 3607	LERWICK
HU43NE 9	The Herdas	HU 4500 3844	LERWICK
HU55NW 2	Hog Sound	HU 5081 5813	NESTING
HU56SE 1	Whalsay, Loch Of Huxter	HU 5586 6200	NESTING
HU58NW 1	Yell, Aywick, Brough Of Stoal	HU 5455 8730	YELL
HU68NW 2	Fetlar, Ruir Taing, Lamb Hoga	HU 6157 8731	FETLAR
HU68NW 5	Fetlar, Aithbank, Winna Tonga	HU 6417 8972	FETLAR
HU69SE21	Lambigarth, Fetlar	HU 6529 9191	FETLAR
HU69SW 34	Fetlar, Butsa Pund	HU 6386 9430	FETLAR
HZ27SW 6	Fair Isle, Landberg	HZ 2230 7225	DUNROSSNESS
HZ27SW11	Fair Isle, Burrista	HZ 2019 7272	DUNROSSNESS

Table A6.7 Orkney Promontory Forts

Table A6.7 Orkney promontory forts (Lamb 1980a)			
NMRS no.	Site name	Grid reference	Parish
HY10 SE1	Hoy, St John's Head, Brae Brough	HY 1854 0311	HOY
HY20 NW20	Brough of Braebister, Hoy	HY 2130 0522	HOY
HY21NW1	Yesnaby Broch of Borwick	HY 2241 1678	SAND
HY21 NW7	Yesnaby, Brough Of Bigging	HY 2194 1574	SAND
HY21 SE22	Point of Onston, Stenness	HY 2828 1179	STEN
HY31 SW36	Nether Bigging, Stenness	HY 3006 1192	STEN
HY33SE2	Midhowe, Rousay	HY 3716 3059	RAE
HY51 SW4	The Brough, Tankerness	HY 5450 1005	STAD
HY60 SW5	Castle of Sand Geo, Copinsay	HY 6117 0171	STAD
HY62 SE18	Stronsay, Middle Banks	HY 6893 2341	STRON
HY63 NW79	Sanday, Grunavi Head	HY 6265 3958	CRAB
HY64 SW5	Sanday, Scuthi Head	HY 6330 4007	CRAB
ND48 NE11	Brough of Windwick, S. Ronaldsay	ND 4586 8724	SORO
ND48 SW 2	Castle of Burwick, S. Ronaldsay	ND 4348 8423	SORO

Appendix 7

Barrows and cists in Orkney and burial related information

Concordance list and distribution maps

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Note A7.1

Justification of selection/rejection of sites for table A7.1

All the sites in the tables below were individually evaluated as part of a desk top assessment of all the available records, from the starting point of a NMRS Canmore search in December 2007, using the search terms barrow(s), mound(s), cairn(s) and cist(s). These results have been cross-checked with information from the Royal Commission survey (RCAMS 1946); the Orkney Barrows project (e.g. Downes 1997a & 1998c); the Orkney SMR and other survey sources (e.g. Lamb 1980b & 1983b). Since this thesis has been an ongoing project over a number of years the list has been periodically checked and updated in the light of recent discoveries (e.g. Lee 2008a; Moore 2013). The list was last updated at 31st May 2017. Canmore does not accurately classify barrows: it currently lists only 109 barrows and four barrow cemeteries in Orkney.

Mounds and cairns were included in the search as they tended to be a catchall term for the field surveyors, who in an initial survey were not sure what they have seen. One of the weaknesses of the Canmore records is that the site classifications are not necessarily updated in light of new information. It is possible to find a site classified under one heading, then to read contradictory information in the description. The majority of the rejected sites in table 7.2 are sites that are classified as mounds or cairns by the NMRS. The rejected sites in table 7.2 that have a figure in the column for number of barrows or cists were classified as such by the NMRS.

The sites listed below are those for which there are reasonable grounds for believing them to be Bronze Age. The numbers listed are quite likely to be an underestimate, rather than the opposite, as I have erred on the side of caution. The difficulties of correctly identifying a funerary monument as Bronze Age, in the absence of definitive finds or radiocarbon dates, has been discussed elsewhere in this thesis (Section 6.1.2).

Sites that were rejected (these are listed in table A7.2 below):

- The majority of vague reports such as '*stone cist found with ashes*' (e.g. ONB 1880, OS1/23/1/114) noted on the 1st edition OS map, that did not have a reasonable corroborating source. Many of these sites may be Bronze Age, but this cannot be conclusively demonstrated. 'Cists and ashes' may also indicate Pictish cemeteries (e.g. Oxtro Broch: Petrie 1874, 76-8; see also Section 6.1.1).
- Any site with too little detail to classify e.g. single sites noted in walkover survey that were recorded as possible barrows on the basis that they were low green mounds (e.g. Card 1998), but which were without any other associations that might enable a classification. Some of these may be Bronze Age funerary monuments, but in the absence of excavation this cannot be confirmed.
- Any site that is completely unlocated apart from a vague description e.g. some of Petrie's notebook entries. These are excluded to eliminate the possibility of a double entry for a site recorded elsewhere.

Sites that were included:

- Sites confirmed by a field visit by the OS archaeology division.
- Sites confirmed by the RCAMS 1946 or by recent RCAHMS field visits.
- Sites confirmed by the Orkney Barrows Project (Downes 1997a).
- Sites identified by the former Orkney County Archaeologist Dr Raymond Lamb in one of his surveys (e.g. Lamb 1980b & 1982).
- Sites confirmed by archaeological walkover surveys (e.g. Lawrence 2008; Lee 2012).
- Any mound or cairn that was associated with definite barrows e.g. an obvious barrow cemetery with one barrow listed as a generic mound.

- Any cist that would otherwise have been discarded apart from its association with other definite or very likely barrows or cists.
- Unlocated but definite reports. For example a detailed description of an excavation in a particular parish, but not given a close location (these are only listed in the tallies).

Table A7.1 Concordance list for the distribution maps shown in figures 7.1 – 7.9
 B= Barrows, C = Cists

Table A7.1 Concordance list for the distribution maps shown in figures 7.1 – 7.9						
No.	NMRS no.	Site Name	Grid reference	Parish	No. B	No. C
1	HY20NE2	HALL OF IRELAND	HY2945 0992	STEN	1	1
2	HY20NW3	INNERTOWN	HY 2331 0964	STRO	-	1
3	HY20SE19	HOY KINGIE LANG	HY 2725 0053	HOAG	1	1
4	HY21NE2	VIA	HY2584 1609	SAND	1	2
5	HY21NE6	NEWHOUSE	HY 2639 1662	SAND	1	-
6	HY21NE7	ROSEMOUNT	HY 273 165	SAND	14	2
7	HY21NE18	ESS NESS	HY2994 1662	BIHA	5	1
8	HY21NE19	LINGAFIELD	HY 264 153	SAND	16	14
9	HY21NE20	MIDHOUSE	HY 2782 1604	SAND	7	-
10	HY21NE27	FIDDLERHOUSE	HY 2582 1581	SAND	1	6
11	HY21NE30	NISTABEN	HY 2994 1650	BIHA	-	1
12	HY21NE32	HOWABACK	HY 2934 1955	SAND	1	1
13	HY21NE33	HOWABACK	HY21NE33	SAND	1	-
14	HY21NE34	GOGERABACK	HY 2938 1942	SAND	1	1
15	HY21NE38	HACKLAND	HY 2788 1933	SAND	1	1
16	HY21NE41	VETQUOY	HY 268 186	SAND	5	2
17	HY21NE42	CUMBLA N'GARTH	HY261 190	SAND	9	-
18	HY21NE43	HURKISGARTH	HY 2545 1770	SAND	1	1
19	HY21NE45	STOCKAN	HY 2640 1790	SAND	1	-
20	HY21NE46	STOCKAN	HY 2640 1787	SAND	1	-
21	HY21NE47	STOCKAN	HY 2642 1781	SAND	1	-
22	HY21NE48	STOCKAN	HY 2619 1793	SAND	1	-
23	HY21NE49	STOCKAN	HY 2648 1804	SAND	11	-
24	HY21NE51	MILL OF RANGO	HY 2663 1804	SAND	1	-
25	HY21NE52	MILL OF RANGO	HY 2667 1803	SAND	-	1
26	HY21NW2	SOUTH SEATTER	HY 2339 1637	SAND	1	2
27	HY21NW5	SOUTH GYRAN	HY 2425 1543	SAND	1	-
28	HY21NW9	GYRON HILL	HY 2410 1574	SAND	1	1
29	HY21NW10	GYRON HILL	HY 2403 1533	SAND	-	1
30	HY21NW11	VELZIAN	HY 2313 1704	SAND	3	-
31	HY21NW15	MILLHOUSE	HY 2388 1933	SAND	3	4
32	HY21NW18	KN OF NEBIGARTH	HY 2316 1750	SAND	1	-
33	HY21NW19	BROCKAN KN O GEOSO	HY 2282 1792	SAND	1	1
34	HY21NW20	KN OF ANGEROW	HY 2352 1720	SAND	2	2
35	HY21NW27	VELZIAN	HY 231 173	SAND	5	-
36	HY21NW35	SAND FIOELD	HY 2422 1955	SAND	-	1
37	HY21SE3	BOOKAN	HY 2889 1371	SAND	1	-
38	HY21SE8	WASB, SKAE FRUE	HY 2824 1440	SAND	1	3
39	HY21SE11	NOB PLUMCAKE M	HY 2951 1348	STEN	1	2
40	HY21SE15	NESS OF BRODGAR	HY 2941 1328	STEN	1	-
41	HY21SE16	NESS OF BRODGAR	HY 2954 1323	STEN	8	-
42	HY21SE19	WASBISTER	HY 2881 1397	SAND	1	-
43	HY21SE21	NESS OF BRODGAR	HY 2946 1313	STEN	1	-
44	HY21SE23	ARION	HY 2563 1439	STRO	-	1
45	HY21SE29	KNOWES OF COTT	HY 2518 1348	STRO	1	-
46	HY21SE40	HOWAN WASBUSTER	HY 2792 1466	SAND	7	1

Table A7.1 Concordance list for the distribution maps shown in figures 7.1 – 7.9						
No.	NMRS no.	Site Name	Grid reference	Parish	No. B	No. C
47	HY21SE103	NETHER ONSTAN	HY 2928 1167	STEN	-	1
48	HY21SE106	REDLANDHILL	HY 2647 1319	STRO	-	1
49	HY21SW6	MOUSLAND	HY 2309 1264	STRO	1	1
50	HY22NE1	RANTAN	HY 2961 2823	BIHA	3	2
51	HY22NE5	KN OF CRUSTAN	HY 2747 2897	BIHA	1	1
52	HY22NE7	STANERANDY	HY 2747 2768	BIHA	3	-
53	HY22NE8	RAVIE HILL	HY 2676 2508	BIHA	8	1
54	HY22NE14	KIRBISTER HILL	HY 2843 2637	BIHA	13	1
55	HY22NE15	STANERANDY	HY2674 2761	BIHA	1	-
56	HY22NE16	QUOYHORRIE	HY 2848 2701	BIHA	4	-
57	HY22NE18	HUNDLAND	HY 2994 2675	BIHA	2	1
58	HY22NE19	HUNDLAND HILL	HY 2993 2688	BIHA	1	1
59	HY22NE21	KN OF LINGRO	HY 2841 2904	BIHA	3	-
60	HY22NE23	QUEENA	HY 2776 2783	BIHA	2	-
61	HY22SE1	SWARTLAND	HY 2721 2156	SAND	1	-
62	HY22SE12	DOUNBY	HY 2945 2014	SAND	-	1
63	HY22SE14	QUINNI	HY 2548 2288	BIHA	3	-
64	HY22SE16	LOCH OF BANKS	HY 2767 2287	BIHA	3	-
65	HY22SE17	KN OF SMIRRUS	HY 2914 2156	BIHA	1	1
66	HY22SE19	EAST HOUSE	HY 2905 2079	SAND	2	-
67	HY22SE22	DOUNBY HOUSE	HY 2924 2082	SAND	2	-
68	HY22SE23	HILL OF CRUADAY	HY 2526 2205	SAND	2	-
69	HY22SE24	KNOWES OF HOWANA	HY 2654 2169	SAND	9	1
70	HY22SE26	GRIND, SKEABRAE	HY 2692 2062	SAND	1	-
71	HY22SE27	GAIRSTY	HY 2632 2046	SAND	2	-
72	HY22SE30	QUINNI MOAN	HY 2798 2112	SAND	1	-
73	HY22SE31	QUINNI MOAN	HY 277 210	SAND	-	4
74	HY22SE32	DOUNBY	HY 2967 2097	BIHA	-	2
75	HY22SE34	QUINNI	HY 2550 2269	BIHA	1	1
76	HY22SE36	QUEENAFJOLD	HY 2654 2496	BIHA	1	1
77	HY22SE38	BLACK KNOWE	HY 2864 2455	BIHA	1	-
78	HY22SE41	RUNA TWATT	HY 2657 2449	BIHA	2	-
79	HY22SE42	QUINNI	HY 2518 2315	BIHA	1	-
80	HY22SE43	LINNA BRECK	HY 2537 2488	BIHA	5	-
81	HY22SE44	GREENY NETH BIGG	HY 2858 2328	BIHA	4	-
82	HY22SE45	RAVIE HILL	HY 264 248	BIHA	1	-
83	HY22SE46	BERRYDALE	HY 2617 2463	BIHA	1	-
84	HY22SE50	RAVIE HILL	HY2560 2485	BIHA	1	-
85	HY22SE51	RAVIE HILL	HY 2598 2497	BIHA	3	-
86	HY22SE108	BERRYDALE	HY 2618 2488	BIHA	2	-
87	HY22SE109	SKEABREA	HY 2690 2037	SAND	1	-
88	HY22SW2	KNOWE OF GAIRSTY	HY 2347 2272	BIHA	2	-
89	HY22SW9	VESTRA FJOLD	HY 2416 2210	SAND	4	-
90	HY22SW12	QUOYLOO, STOVE	HY 2440 2077	SAND	-	1
91	HY22SW13	KN OF YONBELL	HY 2457 2264	SAND	2	-
92	HY22SW14	HILL OF CRUADAY	HY 2479 2199	SAND	4	1
93	HY22SW24	HOLLAND	HY 2455 2350	BIHA	1	-
94	HY30NE2	GROUNDWATER	HY 3696 0978	OR	1	-

Table A7.1 Concordance list for the distribution maps shown in figures 7.1 – 7.9						
No.	NMRS no.	Site Name	Grid reference	Parish	No. B	No. C
95	HY30NE3	NEARHOUSE HILL	HY 3591 0961	OR	8	-
96	HY30NE5	U' GROUNDWATER	HY 3750 0873	OR	7	-
97	HY30NE14	GROUNDWATER	HY 3745 0894	OR	-	4
98	HY30NE16	SKAILL	HY 3551 0978	OR	-	2
99	HY30NE47	ORPHIR, N'HOUSE	HY 362 068	OR	1	-
100	HY30SW21	CALF OF CAVA	HY 3219 0054	OR	1	1
101	HY31NE5	BLACK KNOWE	HY 3695 1988	EAR	1	1
102	HY31NE6	KN OF LYRON	HY 3863 1964	EAR	1	-
103	HY31NE7	SANDYHALL	HY 3990 1940	EAR	6	1
104	HY31NE8	OYCE OF ISBISTER	HY 3902 1802	EAR	3	1
105	HY31NE10	WARD OF REDLAND	HY 3669 1720	FIR	3	-
106	HY31NE13	BRAE O MUCKQUOY	HY 3760 1740	FIR	-	2
107	HY31NE14	ISBISTER	HY 39 18	EAR	1	3
108	HY31NE22	MOAN FARM	HY 368 155	FIR	-	1
109	HY31NW7	FEOLQUOY	HY 3174 1551	BIHA	3	-
110	HY31NW13	STTR, SYRA DALE	HY 3459 1575	FIR	2	2
111	HY31NW14	SETTER	HY 3458 1544	FIR	2	-
112	HY31NW16	DALE	HY 3311 1538	BIHA	1	1
113	HY31NW20	FEOLQUOY	HY 3176 1571	BIHA	1	-
114	HY31NW25	FURSO	HY 3127 1664	BIHA	1	-
115	HY31NW27	YELDAVALE	HY 3113 1667	BIHA	-	1
116	HY31NW29	HAINGER HOWE	HY 3065 1715	BIHA	1	1
117	HY31NW31	NISTHOUSE, MIRB.	HY 3163 1983	BIHA	4	-
118	HY31NW34	BOSQUOY	HY 3106 1846	BIHA	-	1
119	HY31NW39	LYDE ROAD	HY 3303 1821	BIHA	1	-
120	HY31NW40	KN OF TRINNAWIN	HY 3349 1891	BIHA	5	1
121	HY31NW41	NESS-BRECK, CORR.	HY 3331 1901	BIHA	3	2
122	HY31NW42	KN OF TROTTY	HY 342 174	BIHA	11	8
123	HY31NW43	KN OF WHEATLAWS	HY 318 195	BIHA	3	1
124	HY31NW45	CORSTON	HY 319 197	BIHA	7	-
125	HY31NW56	WERNE	HY 3217 1800	BIHA	-	3
126	HY31NW57	HINDRAFIOLD	HY 3245 1857	BIHA	-	1
127	HY31NW100	CORRIGALL (UPPER BIGGING)	HY 3284 1918	BIHA	-	1
128	HY31NW102	HARRAY, GEROIN	HY 3288 1751	BIHA	-	1
129	HY31 SE6	SKAILL	HY 3500 1033	OR	7	2
130	HY31SE10	SNABA HILL	HY 3522 1470	FIR	5	-
131	HY31SE11	SKAILL	HY 350 102	OR	-	1
132	HY31SE12	MARKET GREEN FIN	HY 3643 1331	FIR	4	2
133	HY31SE13	HILL OF HEDDLE	HY 359 131	FIR	4	-
134	HY31SE20	FINSTOWN SCHOOL	HY 362 142	FIR	-	3
135	HY31SE22	BINSCARTH HOUSE	HY 3504 1420	FIR	1	-
136	HY31SE31	TORRIEDAY	HY 353 127	FIR	-	1
137	HY31SW5	NESS GRIMESTON	HY 3052 1489	BIHA	1	-
138	HY31SW7	VOLA	HY 3147 1395	STEN	1	-
139	HY31SW9	HOWE HARPER	HY 3456 1437	FIR	1	-
140	HY30SW12	GYRE	HY 3409 0464	OR	-	1
141	HY31SW15	SUMMERSDALE	HY 3474 1046	STEN	11	1
142	HY31SW16	BINSCARTH	HY 3466 1432	FIR	2	1

Table A7.1 Concordance list for the distribution maps shown in figures 7.1 – 7.9						
No.	NMRS no.	Site Name	Grid reference	Parish	No. B	No. C
143	HY31SW17	HILL OF HEDDLE	HY 3452 1343	FIR	1	1
144	HY31SW18	HILL OF HEDDLE	HY 3442 1350	FIR	7	1
145	HY31SW21	MAESHOWE	HY 3175 1282	STEN	9	-
146	HY31SW23	NISTABEN	HY 3355 1183	STEN	2	-
147	HY31SW25	BRODGAR FARM	HY 302 129	STEN	-	4
148	HY31SW32	LOCHSIDE	HY 312 137	STEN	-	7
149	HY31SW56	WASDALE	HY 3463 1445	FIR	2	-
150	HY31SW57	BINSCARTH	HY 3482 1370	FIR	3	-
151	HY31SW129	SNABA HILL	HY 3492 1455	FIR	1	-
152	HY32NE18	REEKY KNOWES	HY 3874 2652	EAR	6	-
153	HY32NE22	WARD HILL, ROUS	HY 3831 3002	RAE	2	1
154	HY32NE26	KN OF SMERSSO	HY 3966 2542	EAR	2	2
155	HY32NE34	SWARTA FILD, RO	HY 3884 2849	RAE	1	-
156	HY32NE94	HOWE	HY 3604 2616	EAR	1	-
157	HY32NW10	COSTA MILL, URIGAR	HY 3383 2814	EAR	5	1
158	HY32NW17	COSTA HILL	HY 3130 2912	BIHA	1	-
159	HY32NW22	COSTA HILL	HY 3072 2953	BIHA	1	-
160	HY32SE2	BLUBBERSDALE	HY 378 202	EAR	3	-
161	HY32SE5	LOWER ELLIBISTER	HY 3830 2136	EAR	4	1
162	HY32SE8	SEVEN KNOWES Gitterpitten	HY 3928 2072	EAR	7	2
163	HY32SE13	BLUBBERSDALE	HY 3718 2000	EAR	1	3
164	HY32SE14	CASTLE, RENDALL	HY 3851 2019	EAR	1	1
165	HY32SE15	HACKLAND HILL	HY 3942 2081	EAR	2	-
166	HY32SE20	LOWER ELLIBISTER	HY 386 212	EAR	-	1
167	HY32SE51	FERNDALE	HY 383 203	EAR	1	2
168	HY32SW1	HANDEST	HY 3030 2076	BIHA	1	1
169	HY32SW2	HOLODYKE	HY 3048 2028	BIHA	1	-
170	HY32SW3	KNOWES OF CUEAN	HY 3024 2287	BIHA	-	-
171	HY32SW10	KNOWES OF QUOYSCOTTIE	HY3017 2216	BIHA	17	3
172	HY32SW13	HOWALLY DOUNBY	HY 3083 2452	BIHA	1	-
173	HY32SW14	KN OF YESKO	HY 3123 2081	BIHA	2	1
174	HY32SW18	HOLLANDS, MIRB	HY 3177 2009	BIHA	2	-
175	HY32SW19	NEWHOUSE, KNAR.	HY 3041 2116	BIHA	1	1
176	HY32SW56	HOWALLY DOUNBY	HY 3072 2488	BIHA	1	-
177	HY32SW21	SKELDAY HILL	HY 31 24	BIHA	-	1
178	HY33SE20	TOO OF NUGLE ROUSAY	HY 3821 3354	RAE	1	1
179	HY33SE21	QUANDALE, ROUS	HY 372 314	RAE	3	3
180	HY33SE26	QUENDAL, ROUS	HY 3731 3164	RAE	2	2
181	HY33SE27	WHOOM, ROUSAY	HY 370 312	RAE	3	3
182	HY33SE28	SANDY HOLES, ROU	HY 366 312	RAE	2	4
183	HY33SE29	SCABRA HEAD ROUS	HY 365 312	RAE	1	1
184	HY33SE30	QUENDAL TAFTS RO	HY 3716 3260	RAE	1	1
185	HY33SE31	QUENDAL, ROUSAY	HY 3743 3184	RAE	1	-
186	HY33SE32	QUENDAL, ROUSAY	HY 3732 3201	RAE	1	-
187	HY33SE34	QUENDAL ROUSAY	HY 3697 3152	RAE	4	-
188	HY33SE40	WARD HILL ROUSAY	HY 3828 3002	RAE	4	-
189	HY40NE2	TOWER HILL	HY 463 095	KASO	3	1
190	HY40NE4	5 HILLOCKS, RASHIE	HY 4598 0536	HOLM	8	-

Table A7.1 Concordance list for the distribution maps shown in figures 7.1 – 7.9						
No.	NMRS no.	Site Name	Grid reference	Parish	No. B	No. C
191	HY40NE5	HILLOCKS OF GARTH	HY 4678 0780	KASO	9	1
192	HY40NE15	LANG HILL 5 HILLO.	HY 4925 0670	STAD	9	-
193	HY40NE50	CULDIGEO	HY 4991 0505	HOLM	3	-
194	HY40NW3	CRANTIT	HY 4385 0968	KASO	-	2
195	HY40NW4	NEWBIGGING	HY 4345 0983	KASO	3	3
196	HY40NW8	GREENIGOE	HY 407 075	OR	-	1
197	HY40NW9	FOVERAN	HY 4206 0801	KASO	-	2
198	HY40NW17	CRANTIT	HY 440 098	KASO	-	2
199	HY40SE1	LAUGHTONS KN.	HY4826 0258	HOLM	1	1
200	HY40SE2	HALL OF GORN	HY 4837 0261	HOLM	3	1
201	HY40SE3	VALDIGAR	HY 463 027	HOLM	2	1
202	HY40SE4	BACKAKELDAY	HY 4553 0362	HOLM	-	2
203	HY40SE16	BLOMUIR	HY 4712 0319	HOLM	-	1
204	HY40SE20	BLOMUIR	HY 4718 0311	HOLM	-	-
205	HY41NE9	BALFOUR	HY 479 165	SHAP	1	1
206	HY41NE19	TWI NESS SHAPINSAY	HY 4676 1625	SHAP	1	1
207	HY41NE68	OWAR aka RIFF	HY 4239 1930	EAR	1	1
208	HY41NW1	WEST PULDRITE	HY 4148 1857	EAR	2	1
209	HY41NW2	VARME DALE	HY 4074 1856	EAR	7	3
210	HY41NW3	WEST PULDRITE	HY 4131 1866	EAR	3	1
211	HY41NW5	KNOWES OF EURO	HY 4131 1883	EAR	2	1
212	HY41NW9	SOUTH ATTIT	HY 422 197	EAR	-	1
213	HY42NW33	SHINGLY HILL	HY 4382 2820	RAE	1	1
214	HY41SE13	HOLLAND	HY 477 111	KASO	5	2
215	HY41SE15	CLEAT	HY 4698 1175	KASO	-	1
216	HY41SE174	CARNESS	HY 4643 1421	KASO	4	-
217	HY41SW2	SAVEROCK	HY 427 126	KASO	-	3
218	HY41SW8	NEWBIGGING	HY 43 10	KASO	-	1
219	HY41SW288	WIDFORD HILL	HY4218 1129	KASO	-	1
220	HY42NW10	TRUMLAND, ROUS	HY 4246 2742	RAE	1	4
221	HY42NW16	GEORD OF NEARS ROU	HY 4236 2738	RAE	1	1
222	HY42NW32	KNARSTON, ROUS	HY 4394 2921	RAE	1	1
223	HY42NW37	GREEN HILL ROUSAY	HY 4153 2787	RAE	4	-
224	HY42NW39	TRUMLAND ROUSAY	HY 4242 2823	RAE	5	-
225	HY42SW19	HALL OF RENDALL	HY 424 203	EAR	-	1
226	HY42 SW36	KEWING	HY 4007 2224	EAR	-	1
227	HY43SE9	EGILSAY, MID SKAILL	HY 4626 3009	RAE	-	1
228	HY43SW17	MANSIE'S KN CU RO	HY 4215 3127	RAE	5	5
229	HY43SW23	ERNE TOWER ROU	HY 4000 3464	RAE	1	-
230	HY43SW27	FARACLETT ROUSAY	HY 4383 3280	RAE	1	-
231	HY43SW33	WEST CRAIE ROUSAY	HY 4188 3152	RAE	1	-
232	HY43SW34	BRITTANY ROUSAY	HY 4170 3105	RAE	1	1
233	HY44NW36	THE BLOODY TUACKS	HY 424 450	WEST	7	-
234	HY44SW20	MAE SAND WESTRAY	HY 445 429	WEST	-	4

Table A7.1 Concordance list for the distribution maps shown in figures 7.1 – 7.9						
No.	NMRS no.	Site Name	Grid reference	Parish	No. B	No. C
235	HY45SE3	KRAA-TOOIES ¹	HY 497 544	PAWE	40	-
236	HY50NE5	BLOWES	HY 571 060	STAD	-	1
237	HY50NE6	GREENTOFT	HY 5667 0696	STAD	-	1
238	HY50NE10	THE WARD	HY 5676 0717	STAD	1	5
239	HY50NW4	WATERHALL, TANK	HY 520 095	STAD	-	1
240	HY50NW9	TOB	HY 5 0	STAD	1	-
241	HY50NW15	ST ANDREWS	HY 5 0	STAD	3	4
242	HY50NW16	LITTLE CROFTY	HY 5158 0622	STAD	-	1
243	HY50NW18	ST ANDREWS	HY 5 0	STAD	-	1
244	HY50NW61	LANGSKAILL - LONG HOWE	HY 5094 0599	STAD	1	-
245	HY51NW3	STENTLAQUOY SHAP	HY 5286 1687	SHAP	10	2
246	HY51NW7	UNYATUAK SHAP	HY 52451983	SHAP	1	-
247	HY53NE11	STONE OF SETTER EDAY	HY 5642 3720	EDAY	1	-
248	HY53NE27	CARRICK FARM EDAY	HY 5637 3759	EDAY	1	1
249	HY53SW10	EDAY FERSNESS	HY 5303 3303	EDAY	1	-
250	HY54SW11	STANCRO, WESTRAY	HY 5006 4044	WEST	3	2
251	HY54SW12	STANCRO WESTRAY	HY 5013 4049	WEST	1	-
252	HY54SW26	STANCRO WESTRAY	HY 5006 4047	WEST	1	-
253	HY55SW23	BERRYHILL KRAA TOOIES ²	HY 5050 4056	PAWE	-	-
254	HY55SW24	BERRYHILL KRAA TOOIES	HY 5046 5456	PAWE	-	-
255	HY55SW25	BERRYHILL KRAA TOOIES	HY 5039 5467	PAWE	-	-
256	HY62NW1	HUNTON ORAMS FA	HY 6450 2718	STRON	3	7
257	HY62NW4	CLESTRAIN STRON	HY 6388 2779	STRON	-	1
258	HY62NW5	WHITEHALL STRON	HY 6462 2819	STRON	-	-
259	HY62NW11	LINGA HOLM	HY 6112 2778	STRON	1	1
260	HY63NE5	AUGMUND H WEST	HY 676 375	LADY	11	4
261	HY63NE6	ELSNESS SANDAY	HY 673 375	LADY	26	1
262	HY63NW3	THE KNOWES SAND	HY 6342 3880	CRAB	3	-
263	HY63NW15	BACKASKAILL SAND	HY 641 394	CRAB	-	1
264	HY63NW24	BACKASKAILL SAND	HY 6391 3938	CRAB	-	1
265	HY63SW5	HACK'S NESS SANDAY	HY 6152 3403	CRAB	1	-
266	HY63SW9	SPUR NESS SANDAY	HY 6051 3447	CRAB	2	-
267	HY64SE2	THOR NESS SANDAY	HY 6723 4303	CRAB	1	-
268	HY64SE17	KN OF YARROW SAN	HY 6547 4401	CRAB	1	1
269	HY64SE54	SANDAY	HY 6 4	CRAB	-	1
270	HY64SE135	SANDAY, THORSNESS	HY 6740 4302	CRAB	1	-
271	HY64SW1	LEYLAND SANDAY	HY 646 402	CRAB	-	1
272	HY64SW2	LEYLAND SANDAY	HY 6493 4042	CRAB	-	1
273	HY64SW3	LEYLAND SANDAY	HY 649 404	CRAB	-	2
274	HY64SE44	OTTERSWICK SAND	HY 69 42	LADY	-	Many ³

¹ There are multiple NMRS entries for the North Head area of Papa Westray: HY55SW23, HY55SW24 and HY55SW25. The OS revision recorded at least 40 mounds in this area, there are further reports of large areas covered by mounds at Kraa-Tooies, Berry Hill and Clestrain (Downes 1998c). Access during various surveys has been limited by the presence of an Arctic tern colony; the Orkney Barrows Survey noted 20 mounds including 14 definite barrows under reference HY45SE3; 40 mounds for the whole of the North Head is likely to be a minimum.

² See note on HY45SE3 above for all the Kraa-Tooies entries.

³ Antiquarian report, no further details available (Traill 1845, 134 – 42).

Table A7.1 Concordance list for the distribution maps shown in figures 7.1 – 7.9						
No.	NMRS no.	Site Name	Grid reference	Parish	No. B	No. C
275	HY74NE1	TOFTS NESS SANDAY	HY 760 470	LADY	Many ⁴	-
276	HY74SE34	SANDAY, STENCHMAE	HY 7584 4396	LADY	-	1
277	HY75NE1	NEVEN N. RONALD	HY 7720 5504	CRAB	1	1
278	HY75NE2	TOR NESS N RONALDSAY ⁵	HY 756 553	CRAB	?	-
279	HY75NE6	DENNIS NESS N. RO	HY 7868 5580	CRAB	1	1
280	HY75NE7	NEVEN N. RONALD	HY 7717 5504	CRAB	-	1
281	HY75SE12	ANTABRECK N. RON	HY 7584 5411	CRAB	-	2
282	ND38NW5	CANTICK HEAD	ND 3405 8906	WAFL	1	-
283	ND38NW11	CANTICK HEAD	ND 3431 8915	WAFL	1	-
284	ND38NW17	CANTICK HEAD	ND 3469 8965	WAFL	1	1
285	ND38NW18	CANTICK HEAD	ND 3466 8958	WAFL	1	1
286	ND39NW2	UPPER HOUSE FARA	ND 3306 9609	WAFL	-	1
287	ND39SE3	POINT OF LEVAL FL	ND 3575 9251	WAFL	1	1
288	ND39SE8	HEAD OF BANKS FL	ND 3615 9241	WAFL	1	-
289	ND48NE2	HESTA HEAD S RONALD	ND 4654 8799	SORO	1	-
290	ND48NE13	BROLL S. RONALDS	ND 4525 8795	SORO	1	-
291	ND48NE39	WARD HILL	ND 4548 8855	SORO	1	-
292	ND48NW3	CLOUDUHALL S RO	ND 4349 8958	SORO	1	1
293	ND48NW5	NEV HILL	ND 4292 8931	SORO	1	1
294	ND48NW15	HOSTON HEAD SR	ND 4346 8751	SORO	1	-
295	ND48SE3	LIDDEL S RONALDSAY	ND 4633 8323	SORO	2	-
296	ND48SE4	LIDDEL S RONALDSAY	ND 4612 8326	SORO	7	-
297	ND48SW8	BROUGH NESS S RON	ND 4460 8296	SORO	10	-
298	ND49SE9	DYKE-END S. RON	ND 4758 9227	SORO	3	-
299	ND49SW5	BIG HOWE NEWBIG	ND 4300 9082	SORO	2	2
300	ND49SW14	KIRKIE HILL S RONALD	ND 4384 9023	SORO	1	-
301	ND59NW5	CORNQUOY	ND 5237 9966	HOLM	1	-
302	N/A	Moore 2013 Site EHS50	HY 3636 2905	RAE	1	-
303	N/A	Moore 2013 Site EHS51	HY 3636 2905	RAE	1	-
304	HY42SW5	QUEENAMUCKLE	HY 4192 2192	EAR	3	2
305	HY42NW2	TAVERSOE TUICK ROUS	HY 4257 2761	RAE	-	3
306	HY44NW 33	LINKS OF NOLTLAND CEMETERY ⁶	HY 428 493	WEST	65 burials	
307	HY41SW279	RAMBERRY	HY 4240 3083	KASO	3	1
308	N/A	QUANDALE SURVEY SITE 80 ⁷	HY 3780 3244	RAE	1	-
309	N/A	QUANDALE SURVEY SITE 81	HY 3793 3245	RAE	1	-
310	N/A	QUANDALE SURVEY SITE 96	HY 3737 3270	RAE	1	-
311	N/A	QUANDALE SURVEY SITE 98	HY 3779 3245	RAE	1	-
312	N/A	QUANDALE SURVEY SITE 114	HY 3740 3253	RAE	1	-
313	HY22NE30	GARSETTER	HY 256 278	BIHA	-	1

⁴ Antiquarian report, no further details available (Traill 1845, 134 – 42).

⁵ Numerous cairns here some of which may be funerary, a possible chambered tomb, and three to four possible prehistoric houses but all subject to heavy stone robbing, possibly similar to the Sanday headland sites (Downes 1998f). Orkney Barrows Survey (ibid) recorded at least 15 definite cairns and a burnt mound, but could not confirm definite barrows here due to the severity of damage, and suggested that Tor Ness was likely to be similar to the headlands in Sanday (see Section 5.5).

⁶ Extensive cemetery, at least 65 burials, both inhumations and cremations, including 15 individuals buried in a large reusable cist (Moore & Wilson 2013).

⁷ Walkover survey: all Quandale survey sites (Lee 2008a)

Table A7.1 Concordance list for the distribution maps shown in figures 7.1 – 7.9						
No.	NMRS no.	Site Name	Grid reference	Parish	No. B	No. C
314	ND48NW19	GREEN CLIVIE	HY 4340 8666	SORO	4	
315	HY30NE53	HOBBI ⁸ STER ⁸ (NR LOCH GRIFFYLT)	HY 4020 0650	OR	1	
316	HY30NE53	HOBBI ⁸ STER (NR SHORE)	HY 4000 0630	OR	3	
317	HY53NE29	CARRICK HOUSE EDAY	HY 5635 3890	EDAY	1	
			TOTALS		728	297

⁸ Hobbister sites: Walkover survey (Sharman & Hollinrake 2007)

Table A7.2 The rejected sites not included in the distribution maps below.

See notes above for explanation of rejection criteria.

Table A7.2 Sites rejected and not included in the barrow/cist distribution maps below					
NMRS NO.	NAME	GRID REF	PARISH	No. B	No. C
HY20NE12	STROMNESS	HY 25 09	STRO	1	-
HY20NE19	GLEBE FARM, STR	HY 251 079	STRO	-	2
HY20NE20	STR GOLF COURSE	HY2503 0776	STRO	-	3?
HY20NE21	KN OF GEMASHOWE	HY 2931 0969	STEN	-	-
HY20NE84	GARSON GRAEMSAY	HY 258 061	HOAG	-	-
HY20NE107	UPPER QUOYS GRAEM	HY 2632 0532	HOAG	-	-
HY20NE108	SCARRATAING GRAEM	HY 2702 0510	HOAG	-	-
HY20NE110	FLAGHILL GRAEMSAY	HY 2567 0542	HOAG	-	-
HY20NW16	SELWICK HOY	HY 2267 0536	HOAG	-	-
HY20NW19	HILLOCK O FULZIEGEO	HY 2493 0645	HOAG	-	-
HY20SW2	LEEKSHOUSE, HOY	HY 243 038	HOAG	-	1
HY20SW5	TUACK O T WITTER	HY 2234 0464	HOAG		1
HY20SW17	WHANESS BURN	HY 2447 0179	HOAG	1?	1?
HY20SW26	HESTOR GRAEMSAY	HY 248 049	HOAG	1	-
HY21NE4	VIA	HY 2601 1598	SAND	-	1?
HY21NE5	OVERHOUSE	HY 2571 1646	SAND	-	3
HY21NE8	LYKING	HY 270 153	SAND	-	3
HY21NE13	UPPER LEE KNOWE	HY 2833 1627	SAND	-	-
HY21NE14	LOWER LEE KNOWE	HY 2836 1612	SAND	-	-
HY21NE15	KN OF BACKATAING	HY 2816 1562	SAND		1
HY21NE16	APPIETOWN	HY 2838 1503	SAND	1	1
HY21NE23	STOCKAN	HY 2651 1774	SAND	-	2
HY21NE25	LYKING	HY 274 151	SAND	-	-
HY21NE26	LYKING	HY 2699 1549	SAND	-	1
HY21NE36	HACKLAND	HY 2792 1961	SAND	-	-
HY21NE37	KIRK NESS	HY 2848 1947	SAND	-	5
HY21NE39	VETQUOY	HY 2709 1907	SAND	-	1
HY21NE50	WASUM HOURSTON	HY 2884 1971	SAND	1?	-
HY21NE53	UPP' SCARRATAING	HY 2664 1789	SAND	-	3
HY21NW4	SOUTH GYRAN	HY 2402 1537	SAND	-	1
HY21NW8	SOUTH GYRAN	HY 24 15	SAND	-	-
HY21NW16	SKAILL HOUSE	HY 2341 1870	SAND	1?	-
HY21SE4	BOOKAN	HY 280 145	SAND	N/A	N/A
HY21SE6	BUCKAN	HY 2846 1478	SAND	-	1
HY21SE9	WADBISTER	HY 2859 1427	SAND	-	2
HY21SE12	FRESH KNOWE	HY 2960 1339	STEN	-	-
HY21SE14	SALT KNOWE	HY 2927 1328	STEN	-	1
HY21SE24	THE BRECKS, WADB	HY 2857 1426	SAND	1	1
HY21SE28	STROMNESS	HY 25 10	STRO	1	6

Table A7.2 Sites rejected and not included in the barrow/cist distribution maps below					
NMRS NO.	NAME	GRID REF	PARISH	No. B	No. C
HY21SE34	REDLAND	HY 2671 1380	STRO	-	-
HY21SE37	NESS OF SEATTER ⁹	HY 2725 1286	STRO	2?	-
HY21SE38	NESS OF SEATTER	HY 2755 1265	STRO	4?	-
HY21SE39	VERON POINT	HY 2566 1495	SAND	1?	-
HY21SW4	BRETTOBRECK	HY 2495 1364	STRO	-	1
HY22NE17	QUOYHORRIE	HY 2867 2665	BIHA	-	-
HY22NE20	QUOYHORRIE	HY 297 269	BIHA	-	1
HY22NE24	STRATHYRE	HY 2664 2522	BIHA	-	1
	VOID				
HY22NW3	POINT OF SNUSAN	HY 2458 2730	BIHA	-	-
HY22NW4	MOUNT MISERY	HY 2458 2735	BIHA	-	-
HY22NW9	WINDBRECK	HY22NW9	BIHA	-	1
HY22NW10	ROSEVIEW	HY 2466 2537	BIHA	-	2
HY22NW13	POINT BUCKQUOY	HY 244 282	BIHA	-	-
HY22SE5	KN BAIN H'GARTH	HY 2544 2039	SAND	3?	-
HY22SE8	GREENY, NORTON	HY 2836 2226	BIHA	-	?
HY22SE52	QUINNI	HY 2577 2303	BIHA	-	1
HY22SW1	RUBRECK	HY 2445 2483	BIHA	-	4
HY22SW4	GAIRSTY	HY 234 229	BIHA	?1	-
HY22SW5	W. BAIN ROSSEL HO	HY 2484 2016	SAND	?	?
HY22SW6	HILL OF CRUADAY	HY 2479 2162	SAND	?1	-
HY22SW11	HUAN	HY 2373 2065	SAND	-	1
HY22SW15	HILL OF CRUADAY	HY 24 22	SAND	-	1
HY22SW18	KNOWES OF ESCO	HY 2481 2099	SAND	2?	-
HY22SW19	LENAHOWE	HY 2312 2014	SAND	-	1
HY22SW23	KN OF HOLLAND	HY 2468 2361	BIHA	1?	-
HY22SW28	NETHERSKAILL	HY 2349 2457	BIHA	-	-
HY30NE7	ORPHIR, ROADSIDE	HY3552 0628	OR	-	1
HY30NE8	SWANBISTER	HY 3503 0575	OR	-	1
HY30NE9	BURN OF LERQUOY	HY 3568 0582	OR	-	1
HY30 NE49	HOBBIESTER FARM	HY 387 072	OR	1?	1?
HY30 NW2	WARD HILL	HY 3354 0798	OR		1
HY30 NW31	KONGARSKNOWE	HY 3446 0513	OR	1?	-
HY30SW9	ORPHIR	HY 3 0	OR	-	-
HY30SW23	CALF OF CAVA 2	HY 3225 0052	OR	-	-
HY30SW37	CAVA 1	HY 3265 0006	OR	-	-
HY30SW59	GYRE	HY 3403 0473	OR	-	-
HY30SW60	GYRE	HY 3418 0447	OR	-	-
HY31NE3	SMOOGARTH	HY 3618 1533	FIR	1	1?
HY31NW3	YELDAVALE	HY 3114 1669	BIHA	-	2

⁹ Note in Orkney SMR, survey visit by Orkney Barrows Project, SMR site no. 1494: 'These structures look more like houses than cairns. There are two circular formations of large blocky stones. If they are burial cairns they could be ring cairns but they look more like houses'.

Table A7.2 Sites rejected and not included in the barrow/cist distribution maps below					
NMRS NO.	NAME	GRID REF	PARISH	No. B	No. C
HY31NW4	FURSO	HY 3120 1664	BIHA	-	3
HY31NW5	YELDAVALE	HY31NW5	BIHA	-	1
HY31NW8	BUCKQUOY	HY 3178 1541	BIHA	-	1
HY31NW9	BUCKQUOY	HY 3188 1530	BIHA		1
HY31NW11	WOODWYN	HY 3278 1594	BIHA	1?	-
HY31NW17	WINKSETTER	HY 3421 1652	BIHA	-	1
HY31NW18	WINKSETTER	HY 346 165	BIHA	-	2
HY31 NW109	HOWE HARRAY	HY 3282 1740	BIHA	Neo	-
HY31NE17	BURN OF GEO	HY 3625 1575	FIR	-	1
HY31NW35	KNOWE OF MOAN	HY 3124 1802	BIHA	IA	IA
HY31NW37	HARRAY SCHOOL	HY 3214 1711	BIHA	1?	-
HY31NW44	KN OF CONYEAR	HY 301 193	BIHA	2?	-
HY31NW47	LOCH OF BOSQUOY	HY 30 18	BIHA	-	1
HY31NW48	BEBORAN	HY 3060 1712	BIHA	-	3
HY31NW52	CAPERHOUSE	HY31NW52	BIHA	1?	-
HY31NW53	FURSO	HY 3120 1656	BIHA	1?	-
HY31NW54	FURSO	HY 3124 1654	BIHA	1?	-
HY31SE14	HEDDLE COTTAGE	HY 358 125	FIR	-	-
HY31SE19	RENNIBISTER	HY 3982 1292	FIR	?1	-
HY31SW13	NISTABEN	HY 3338 1166	STEN	?3	-
HY31SW22	QUOYER	HY 3173 1407	STEN	1?	?
HY31SW26	MAES HOWE	HY 3191 1286	STEN	-	1
HY31SW27	DAMS	HY 3117 1095	STEN	-	1?
HY31SW33	HUNDATOWN	HY 323 145	BIHA	-	2
HY31SW35	STENNESS ODIN	HY 3094 1262	STEN	-	-
HY31SW68	ORK, KONISQUOY	HY	STRO	-	1
HY31SW72	LOCHVIEW	HY 302 128	STEN	-	-
HY32NE14	THE GRAAND EYNHALL	HY 3590 2874	RAE	-	-
HY32NE15	WESTNESS, ROUSAY	HY 3830 2909	RAE	-	1
HY32NE30	EYNHALLOW	HY 3582 2888	RAE	-	-
HY32NE38	WARD HILL ROUSAY	HY 3866 2954	RAE	-	-
HY32NE45	TAING OF BURGAR	HY 3526 2767	EAR	-	1
HY32NW4	LOWER ARSDALE	HY 3263 2869	EAR	1?	-
HY32NW16	PETER'S KIRK	HY 3371 2870	EAR	-	-
HY22SE12	STYES OF AIKERNESS	HY 3655 2291	EAR	1?	-
HY32SE16	ARWICK	HY 389 248	EAR	-	1
HY33SE38	MANSEMASS HILL R	HY 3770 3076	RAE	-	1
HY33SE39	MANSEMASS HILL R	HY 3784 3071	RAE	-	1
HY34NE1	NOUP HEAD WEST	HY 3921 4971	WEST	-	-
HY40NE3	SIR HUGHS SEAT	HY 4542 0600	KASO	-	-
HY40NE7	MARKSTONE MOSS	HY 4605 0556	HOLM	-	-
HY40NE10	HILLOCK OF GARTH	HY 4704 0679	KASO	1?	-
HY40NE12	GARTH	HY 4653 0680	KASO	1?	-

Table A7.2 Sites rejected and not included in the barrow/cist distribution maps below					
NMRS NO.	NAME	GRID REF	PARISH	No. B	No. C
HY40NE14	WEETHICK ROONDLAS	HY 495 090	STAD	-	-
HY40NE19	CRAW HOWE	HY 4908 0696	STAD	?3	-
HY40NE20	STANELOOF	HY 4833 0698	STAD	1?	-
HY40NE22	ESSONQUOY	HY 4901 0838	STAD	-	-
HY40NE23	HOWE OF STANELOOF	HY 4824 0699	STAD	-	-
HY40NE25	HEATHERY HOWES	HY 480 068	HOLM	1?	-
HY40NW33	NEW SCAPA ROAD	HY 447 090	KASO	14?	-
HY40SE9	GRAEMESHALL	HY 4877 0165	HOLM	-	-
HY41SW7	SAVEROCK	HY 430 129	KASO	1?	-
HY41SW21	WIDEFORD HILL	HY 41 11	KASO	10?	3
HY42NW18	KNITCHEN HILL ROUS	HY 4295 2880	RAE	-	-
HY42NW38	KINGARLY ROUSAY	HY 4340 2974	RAE	-	-
HY42NW40	FROTOFT, ROUSAY	HY 4066 2763	RAE	-	1
HY42NW41	MOUNT PLEASANT RO	HY 4040 2808	RAE	-	-
HY42NW50	WYRE THE TAING	HY 4221 2559	RAE	1?	-
HY42NW54	WYRE THE TAING	HY 4244 2559	RAE	-	1
HY42NW84	HALLBRECK, WYRE	HY 4376 2603	RAE	-	1
HY42NW107	WYRE TESTAQUOY	HY 4362 2591	RAE	1	-
HY42SE5	THE GALT SHAPINSAY	HY 4842 2103	SHAP	1?	-
HY42SW5	QUEENAMUCKLE	HY 4192 2192	EAR	3	2
HY42SW15	GAIRSAY	HY 4411 2233	EAR	-	-
HY43SE2	SCOCK NESS ROUS	HY 4526 3214	RAE	?1	-
HY43SE7	KN OF HOWE EGILS	HY 463 312	RAE		2
HY43SW7	BIGLAND, ROUSAY	HY 435 321	RAE	2?	-
HY42SW14	ENYAS HILL	HY 4077 2073	EAR	-	2
HY43SW16	BIGLAND, ROUSAY	HY 43 32	RAE	-	
HY43SW26	KIERFEA HILL ROUS	HY 4233 3212	RAE	-	1
HY43SW30	BIGLAND ROUSAY	HY 43483208	RAE	1?	1?
HY44NE12	BERRIEDALE WESTR	HY 454 492	WEST	-	1
HY44NW10	COUTERS HILL WES	HY 421 486	WEST	1?	-
HY44NW15	WESTRAY GALLO HILL	HY 4313 4617	WEST	-	-
HY44NW25	COUTERS HILL WESTR	HY 4173 4850	WEST	3?	-
HY44NW26	FARRIVALD WESTR	HY 423 492	WEST	-	1
HY44NW27	WILKIES KNOWE	HY 4 4	WEST	-	2
HY44NW28	NISTIGAR, WESTRAY	HY 449 454	WEST	-	1
HY44NW44	NOLTLAND WESTRAY	HY 429 491	WEST	-	-
HY44SE12	WESTRAY TUQUOY	HY 4542 4397	WEST	-	-
HY44SW10	KESTRO, WESTRAY	HY 4471 4314	WEST	-	1
HY44SW14	FITTY HILL WESTRAY	HY 4297 4486	WEST	1?	-
HY44SW12	AYRE OF BURRISTAE WE	HY 4331 4281	WEST	-	-
HY44SW13	LANGSKAILL WESTRAY	HY 4344 4256	WEST	-	-
HY45SE13	HYNDGREENIE	HY 4955 5387	PAWE	-	-
HY45SE22	SKAILL, WESTRAY	HY 460 522	WEST	-	1

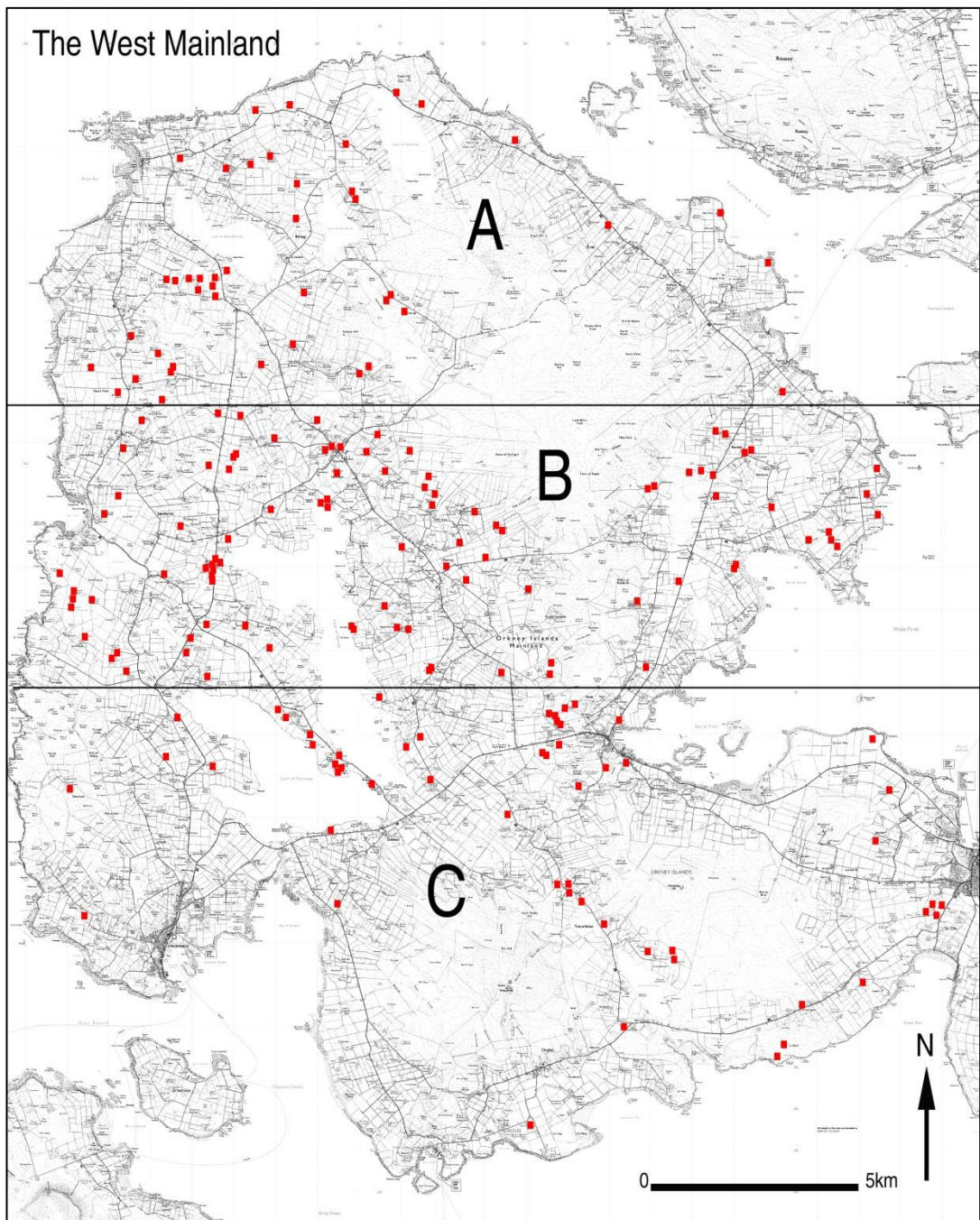
Table A7.2 Sites rejected and not included in the barrow/cist distribution maps below					
NMRS NO.	NAME	GRID REF	PARISH	No. B	No. C
HY45SE47	NORTH VIA PAPAY	HY 4982 5335	PAWE	-	-
HY45SE60	BAY OF SKAILL WEST	HY 455 512	WEST	-	1
HY45SW2	TRENABIE WESTRAY	HY 4439 5113	WEST	-	-
HY45SW3	VAVAL WESTRAY	HY4463 5175	WEST	-	-
HY50NE2	DENWICK	HY 5748 0863	STAD	-	1
HY50NE4	MILLFIELD	HY 5743 0704	STAD	?2	-
HY50NE8	KEIGAR	HY 55 06	STAD	-	-
HY50NE11	SOUTH KEIGAR	HY 552 063	STAD	-	-
HY50NE30	HOWAN LICKEN	HY 5930 0930	STAD	-	-
HY50NE35	UPPER STOVE	HY 5852 0728	STAD	1?	-
HY50NE36	UPPER STOVE	HY 5864 0706	STAD	1?	-
HY50NE37	UPPER STOVE	HY 5846 0726	STAD	1?	-
HY50NE38	UPPER STOVE	HY 5839 0726	STAD	1?	-
HY50NE39	UPPER STOVE	HY 5820 0730	STAD	1?	-
HY50NE40	UPPER STOVE	HY 5803 0774	STAD	1?	-
HY50NE42	CORNQUOY NEVI	HY 5865 0590	STAD	1	1?
HY50NW7	HOWIES OF BOSSACK	HY 5046 0844	STAD	?5	-
HY50NW27	BRYMER TANKERNESS	HY 5028 0599	STAD	1?	-
HY50NW39	SAND OF NESS	HY 5366 0945	STAD	-	-
HY50NW40	SAND OF NESS	HY 5369 0944	STAD	-	-
HY50NW45	THE GLOUP	HY 5448 0973	STAD	-	-
HY50SE5	BLACK HOLM	HY 5937 0199	STAD	-	1
HY50SE9	STONEHALL	HY 5538 0346	STAD	-	-
HY50SE13	POINT OF AYRE	HY 5906 0394	STAD	-	-
HY50SE14	LITTLE COTTAGE	HY 5708 0448	STAD	-	-
HY50SW10	GEARS	HY 5402 0367	STAD	1?	?1
HY50SW15	WARTHILL	HY 5255 0126	HOLM	-	-
HY51NW11	HOUSEBAY, SHAP	HY 508 165	SHAP	-	3
HY51NW14	HILLOCK OF QUOYS	HY 5192 1985	SHAP	-	-
HY51NW20	SWARTAQUOY SHAP	HY 5166 1907	SHAP	-	1
HY52NE2	WAR NESS EDAY	HY 55 28	EDAY	-	-
HY52SW3	NESS OF ORK SHAP	HY 5366 2242	SHAP	-	?
HY52SW6	GIRNIGOE SHAPINSAY	HY 5238 2133	SHAP	-	-
HY53NE25	CALF OF EDAY	HY 5832 3892	EDAY	-	-
HY53NE28	EDAY, MILL LOCH	HY 5651 3702	EDAY	-	-
HY53NE29	CARRICK HOUSE EDAY	HY 5635 3890	EDAY	1?	0
HY53NW6	FARA	HY 5296 3639	EDAY	-	-
HY53NW9	RAPNESS, WESTRAY	HY 5003 3863	WEST	-	1
HY53NW5	CRAW TUA WEST	HY 5018 3951	WEST	-	1
HY53SE3	BAY OF LONDON EDAY	HY 5659 3440	EDAY	-	1
HY53SE8	EDAY THE MANSE	HY 560 323	EDAY	-	-
HY53SE16	EDAY	HY 5585 3251	EDAY	-	-
HY53SE18	SANDS OF DOOMY	HY 5566 3377	EDAY	-	-

Table A7.2 Sites rejected and not included in the barrow/cist distribution maps below					
NMRS NO.	NAME	GRID REF	PARISH	No. B	No. C
HY54SW6	PETERKIRK WEST	HY 5002 4006	WEST	?2	-
HY61NE6	AUSKERRY	HY 6703 1664	STRON	-	-
HY62NE7	BRAES OF HOWAR	HY 652 285	STRON	-	1
HY62NE25	STRONSAY CUMLEY	HY 67 26	STRON	-	-
HY62NW10	LINGA HOLM	HY 6180 2716	STRON	1?	-
HY62NW14	JOHNS HILL STRON	HY 6347 2891	STRON	-	-
HY62NW17	HUIP NESS STRON	HY 6471 2981	STRON	1?	-
HY62NW45	LINGA HOLM N TAING	HY 6214 2788	STRON	-	-
HY62SE28	STRONSAY LEA SHUN	HY 6576 2152	STRON	-	-
HY62SE33	STRONSAY CLEAT	HY 6880 2208	STRON	-	-
HY62SW6	CUBBIE ROO'S LADE	HY 6056 2157	STRON	-	-
HY63NW4	BOLOQUOY SANDAY	HY 6260 3896	CRAB	-	-
HY63NW5	STOVE, SANDAY	HY 608 355	CRAB	-	-
HY63NW25	KNOWES, SAND	HY 6353 3878	CRAB	-	1
HY63 NW27	NORTH MIRE	HY 6205 3799	CRAB	1?	1?
HY63NW28	BARBERS TOWER	HY 6346 3896	CRAB	-	-
HY63NW32	WARSETTER, SAND	HY 628 377	CRAB	1	1
HY63NW33	MIRES SANDAY	HY 6350 3942	CRAB	-	-
HY63NW42	WHUPLAND HILL	HY 6049 3612	CRAB	-	1
HY63SW2	HUIP NESS STRONSAY	HY 6470 3001	STRON	-	-
HY63SW10	HACKS NESS SAND	HY 6149 3426	CRAB	-	-
HY63SW11	SPUR NESS SANDAY	HY 6036 3414	CRAB	-	-
HY63SW12	HOLM OF HUIP	HY 627 308	STRON	-	-
HY63SW18	HOLM OF HUIP	HY 6268 3098	STRON	-	-
HY63SW19	HOLM OF HUIP	HY 6265 3095	STRON	?1	-
HY64NE14	H'HOW COT BRAE	HY 69 45	CRAB	-	-
HY64SE1	THOR NESS SANDAY	HY 669 431	CRAB	-	-
HY64SE6	NESS OF BROUGH SAN	HY 6544 4256	CRAB	1?	-
HY64SE7	LEAVIS GARTH SAN	HY 695 416	LADY	1	1
HY64SE8	BRAES OF GORN	HY 6677 4450	CRAB	1?	-
HY64SE19	GALLOW HILL SAND	HY 6615 4065	CRAB	-	2
HY73NW1	KNAP OF GRINDISH	HY 7069 3802	LADY	-	3
HY73NW5	TRES NESS SANDAY	HY 7 3	LADY	-	-
HY73NW8	TRES NESS SANDAY	HY 7119 3757	LADY	1?	-
HY74SE8	MACKABUSTER SAN	HY563 4468	LADY	1?	-
HY74SE16	CRUE-MARRON-DEME	HY 7668 4404	LADY	-	-
HY74SW18	CLEAT SANDAY	HY 7039 4302	LADY	-	1?
HY75NE3	NETHER LINNAY N RON	HY 759 552	CRAB	-	-
HY75NE10	GARSO, N. RONALDS	HY 7725 5542	CRAB	-	1?
HY75NE22	DENNIS NESS N RON	HY 784 559	CRAB	-	-
HY75SE11	FINYAR HOUSE BRAE	HY 7610 5409	CRAB	-	-
HY75SE13	N. RONALDSAY	HY	CRAB	-	-
HY75SE16	HOLLAND N. RON	HY 753 531	CRAB	-	1

Table A7.2 Sites rejected and not included in the barrow/cist distribution maps below					
NMRS NO.	NAME	GRID REF	PARISH	No. B	No. C
HY75SE31	TRIM TUOS	HY 7569 5396	CRAB	-	-
ND38NE6	NORTH HEAD SWONA	HY 3909 8508	SORO	-	-
ND38NE7	NORTH HEAD SWONA	ND 39 85	SORO	?1	-
ND38NE8	NORTH HEAD SWONA	ND 3900 8522	SORO	-	1
ND38NW2	GALLOW TUAG S WALLS	ND 3036 8938	WAFL	-	-
ND38NW27	HILL O WHITE HAMARS	ND 3105 8882	WAFL	-	-
ND38NW28	MISBISTER THE LOFT	ND 3288 8891	WAFL	-	-
ND38NW29	MISBISTER THE LOFTS	ND 3325 8885	WAFL	-	-
ND38SE8	WARBISTER HILL SWON	ND 3910 8421	SORO	-	-
ND38SE10	SWONA THE TARF	ND 3860 8382	SORO	7?	-
ND39NW10	WHITINGPOINT FARA	ND 3288 9702	WAFL	-	-
ND39NW23	UPPER QUOY FARA	ND 3269 9611	WAFL	-	-
ND39NW29	UPPER HOUSE FARA	ND 3289 9601	WAFL	-	-
ND39NW48	FARA	ND 3303 9559	WAFL	-	-
ND39NW53	FARA	ND 3351 9541	WAFL	-	-
ND39NW70	FARA BACK BURN	ND 3249 9557	WAFL	-	-
ND39NW88	FARA UPPER HOUSE	ND 3308 9606	WAFL	-	-
ND39NW89	FARA UPPER HOUSE	ND 3315 9603	WAFL	-	-
ND39NW110	CAVA	ND 3255 9964	OR	-	-
ND39NW134	MUCKLE HOUSE CAVA 1	ND 3267 9934	OR	-	-
ND39NW135	MUCKLE HOUSE CAVA 2	ND 3277 9929	OR	-	-
ND39NW146	RYSA LITTLE 1	ND3090 9848	WAFL	-	-
ND39NW149	RYSA LITTLE 2	ND 3145 9766	WAFL	-	-
ND39SE5	SWITHA, THE OOL	ND 3613 9029	WAFL	1?	1
ND39SE6	PT O THE POOL SWI	ND 3587 9059	WAFL	1?	1
ND39SE7	NOUST OF SWITHA SWI	ND 3652 9110	WAFL	1?	-
ND39SE12	SWITHA	ND 3670 9108	WAFL	-	-
ND39SE14	SWITHA	ND 3679 9121	WAFL	-	1
ND48NE6	HALCRO DEADMANS HI	ND 4594 8554	SORO	-	1
ND47NE7	THE KILN MUCK SKERRY	ND 4633 7843	SORO	1?	1??
ND47NE13	MUCKLE SKERRY	ND 4664 7821	SORO	-	-
ND47NE14	MUCKLE SKERRY	ND 4628 7835	SORO	?1	?1
ND47NE15	MUCKLE SKERRY	ND 4656 7846	SORO	-	-
ND 47NE16	MUCKLE SKERRY	ND 4687 7843	SORO	?1	?1
ND48NE15	WARD HILL S RONALDS	ND 4554 8865	SORO	-	-
ND48NE16	GAIRY HILL S RONALD	ND 4655 8556	SORO	-	-
ND48NE17	HALCRO HEAD S RON	ND 4734 8567	SORO	-	-
ND48NE19	HESTA HEAD S RONAL	ND 4621 8786	SORO	-	-
ND48NW14	SANDYHILL S RONALD	ND 4413 8726	SORO	1?	-
NOT USED					
ND48NW24	BARSWICK S RONALD	ND 434 864	SORO	-	-
ND48SE9	SOUTH RONALDSAY	ND 469 834	SORO	-	-
ND49NE9	THE RUFF BURRAY	ND 4537 9665	SORO	-	-

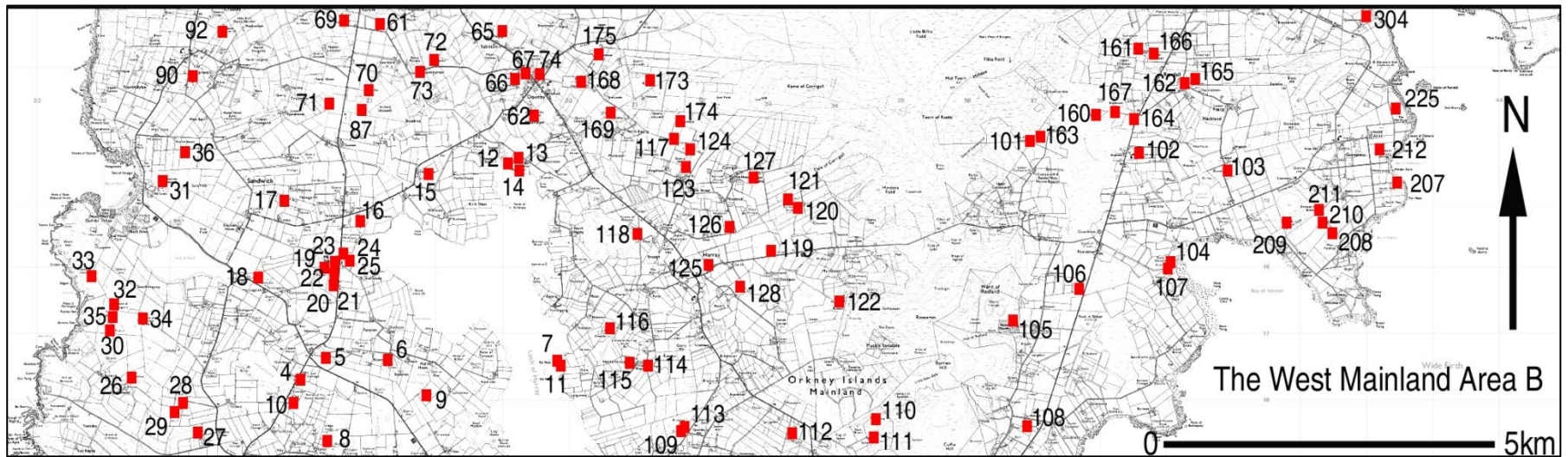
Table A7.2 Sites rejected and not included in the barrow/cist distribution maps below					
NMRS NO.	NAME	GRID REF	PARISH	No. B	No. C
ND49NE24	BURRAY	ND 462 972	SORO	-	-
ND49NW3	HUNDA	ND 440 967	SORO	-	-
ND49NW4	HUNDA T CAIRN HEAD	ND 435 962	SORO	-	-
ND49NW5	EAST AYRE HUNDA	ND 447 974	SORO	-	-
ND49SE5	HALLBRECK S RONALD ¹⁰	ND 4879 9404	SORO	-	-
ND49SE16	KIRKHOUSE S RONALD	ND 4724 9084	SORO	-	-
ND49SE19	KIRK NESS S RONALDSAY	ND 4738 9117	SORO	-	-
ND49SE20	KIRKHOUSE S RON	ND 4695 9089	SORO	-	1
ND49SE24	GRIM NESS S RONALD	ND 491 927	SORO	-	-
ND49SE25	VENSILLY S RONALDSAY	ND 4533 9141	SORO	-	-
ND49SE26	NORTH CARA S RON	ND 4734 9462	SORO	-	-
ND49SE36	HALLBRECK S RON	ND 4840 9450	SORO	-	-
ND49SW44	QUARRYHOUSE S RON	ND 413 942	SORO	-	-
ND49SW49	MIDBANKS S RON	ND 421 902	SORO	?2	-

¹⁰ Possibly a chambered tomb, now destroyed: see the Canmore entry for details



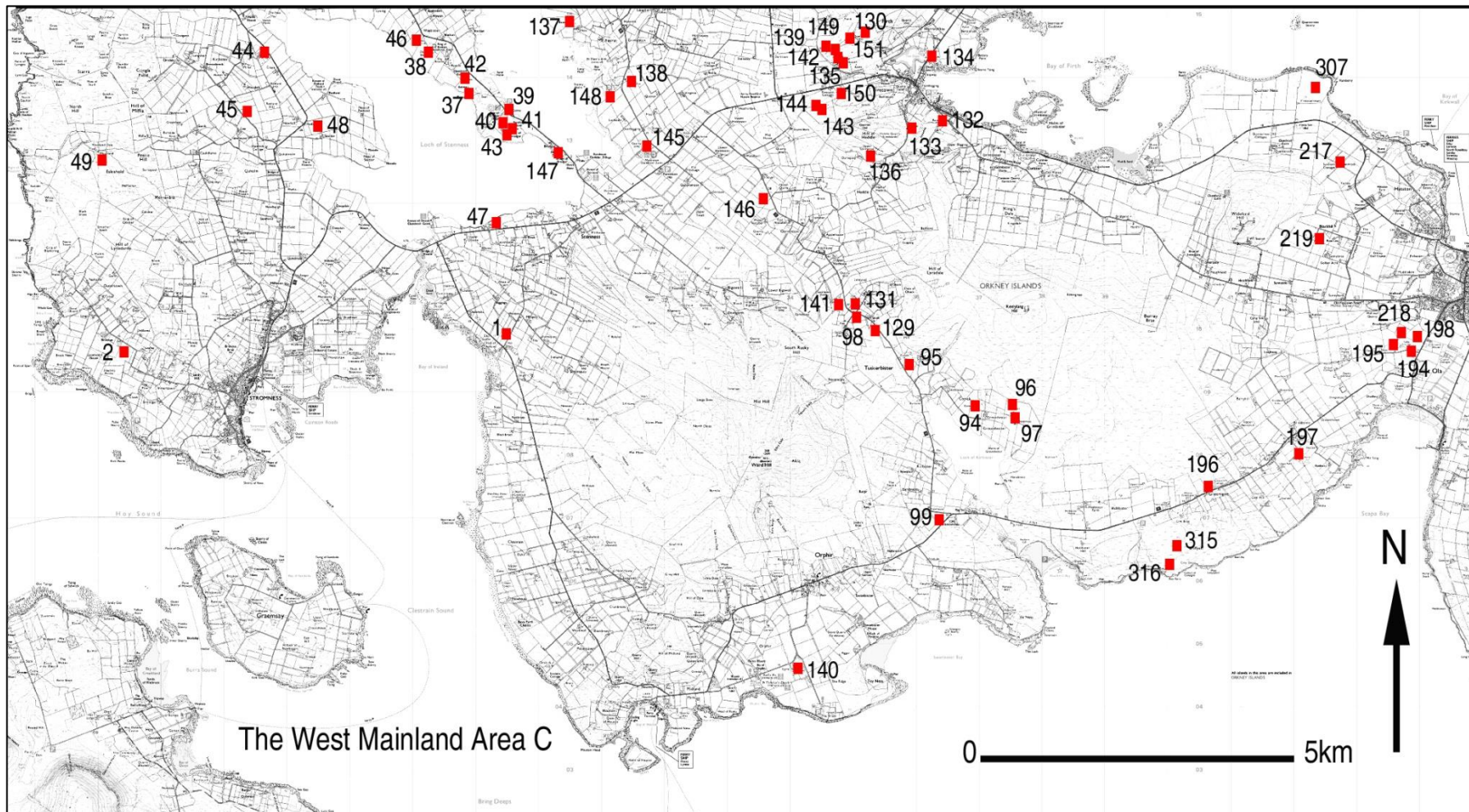
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Figure A7.1 The West Mainland divided into three areas: A, B & C for the enlarged maps below.



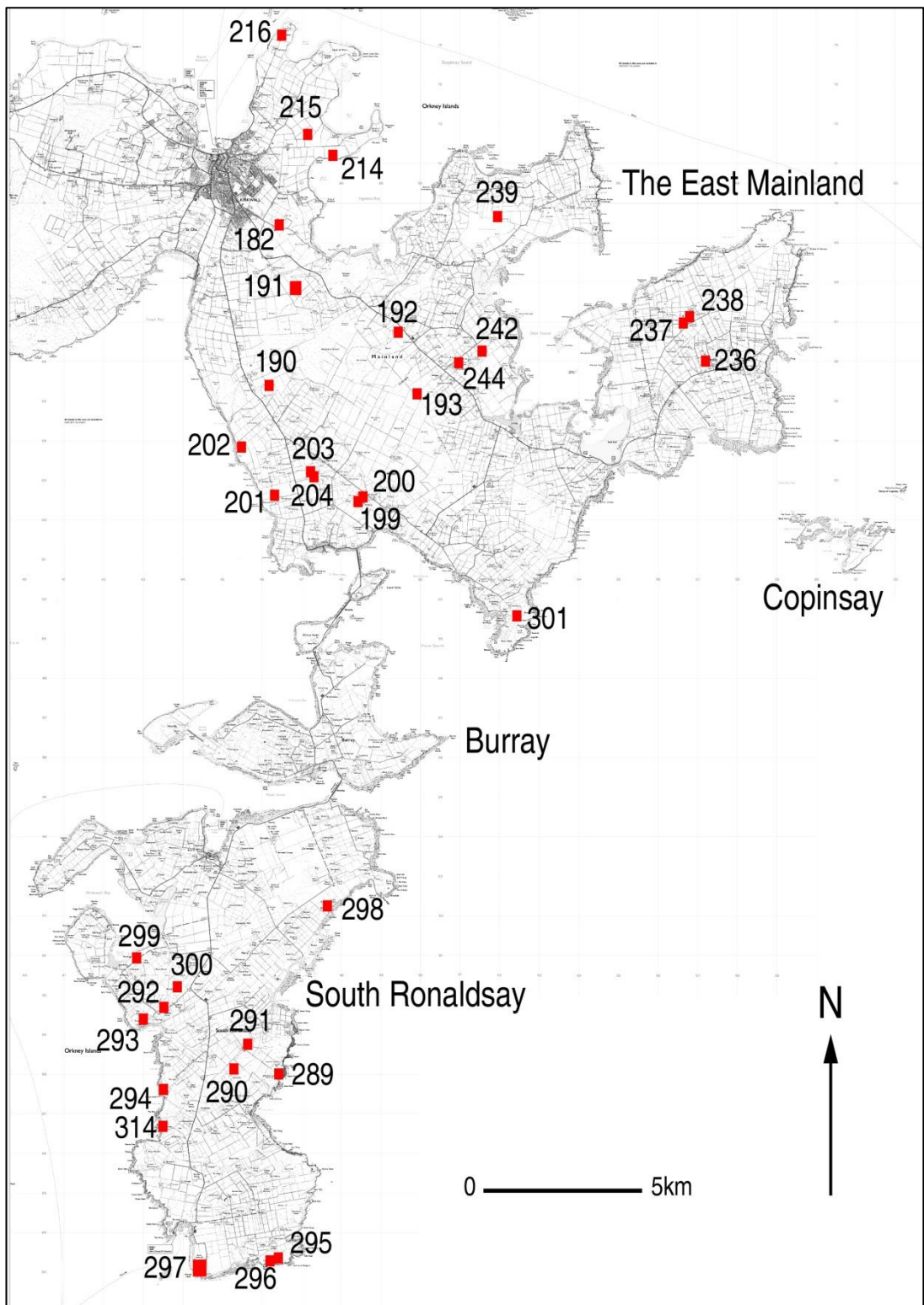
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Figure A7.3 Barrows and cists in the West Mainland, Area B.



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Figure A7.4 Barrows and cists in the West Mainland, Area C.



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Figure A7.5 Barrows and cists in the East Mainland, Burray and South Ronaldsay.

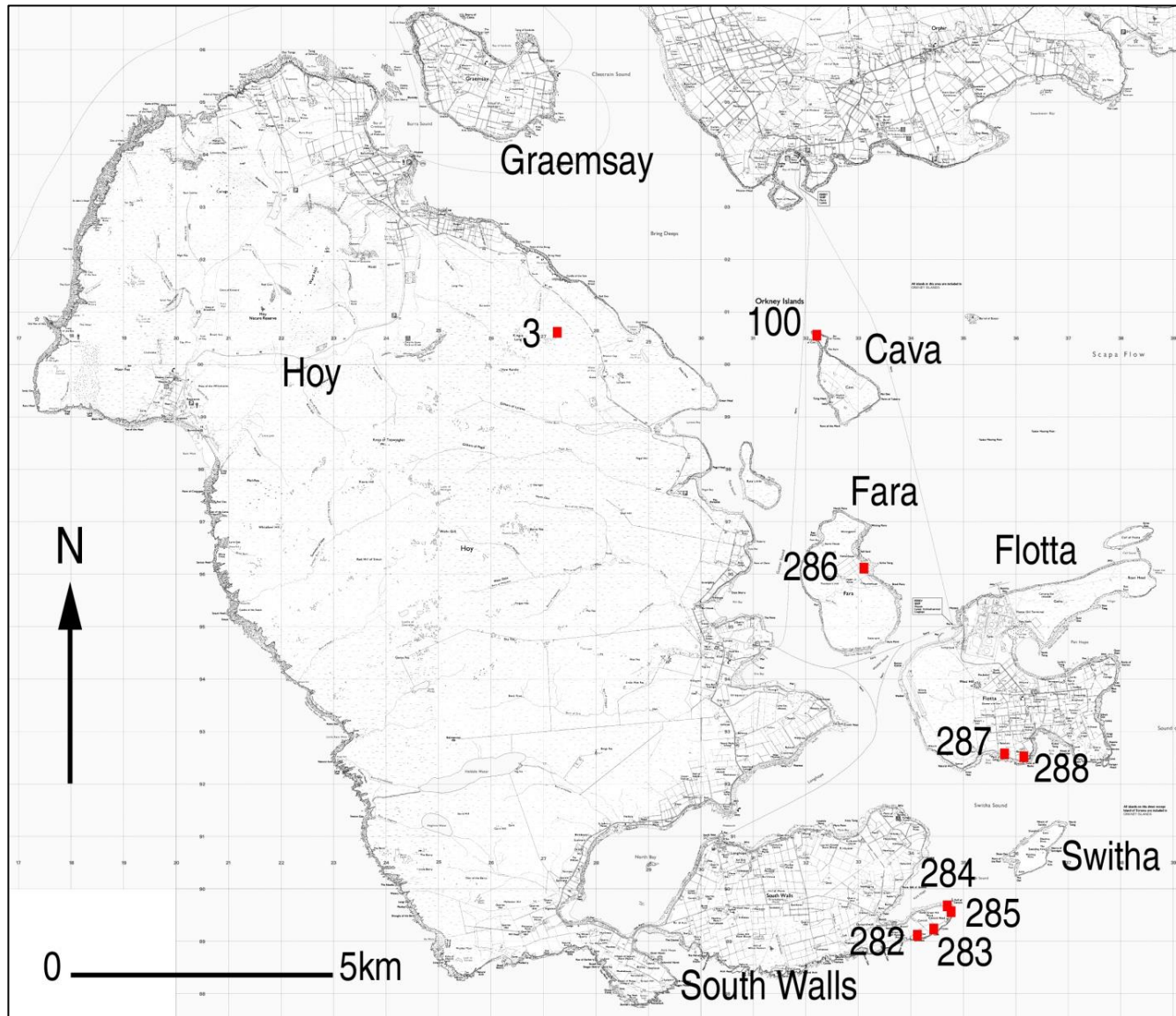
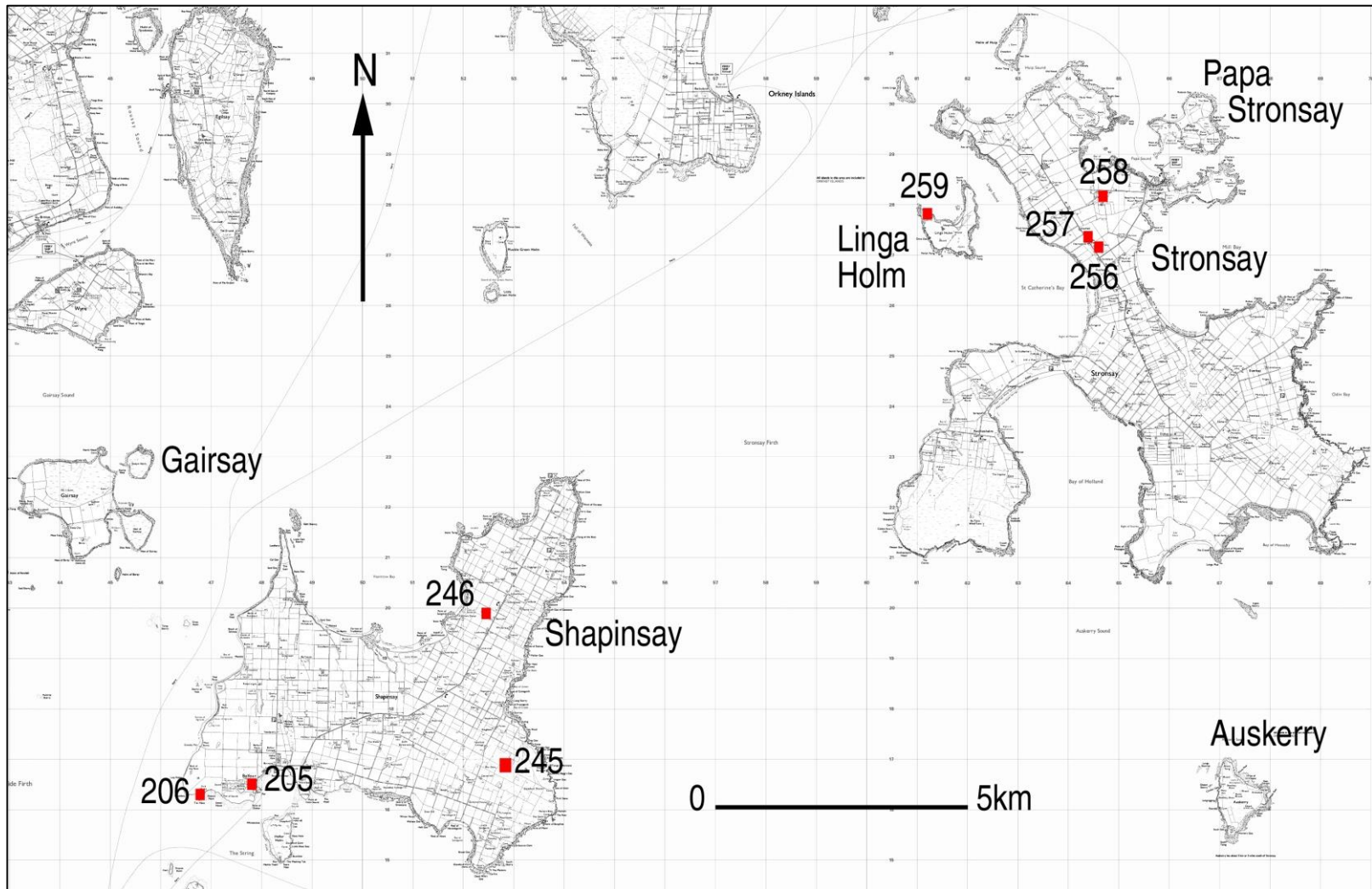


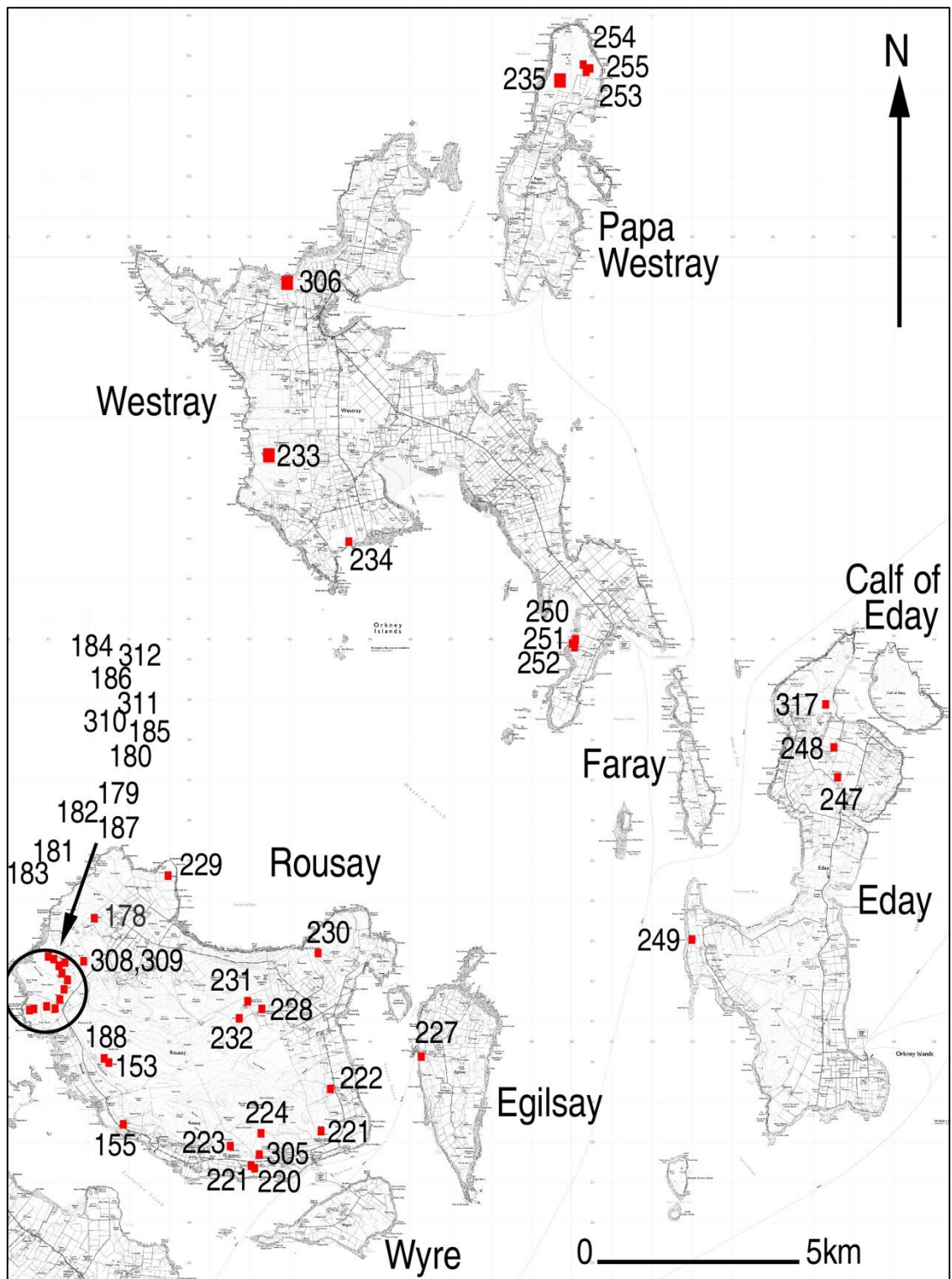
Figure A7.6 Barrows and cists in Hoy, Walls, Flotta, and the smaller isles.

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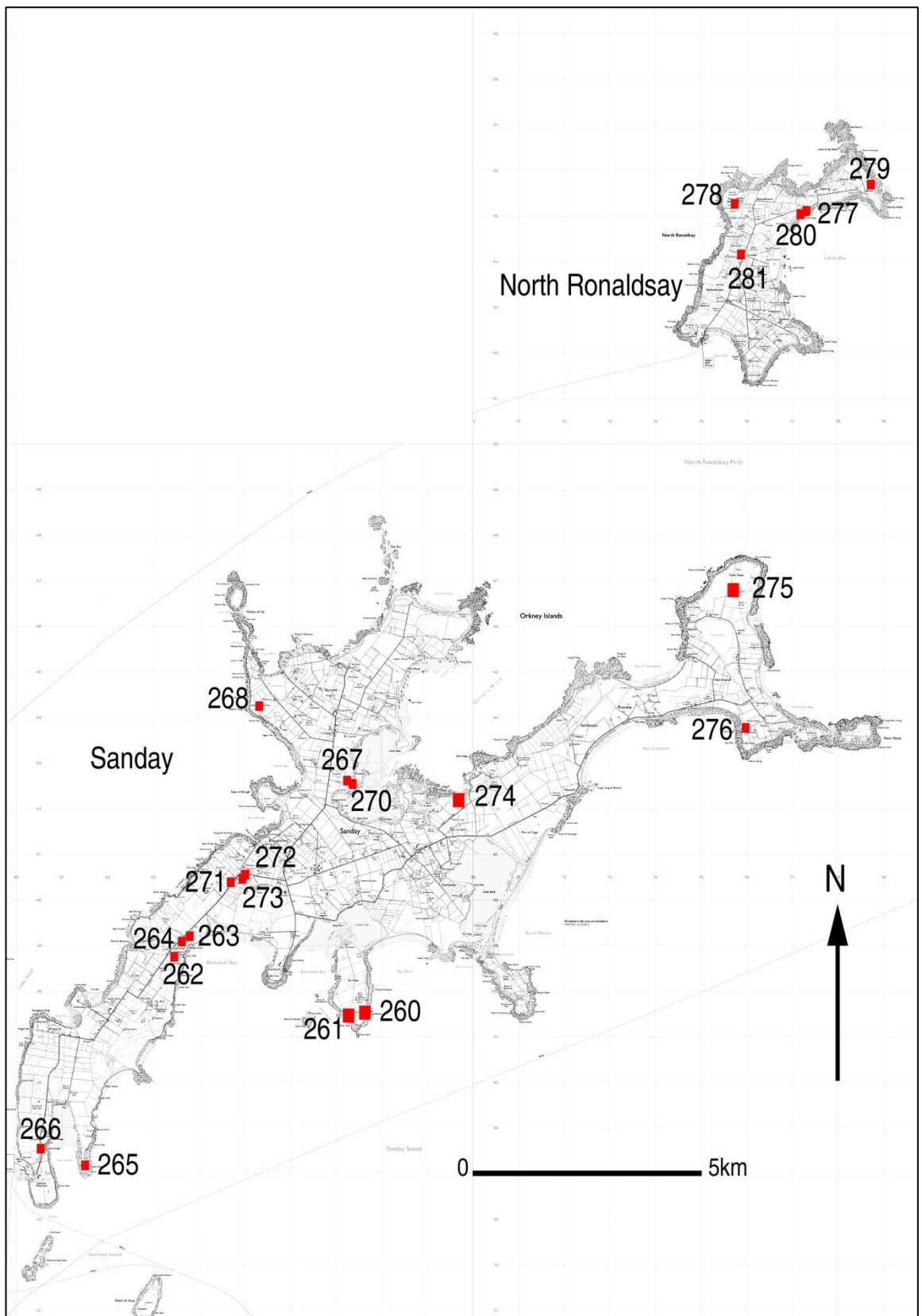
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Figure A7.7 Barrows and cists in Shapinsay, Stronsay and Gairsay.



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Figure A7.8 Barrows and cists in Westray, Eday, Rousay and small islands.



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Figure A7.9 Barrows and cists in Sanday and North Ronaldsay.

Table A7.3 Summary of published Orkney Bronze Age burials, types and finds

Table A7.3 Summary of published Orkney Bronze Age burials, types and finds			
Site Name	Type	Finds	Reference
Summersdale, Stenness	Barrow & Cist	Inhumation & cremation	Ashmore 1974
Crantit, St Ola	Cists	Cremation	Ballin Smith 2014
Kewing, Rendall	Cist	Cremation, tiny frags Beaker?	Ballin Smith 2014, 91 – 109
Nether Onston, Stenness	Cist	Inhumation?	Ballin Smith 2014, 110 – 16
Bu Farm, Rapness, Westray	Barrows & cists	Cremations	Barber et al 1996
Knowes of Trotty, Harray	Barrows & cist	Cremation, gold discs, amber	Card & Downes 2005; Petrie 1860
West Puldrite, Rendall	Barrow & Cist	Inhumations	Corrie 1929
Trumland, Rousay	Barrow & Cists	Cremations, steatite urns	Craw 1934
Little Crofty, Tankerness	Cist	Socketed knife	Cursiter 1887
Crantit, St Ola	Cist, 1x2 storey	Antler hammer, cremation & inhumation	Cursiter 1910
Sand Fiold, Sandwick	Rock cut cist, multi period	Cremations/inhumation, Vase urn	Dalland 1999
Mousland, Stromness	Barrow & cist	Cremation, steatite axe	Downes 1994a
Linga Fiold, Sandwick	Barrows & cists	Cremations, steatite urns, ard points etc	Clouston 1845, 55-8; Downes 2005, 251 - 86;
Gitterpitten, Rendall	Barrows & cists, pits	Cremations	Downes & May 2005a, 287 – 91
Varme Dale, Rendall	Barrows & cists	Cremations	Downes & May 2005a, 291 – 3
Blomuir 1, Holm	Cist, corbelled stone cover	Cremations	Downes & May 2005b, 294
Blomuir 2, Holm	Probable cist	Urn & cremation	Downes & May 2005b, 295
Redlandhill, Stromness	Cist N/T of burial	Food vessel type, honey residue	Downes & May 2005b, 295-6
Upper Bigging, Corrigall, Harray	Cist N/T of burial,	Cramp outside cist, Food vessel type	Downes & May 2005b, 296
Riff, Rendall	Cist	Cremation & inhumations	Downes & May 2005b, 298 – 9
Banks, Quarrel Geo, S. Ronaldsay	Barrow & Cist	Cremation & inhumations	Downes & May 2005b, 299
Ferndale, Rendall	Barrow & Cists	Cremations & inhumation	Duffy 2005

Table A7.3 Summary of published Orkney Bronze Age burials, types and finds			
Site Name	Type	Finds	Reference
Ramberry, St. Ola	Barrow & cist	N/T badly damaged	Crozier et al 2016
Queenamuckle, Rendall	Barrow	Steatite urn, cremation	Dunbar 2014
Geord of Nears, Rousay	Barrow & Cist	Cremation, 2 steatite urns	Grant 1933a
Blows, Deerness	Cist	Cremation, clay urn	Grant 1933b
Knap Knowes, Quandale, Rousay	Barrow cemetery & cists	Cremations, clay urns	Grant 1937
Whoom, Quandale, Rousay	Barrow cemetery & cists	Cremations, steatite urn & plugs	Grant 1937
Sandy Holes, Quandale, Rousay	Barrow cemetery & cists	Cremations	Grant 1937
Scabra head, Quandale, Rousay	Barrow cemetery & cists	Cremations	Grant 1937
Tafts, Quandale, Rousay	Barrow cemetery & cists	Cremations	Grant 1937
Ward Hill, Rousay	Barrow & cist	Empty-previously disturbed	Grant 1937
Taversoe Tuick	Tomb; inserted cists	Cremations c. 5 -6, some urned	Grant 1939b, Reynolds 1985
Lochside, Stenness	Cists	Cremation, NFD	Greig 1931
Lopness. Sanday	Cist	Inhumation, pottery (?contamination)	Innes 2016
Knowes of Quoyscottie, Birsay	Barrow & cremation cemetery	Multiple cremations, ards, pottery	Hedges 1977
Lower Ellibister	Cist	Cremation	Hedges 1980
Hindrafiold	Cist	Cremation	Hedges 1980
Werne 1 & 2	Cists	Cremations	Hedges 1980
Garsetter, Birsay	Cist	Cremation	Hedges 1980
Sandyha Rendall	Barrow cemetery & Cist	Cremation	Hedges 1980
South Attit, Rendall	Cist	Cremation	Hedges 1980
Cleat, St Ola	Cist	Cremation	Hedges 1980
Castle, Rendall	Cist	Cist empty apart from hammer stone	Kirkness 1925a & b
Hundatown, Grimston, Harray	Cist	Cremation	Kirkness 1927
Crantit, St Ola	Cist	Cremation	Marwick 1924c

Table A7.3 Summary of published Orkney Bronze Age burials, types and finds			
Site Name	Type	Finds	Reference
Ness of Brodgar, Stenness	Cists	Inhumations, carved stone	Marwick 1926
Backakelday, Holm	Cists	Cremation and inhumation	Marwick 1928a
Blows, Deerness	Cist	Steatite urn, cremation	Marwick 1929a & 1929c
Groundwater Hill, Orphir	Cists	Cremations and inhumation	Marwick 1929a
Lyking, Sandwick	Cist	Steatite urn, inhumation	Marwick 1949
Newhouse, Birsay	Cist	Food vessel/beaker hybrid	Marwick 1949
Corquoy, Rousay	Barrows & cists	Cremations and steatite urn	M'Cre 1881
Links of Noltland, Westray	Inhumation& cremation cemetery	65 burials, no details available	Moore & Wilson 2011a
Links of Skail, Sandwick	Barrows & cists	Jet necklace & bone/ivory toggle	Low 1879, intro; Lysaght 1974
Holland, St Ola	Barrow & cists	Cremation and inhumation	Neil 1981
Plum-cake Knowe, Brodgar	Barrow & cists	Cremations, steatite & clay urns	Petrie 1856, 58-60
Newbigging, Kirkwall	Barrow & cists, 1x2 storey	Inhumations & cremation	Petrie 1866a
Isbister, Rendall	Cists - cemetery	Inhumations & cremations	Petrie 1866a
St. Andrews I, NFD	Barrow & Cist	Clay urn cremated bone, ard point?	Petrie 1868b
St. Andrews II, NFD	Barrow & Cist	Cremated bone, ard point	Petrie 1868b
Near Bookan, Sandwick	Barrow & Cist	Ard point	Petrie 1868b
Whitehall, Stronsay	Many graves NFD	Axe ¹¹ , urns, cremations/inhumations, ard	Petrie 1868b; HY62NW5: Petrie notebooks
Oram's Fancy, Stronsay	Cists, 1x2 storey	Cremations, steatite urns	Petrie 1870
Laughton's Knowe, Holm	Barrow & cist	Cremation, LBA razor	Piggott 1947
Moan Farm, Firth	Rock cut cist, reusable?	Inhumation	Richards & Stuart 1994

¹¹ Battleaxe ORK5 (Fenton 1988).

Table A7.3 Summary of published Orkney Bronze Age burials, types and finds			
Site Name	Type	Finds	Reference
Queenafjold, Twatt, Birsay	Barrow & Cist	Cremation	Ritchie & Ritchie 1974
Loth Road, Sanday	Barrow, cist & pits	Cremation, steatite urns, ard points etc	Sharman 2007a
Gyre, Orphir	Double cist	Inhumations	Simpson, Murphy et al 2007a
Skae Frue, Sandwick	Barrow & cists	Inhumations	Thomas 1852, 107 – 10
Geroin, Harray	Cist	Cremation	Toolis 2004
Antabreck, North Ronaldsay	Cists	Inhumation & cremation	Traill 1876
Taversoe Tuick, Rousay	Cists	Cremations, urns	Turner 1903
Innertown, Stromness	Cist	Inhumations	Watt 1878
Gyron Hill, Sandwick	Barrow & Cist	Steatite urn and cremated bone	Watt 1885
Gyron Hill, Sandwick	Cist	Steatite urn and cremated bone	Watt 1885
Cott, Stronsay	3 x Cists	Battleaxe, cremations	Working Stones Project ¹²

¹² Previously unrecorded example discovered in the Cambridge Museum of Archaeology and Anthropology during the Working Stones project, along with an account of its discovery published on page 5 of the Orcadian newspaper on the 17th of August 1907: <http://orkneystonetools.org.uk/themes/biographies/objects/battle-axe-cott-stronsay>

Table A7.4 Beaker/Beaker-like pottery & Food Vessel Hybrids from Orkney sites

Table A7.4 Beaker/Beaker-like pottery & Food Vessel Hybrids from Orkney sites	
(1) Beaker & Beaker-like pots	
(i) Settlement sites	Reference
Braes of Ha' Breck, Wyre: from quarry backfill	Thomas 2010 & 11; Sheridan 2013, 56-8
Crossiecrown, Kirkwall & St. Ola	Jones, A.M. 2016
Links of Noltland, Westray	Clarke et al 1985, 92
	Clarke et al forthcoming
Ness of Brodgar, Stenness	Towers et al 2015
Rinyo, Rousay	Childe & Grant 1939 & 1947
Tofts Ness, Sanday	MacSween 2007
Barnhouse, Stenness ¹³	Richards, Jones A.M. et al 2016, 197
(ii) Chambered tombs	
Calf of Eday Long	Davidson & Henshall 1989, 79, 93-4
Holm of Papa Westray North	Henshall 2009, 36; Ritchie 2009, 25
Howe, Stromness	Ballin Smith 1994, 24-5
Knowe of Yarso, Rousay (Beaker + Food vessel)	Davidson & Henshall 1989, 79, 93-4
(iii) Bronze Age funerary context	
Kewing, Rendall (cremated on pyre, not placed in cist)	Ballin Smith 2014, 108 - 9
Tiny fragments: 7 sherds total weight 5.5g	
(iv) Uncertain, possibly funerary, contexts	
Site 2, Ramberry Head, St. Ola	Crozier et al 2016; Jones, R. 2016
(2) Beaker/Food Vessel Hybrids (all funerary contexts)	
Newhouse, Birsay	Marwick 1949
Redland, Stromness	Downes & May 2005b, 295-7
Upper Bigging, Corrigall, Harray	Downes & May 2005b, 295-7
Roeberry, South Walls (redeposited)	Lee 2010

¹³ See Table 7.2

Appendix 8

Burnt mounds in Orkney

Concordance list and distribution maps.

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Figure A8.2 Burnt mounds in the East Mainland (with Auskerry inset).	4
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Notes

- 1) All the sites in the tables below were individually evaluated as part of a desk top assessment of all the available records, from the starting point of a NMRS Canmore search in December 2007. These results have been cross-checked with information from the Royal Commission survey (RCAMS 1946); the Orkney SMR and other survey sources (e.g. Lamb 1980b & 1983b). Since this thesis has been an ongoing project over a number of years the list has been periodically checked and updated in the light of recent discoveries (e.g. Gee 2016; Lawrence 2008). The list was last updated at 31st May 2017.
- 2) Sources used include surveys conducted for local and government bodies, commercial and research projects. Examples of these include the Farm Ancient Monument Survey Grant Scheme (e.g. Card 1998); surveys for heritage management purposes (e.g. Moore & Wilson 2004); coastline monitoring (e.g. Moore & Wilson 1998); updates to the RCAMS 1946 (e.g. Lamb 1982); University based research projects and landscape surveys (e.g. Hunter et al 1982; Lee 2012).
- 3) All extant burnt mounds are included.
- 4) All destroyed burnt mounds that on a balance of probabilities appear to have been genuine are included. Many of these were recorded as ploughed out but still visible by J. M. Corrie (RCAMS 1946; Section 3.7.1).
- 5) To obtain the figures quoted in Chapter 10 for burnt mounds elsewhere (i.e. 1,863 results for Scotland as a whole, 1,564 results for England, 686 results for Wales, 7,821 results for Eire and 429 results for Northern Ireland) the following searches and terms were used: Scotland via Canmore and England via Heritage Gateway were both searched online on 17/02/15; whilst Northern Ireland was searched online on 06/09/16 via the NISMR; all using the search term 'burnt mound'. The Archaeological Survey of Ireland was searched online on 17/02/15 using the search terms burnt mound, *fulacht fia*, burnt spread and burnt pit, although the

majority of the Irish results are for *fulacht fia* (6,606). County Cork produced too many results to display online and the correct figure was obtained by querying the National Monuments Service of Ireland. (The Irish archaeological term for a burnt mound is *fulacht fiadh* (singular) *fulachta fiadh* or the plural *fulachta(i) fia*). An Archwilio search on 4/09/16 produced too many results to display in several regions, but queries to the Dyfed, Gwynedd and Clywd-Powys Archaeological Trusts provided the final total, although the Regional Archaeologist for the Clywd-Powys Trust believes that there is a problem with under recording of burnt mounds in their area (Chris Martin, pers comm). The total figures for burnt mounds in all areas searched i.e. Scotland, England, Wales, Northern Ireland and Eire, is for sites rather than number of mounds, so may include multiple mounds. Relevant website addresses are in the bibliography.

Table A8.1 Burnt mound concordance list for figures A8.1 – A8.10

Table A8.1 Burnt mound concordance list for figures A8.1 – A8.10					
No.	NMRS no.	Site Name	Grid reference	Parish	No. of BM
1	HY20NE7	KNOWE OF BEA	HY 297 096	STEN	1
2	HY21NE31	FAN KNOWE HYVAL COTT.	HY 2999 1975	SAND	1
3	HY21NW3	EAST BIGGING	HY 2260 1496	SAND	2
4	HY21NW72	EAST BIGGING	HY 22635 14894	SAND	1
5	HY21SE20	WASBISTER	HY 2896 1378	SAND	1
6	HY21SE26	VOY	HY 2535 1497	SAND	1
7	HY21SE33	REDLAND	HY 2670 1389	STRO	1
8	HY21SE35	SEATTER	HY 2681 1279	STRO	1
9	HY21SE36	BURN OF UNA QUHOLM	HY 2630 1269	STRO	2
10	HY21SW3	QUHOLM BURN OF UNA	HY 2484 1254	STRO	1
11	HY21SW5	DON	HY 2270 1029	STRO	1
12	HY22NE12	KIRBISTER FARM	HY 2822 2537	BIHA	1
13	HY22NE13	LOCH OF HUNDLAND	HY 292 273	BIHA	1
14	HY22NE25	DURKADALE DOUNBY	HY 2990 2507	BIHA	1
15	HY22NE33	BURN OF DURKADALE	HY 2956 2527	BIHA	1
16	HY22NW2	LEEQUOY	HY 2397 2502	BIHA	1
17	HY22SE6	KNOWE OF MAKERHOUSE	HY 2935 2114	BIHA	1
18	HY22SE7	BRECKNESS	HY 2980 2173	BIHA	2
19	HY22SE11	ESGAR	HY 2958 2106	BIHA	2
20	HY22SE18	EAST HOUSE	HY 2895 2059	SAND	1
21	HY22SE20	QUINNI MOAN	HY 2764 2105	SAND	2
22	HY22SE21	LOCH OF TRONSTON	HY 2617 2082	SAND	1
23	HY22SE28	UPPER LINKLATER	HY 2601 2208	SAND	2
24	HY22SE33	BRYAMEADOW FARM	HY 258 225	SAND	2
25	HY22SE37	GREEN KNOWE BRAESIDE	HY 2856 2472	BIHA	1
26	HY22SE40	KN BRENDA DOWNATOWN	HY 2661 2381	BIHA	2
27	HY22SE49	KNOWE OF FORSAKELDA	HY 2830 2314	BIHA	1
28	HY22SE99	ESGAR	HY 2961 2099	BIHA	1
29	HY22SE100	ESGAR	HY 2966 2097	BIHA	1
30	HY22SE101	LOCH OF BANKS	HY 2787 2315	BIHA	1
31	HY22SW3	KNOWE OF EVERSTI	HY 2300 2288	BIHA	1
32	HY22SW20	KNOWE OF GARRAQUOY	HY 2374 2370	BIHA	1
33	HY22SW21	KNOWE OF FLAWS	2313 2434	BIHA	1
34	HY22SW22	KNOWE OF DALE	HY 2494 2434	BIHA	1
35	HY22SW25	KNOWE OF NETHERSKAILL	HY 2341 2424	BIHA	1
36	HY22SW26	KNOWE OF SCORN	HY 2498 2388	BIHA	1
37	HY30NE11	SWANBISTER HOUSE	HY 3514 0531	OR	1
38	HY30NE15	SMOOGRO	HY 36 05	OR	1
39	HY30SW5	BU OF ORPHIR	HY 3331 0469	OR	1
40	HY30SW13.01	BU OF ORPHIR POND	HY3325 0470	OR	1
41	HY30SW15	EARL'S BU	HY 334 045	OR	1
42	HY31NE4	BURNES BRIDGE	HY 3886 1636	FIR	5

Table A8.1 Burnt mound concordance list for figures A8.1 – A8.10					
No.	NMRS no.	Site Name	Grid reference	Parish	No. of BM
43	HY31NE8	OYCE OF ISBISTER	HY 3902 1802	EAR	3
44	HY31NE11	REDLAND	HY 3668 1703	FIR	1
45	HY31NE46	THE WHINS	HY 3735 1625	EAR	2
46	HY31NW12	SETTER	HY 3434 1560	FIR	1
47	HY31NW21	WINKSETTER	HY 340 162	BIHA	1
48	HY31NW22	BALLARAT HOUSE	HY 3011 1634	BIHA	1
49	HY31NW26	BALLARAT HOUSE	HY 3033 1640	BIHA	1
50	HY31NW110	BOSQUOY	HY 3037 1819	BIHA	1
51	HY31SE2	RENNIBISTER	HY 3990 1293	FIR	1
52	HY31SE15	BENZIAROTH	HY 3678 1488	FIR	1
53	HY31SE16	FINSTOWN	HY 3545 1400	FIR	1
54	HY31SW28	KOKNA-CUMMING	HY 303 127	STEN	1
55	HY31SW29	BIGSWELL	HY 3314 1045	STEN	1
56	HY32NE20	ROUSAY CORSE	HY 391 281	RAE	1
57	HY32NE21	ROBIE'S KNOWE	HY 3620 2665	EAR	1
58	HY32 NE29	LITTLE KYARL	HY 3651 2939	RAE	1
59	HY32NE36	ROUSAY, YORVILLE	HY 3943 2798	RAE	1
60	HY31NW3	BURN OF POW	HY 3340 2867	EAR	1
61	HY32NW8	CHRISMO	HY 3149 2890	EAR	1
62	HY32NW14	DURKADALE	HY 3017 2505	BIHA	1
63	HY32SE3	ELLIBISTER	HY 38 21	EAR	3
64	HY32SE4	ELLIBISTER	HY 38 21	EAR	1
65	HY32SW7	OVERABIST	HY 331 238	BIHA	1
66	HY32SW11	BEAQUOY	HY 3010 2198	BIHA	2
67	HY32SW12	HOWANA GRUNA	HY 3219 2395	BIHA	1
68	HY32SW15	BRETTAVALLE KNARSTON	HY 3058 2080	BIHA	1
69	HY32SW16	KINGSDALE	HY 315 211	BIHA	1
70	HY32SW20	DURKA DALE	HY 3022 2495	BIHA	1
71	HY33SE3	ROUSAY KNOWE OF GORN	HY 3869 3341	RAE	1
72	HY33SE4	ROUSAY WASBISTER COGAR	HY 3943 3273	RAE	1
73	HY33SE5	ROUS QUOYNALONGA NESS	HY 3647 3200	RAE	1
74	HY33SE6	WASBISTER BLEACHING KNO	HY 3957 3316	RAE	1
75	HY33SE7	ROUSAY LOWER QUANDALE	HY 3682 3191	RAE	1
76	HY33SE8	ROUSAY QUENDAL TAFTS	HY 3712 3249	RAE	2
77	HY33SE9	INNISTER KN OF HAMMAR R	HY 3894 3351	RAE	1
78	HY33SE15	QUANDALE KN OF DALE ROU	HY 3742 3217	RAE	1
79	HY33SE25	ROUSAY NORTH HOWE	HY 3706 3098	RAE	1
80	HY33SE42	ROUSAY NORTH HOWE	HY 3689 3077	RAE	1
81	HY33SE96	ROUSAY QUENDALE	HY 37362 32219	RAE	1
82	HY40NE9	GRIMSQUOY	HY 4729 0846	KASO	1
83	HY40SE7	CREARHOWE	HY 4930 0235	HOLM	1
84	HY40SE10	TOWER OF CLETT	HY 4949 0165	HOLM	1
85	HY40SE21	BURN OF GANGSTA	HY 4573 0350	HOLM	1

Table A8.1 Burnt mound concordance list for figures A8.1 – A8.10					
No.	NMRS no.	Site Name	Grid reference	Parish	No. of BM
86	HY41NE7	STRATHORE SHAPINSAY	HY 4900 1933	SHAP	1
87	HY41NE11	WALTNESS HILL' OF HOMRIE	HY 4778 1938	SHAP	1
88	HY41SW6	SAVEROCK	HY 4348 1280	KASO	1
89	HY41SW13	PICKAQUOY	HY 4407 1116	KASO	1
90	HY42NE1	WYRE SKIRMIE CLETT	HY 4555 2622	RAE	1
91	HY42NE5	EGILSAY KIRBIST	HY 4755 2890	RAE	1
92	HY42NW30	KNARSTON KN OF ORO ROU	HY 4440 2951	RAE	1
93	HY42NW31	ROUSAY CRUAR	HY 4470 2891	RAE	1
94	HY42NW35	WYRE TESTAQUOY	HY 4367 2580	RAE	1
95	HY42SE1	GAIRSAY SWEYN'S CASTLE	HY 4507 2195	EAR	1
96	HY42SE2	SHAPINSAY GARTH	HY 4866 2016	SHAP	1
97	HY43NE1	WESTRAY BENZIECOTT	HY 4997 3923	WEST	2
98	HY43SW2	ROUSAY WOO	HY 4346 3113	RAE	1
99	HY43SW3	ROUSAY LANGSKAILL	HY 4020 3310	RAE	1
100	HY43SW4	ROUSAY BRENDALÉ	HY 430 314	RAE	1
101	HY43SW25	ROUSAY WOO	HY 4336 3092	RAE	1
102	HY43SW37	ROUSAY SUSO BURN	HY 4225 3085	RAE	1
103	HY44NE4	WESTRAY GARTH	HY 4661 4525	WEST	1
104	HY44NE10	WESTRAY GILL PIER	HY 4502 4923	WEST	1
105	HY44NW9	WESTRAY NOUP	HY 4168 4893	WEST	1
106	HY44NW18	WESTRAY N OF PIEROWALL	HY 43 48	WEST	1
107	HY44NW19	WESTRAY LOCH OF BURNES	HY 4268 4807	WEST	1
108	HY44NW20	WESTRAY LOCH OF BURNES	HY 429 481	WEST	1
109	HY44NW33	LINKS OF NOLTLAND WESTRAY	HY 428 493	WEST	1
110	NY44NW37	WESTRAY HILLDAVALE	HY 4261 4788	WEST	1
111	HY44NW38	WESTRAY LOCH OF BURNES	HY 42 48	WEST	1
112	HY44SE4	WESTRAY LOCH OF WASBIST	HY 4898 4263	WEST	1
113	HY44SW5	WESTRAY LANGSKAILL	HY 4263 4301	WEST	1
114	HY45SE2	KNOWE OF BACKASKAILL	HY 48535090	PAWE	1
115	HY45SE6	PAPA WESTRAY HOLLAND	HY 4872 5123	PAWE	2
116	HY45SE7	PAPA WESTRAY NEWBIGGING	HY 4913 5334	PAWE	3
117	HY45SE8	NR KIRK OF HOWE PAPA WES	HY 493 530	PAWE	1
118	HY45SE9	KNOWES OF MAYBACK PA WE	HY 4942 5228	PAWE	2
119	HY45SE10	MILLIEMAHOOSE PAPA WEST	HY 4895 5167	PAWE	1
120	HY50NE3	GREENTOFT	HY 5686 0698	STAD	2
121	HY50NE23	WINDBRECK	HY 55 05	STAD	1
122	HY50NE41	GREENTOFT	HY 5670 0682	STAD	1
123	HY50NE43	BRAEBUSTER	HY 5501 0573	STAD	1
124	HY50NW10	HAWELL	HY 5124 0652	STAD	1
125	HY50NW11	BRECK	HY 5147 0604	STAD	1
126	HY50NW12	MILLBRAE	HY 513 052	STAD	2
127	HY50NW20	GRIND	HY 5030 0665	STAD	1
128	HY50NW23	LOCH OF TANKERNESS	HY 5219 0928	STAD	1

Table A8.1 Burnt mound concordance list for figures A8.1 – A8.10					
No.	NMRS no.	Site Name	Grid reference	Parish	No. of BM
129	HY50NW35	NESS	HY 5436 0936	STAD	1
130	HY50SE1	MUSSAQUOY	HY 5660 0369	STAD	1
131	HY50SE2	LOWER GRITLEY	HY 560 044	STAD	6
132	HY50SE29	STONEHALL	HY 5546 0365	STAD	1
133	HY50SW5	CAMPSTON	HY 5342 0428	STAD	1
134	HY50SW8	ST PETER'S KIRK	HY 5368 0422	STAD	1
135	HY50SW11	STEMBISTER	HY 5384 0223	STAD	1
136	HY50SW12	DINGYSHOWE BAY PEERIE HOWE	HY 5475 0324	STAD	1
137	HY51NW8	SHAPINSAY HAROLDSGARTH	HY 5198 1591	SHAP	1
138	HY51NW9	SHAPINSAY HANNA TOFT	HY 5042 1684	SHAP	1
139	HY51NW13	SHAPINSAY STEAQUOY	HY 5190 1638	SHAP	1
140	HY51NW15	SKENSTOFT	HY 517 196	SHAP	3
141	HY51SW1	HOWE OF LANGSKAILL	HY 5147 1048	STAD	1
142	HY52NE3	EDAY WARNESS	HY 5533 2845	EDAY	1
143	HY52NE4	KNOLL OF MERRIGARTH	HY 5528 2888	EDAY	1
144	HY52NE7	EDAY GREENTOFT	HY 5539 2878	EDAY	1
145	HY53SE9	EDAY BAY OF DOOMY	HY 5577 3481	EDAY	1
146	HY53SE10	EDAY SKAILL	HY 5658 3293	EDAY	1
147	HY53SE11	EDAY STENAQUOY	HY 5644 3080	EDAY	1
148	HY53SE27	EDAY STENAQUOY	HY 567 316	EDAY	1
149	HY53SW11	EDAY DALE	HY 5297 3311	EDAY	1
150	HY53SW2	EDAY WARRENHALL	HY 530 322	EDAY	1
151	HY53SW6	EDAY FERSNESS	HY 5290 3375	EDAY	1
152	HY54SW1	KNOWE OF GOLTOQUOY	HY 5093 4168	WEST	1
153	HY54SW2	KNOWE OF COTTERCHAN	HY 5114 4154	WEST	1
154	HY54SW3	KNOWE OF HAMAR WESTRAY	HY 5039 4127	WEST	1
155	HY54SW4	WESTRAY PERTH	HY 5087 4107	WEST	2
156	HY54SW5	WESTRAY CLAYBRAES	HY 5059 4014	WEST	1
157	HY54SW30	WESTRAY SAND GEO	HY 5198 4054	WEST	1
158	HY60SW2	COPINSAY FARM COPINSAY	HY 6090 0150	STAD	1
159	HY61NE2	AUSKERRY	HY 6741 1634	STRON	1
160	HY62NE3	STRONSAY BLEACHING KN	HY 6535 2804	STRON	2
161	HY62NE8	STRONSAY ODNES	HY 6829 2523	STRON	1
162	HY62NE11	YEASTHOUSE KNOWE PA STR	HY 6675 2944	STRON	1
163	HY62NE24	STRONSAY ODNES	HY 6868 2544	STRON	1
164	HY62NW2	STRONSAY MID GARTH	HY 6301 2832	STRON	1
165	HY62NW3	STRONS MID GARTH STURSY	HY 634 286	STRON	1
166	HY62NW6	STRONSAY DALE	HY 6496 2516	STRON	1
167	HY62NW15	STRONSAY THE HILLOCKS	HY 6319 2991	STRON	2
168	HY62NW30	STRONSAY YEARNASSETTER	HY 6420 2692	STRON	1
169	HY62SE2	STRONSAY GROBISTER ¹	HY 6562 2400	STRON	2
170	HY62SE3	STRONSAY KIRBISTER	HY 6858 2356	STRON	1

¹ There are two mounds far enough apart to warrant separate plotting, but only one NMRS number

Table A8.1 Burnt mound concordance list for figures A8.1 – A8.10					
No.	NMRS no.	Site Name	Grid reference	Parish	No. of BM
171	HY62SE4	STRONSAY MELLS KIRK	HY 656 219	STRON	1
172	HY62SE5	BANKS THE WASPY & ' NAVSY	HY 6514 2373	STRON	1
173	HY62SW2	SANDS OF ROTHIESHOLM	HY 6269 2433	STRON	1
174	HY62SW3	STRONSAY LODGE FARM	HY 6459 2413	STRON	1
175	HY63NW3	THE KNOWES SANDAY	HY 6342 3880	CRAB	1
176	HY63NW6	SANDAY HOOSIE MOUND	HY 6285 3775	CRAB	1
177	HY63NW7	SANDAY STOVE	HY 6099 3582	CRAB	1
178	HY63NW26	SANDAY SCARRIGARTH	HY 6290 3862	CRAB	1
179	HY63SW6	SANDAY SPURNESS	HY 6060 3479	CRAB	1
180	HY64NE2	SANDAY ORTIE	HY 6853 4505	CRAB	1
181	HY64SE3	SANDAY COLLIGARTH	HY 689 416	LADY	3
182	HY64SE4	SANDAY COLLIGARTH	HY 6916 4154	LADY	1
183	HY64SE9	SANDAY NEWBIGGINGS	HY 6599 4179	CRAB	1
184	HY64SE10	SANDAY NORTHSKAILL	HY 6814 4453	CRAB	1
185	HY64SE11	SANDAY KNOWE	HY 6786 4418	CRAB	1
186	HY64SE34	SANDAY ANNABRAKE	HY 6637 4424	CRAB	1
187	HY64SE35	SANDAY PINCOD	HY 6631 4397	CRAB	1
188	HY64SE40	SANDAY QUIVALS LOCH	HY 6703 4186	CRAB	1
189	HY74NW9	SANDAY MEUR	HY 7465 4571	LADY	1
190	HY74SE1	SANDAY PARK	HY 7727 4371	LADY	1
191	HY74SE5	SANDAY NORTHWALL	HY 756 446	LADY	1
192	HY74SW3	SANDAY BUTTER KNOWE	HY 7096 4315	LADY	1
193	HY74SW4	SANDAY CLEAT	HY 7055 4263	LADY	1
194	HY74SW5	SANDAY CLEAT	HY 7034 4258	LADY	1
195	HY74SW10	SANDAY IVAR'S KNOWE	HY 7158 4335	LADY	1
196	HY74SW12	SANDAY LEAVISGARTH	HY 7001 4145	LADY	2
197	HY75NE2	N RONALD TOR NESS	HY 756 553	CRAB	1
198	HY75NE13	N RONALD DENNIS LOCH	HY 7875 5547	CRAB	1
199	HY75SE7	N RONALD ANCUM LOCH	HY 7623 5425	CRAB	1
200	HY75SE8	N RO KNOWE O SAMILANDS	HY 7657 5305	CRAB	1
201	HY75NE9	N RONALD VIGGAY	HY 7687 5237	CRAB	1
202	HY75SE14	N RONALD ANCUMTOUN	HY 7677 5479	CRAB	2
203	ND28NE1	BRIMS HILLOCK O SALWICK	ND 2876 8869	WAFL	1
204	ND28NE20	HOY	ND 285 880	WAFL	1
205	ND38NW4	HOY CANTICK	ND 3394 8929	WAFL	1
206	ND38NW7	SOUTH WALLS GREEN HILL	ND 3098 8910	WAFL	1
207	ND38NW52	MILL BURN	ND 325 894	WAFL	1
208	ND38SW63	SOUTH WALLS SNELSETTER	ND 326 889	WAFL	1
209	ND39SE9	FLOTTA BLACKAWALL	ND 3553 9415	WAFL	1
210	ND39SW2	SOUTH WALLS KIRBUSTER	ND 3222 9070	WAFL	1
211	ND39SW3	SOUTH WALLS NEWBIGGING	ND 33 90	WAFL	1
212	ND39SW4	S WALLS LAURIE'S KNOWE	ND 3226 9081	WAFL	1
213	ND39SW57	HOY MID RINNIGILL	ND 312 938	WAFL	1

Table A8.1 Burnt mound concordance list for figures A8.1 – A8.10					
No.	NMRS no.	Site Name	Grid reference	Parish	No. of BM
214	ND39SW124	SOUTH WALLS FEA	ND 3075 9022	WAFL	1
215	ND39SW125	HOY LONGHOPE	ND 3130 9080	WAFL	1
216	ND47NE3	THE KILN MUCKLE SKERRY	ND 4638 7844	SORO	1
217	ND48NW6	S RONALD NEWHOUSE	ND 4367 8939	SORO	1
218	ND48NW7	S RONALD HUNE BAY	ND 4350 8828	SORO	2
219	ND48NW8	S RONALD MOSSETTER	ND 449 863	SORO	1
219a	ND48NW8	S RONALD MOSSETTER ²	ND 449 863	SORO	1
220	ND48NW9	S RONALD BARSWICK	ND 4309 8606	SORO	1
221	ND48NW11	S RONALD GREENQUOY	ND 4346 8627	SORO	1
222	ND48NW12	S RONALD MUCKLEHOUSE	ND 4386 8891	SORO	1
223	ND48NW13	S RONALD CLOUDUHALL	ND 4351 8940	SORO	1
224	ND48NW18	MUCKLEHOUSE THE CAIRNS	ND 4357 8883	SORO	1
225	ND48SE2	S RONALD LIDDEL SOUTH	ND 4646 8411	SORO	1
226	ND48SE5	S RONALD LIDDEL	ND 4649 8416	SORO	1
227	ND48SW3	S RONALD BROUGH	ND 4470 8324	SORO	1
228	ND49SE2	S RONALD HONEYSGEO	ND 4868 9317	SORO	1
229	ND49SE10	S RONALD BRECKS	ND 4781 9336	SORO	1
230	ND49SE11	S RONALD HALL OF CARA	ND 4779 9465	SORO	1
231	ND49SE14	S RONALD SOUTH CARA	ND 478 930	SORO	1
232	ND49SE15	S RONALD KIRKHOUSE	ND 4716 9119	SORO	1
233	ND49SW15	S RON OYCE OF HERSTON	ND 4205 9072	SORO	1
234	ND49SW16	S RON NEWBIGGING FARM	ND 4328 9066	SORO	1
235	ND49SW17	S RONALD LITTLE MYRE	ND 4339 9117	SORO	1
236	ND49SW97	S RONALD BLANSTER	ND 447 929	SORO	1
237	N/A	NEWARK BAY, S RONALDSAY ³	ND 4585 9023	SORO	3
238	EHS10	BURGAR ⁴	HY3483 2760	BIHA	1
239	YES29	EAST BIGGING	HY 2264 1488	SAND	1
240	YES105	EAST BIGGING	HY 2257 1508	SAND	1
241	SITE 4	QUANDALE SURVEY ⁵	HY 3739 3152	RAE	1
242	SITE 5	QUANDALE SURVEY	HY 3734 3152	RAE	1
243	SITE 13	QUANDALE SURVEY	HY 3709 3157	RAE	1
244	SITE 19	NETHER MOUSLAND ⁶	HY 2232 1270	STRO	1
245	SITE G13	BRAEBISTER ⁷	HY 2179 0437	HOAG	1
246	SITE G44	BRAEBISTER	HY 2213 0437	HOAG	1
247	SITE G54	BRAEBISTER	HY 2218 0425	HOAG	1

² The NMRS describes two mounds (the second plotted as 219a) but no separate number is given despite the distance that separates them; both have been destroyed

³ Walkover survey (Lawrence 2008).

⁴ Walkover survey: Burgar & both East Bigging sites (Moore 2013)

⁵ Walkover survey: all Quandale survey sites (Lee 2008a)

⁶ Walkover survey (Lee et al 2014, site 19)

⁷ Walkover survey: all Braebister sites (Lee 2012)

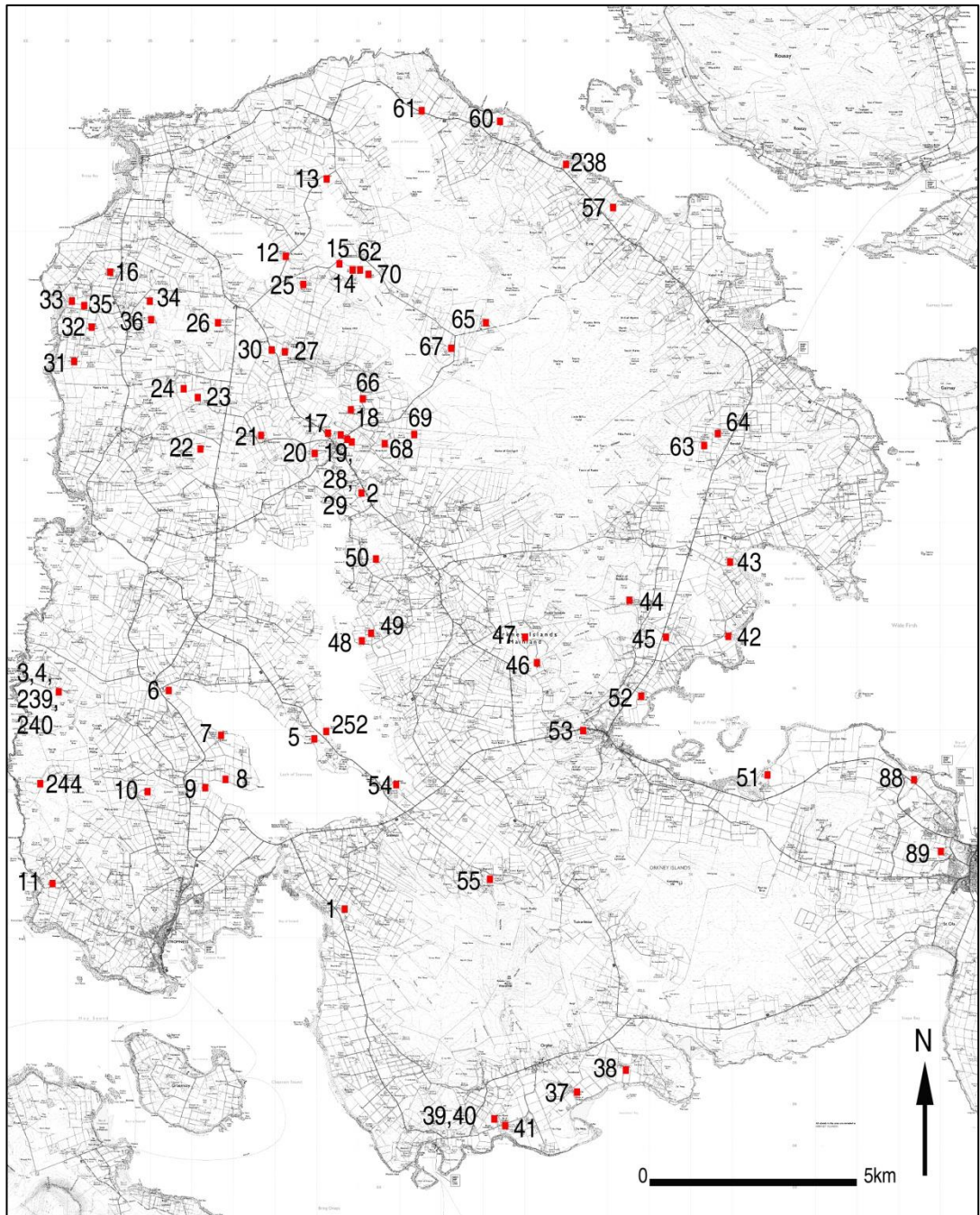
Table A8.1 Burnt mound concordance list for figures A8.1 – A8.10					
No.	NMRS no.	Site Name	Grid reference	Parish	No. of BM
248	(HY74NE 1)	SHELLY KNOWE TOFTS NESS ⁸	HY 7600 4650	LADY	1
249	HY41SE13	HOLLAND ⁹	HY 477 111	KASO	1
250	ND28NE 10	HOY, KIRK GEO	ND 2846 8820	HOAG	1
251	(HY74NE 1)	MOUND 24 TOFTS NESS ¹⁰	HY 7510 4410	LADY	1
252	N/A ¹¹	BOCKAN	HY 2918 1399	SAND	1
				TOTAL	297

⁸ Shelly Knowe does not have its own NMRS number; HY74NE1 is a very confused entry covering the entire peninsula, including c.50 mounds and dykes. That it is a burnt mound has been confirmed by geophysics (Dockrill, Gater & Simpson 2007, 120 – 4).

⁹ Part of a group of barrows, one NMRS number for whole group including the burnt mound.

¹⁰ As note 8.

¹¹ Gee 2016a.



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Figure A8.1 Burnt mounds in the West Mainland.

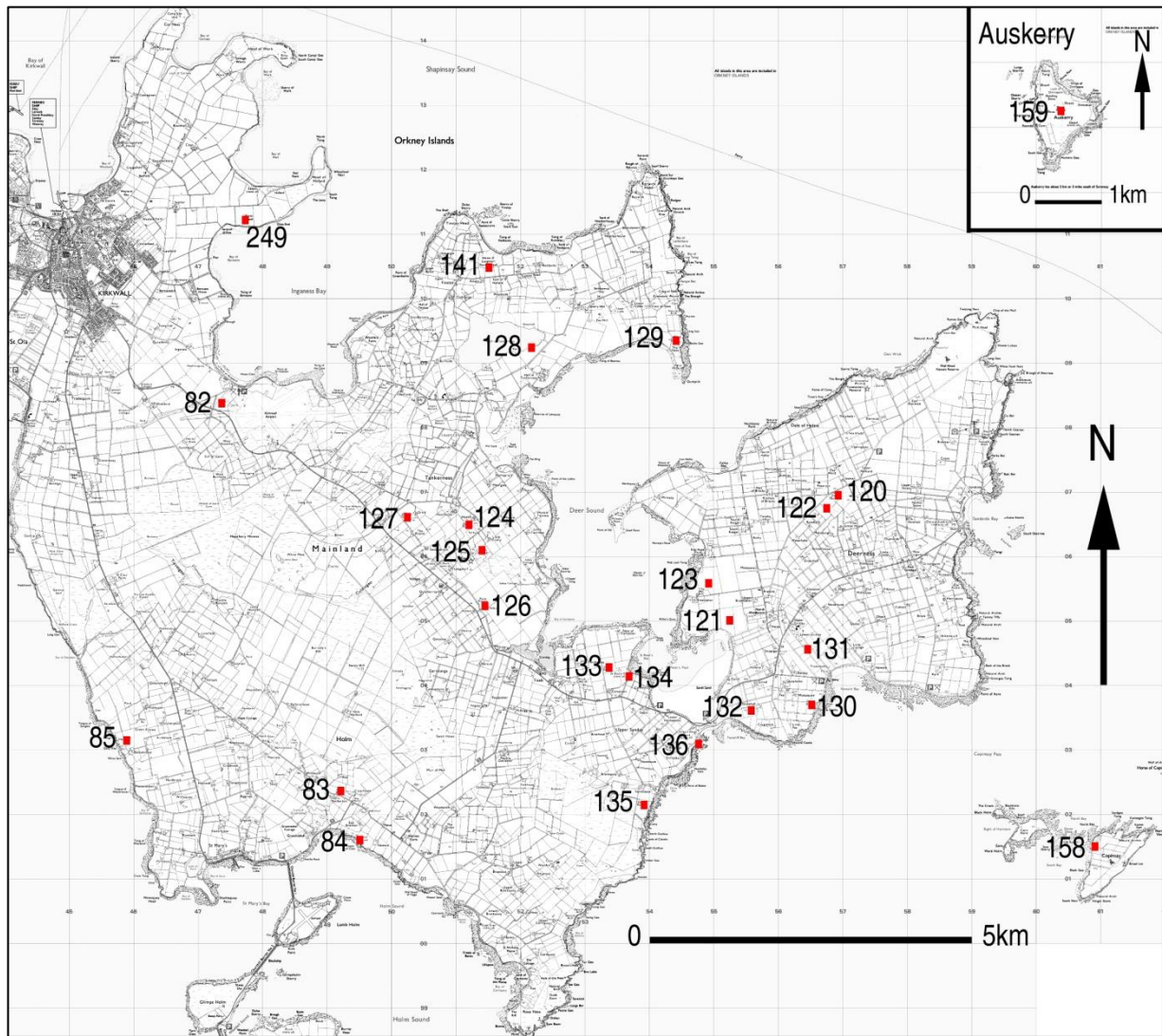
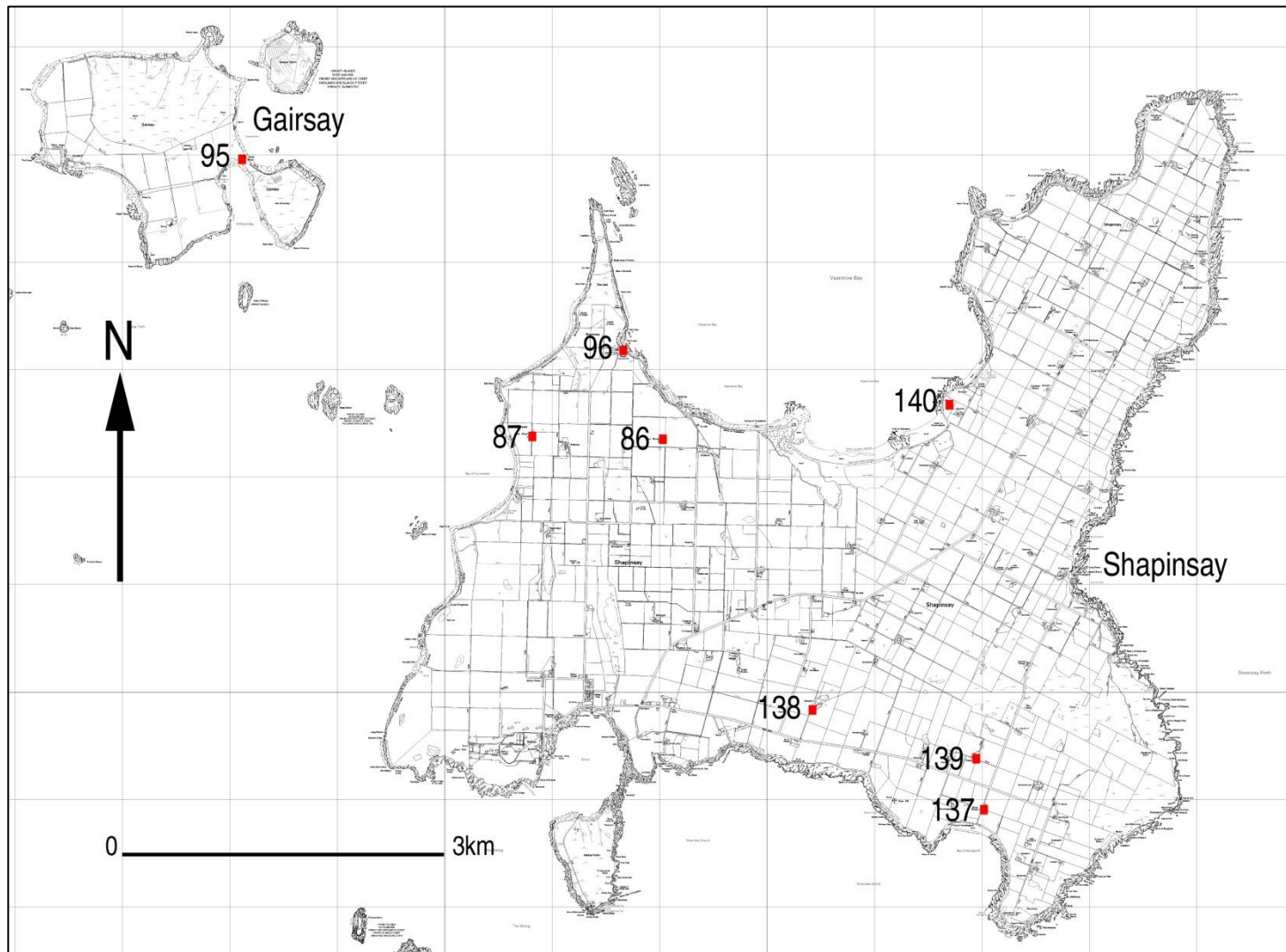


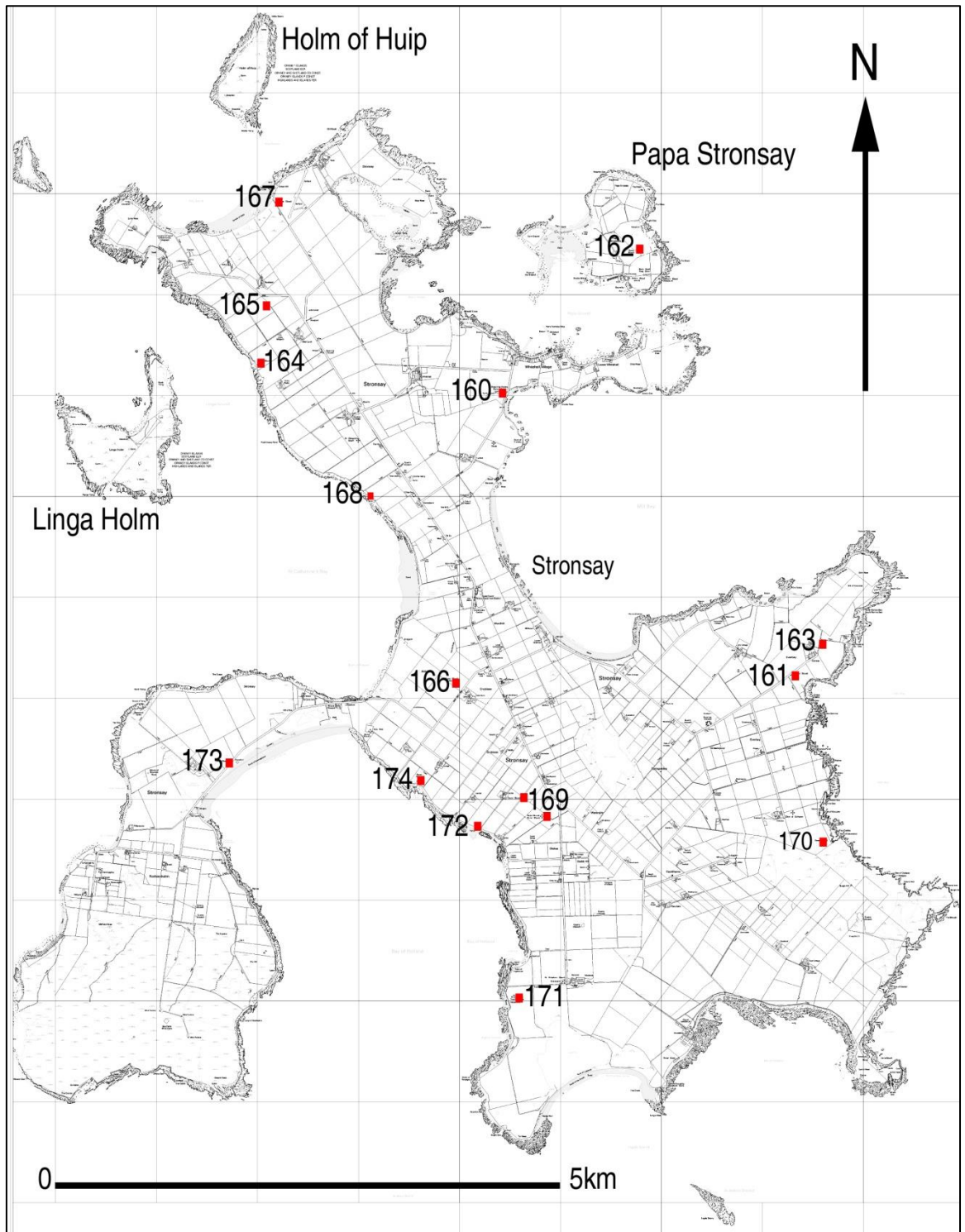
Figure A8.2 Burnt mounds in the East Mainland (with Auskerry inset).

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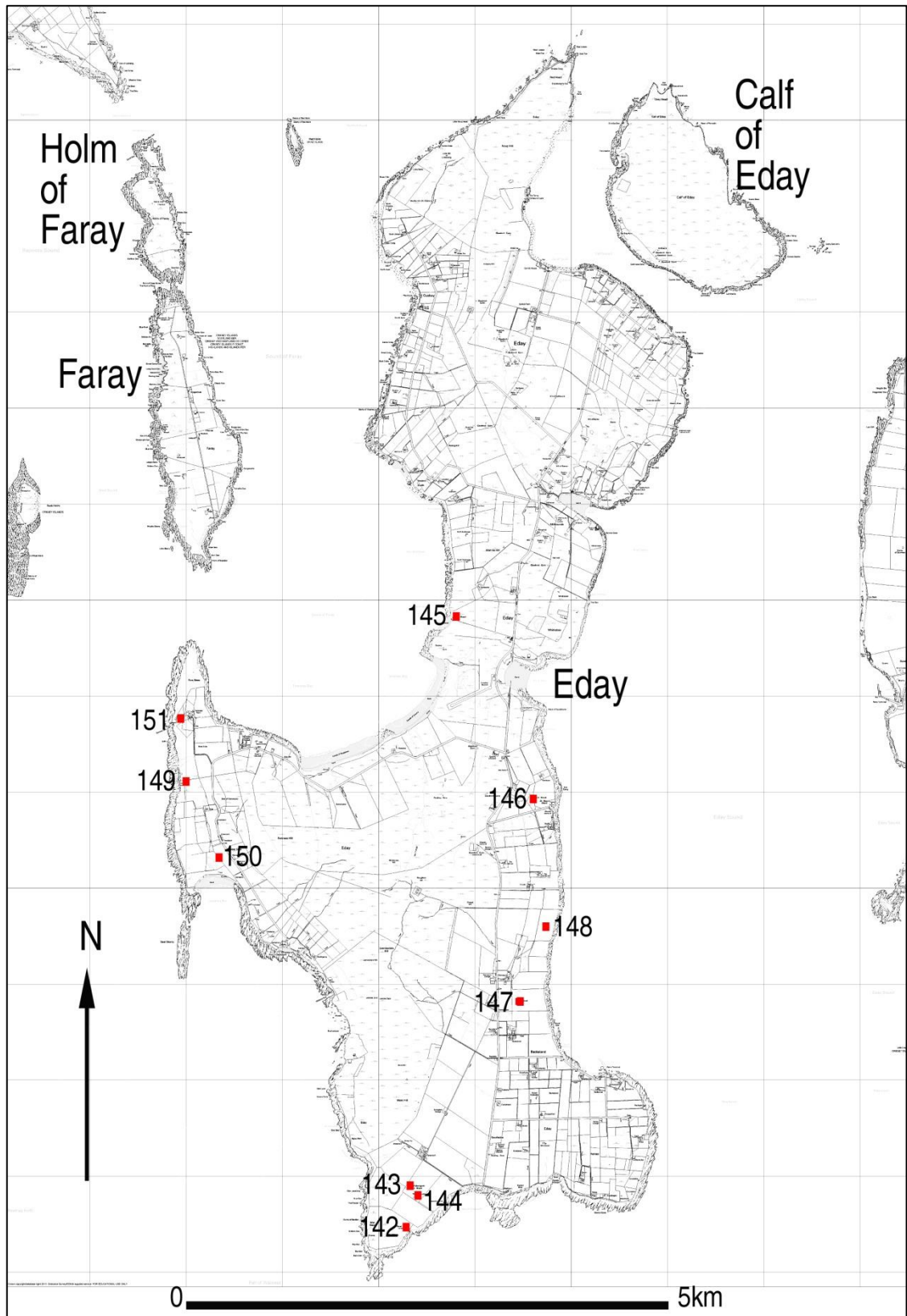
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Figure A8.3 Burnt mounds in Shapinsay and Gairsay.



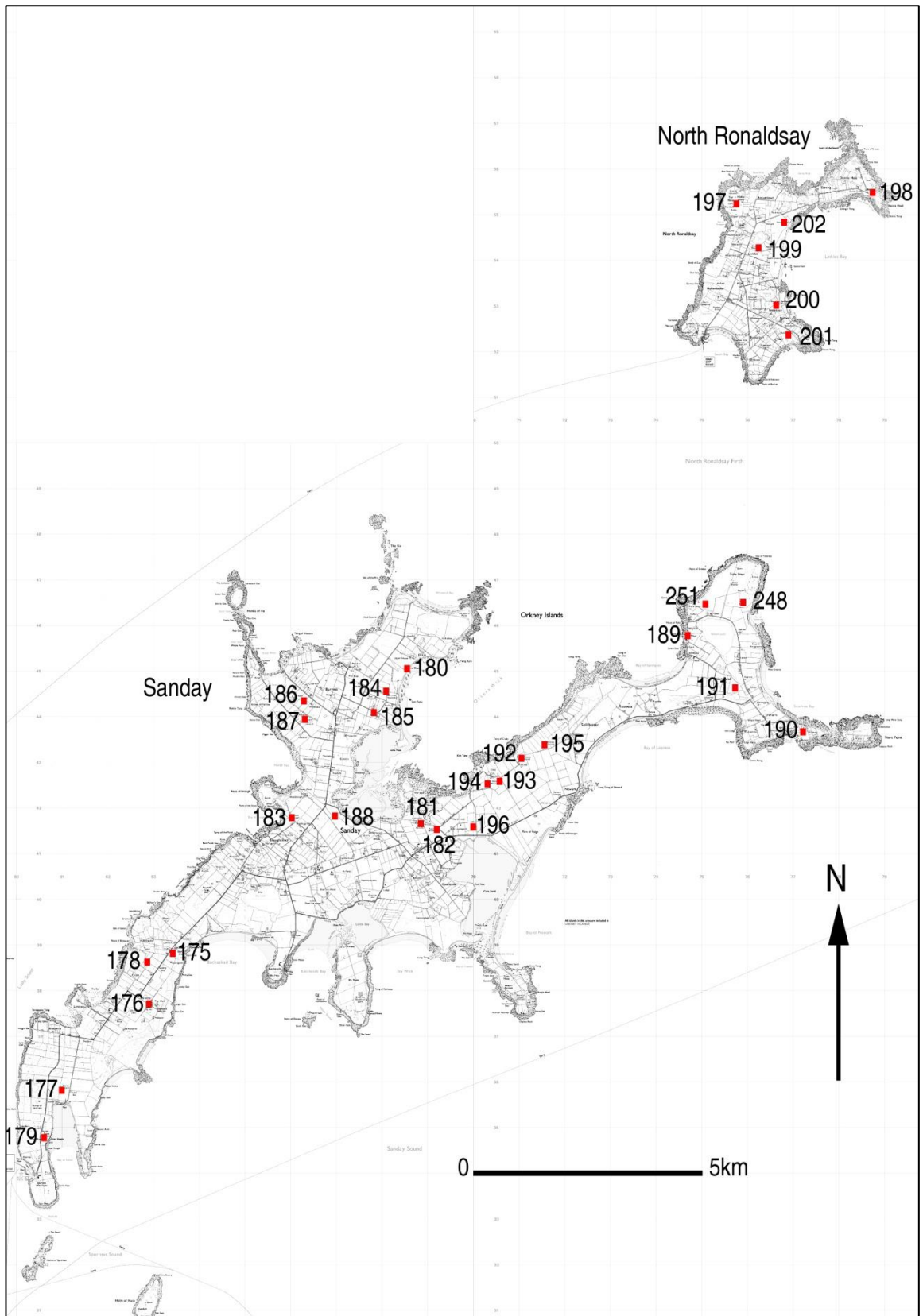
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Figure A8.4 Burnt mounds in Stronsay.



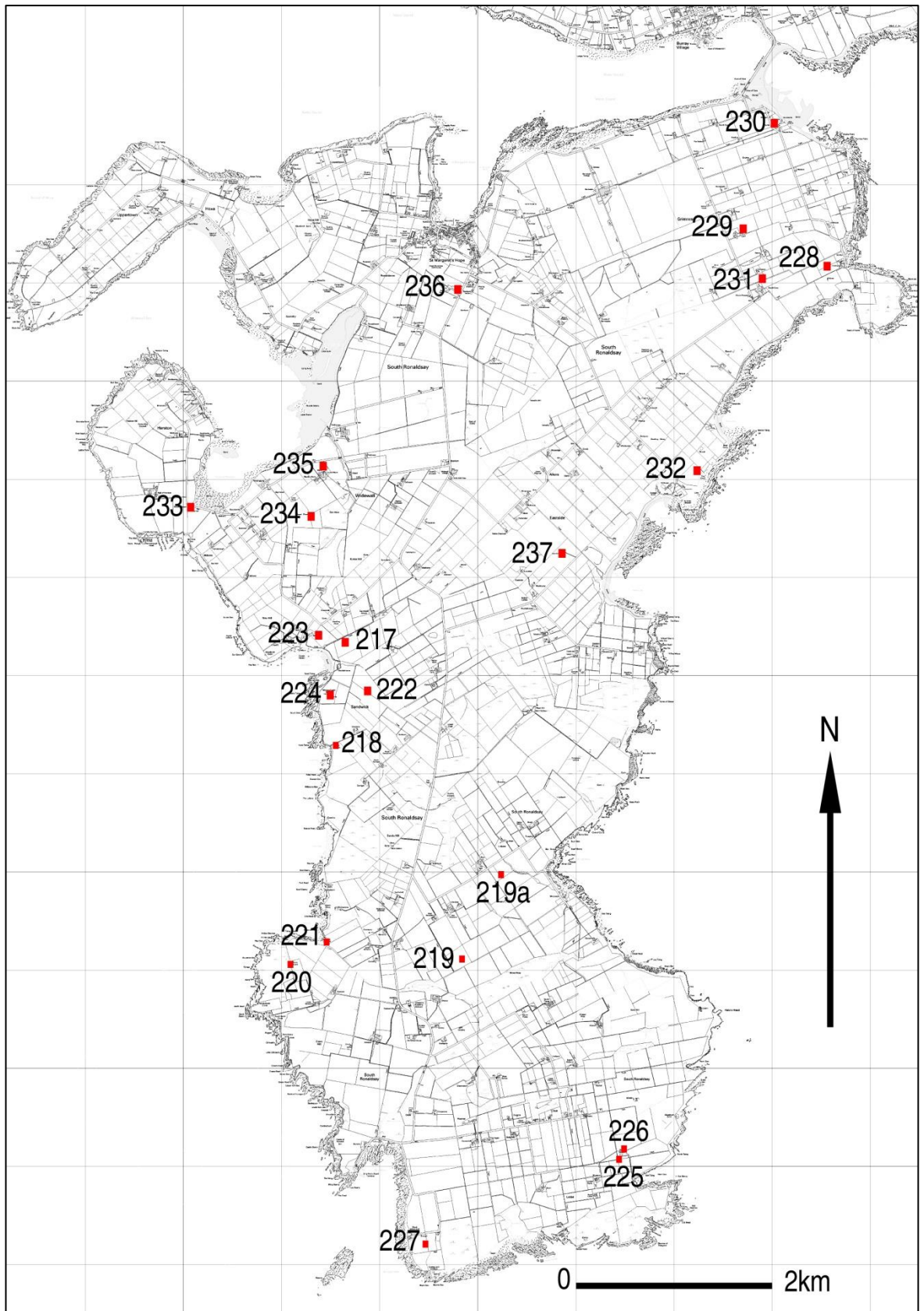
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Figure A8.5 Burnt mounds in Eday.



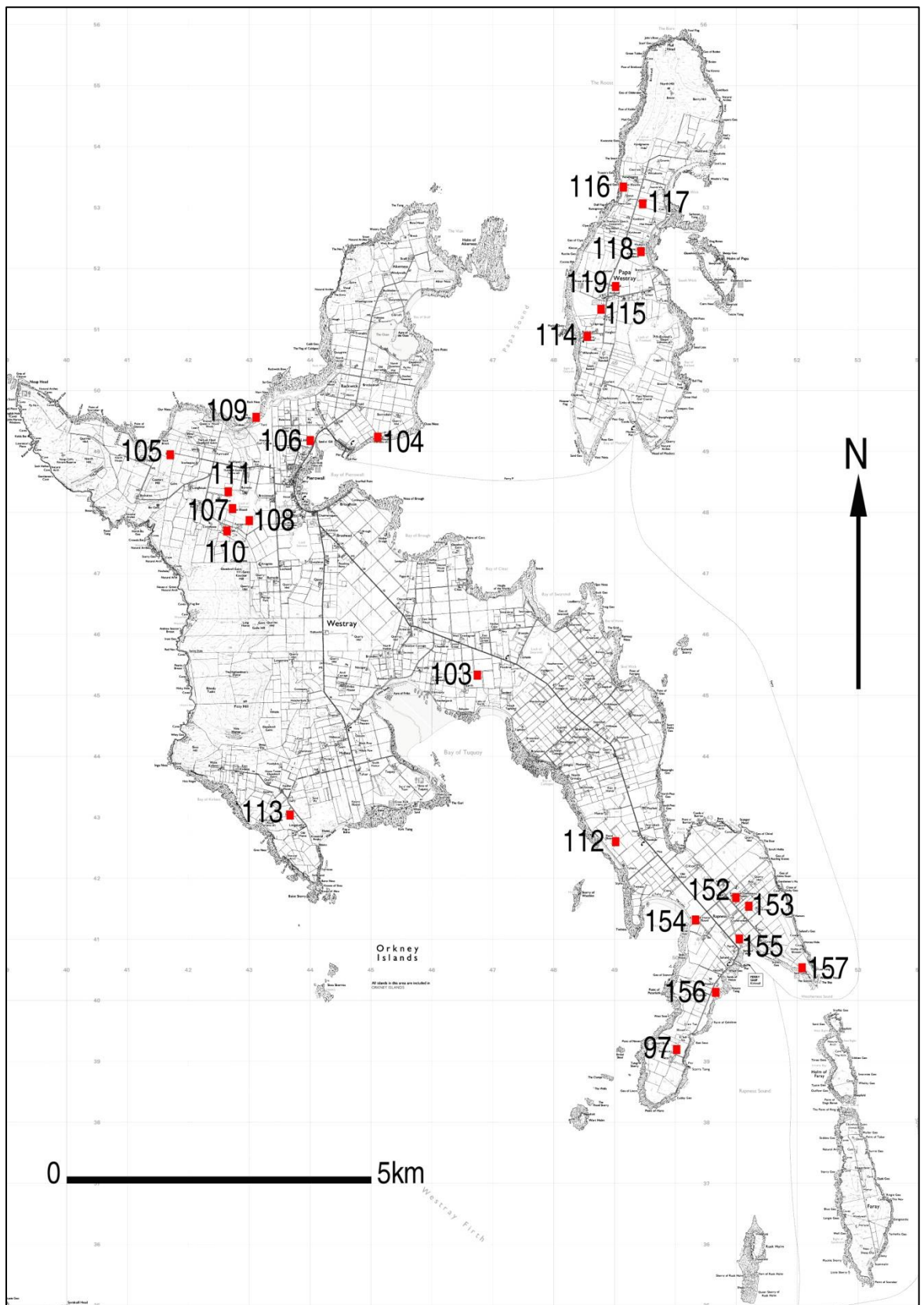
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Figure A8.6 Burnt mounds in Sanday and North Ronaldsay.



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Figure A8.7 Burnt mounds in South Ronaldsay.



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Figure A8.8 Burnt mounds in Westray & Papa Westray.

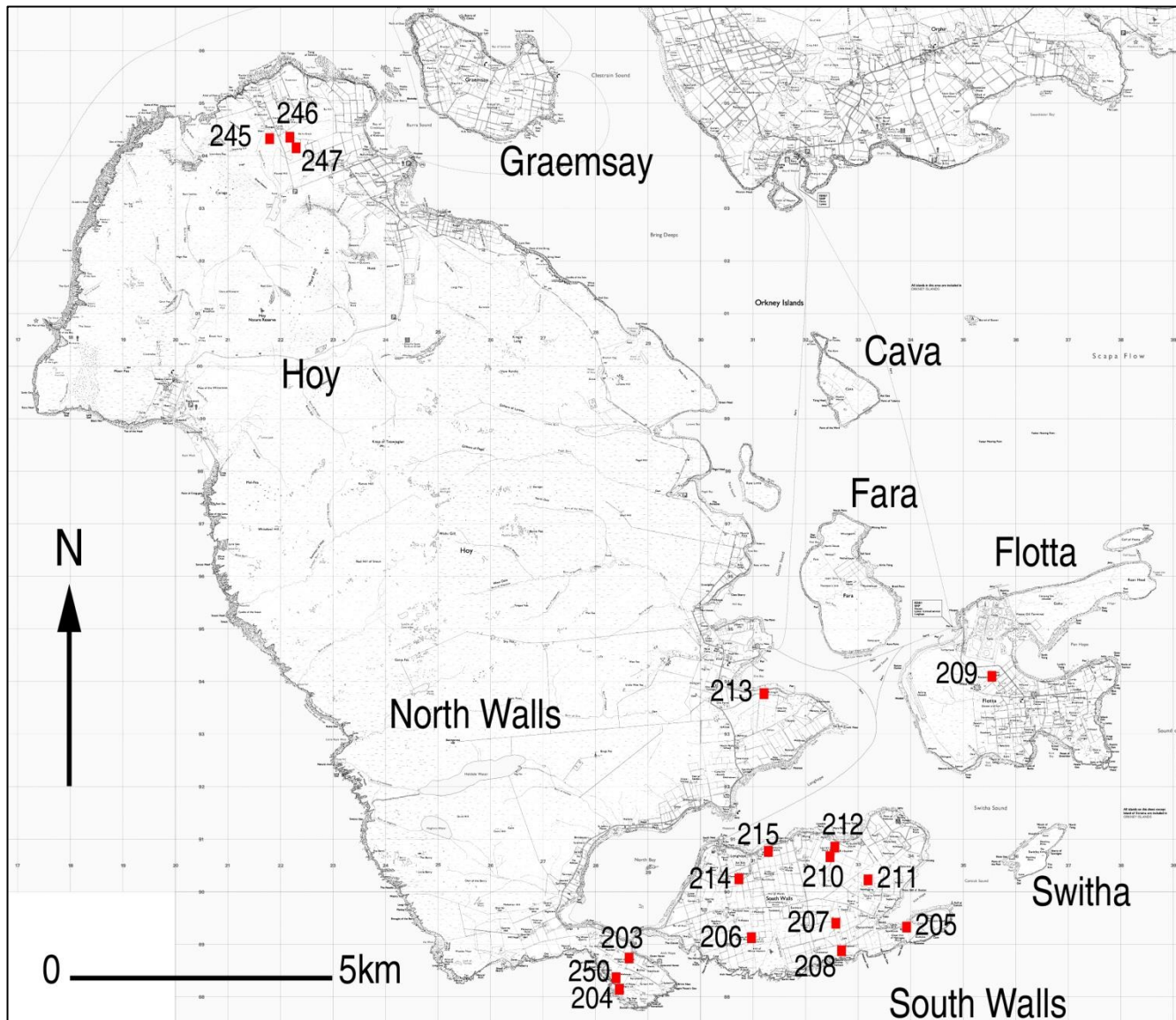


Figure A8.9 Burnt mounds in Hoy, North and South Walls and Flotta.

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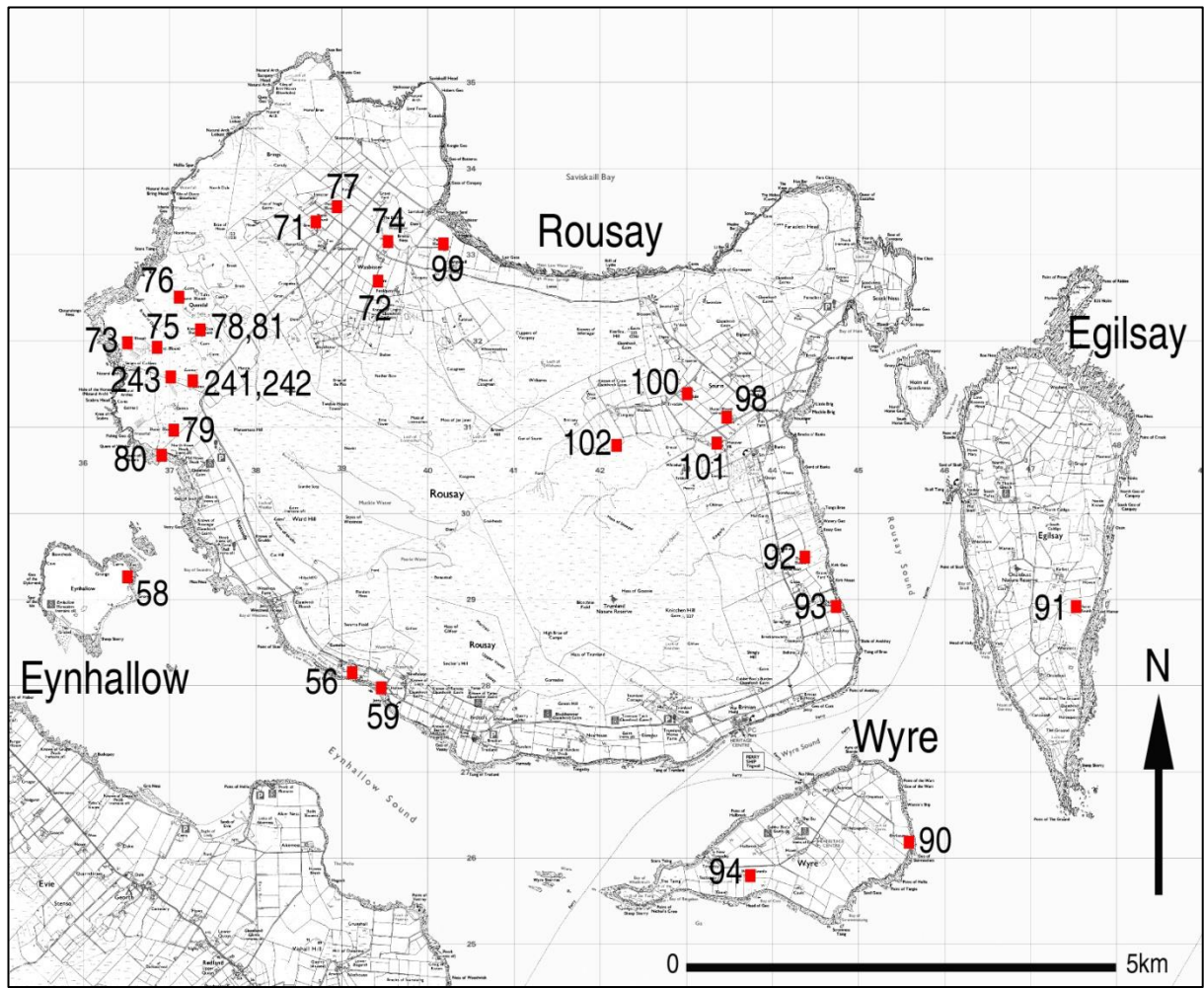


Figure A8.10 Burnt mounds in Rousay, Egilsay, Wyre and Eynhallow.

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Appendix 9

Souterrains in Orkney

Concordance list and distribution maps

Notes	1
Table A9.1 Souterrain Concordance list for Figures A9.1 – A9.6 below.	1
Figure A9.1 Souterrains in the West Mainland.....	3
Figure A9.2 Souterrains in Hoy and Walls.	4
Figure A9.3 Souterrains in the East Mainland, Burray and South Ronaldsay.....	5
Figure A9.4 Souterrains in Rousay, Westray, Papa Westray and Eday.....	6
Figure A9.5 Souterrains in North Ronaldsay and Sanday.....	7
Figure A9.6 Souterrains in Shapinsay, Stronsay and Gairsay.	8

Notes

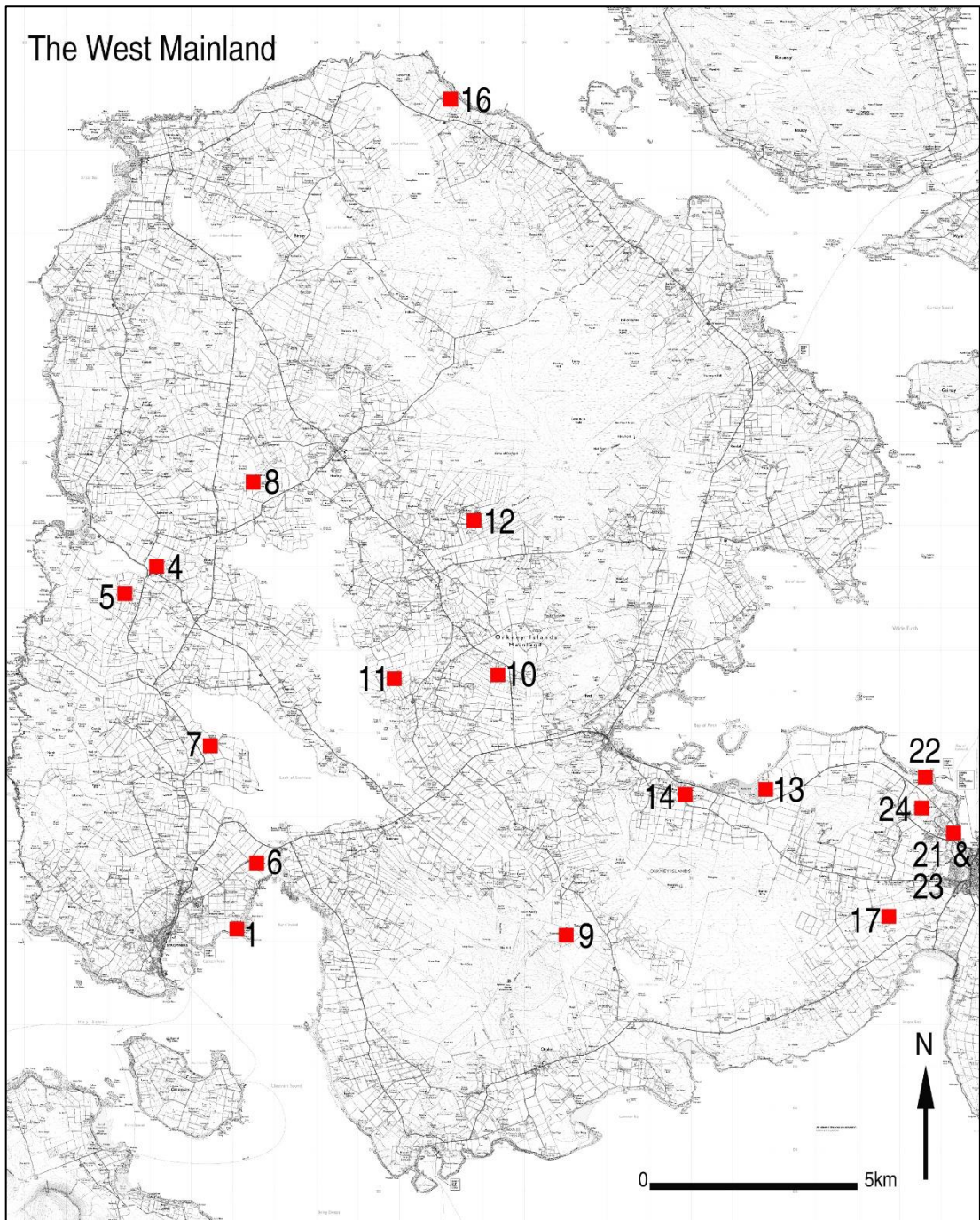
- 1) All the sites in the tables below were individually evaluated as part of a desk top assessment of all the available records, from the starting point of a NMRS Canmore search in December 2007. These results have been cross-checked with information from the Royal Commission survey (RCAMS 1946); the Orkney SMR and other survey sources (e.g. Lamb 1980b & 1983b). Since this thesis has been an ongoing project over a number of years the list has been periodically checked and updated, the list was last updated at 31st December 2015.
- 2) I am reasonably confident that the sites in the tables below are souterrains; sites that are known only from vague reports are not included.

Table A9.1 Souterrain Concordance list for Figures A9.1 – A9.6 below.

Table A9.1 Souterrain concordance list for figures A9.1 – A9.6 below						
Tally	NMRS No	Site name	Grid reference	Parish	Numbers	Reference for excavation or survey if applicable
1	HY20NE11	BU	HY 2697 0933	STRO	1	Hedges 1987a, 25 – 9
2	HY20NW13	HOY, BRAEBISTER UPPER CAIRN	HY 2207 0546	HOAG	1	
3	HY20NW15	HOY, BRAEBISTER LOWER CAIRN	HY 2181 0541	HOAG	1	Cursiter 1930
4	HY21NE57	SANDWICK	HY 24 18	SAND	1	
5	HY21NW29	UNIGARTH	HY 2463 1739	SAND	1	Cruden 1958
6	HY21SE41	THE HOWE	HY21SE41	STRO	1	Ballin Smith 1994, 31 - 5
7	HY21SE108	REDLAND	HY 2628 1381	STRO	1	Brend 2010c
8	HY22SE3	SKEABRAE	HY22SE3	SAND	1	Marwick 1949
9	HY30NE1	NAVERSDALE	HY30NE1	ORPH	1	Marwick 1946
10	HY31NW16	DALE	HY 3311 1538	BIHA	1	Kirkness 1928a & b; Marwick 1927d
11	HY31NW28	BIGGINGS GRIMESTON	HY 3072 1546	BIHA	1	Kirkness 1930
12	HY31NW104	NESSBRECK CORRIGALL	HY 325 190	BIHA	1	Robertson 2007
13	HY31SE3	RENNIBISTER	HY 3973 1260	FIR	1	Marwick 1927a&c
14	HY31SE9	CURSITER	HY 3775 1252	FIR	1	
15	HY32NE1	KNOWE OF ROWIEGAR	HY 3733 2978	RAE	1	RCAMS 1946, vol II, no. 578, 218 – 20 ¹
16	HY32NW11	LOWER MITHOUSE	HY 3234 2911	EAR	1	Craw 1931
17	HY40NW7	ORQUIL FARM	HY 428 097	KASO	1	Simpson, Murphy et al 2007b
18	HY40SE22	ROMA	HY 4783 0314	HOLM	1	
19	HY41NE12	CLIFFDALE	HY 47 16	SHAP	1	Barry 1927b, 363 - 4
20	HY41SE24	HOLLAND	HY 4772 1138	KASO	1	
21	HY41SW3	HATSTON	HY 4362 1238	KASO	1	Marwick 1949

¹ Excavated by Walter Grant but not published; RCAMS entry is a description from his plans

Table A9.1 Souterrain concordance list for figures A9.1 – A9.6 below						
Tally	NMRS No	Site name	Grid reference	Parish	Numbers	Reference for excavation or survey if applicable
22	HY41SW5	SAVEROCK	HY 4368 1296	KASO	1	Thomas 1852, 131 – 4 & plate XVII
23	HY41SW19	GRAINBANK	HY 4413 1161	KASO	1	
24	HY41SW24	HATSTON	HY 4418 1159	KASO	1	Haigh 1983
25	HY42NW27	ROUSAY, GRIPPS	HY 4053 2723	RAE	1	Grant 1939a
26	HY43SW8	HURTISO TAFT OF HUSEBY ROUS	HY 437 314	RAE	1	
27	HY44NW7	WESTRAY PIEROWALL	HY 43 48	WEST	1	Thomas 1852, 129 – 31 & plate XVII
28	HY44SW9	WESTRAY LANGSKAILL	HY 4348 4287	WEST	1	Moore & Wilson 2003b & 2005b; Moore et al 2002
29	ND48NE14	CAIRNS O' THE BU, WINDWICK	ND 4542 8688	SORO	1	Carruthers 2007, 2009, 2010, 2012, & 2013
30	HY50NE9	SOUTH KEIGAR	HY 552 063	STAD	1	Rendall 1934b
31	HY50SE3	NEWARK	HY 5746 0413	STAD	2	Brothwell 1977
32	HY51SW2	YINSTAY	HY 5084 1031	STAD	1	Major 1907
33	HY60SW6	COPINSAY	HY 6122 0159	STAD	1	
34	HY62NE56	PAPA STRONSAY	HY 6660 2927	STRON	1	Lowe 2002
35	HY63NE12	CARSE OF HENZIE HUNT SANDAY	HY 69 39	LADY	1	Traill 1845, 141
36	HY74NW3	SANDAY SANDQUOY	HY 7467 4532	LADY	1	
37	ND48NE8	WINDWICK S RONALDSAY	ND 4595 8668	SORO	1	Excavated 2004 -2005, no published information
38	ND48NE9	FLAWS, S RONALDSAY	ND 4574 8545	SORO	1	Goodfellow 1905
39	ND48NW16	MOSSETTER S RONALDSAY	ND 447 860	SORO	1	
40	ND49SE13	MANSE S RONALDSAY	ND 473 915	SORO	1	Gerard 1845



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Figure A9.1 Souterrains in the West Mainland.

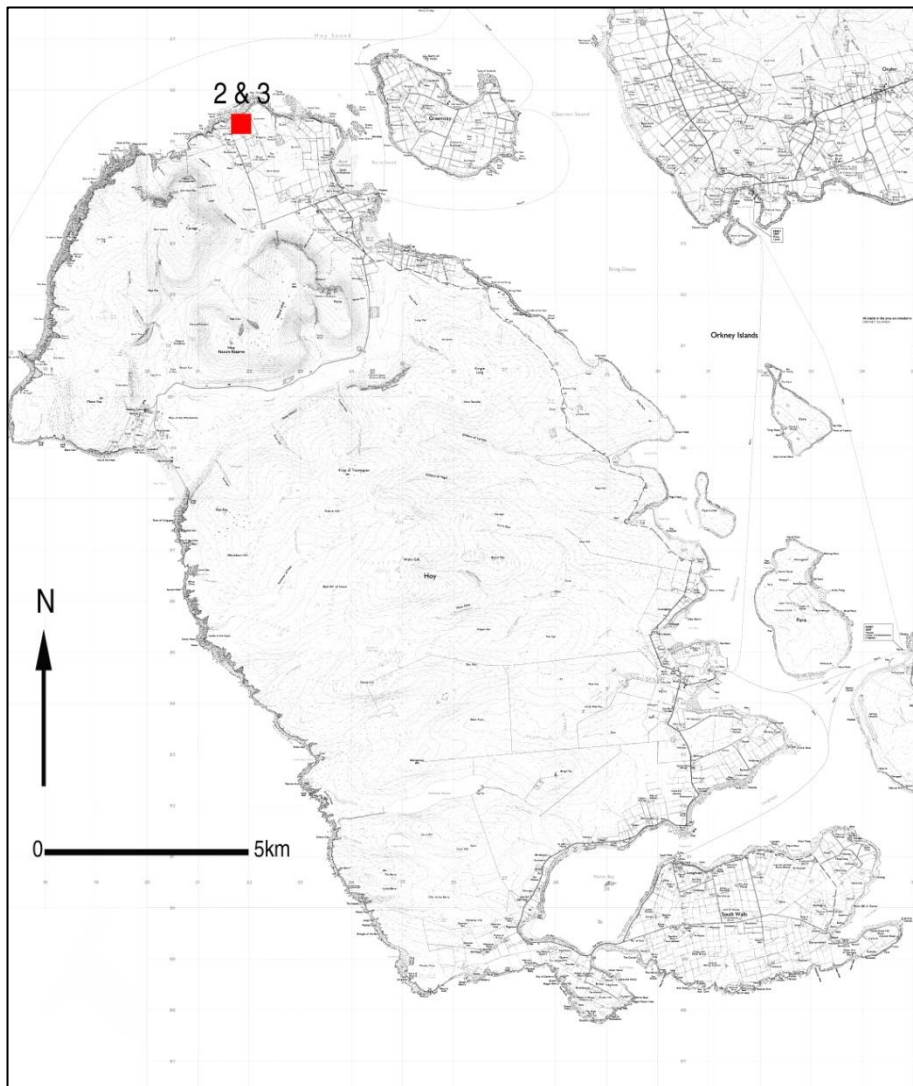
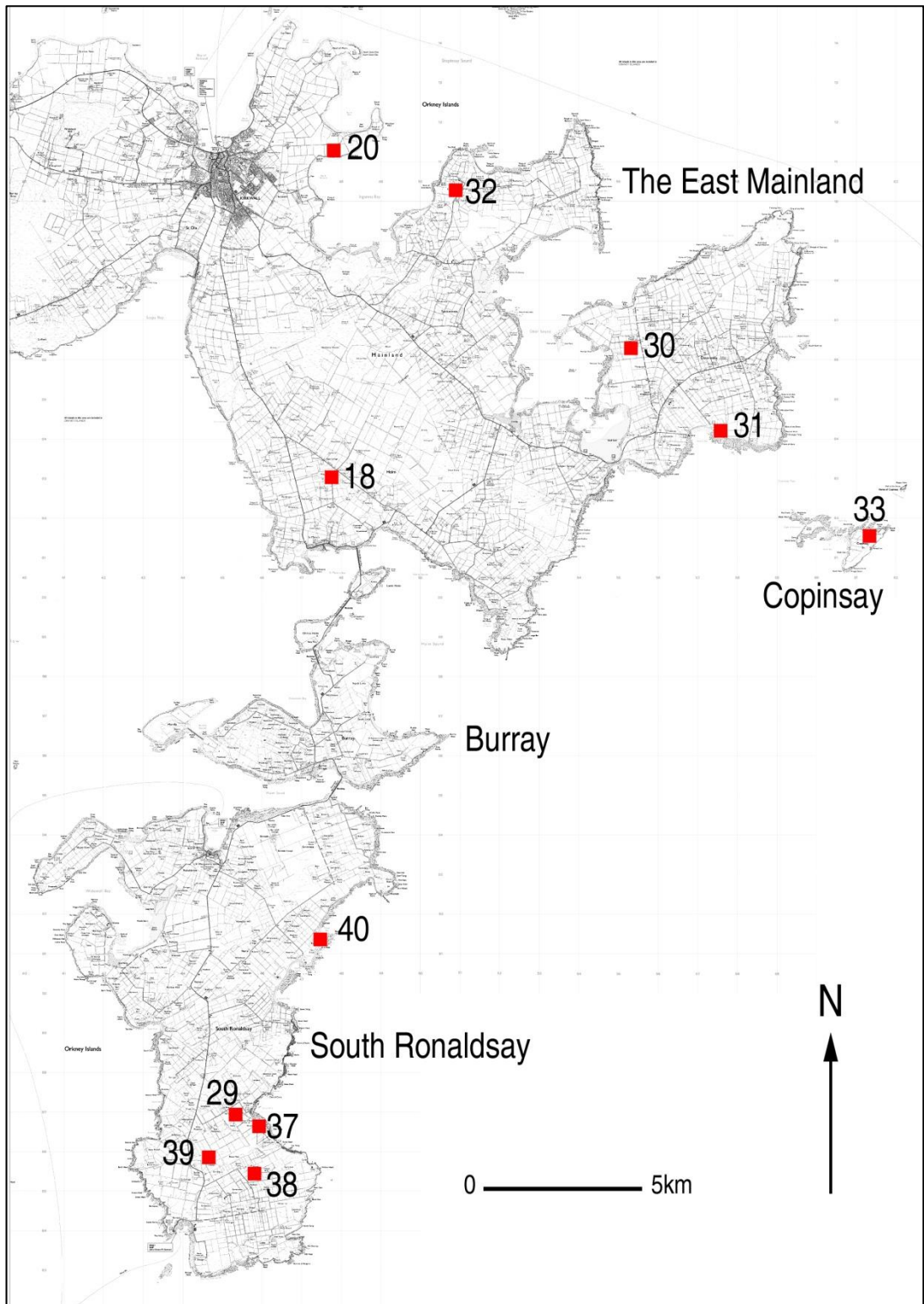


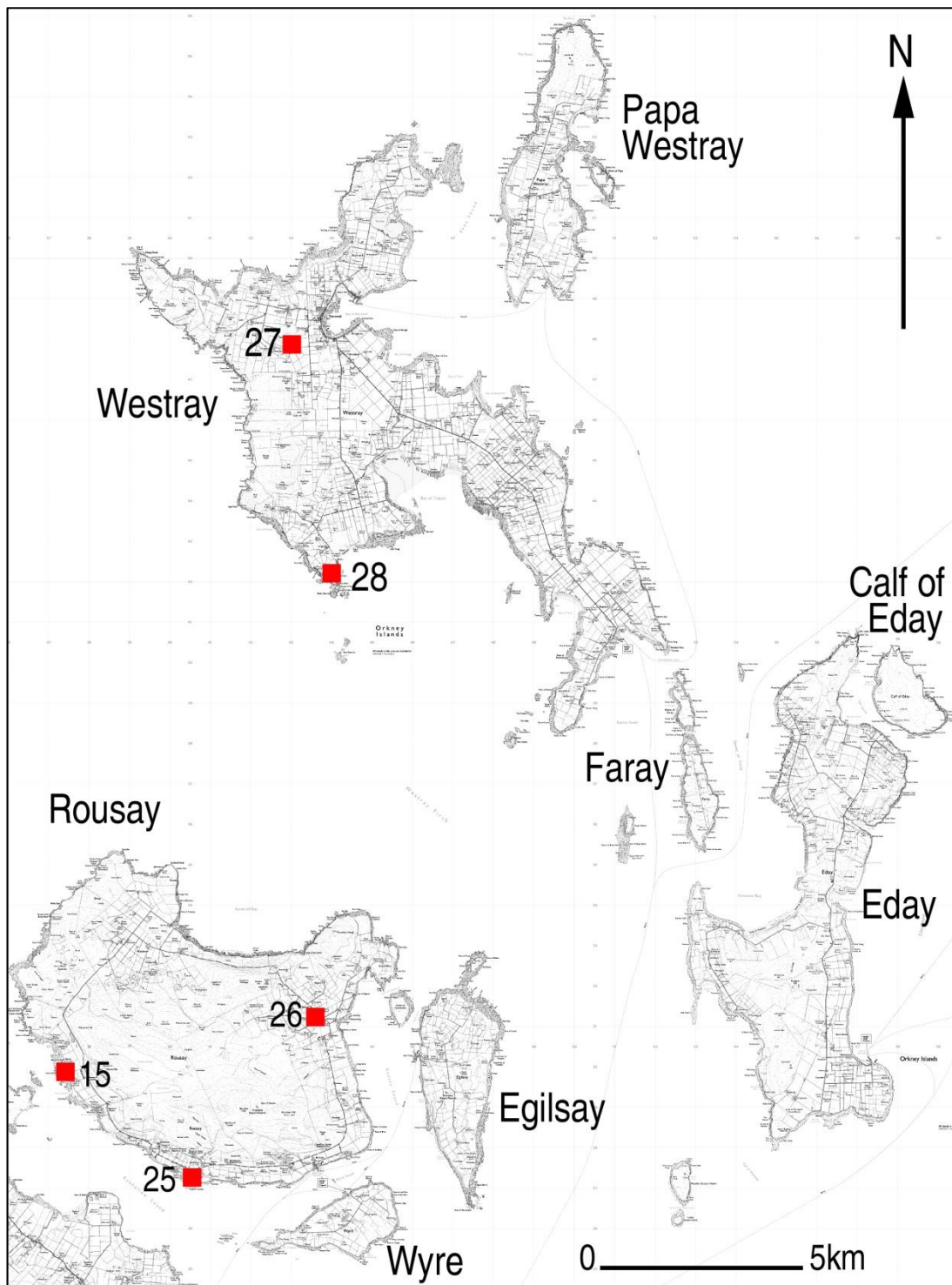
Figure A9.2 Souterrains in Hoy and Walls.

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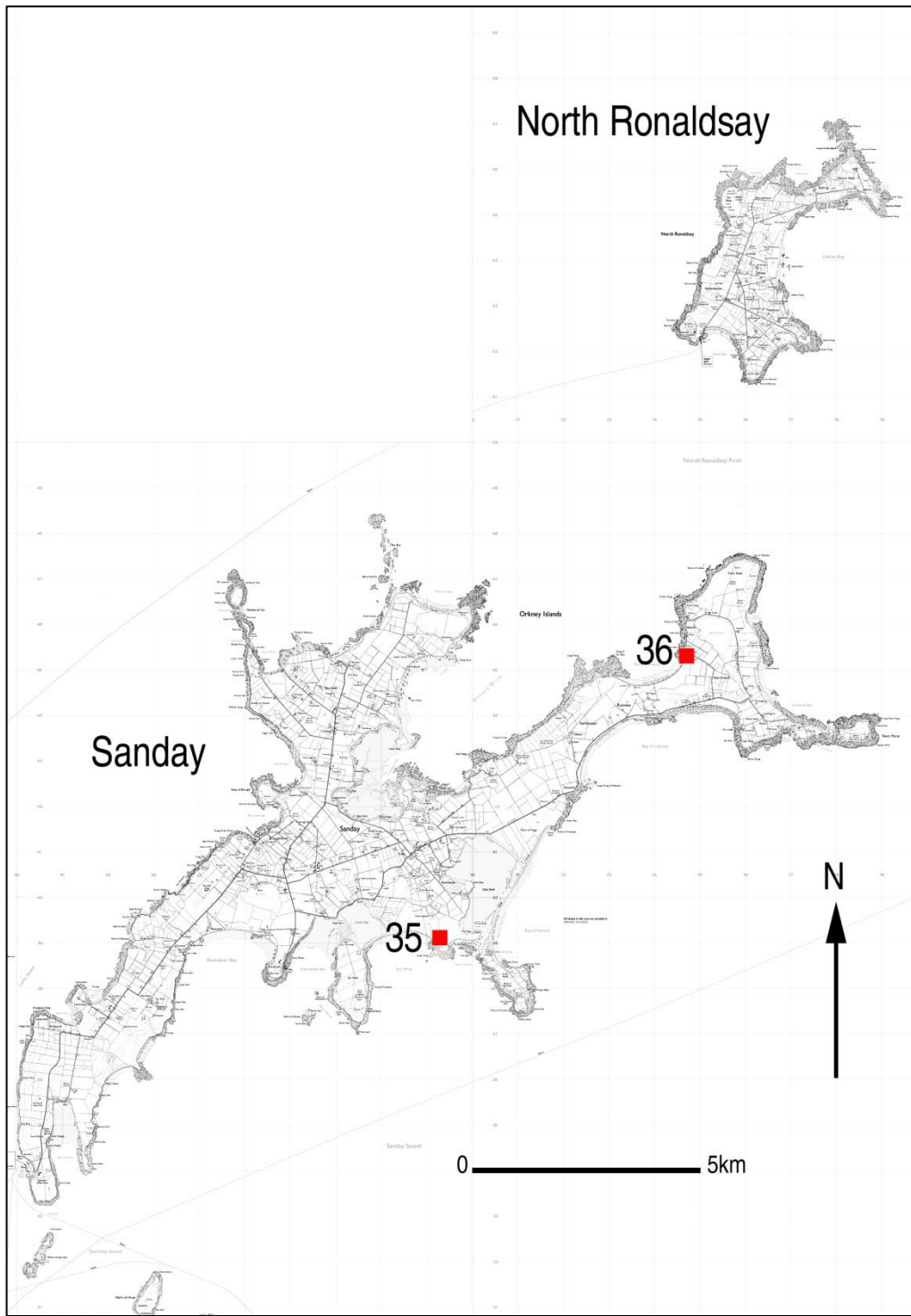
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Figure A9.3 Souterrains in the East Mainland, Burray and South Ronaldsay.



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Figure A9.4 Souterrains in Rousay, Westray, Papa Westray and Eday.



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Figure A9.5 Souterrains in North Ronaldsay and Sanday.

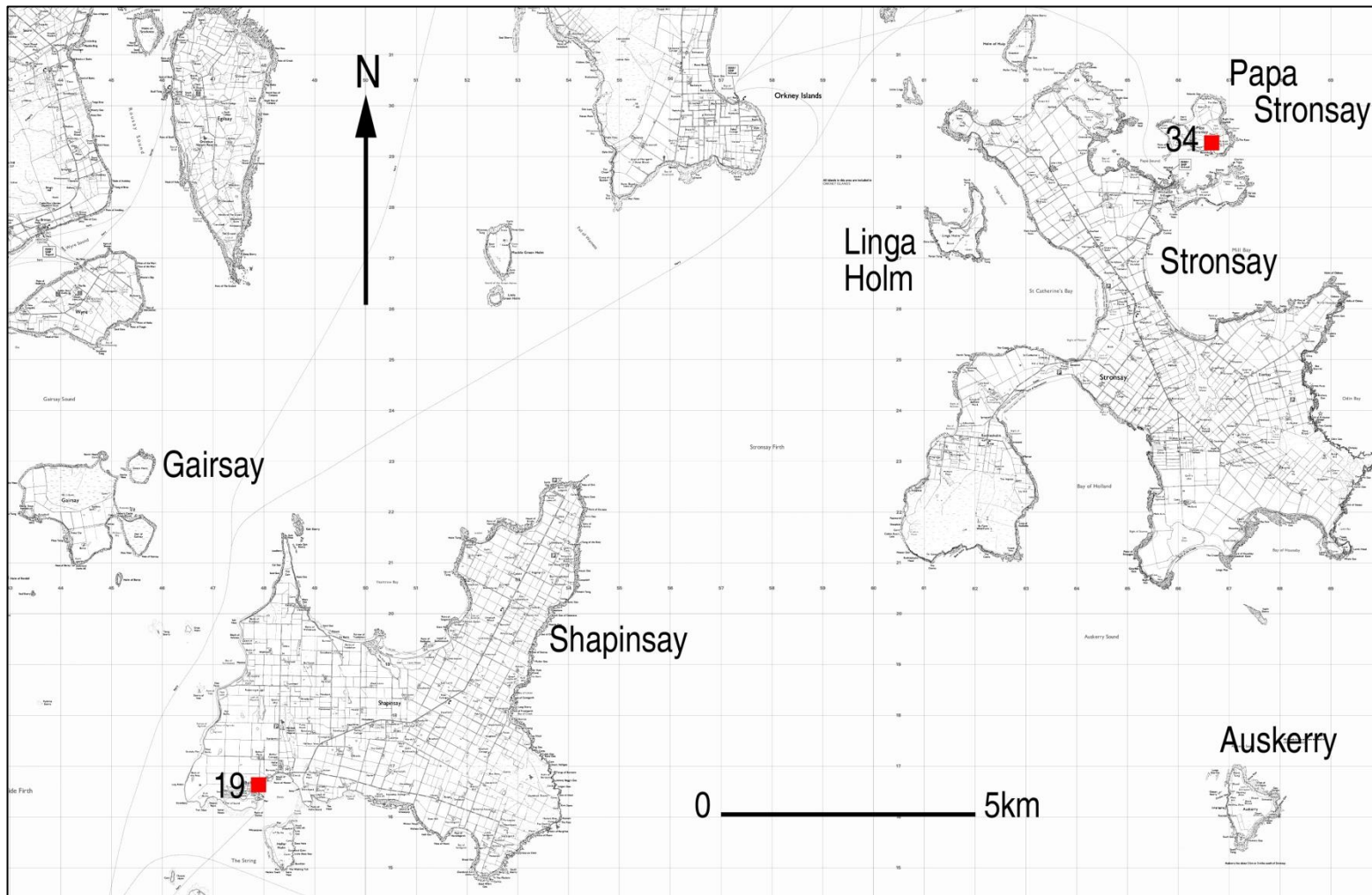


Figure A9.6
Souterrains
in
Shapinsay,
Stronsay
and
Gairsay.

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Appendix 10

Chambered tombs

Concordance list and distribution maps

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Figure A10.7 The Chambered tomb in Swona.	3

Notes

- 1) All the sites in the tables below were individually evaluated as part of a desk top assessment of all the available records, from the starting point of a NMRS Canmore search in December 2007. These results have been cross-checked with information from the Royal Commission survey (RCAMS 1946); the Orkney SMR; and other survey sources (e.g. Lamb 1980b & 1983b), and most importantly from *The Chambered Tombs of Orkney* (Davidson & Henshall 1989). Since this thesis has been an ongoing project over a number of years the list has been periodically checked and updated in the light of recent discoveries (e.g. Lee 2008b). The list was last updated at 31st December 2015.
- 2) The ORK numbers in Table 10.1 below refer to the numbers allocated to the respective tombs by Davidson & Henshall (1989). Those without an ORK number have largely been identified since 1989, or new information has come to light to confirm an identification that was not available to Davidson & Henshall (*ibid*).

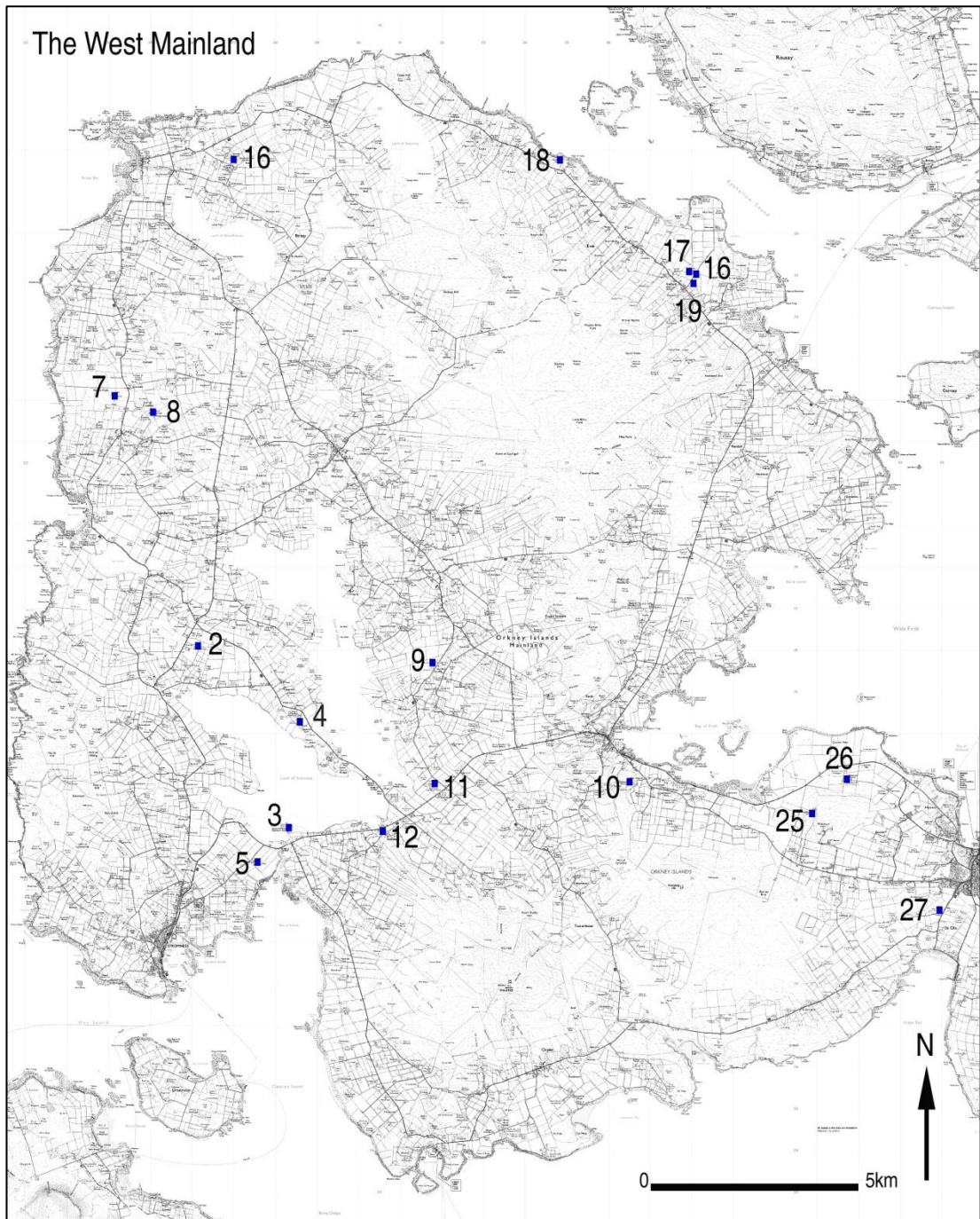
Table A10.1 chambered tomb concordance list

Table A10.1 chambered tomb concordance list. ORK: Davidson & Henshall 1989 number					
Tally	NMRS no,	Site Name	Grid reference	Parish	ORK
1	HY20SW8	HOY DWARFIE STANE	HY 2430 0043	HOAG	ORK 13
2	HY21NE3	VIA STONES OF VIA	HY 2600 1602	SAND	ORK 48
3	HY21SE5	UNSTAN	HY 2829 1172	STEN	ORK 51
4	HY21SE10	BOOKAN	HY 2864 1412	SAND	ORK 4
5	HY21SE41	THE HOWE	HY 2759 1092	STRO	ORK 66
6	HY22NE22	NEWAN	HY 2710 2777	BIHA	ORK 39
7	HY22SW10	VESTRA FIOLD	HY 2408 2184	SAND	ORK 79
8	HY22SW16	HOLY KIRK CRUADAY	HY 2495 2163	SAND	ORK 65
9	HY31NW51	STANEY HILL	HY 3164 1587	BIHA	ORK 74
10	HY31SE1	CUWEEN HILL	HY 3642 1277	FIR	ORK 12
11	HY31SW1	MAESHOWE	HY 3182 1277	STEN	ORK 36
12	HY31SW24	STANDING STONES HOTEL	HY 3025 1165	STEN	-
13	HY32NE1	KNOWE OF ROWIEGAR	HY 3733 2978	RAE	ORK 31
14	HY32NE6	KNOWE OF LAIRO	HY 3988 2796	RAE	ORK 28
15	HY32NE19	KNOWE OF SWANDRO ROUSAY	HY 3753 2966	RAE	-
16	HY32NE23	REDLAND aka R. NORTH	HY 3801 2502	RAE	ORK 57
17	HY32NE25	QUOYS	HY 3782 2507	EAR	ORK 56
18	HY32NW15	BURGAR	HY 3482 2782	EAR	ORK 6
19	HY32SE17	REDLAND aka R. SOUTH	HY 3800 2484	EAR	ORK 73
20	HY33SE1	MIDHOWE ROUSAY	HY 3722 3048	RAE	ORK 37
21	HY33SE22	KNOWE OF LINGRO ROUSAY	HY 3964 3238	RAE	ORK 29
22	HY40NW17	CRANTIT	HY 440 098	KASO	-
23	HY41NE2	HELLIAR HOLM SHAPIN	HY 4843 1534	SHAP	ORK 19
24	HY41SE1	HEAD OF WORK	HY 4834 1382	KASO	ORK 18
25	HY41SW1	WIDFORD HILL	HY 4090 1211	KASO	ORK 54
26	HY41SW4	QUANTERNESS	HY 4177 1292	KASO	ORK 43
27	HY42NE4	EGILSAY ONZIEBUST	HY 4741 2780	RAE	ORK 71
28	HY42NW1	KNOWE OF YARSO ROUS	HY 4048 2795	RAE	ORK 32
29	HY42NW2	TAVERSOE TUICK ROUS	HY 4257 2761	RAE	ORK 49
30	HY42NW3	BLACKHAMMER ROUSAY	HY 4142 2761	RAE	ORK 3
31	HY42NW22	KNOWE OF RAMSAY ROU	HY 4004 2800	RAE	ORK 30
32	HY42NW23	CUBBIE ROO'S BURDEN R	HY 4393 2800	RAE	ORK 11
33	HY43SW9	FARACLETT (HEAD EAST) ¹	HY 4399 3271	RAE	ORK 58
34	HY43SW9	FARACLETT (HEAD WEST)	HY 4399 3271	RAE	ORK 59
35	HY43SW12	BIGLAND LONG ROUSAY	HY 4354 3214	RAE	ORK 1
36	HY43SW13	BIGLAND ROUND ROUS	HY 4383 3250	RAE	ORK 2
37	HY43SW18	KIERFEA HILL ROUSAY	HY 4242 3196	RAE	ORK 26
38	HY43SW19	KNOWE OF CRAIE ROUS	HY 4196 3153	RAE	ORK 27
39	HY43SW28	FARACLETT ROUSAY	HY 4404 3282	RAE	-
40	HY44NE3	POINT OF COTT WESTR	HY 4654 4746	WEST	ORK 41

¹ Faraclett Head East & West share an NMRS number but have separate ORK numbers

Table A10.1 chambered tomb concordance list. ORK: Davidson & Henshall 1989 number					
Tally	NMRS no,	Site Name	Grid reference	Parish	ORK
41	HY44NW14	THE LUM HEAD aka IPHS	HY 4221 4910	WEST	ORK 24
42	HY44NW16	KNUCKER HILL WESTRAY	HY 4286 4705	WEST	ORK 33
43	HY44NW17	CURQUOY WESTRAY	HY431 473	WEST	ORK 34
44	HY44NW32	PIEROWALL QUARRY	HY 4389 4905	WEST	ORK 72
45	HY44SW4	POWDYKES WESTRY	HY 4343 4362	WEST	ORK 42
46	HY44SW8	WESTRY FITTY HILL	HY 4332 4451	WEST	ORK 60
47	HY45SE19	WESTRAY VERE POINT	HY 4583 5045	WEST	ORK 52
48	HY45SW1	TRENABIE WESTRAY	HY 4432 5103	WEST	ORK 78
49	HY50NW58	HURNIP'S POINT	HY 5448 0634	STAD	-
50	HY51SW5	HACKSNESS aka HACO'S N	HY 5218 1491	SHAP	ORK 62
51	HY53NE1	HUNTERSQUOY EDAY	HY 5626 3774	EDAY	ORK 23
52	HY53NE2	CALF OF EDAY NORWEST	HY 5788 3858	EDAY	ORK 9
53	HY53NE3	CALF OF EDAY SOUEAST	HY 5792 3852	EDAY	ORK 10
54	HY53NE7	EDAY LINKERTAING	HY 5539 3937	EDAY	ORK 35
55	HY53NE9	EDAY VINQUOY HILL	HY 5601 3812	EDAY	ORK 53
56	HY53NE10	EDAY BRAESIDE	HY 5633 3757	EDAY	ORK 5
57	HY53NE12	EDAY WITHEBEIR	HY 5675 3537	EDAY	ORK 55
58	HY53NE18	CALF OF EDAY LONG	HY 5786 3861	EDAY	ORK 8
59	HY53NW1	FARAY	HY 5274 3797	EDAY	ORK 17
60	HY53SE5	EDAY CHURCH	HY 5604 3344	EDAY	ORK 15
61	HY53SE6	SANDYHILL SMITHY EDAY	HY 5612 3299	EDAY	ORK 47
62	HY53SE7	EDAY MANSE EDAY	HY 5602 3242	EDAY	ORK 16
63	HY55SW1	HOLM OF P. WESTRAY S	HY 5091 5183	PAWE	ORK 22
64	HY55SW2	HOLM OF P. WESTRAY N	HY 5044 5228	PAWE	ORK 21
65	HY55SW3	HOLM OF P.WES. CENTRE	HY 5070 5185	PAWE	ORK 64
66	HY62NE2	GRICE NESS CUTTER'S TUO	HY 6725 2847	STRON	ORK 61
67	HY62NE13	EARL'S KNOLL PAPA STRON	HY 6682 2920	STRON	ORK 14
68	HY62SE8	STRON WART OF KIRBISTER	HY 6828 2385	STRON	ORK 80
69	HY62SE10	STRONSAY STEBB HILL	HY 6626 2332	STRON	ORK 75
70	HY62SE12	STR WARD OF HOUSEBAY	HY 6702 2115	STRON	-
71	HY62SE16	STRONSAY LAMB NESS	HY 6890 2125	STRON	ORK 69
72	HY62SW8	LOCHEND aka KELSBURGH	HY 6176 2487	STRON	ORK 68
73	HY63NE1	QUOYNESS SANDAY	HY 6766 3779	LADY	ORK 44
74	HY63SW4	HOLM OF HUIP	HY 6282 3116	STRON	ORK 20
75	HY64SE39	SANDAY RETHIE TANG	HY 6511 4424	CRAB	-
76	HY73NW4	SANDAY TRES NESS	HY 7110 3752	LADY	ORK 50
77	HY74NE1	TOFTS NESS SANDAY	HY 760 470	LADY	ORK 77
78	HY74SE4	MT MAESTRY MT MISERY	HY 7831 4351	LADY	ORK 38
79	ND28NE5	HOY DUNCAN'S GEO	ND 2879 8781	W AFL	ORK 81
80	ND38SE2	SWONA STANEMORA	ND 3843 8370	SORO	ORK 76
81	ND38NW9	OUTER GREEN HILL S WALLS	ND 3425 8958	W AFL	-
82	ND48NE12	S RONALD HESTA HEAD	ND 46298788	SORO	ORK 63
83	ND48NW10	S RONALDSAY THE NEV	ND 4284 8921	SORO	ORK 70

Table A10.1 chambered tomb concordance list. ORK: Davidson & Henshall 1989 number					
Tally	NMRS no,	Site Name	Grid reference	Parish	ORK
84	ND48SE1	S RONALD ISBISTER	ND 4704 8449	SORO	ORK 25
85	ND48SE13	BANKS S RONALDSAY	ND 4580 8339	SORO	-
86	ND49NE3	BURRAY	ND 4887 9880	SORO	ORK 7
87	ND49SW4	HOXA HILL THE WART SR	ND 4333 9357	SORO	ORK 67
88	ND59NW1	NORTH CAIRN ROSE NESS	ND 5261 9915	HOLM	ORK 46
89	N/A	ROEBERRY SOUTH WALLS	ND 3410 8909	WAFL	-



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Figure A10.1 Chambered tombs in the West Mainland.

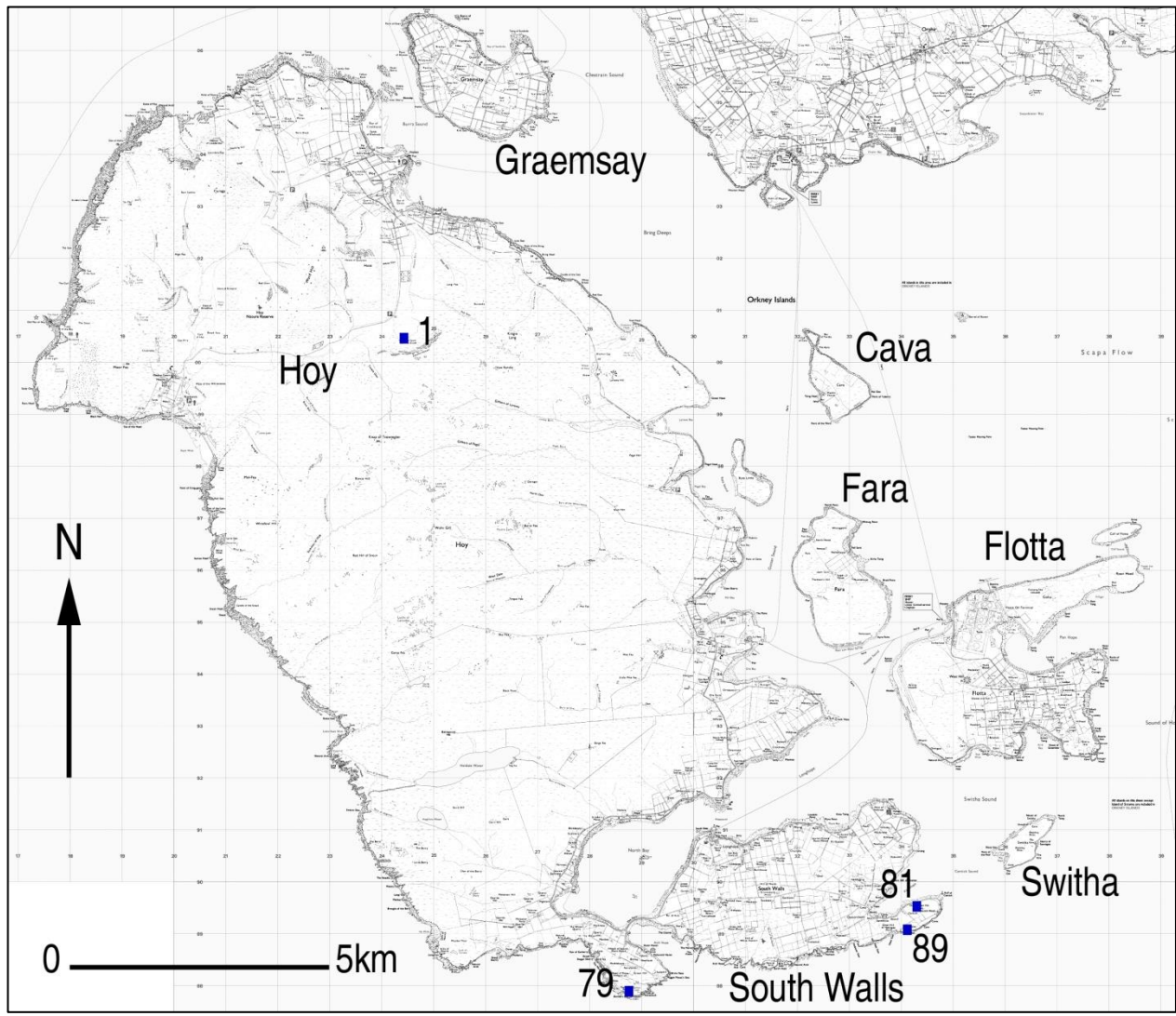
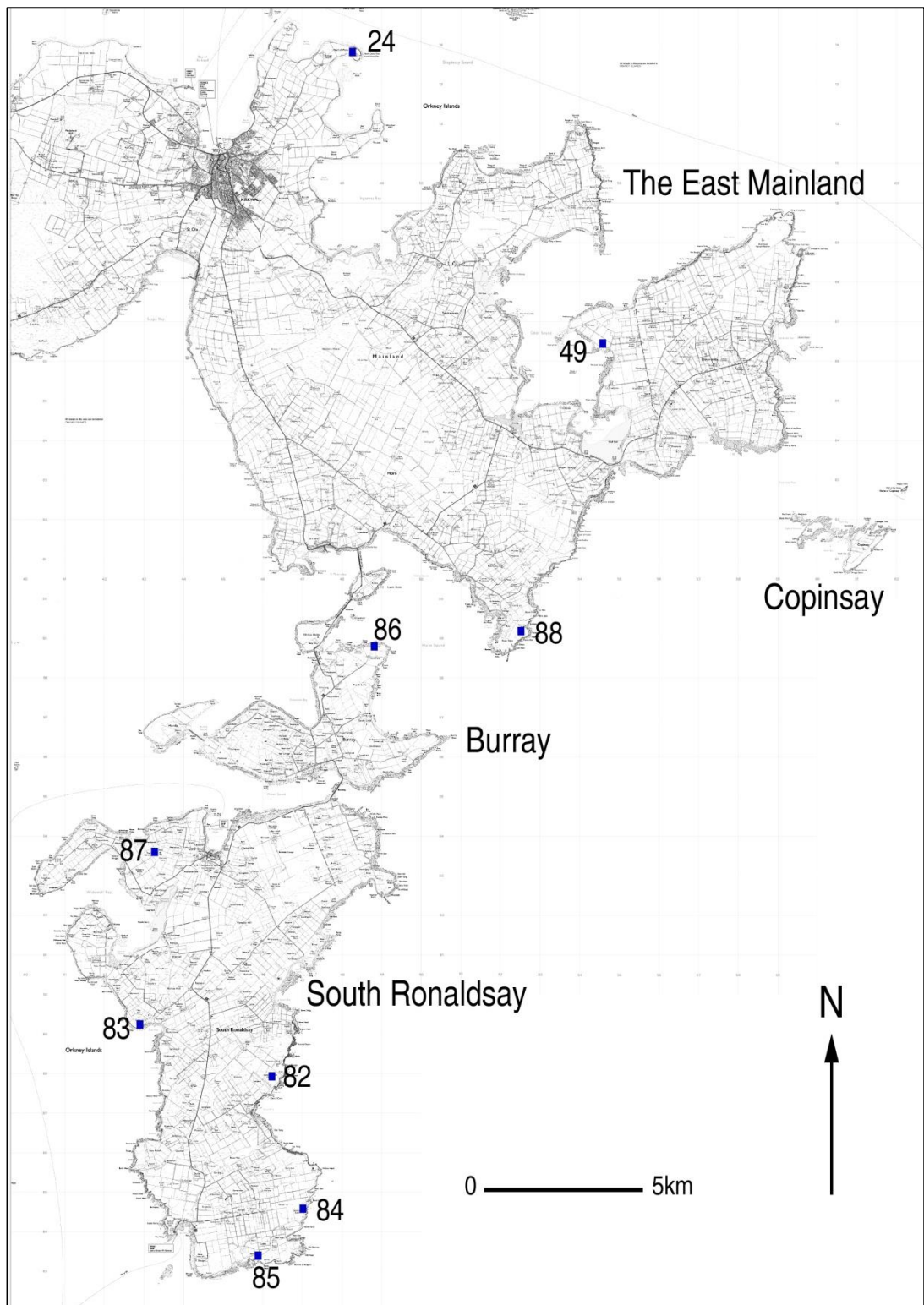


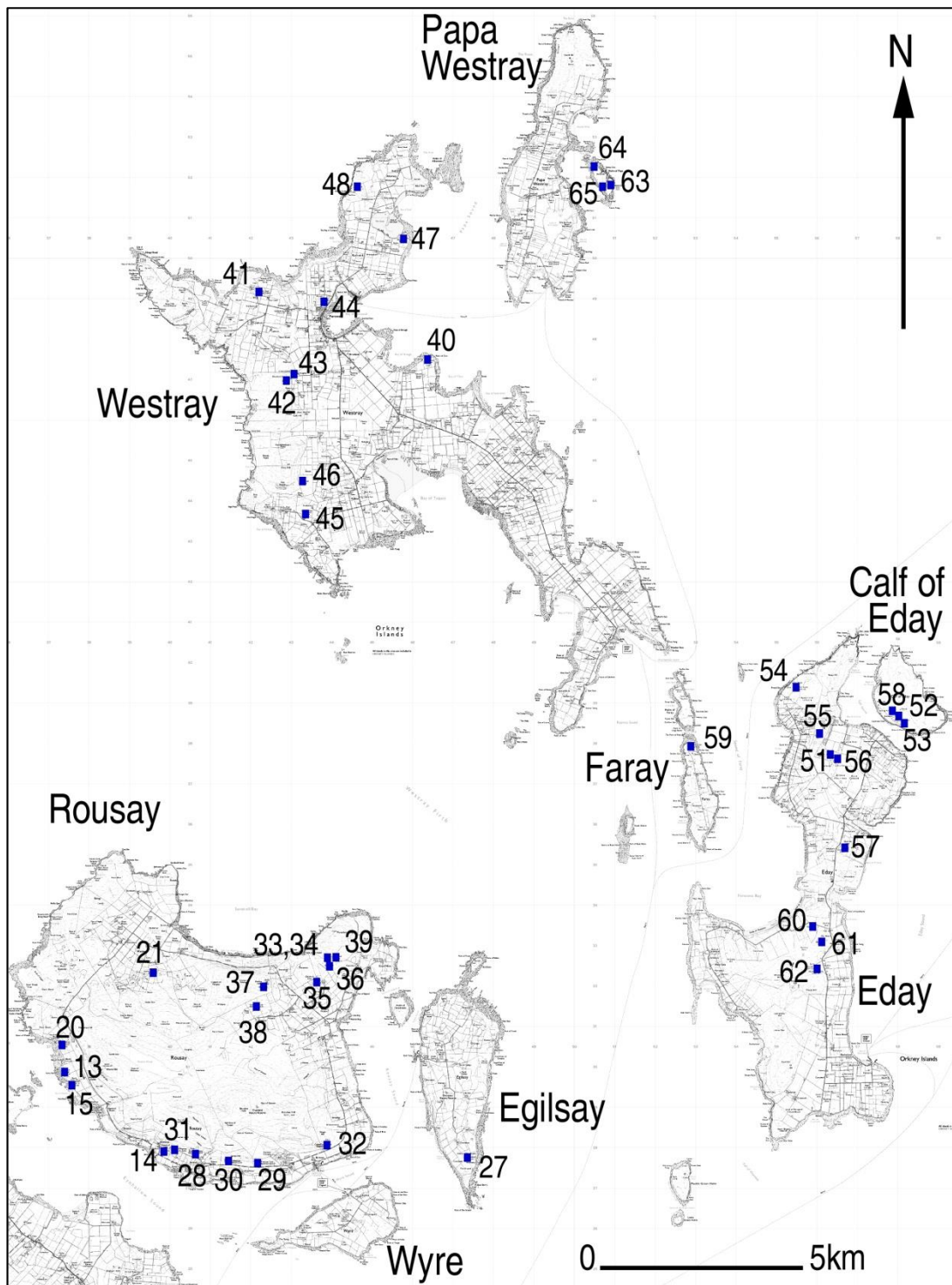
Figure A10.2 Chambered tombs in Hoy and South Walls.

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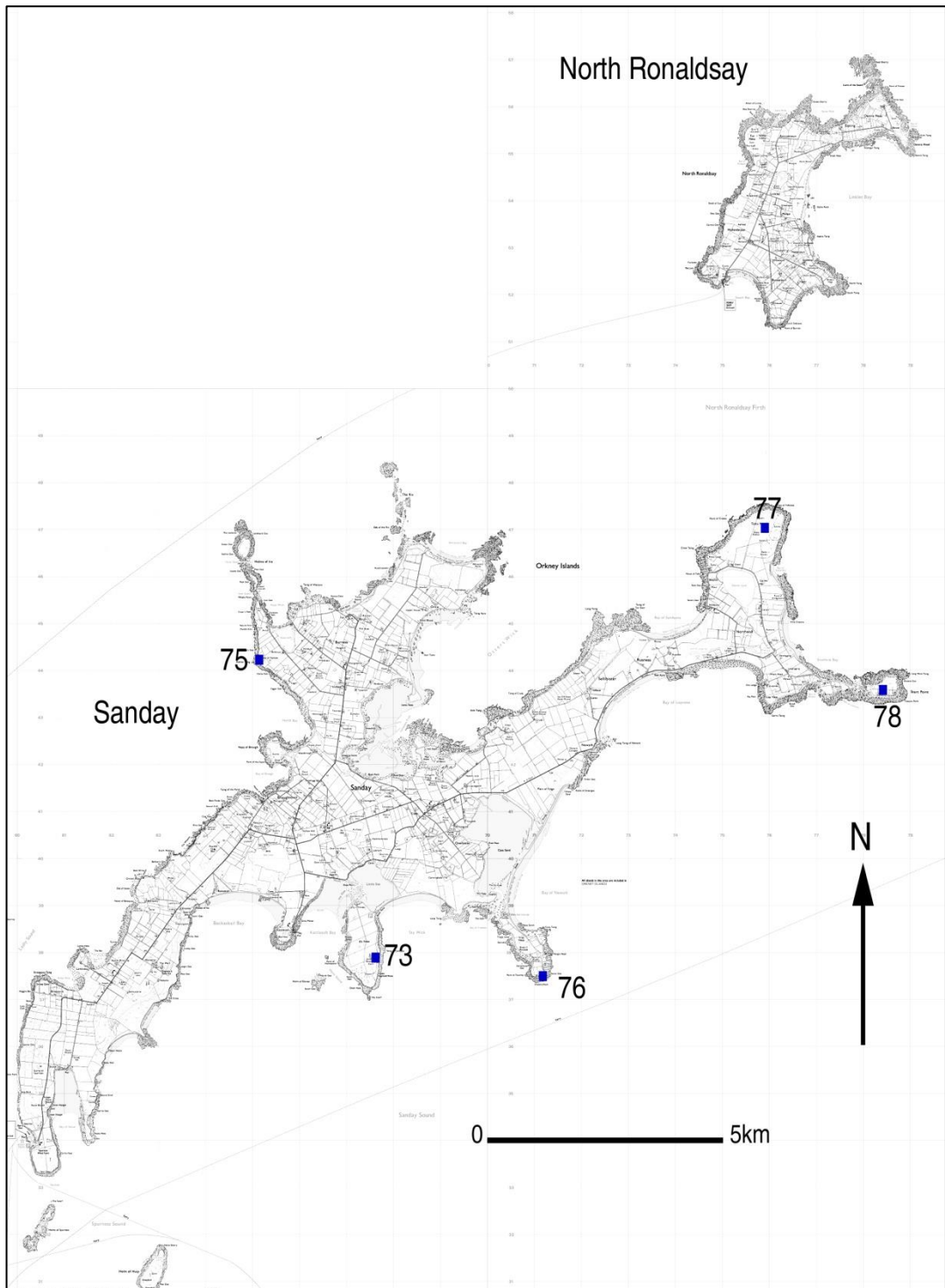
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Figure A10.3 Chambered tombs in the East Mainland, Burray and South Ronaldsay.



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Figure A 10.4 Chambered tombs in Rousay, Westray, Papa Westray and Eday.



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Figure A10.5 Chambered tombs in North Ronaldsay and Sanday.

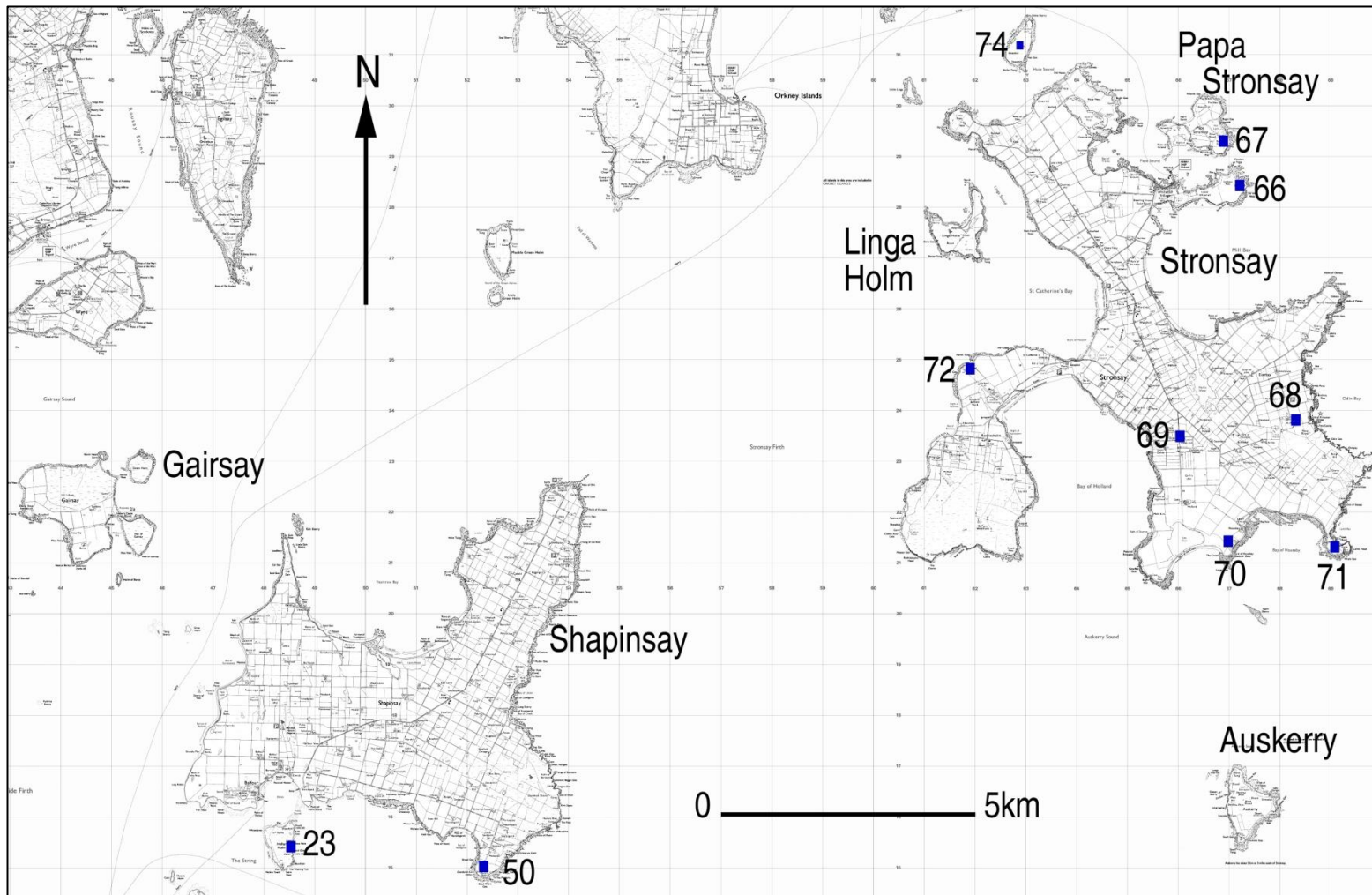
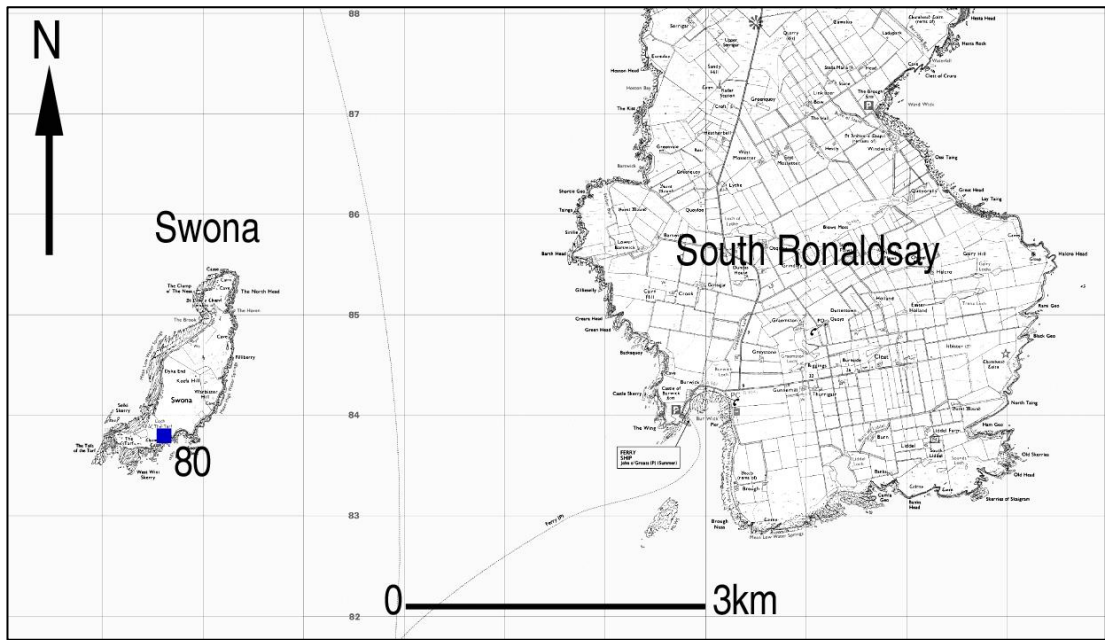


Figure A10.6 Chambered tombs in Shapinsay, Stronsay and Gairsay.

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Figure A10.7 The Chambered tomb in Swona.

Appendix 11

Brochs

Concordance list and distribution maps

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Figure A11.3 Brochs in the East Mainland, Burray and South Ronaldsay.	7
Figure A 11.4 Brochs in Rousay, Westray, Papa Westray and Eday (none).	7
Figure A11.5 Brochs in North Ronaldsay and Sanday.....	7
Figure A11.6 Brochs in Shapinsay, Stronsay and Gairsay.	7

Notes

- 1) All the sites in the tables below were individually evaluated as part of a desk top assessment of all the available records, from the starting point of a NMRS Canmore search in December 2007. Since this thesis has been an ongoing project the list has been periodically checked and updated in the light of recent discoveries up until December 2015.
- 2) Without entering into the technicalities of broch classification the 135 brochs listed below are those that I am reasonably confident are (or were) brochs, in the sense of a very substantial double walled roundhouse of one, two or more stories. Many of these sites are unexcavated and some of these are known only by a report of their destruction so some uncertainty remains.

Table A11.1 Broch concordance list for Figures A11.1 – A11.6 below

Table A11.1 Broch concordance list for Figures A11.1 – A11.6 below				
Number	NMRS no.	Name	Grid reference	Parish
1	HY20NE11	BU ¹	HY 2697 0933	STRO
2	HY20NE71	BU OF CAIRSTON	HY 272 096	STRO
3	HY20NW9	BRECKNESS	HY 2247 0928	STRO
4	HY20NW17	WAREBETH CEMETERY	HY 2373 0818	STRO
5	HY20NW20	HOY BRAEBISTER	HY 2130 0522	HOAG
6	HY20SW7	HOY QUOYNESS GREENHILL BR	HY 2500 0284	HOAG
7	HY21NE1	LOCH OF CLUMLY	HY 2517 1649	SAND
8	HY21NE9	STACKRUE LYKING	HY 2705 1513	SAND
9	HY21NE17	BURRIAN	HY 2888 1538	SAND
10	HY21NE29	RUSSLAND BURRIAN BROCH	HY 2964 1835	BIHA
11	HY21NE40	SCARRATAING	HY 2761 1764	SAND
12	HY21NE44	HOWANS HURKISGARTH	HY 2523 1755	SAND
13	HY21NW1	YESNABY BROCH OF BORWICK	HY 2241 1678	SAND
14	HY21NW22	VERRON	HY 2305 1976	SAND
15	HY21SE17	CUMMI HOWE CUMMINESS	HY 2824 1039	STEN
16	HY21SE31	CASTLE BLOODY	HY 2514 1286	STRO
17	HY21SE32	KNOWE OF REDLAND	HY 2659 1385	STRO
18	HY21SE41	THE HOWE	HY 2759 1092	STRO
19	HY21SE99	CORN HILLOCK	HY21SE 99	STEN
20	HY22NE4	OXTRO	HY 2537 2678	BIHA
21	HY22NE26	LOCH OF HUNDLAND	HY 2978 2635	BIHA
22	HY22SE4	SKEABRAE	HY 2749 2024	SAND
23	HY22SE8	GREENY NORTON Knowe of Taft	HY 2836 2226	BIHA
24	HY22SE35	LOCH OF ISBISTER	HY 2572 2334	BIHA
25	HY22SE39	KNOWE OF SKOGAR	HY 2639 2341	BIHA
26	HY30NE13	HILLOCK OF BRECKNA	HY 3533 0508	OR
27	HY31NE1	BURNESS aka CHAPEL KNOWE	HY 3882 1557	FIR
28	HY31NE2	ST MARY'S KIRK ISBISTER	HY 3997 1872	EAR
29	HY31NE12	BROCH OF REDLAND	HY 3780 1715	FIR
30	HY31NW1	KNOWE OF GULLOW	HY 3069 1629	BIHA
31	HY31NW2	KNOWE OF BURRIAN	HY 3082 1680	BIHA
32	HY31NW15	KIRK OF CLEATON	HY 3019 1565	BIHA
33	HY31NW30	KNOWE OF BOSQUOY	HY 3093 1864	BIHA
34	HY31NW32	CORSTON HOWEN BROUGH	HY 3180 1914	BIHA
35	HY31NW33	BURRIAN CORRIGALL	HY 3235 1937	BIHA
36	HY31NW36	HARRAY CHURCHYARD	HY 3136 1790	BIHA
37	HY31NW38	NETLATER MANSE OF HARRAY	HY 3232 1741	BIHA
38	HY31NW46	LOCH OF BOSQUOY	HY 309 184	BIHA
39	HY31NW49	HARRAY CHURCH	HY 314 179	BIHA

¹ The excavators believed this to be a broch (Hedges 1987a) but this is still the subject of controversy: cf. Armit 2003 & 2005.

Table A11.1 Broch concordance list for Figures A11.1 – A11.6 below				
Number	NMRS no.	Name	Grid reference	Parish
40	HY31SE4	FINSTOWN THE HILLOCK	HY 3611 1415	FIR
41	HY31SE5	INGSHOWE	HY 3903 1277	FIR
42	HY31SE77	DAMSAY	HY 3903 1416	FIR
43	HY31SE80	NETHER BIGGING	HY 3717 1302	FIR
44	HY31SW6	GRIMESTON ST MARY'S KIRK	HY 3109 1426	BIHA
45	HY31SW31	BIG HOWE	HY 3081 1247	STEN
46	HY32NE5	AIKERNESS BROCH OF GURNESS	HY 3817 2685	EAR
47	HY32NE10	KNOWE OF GRUGAR	HY 3564 2730	EAR
48	HY32NE11	KNOWE OF STENSO	HY 3639 2674	EAR
49	HY32NE12	VIERA LODGE ROUSAY	HY 3916 2808	RAE
50	HY32NE27	BROCH OF BURGAR	HY 3521 2771	EAR
51	HY32NW7	VERRON COSTA HILL	HY 3185 2990	EAR
52	HY32NW13	VINQUIN	HY 3269 2830	EAR
53	HY32SW17	NORTH BIGGING Mithouse	HY 3080 2000	BIHA
54	HY33SE2	ROUSAY MIDHOWE	HY 3716 3059	RAE
55	HY33SE10	ROUSAY SOUTH HOWE	HY 3727 3037	RAE
56	HY33SE11	ROUSAY NORTH HOWE	HY 3704 3074	RAE
57	HY33SE13	ROUSAY THE BURRIAN	HY 3949 3338	RAE
58	HY40NW1	BROCH OF LINGRO	HY 4345 0878	KASO
59	HY40NW2	TOFTS FARM BR OF WARBUSTER	HY 4364 0936	KASO
60	HY40SE6	ST MARY'S LOCH OF AYRE	HY 4702 0136	HOLM
61	N/A	SKAILL BAY, S of SKAILL HOUSE ²	HY 2357 1840	SAND
62	HY41NE8	SHAPINSAY LOCH OF WESTHILL	HY 4795 1833	SHAP
63	HY41NW4	NORTH AITTIT	HY 4205 1996	EAR
64	HY41NW6	KNOWE OF DISHERO	HY 4258 1998	EAR
65	HY41NW24	NESS, SALTY KNOWE	HY 41950 17440	EAR
66	HY41SE2	WORK	HY 4747 1350	KASO
67	HY41SE6	BERSTANE	HY 4752 1002	KASO
68	HY41SW291	BROAD ST KIRKWALL	HY 44868 10841	KASO
69	HY42NW13	FROTOFT KN OF BURRIAN ROU	HY 4006 2745	RAE
70	HY42NW15	KNOWE OF HUNCLETT ROUS	HY 4144 2722	RAE
71	HY42SW3	TINGWALL	HY 4011 2286	EAR
72	HY42SW4	NESS OF BORAY	HY 4426 2100	EAR
73	HY42SW9	NESS OF WOODWICK	HY 4007 2487	EAR
74	HY42SW10	WASS WICK	HY 4120 2198	EAR
75	HY42SW12	ST THOMAS' KIRK HALL OF RENDALL	HY 4250 2097	EAR
76	HY43SW6	ROUSAY SCOCKNESS	HY 4498 3308	RAE
77	HY44NE2	CASTLE OF BOTHIKAN PAPAY	HY 4926 4972	PAWE
78	HY44NW11	WESTRAY QUEENA HOWE	HY 4250 4948	WEST

² The broch was located by geophysical survey (OCGU 2008; Ovenden et al 2009, 126, fig. 2). There is an NMRS entry (HY21NW25) for the find of a cross mould at 'Loupandessness' near Skail House, on Skail Bay, at a site which was subsequently described as a slightly stony eminence. It is unclear if the cross mould did in fact come from this location (Marwick 1929b, 23 – 4).

Table A11.1 Broch concordance list for Figures A11.1 – A11.6 below				
Number	NMRS no.	Name	Grid reference	Parish
79	HY44NW22	WESTRAY HOORNESS NOUP	HY 4227 4960	WEST
80	HY44NW24	BROUGH	HY 4482 4904	WEST
81	HY44SE2	PETERKIRK WESTRAY ³	HY 4998 4008	WEST
82	HY44SE3	WESTRAY HODGALEE	HY 4644 4473	WEST
83	HY44SE11	WESTRAY TAFTS	HY 4963 4171	WEST
84	HY44SW1	WESTRAY KN OF BURRISTAE	HY 4317 4291	WEST
85	HY45SE4	ST TREDWELL'S CHAPEL PAPEY	HY 4964 5088	PAWE
86	HY45SE26	PAPA WESTRAY MUNKERHOOSE	HY 4877 5271	PAWE
87	HY50NE20	RIGGIN OF KAMI DEERNESS	HY 5917 0743	STAD
88	HY50NE21	SKAILL DEERNESS	HY 5889 0633	STAD
89	HY50SW21	ST PETERS BAY	HY 5369 0452	STAD
90	HY50NW3	LOCH OF TANKERNESS	HY 5142 0899	STAD
91	HY50NW14	EVES HOWE DEERNESS	HY 5490 0611	STAD
92	HY50SE8	BACKLAND DEERNESS	HY 5804 0402	STAD
93	HY50SW1	CAMPSTON	HY 5288 0411	STAD
94	HY50SW7	DINGY'S HOWE UPPER SANDAY	HY 5476 0330	STAD
95	HY50SW14	ST NICHOLAS' CHURCH HOLM ⁴	HY 5104 0063	HOLM
96	HY51NW5	SHAPINSAY HILLOCK OF HOWE	HY 5117 1599	SHAP
97	HY51NW10	SHAPINSAY BROCH OF STEIRO	HY 5019 1635	SHAP
98	HY52SW2	THE HILLOCK NESS OF ORK	HY 5356 2238	SHAP
99	HY52SW4	HILLOCK OF BURROUGHSTON	HY 5406 2100	SHAP
100	HY62NE6	STRONSAY HUNTON	HY 6534 2754	STRON
101	HY62SE1	STRONSAY LAMB HEAD	HY 6904 2146	STRON
102	HY62SE11	STRONSAY BENI CUML	HY 6715 2142	STRON
103	HY62SW1	R'SHOLM HILLOCK OF BAYWEST	HY 6190 2425	STRON
104	HY63NE7	SANDAY ELSNESS	HY 672 390	LADY
105	HY63NE9	HOW, SANDAY	HY 6606 3927	CRAB
106	HY63NE34	CROSS, SANDAY	HY 62600 38430	CRAB
107	HY63NW1	SANDAY BACKSKAILL	HY 6417 3919	CRAB
108	HY63NW2	SANDAY NEBISTER	HY 6316 3701	CRAB
109	HY63NW12/18 ⁵	LAMBANESS, SANDAY	HY 6138 3797	CRAB
110	HY63NW30	SANDAY BRACHOWER	HY 6200 3738	CRAB
111	HY63SW1	GREENHILL T' NORTH END STR	HY 6322 3008	STRON
112	HY64NE3	RUNNA CLETT SANDAY	HY 6659 4540	CRAB
113	HY64SE14	WEST BROUGH SANDAY	HY 6633 4235	CRAB
114	HY64SE16	SANDAY ICEGARTH CASTLE	HY 6706 4156	CRAB
115	HY64SE21	SANDAY COLLI NESS	HY 6850 4212	LADY

³ Peterkirk is not listed as a broch by NMRS, but trial excavation has confirmed this identification (Moore & Wilson 2000d)

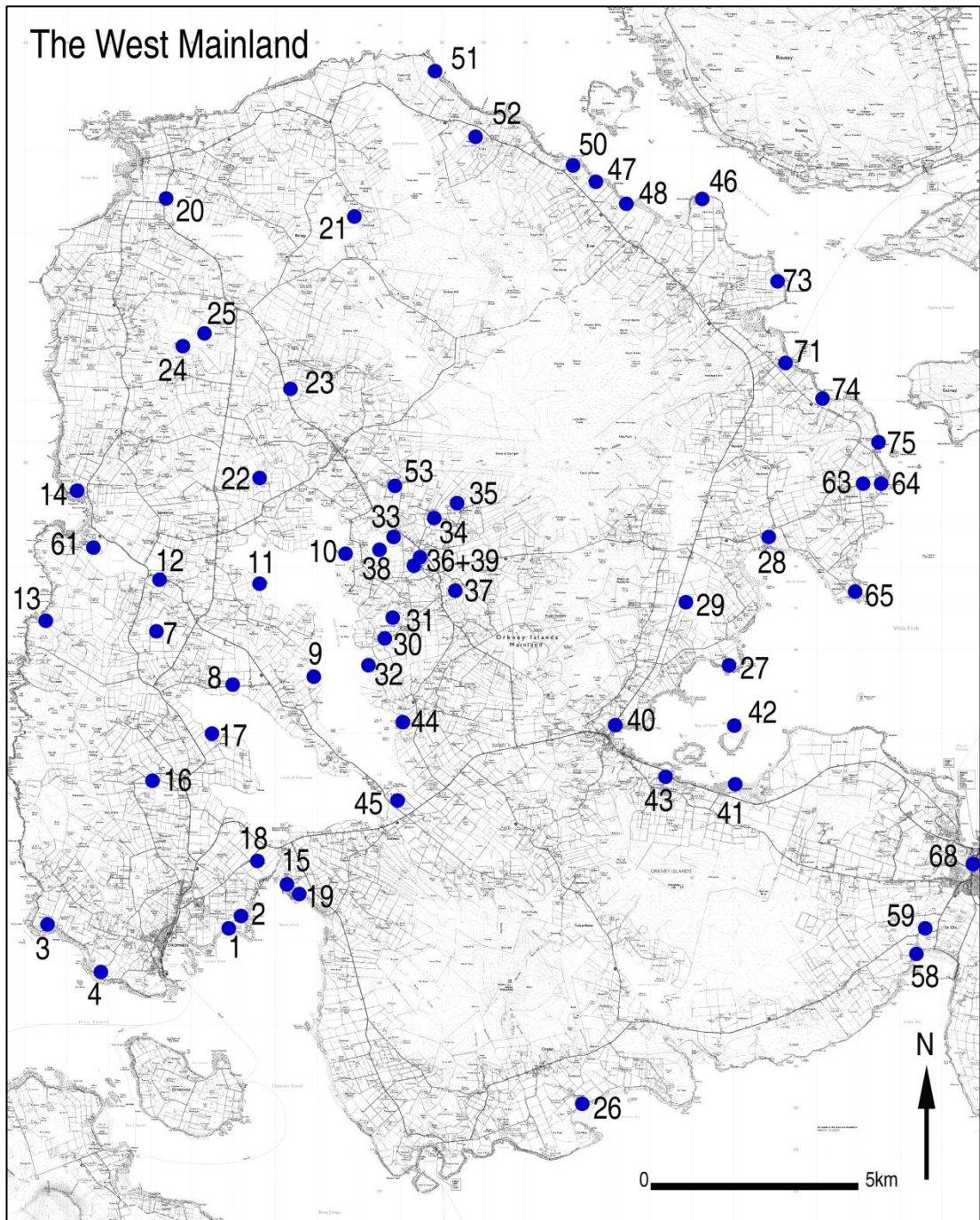
⁴ St. Nicholas' Church is not formally listed as a broch by NMRS but sits on a substantial mound; structural stone has been found during grave digging, and personal observation of surface scatters of artefacts and structural stonework following ploughing would strongly suggest this to be a broch.

⁵ There are several entries in this area for chance finds and sites; it appears likely that HY63NW12 & HY63NW18 are the same site.

Table A11.1 Broch concordance list for Figures A11.1 – A11.6 below				
Number	NMRS no.	Name	Grid reference	Parish
116	HY64SE22	SANDAY MARY GARTH	HY 6539 4118	CRAB
117	HY73NW2	BROCH OF WASSO TRES NESS SA	HY 7092 3794	LADY
118	HY74SE2	SANDAY BURYAN	HY 7724 4340	LADY
119	HY74SW1	SANDAY NEWARK	HY 7168 4256	LADY
120	HY74SW7	SANDAY PETERKIRK	HY 7136 4363	LADY
121	HY75SE3	BROCH OF BURRIAN N RONALD	HY 7627 5138	CRAB
122	ND28NE3	HOY BRIMS THE SKEO	ND 2857 8796	WAFL
123	ND38NW8	GREEN HILL OF HESTI GEO	ND 3375 8905	WAFL
124	ND38NW10	S WALLS BURROUGHSTON	ND 3331 8938	WAFL
125	ND39SW1	S WALLS GREEN HILL	ND 3148 9095	WAFL
126	ND39SW5	GREEN HILL OF SCARTON	ND 3378 9005	WAFL
127	ND48NE14	CAIRNS O THE BU WINDWICK	ND 4542 8688	SORO
128	ND48NW2	S RONALD WEEMS CASTLE	ND 4337 8885	SORO
129	ND48SW1	S RONALD BROUGH FARM	ND 4428 8333	SORO
130	ND49NE1	EAST BROCH OF BURRAY	ND 4897 9881	SORO
131	ND49NE2	WEST BROUGH OF BURRAY	ND 4847 9871	SORO
132	ND49NE7	BURRAY, HILLOCK OF FEA	ND4929 9557	SORO
133	ND49NE8	KYELITTLE BURRAY	ND 4851 9531	SORO
134	ND49NW1	HUNDA THE CAIRN HEAD	ND 4340 9615	SORO
135	ND49SW1	S RONALD HOWE OF HOXA	ND 4252 9396	SORO

Table A11.2 Broch reject list

Table A11.2 Broch reject list with correct identification if known					
NMRS no.	Name	Grif ref	Parish	NMRS Desc	Correct identification if possible
HY43SE2	Rousay, Scock Ness	HY 4526 3214	RAE	BR (poss)	Too little detail available
HY41NE1	SHAPINSAY HELLIAR HOLM	HY 4859 1579	SHAP	BR (poss)	Settlement but not broch (Lamb 1987, 18, no.69)
HY44NW23	Westray, 'knoll Of Skulzie'	HY 4472 4904	WEST	BR (poss)	Too little detail available
HY44SW2	Westray, Knowe Of Skea	HY 4414 4181	WEST	BR (poss)	Multi period site but no broch (Moore & Wilson 2007c)
HY45SE15	Papa Westray, Kirk Of Howe	HY 493 530	PAWE	BR (poss)	Too little detail available
HY50NW1	Taing of Beeman Tankerness	HY 5321 0914	STAD	BR (poss)	BA double house (Lamb 1987 & Orkney SMR)
HY50NW8	Howe Of Langskaill	HY 5078 0591	STAD	BR (poss)	Round Howe: see Section 9.4
HY73NW3	Sanday, Hangie Head, Tres Ness	HY 7120 3800	LADY	BR (poss)	Too little detail available
HY74NW1	Sanday, Brace Garth	HY 7490 4653	LADY	BR (poss)	Too little detail available
HY75NE5	North Ronaldsay, Dennis Ness	HY 78320 55992	CRAB	BR (poss)	Too little detail available
ND38NW9	South Walls, Outer Green Hill	ND 3425 8958	WAFL	BR (poss)	Excavation: chambered tomb (Lee 2008b)
ND47NE5	Saltwater Geo, Muckle Skerry	ND 4681 7846	SORO	BR (poss)	Too little detail available
ND49SW3	South Ronaldsay, Harra Brough	ND 4157 9038	SORO	BR (poss)	Too little detail available
ND49SW6	South Ronaldsay, Brough Of Ontoft	ND 4422 9359	SORO	BR (poss)	Too little detail available
HY31NW105	Nether House	HY 336 179	BIHA	BR (poss)	Too little detail available
HY41SW287	Widford Hill	HY 421 120	KASO	BR (poss)	Too little detail available
HY41SW286	Hatston	HY 426 120	KASO	BR (poss)	Too little detail available
HY63NW70	Sanday, The Knowes	HY 635 390	CRAB	BR (poss)	Too little detail available
HY74SW39	Sanday, Chapel Of Anston	HY 717 426	LADY	BR (poss)	Too little detail available



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Figure A11.1 Brochs in the West Mainland.

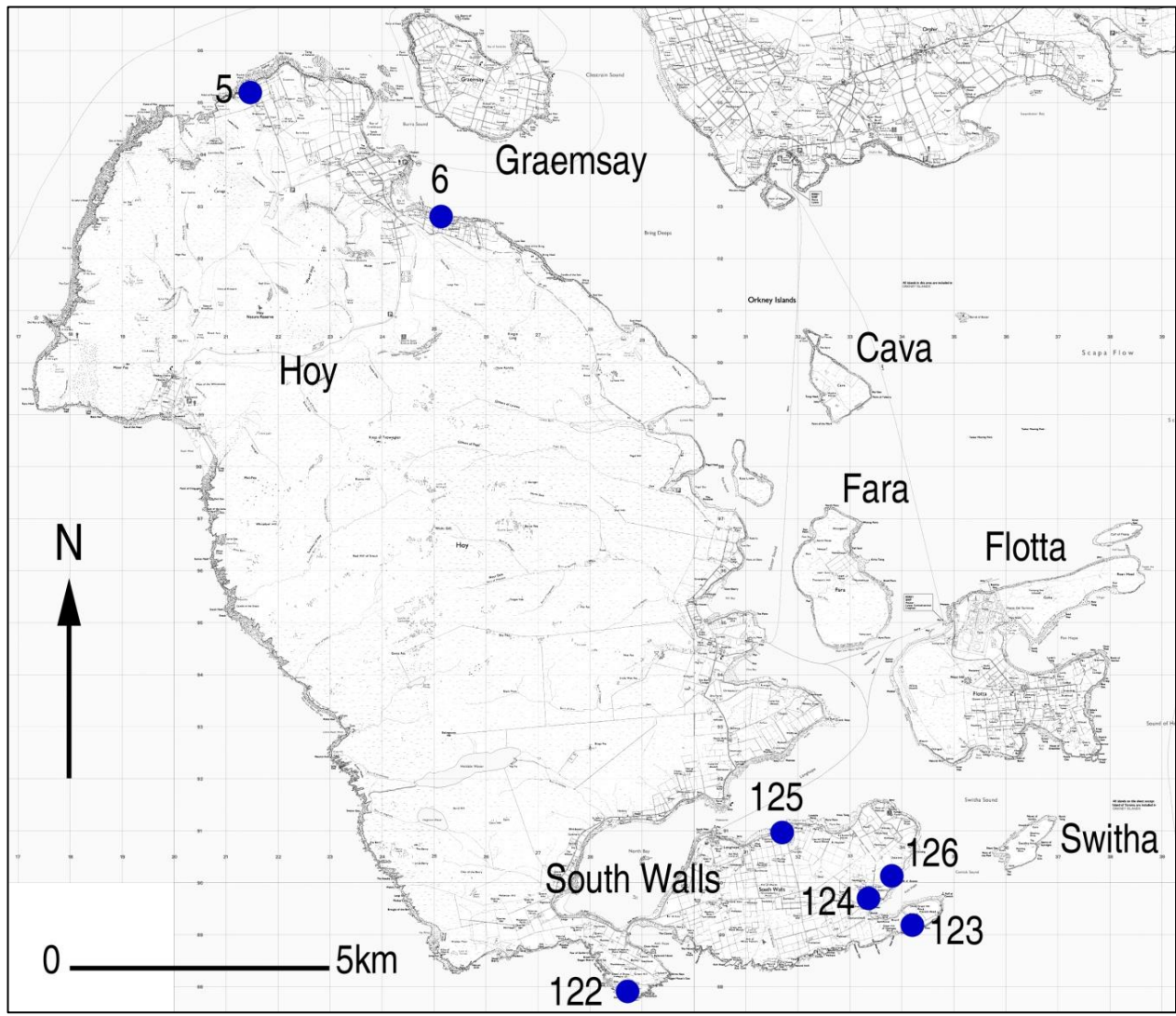
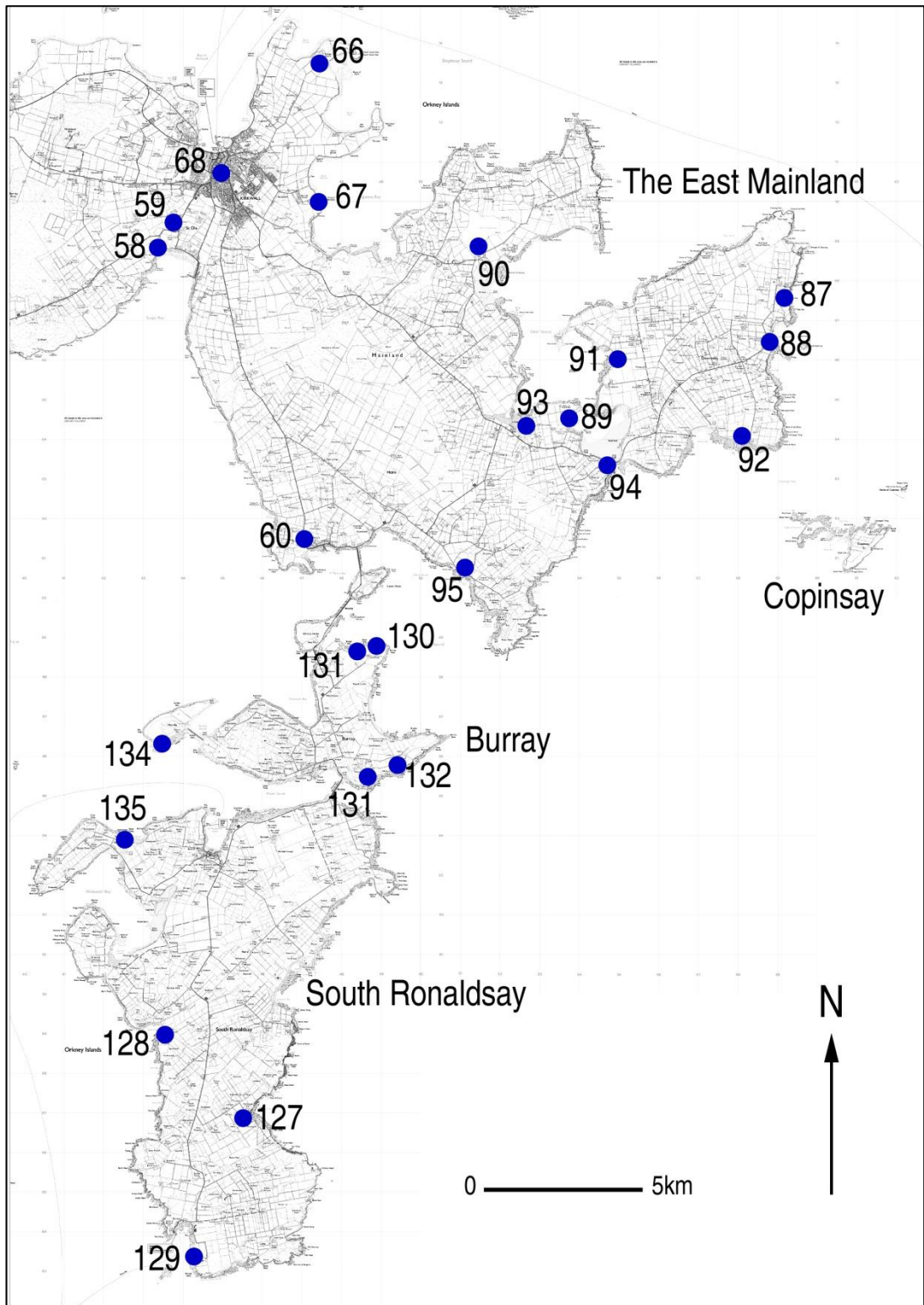


Figure A11.2 Brochs in Hoy and South Walls.

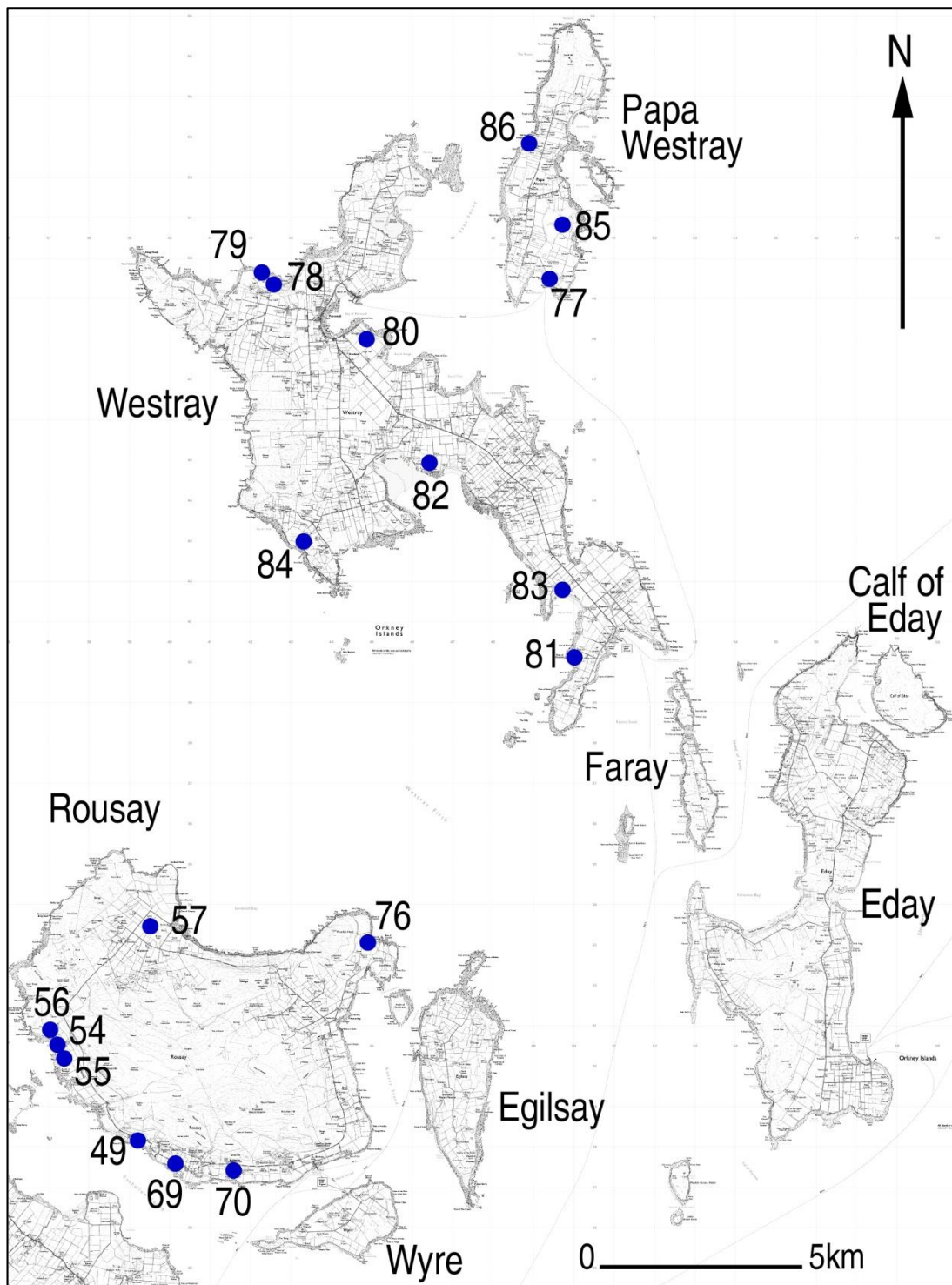
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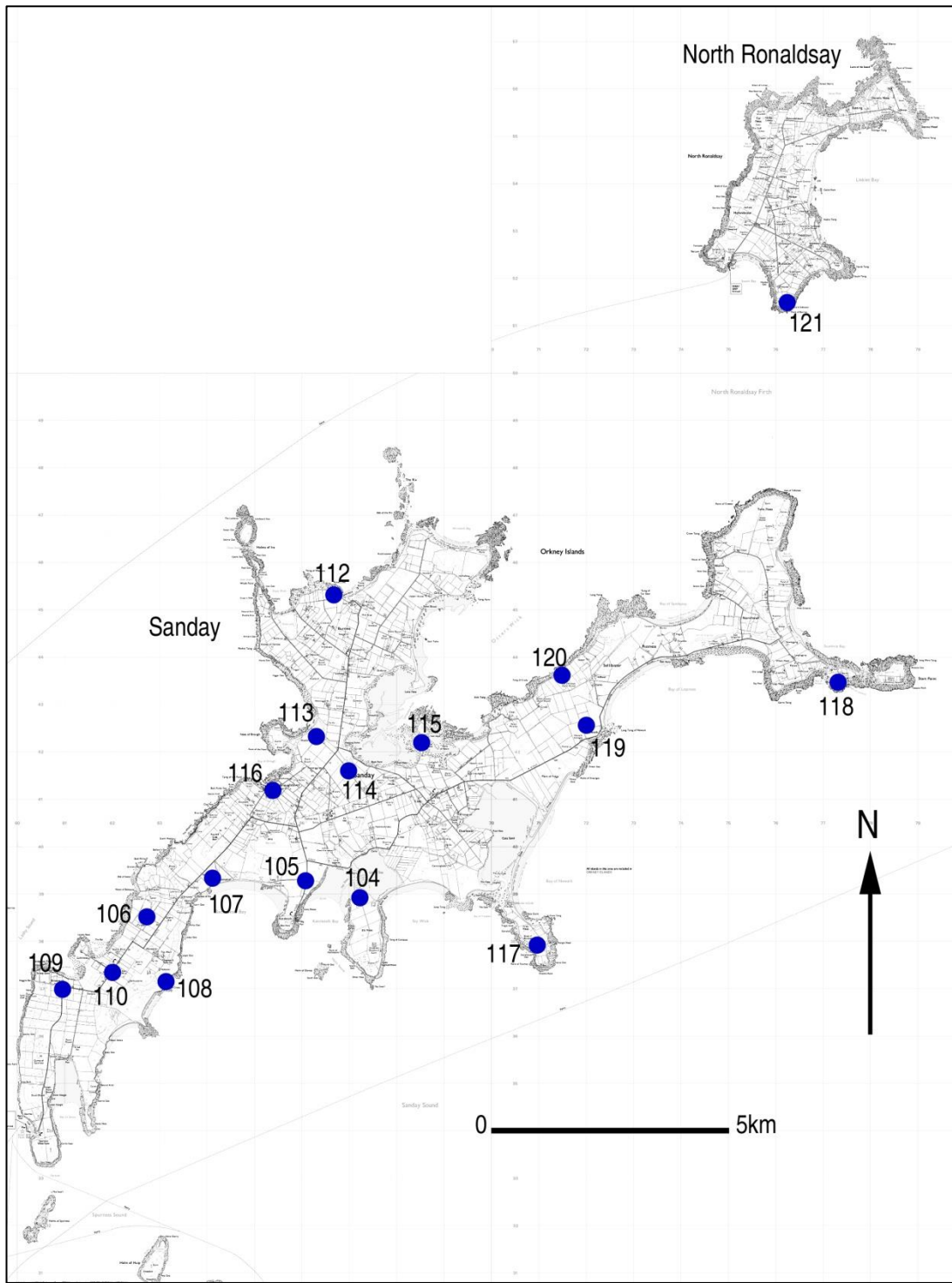
Figure A11.3 Brochs in the East Mainland, Burray and South Ronaldsay.

(Note numbers 58, 59 and 68 are in the West Mainland and so are also shown in Figure A11.1).



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Figure A 11.4 Brochs in Rousay, Westray, Papa Westray and Eday (none).



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Figure A11.5 Brochs in North Ronaldsay and Sanday.

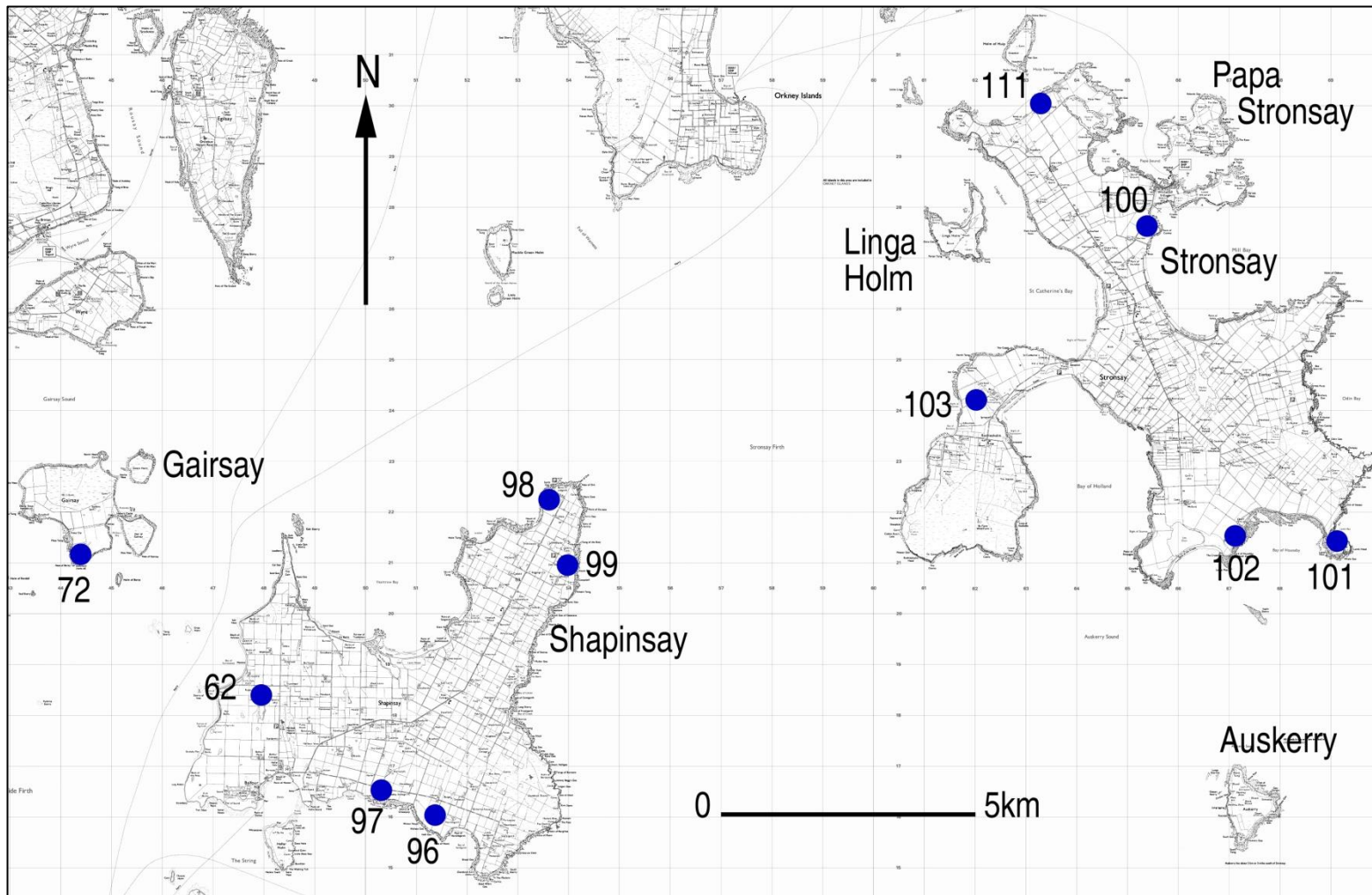


Figure A11.6
Brochs in
Shapinsay,
Stronsay
and
Gairsay.

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Appendix 12

Bronze Age Settlement Locations

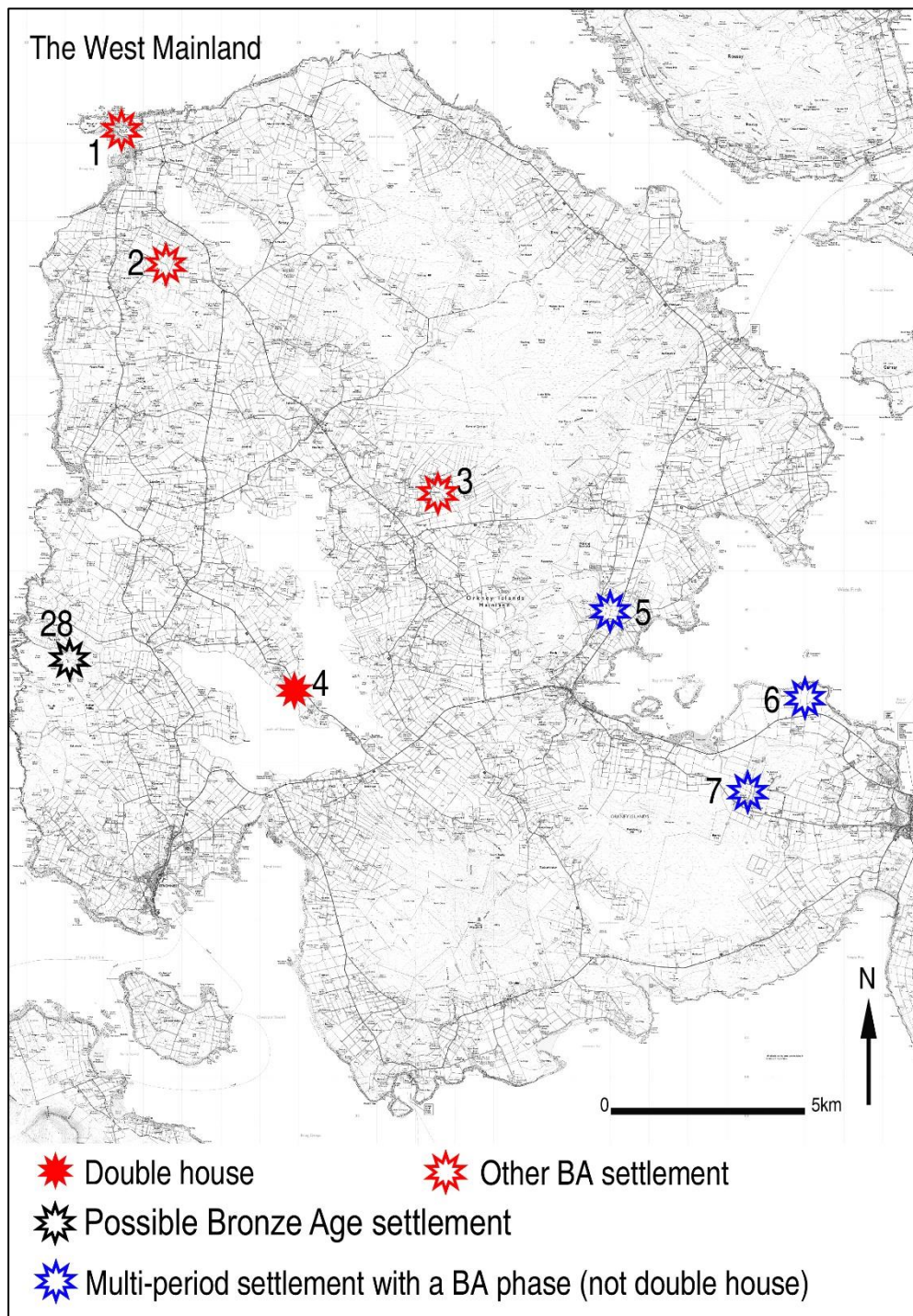
Concordance list and distribution maps

Table A12.1 Settlement concordance list for Figures A12.1 – A12.6 below	1
Figure A12.1 Bronze Age settlements in the West Mainland.....	2
Figure A12.2 Bronze Age settlements in the East Mainland, Burray and South Ronaldsay.....	2
Figure A12.3 Bronze Age settlements in Hoy and South Walls.	2
Figure A12.4 Bronze Age settlements in Rousay, Westray, Papa Westray and Eday.	2
Figure A12.5 Bronze Age settlements in North Ronaldsay and Sanday.....	2
Figure A12.6 Bronze Age settlements in Shapinsay, Stronsay and Gairsay.	2

Table A12.1 Settlement concordance list for Figures A12.1 – A12.6 below

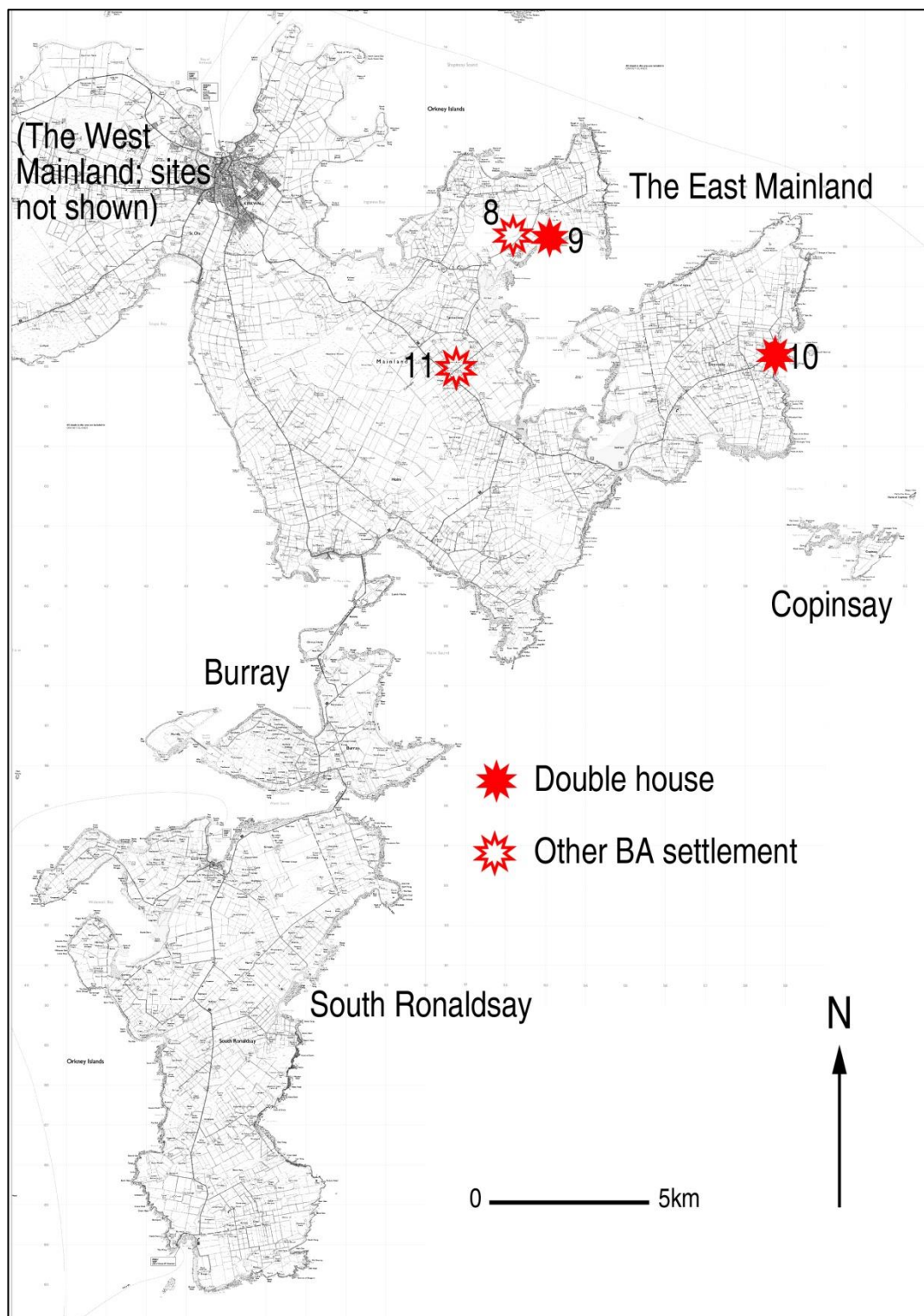
Table A12.1 Probable Bronze Age settlements in Orkney, shown on Figures A12.1 – A12.6 below				
Key: Post-excavation= site not yet fully published, interim reports and grey literature may be available; BA = Bronze Age; ? = some uncertainty as to date				
Site No.	Site Name	Site type	Archaeological Investigation Status	Reference
1	Point of Buckquoy, Birsay	BA midden & structures, not excavated	Trial excavation	Morris 1989, 71 – 107
2	Linna Breck, Birsay	?BA sub-circular houses	Excavation (post-excavation)	Øvrevik 1985, 146 – 9
3	Nessbreck, Corrigall	BA Souterrain; settlement (?BA)	Excavation/ geophysics (post-excavation)	Lee in prep
4	Bookan Wasbister, Stenness	Double House; settlement (?BA)	Field survey, geophysics	Card 2003 & 2005a, 61
5	Brae of Muckquoy, Redland	Multi-period: ?Neolithic – Iron Age?	Fieldwalking/trial excavation/ geophysics	Richards, Downes et al 2016
6	Crossiecrown, St. Ola	Neolithic houses, Beaker, BA C14 date	Excavation	Card et al 2016
7	Smerquoy, St Ola	Neolithic structure; BA C14 date	Excavation (ongoing)	Gee et al 2016
8	Loch of Tankerness	?BA oval house; ard points	Field survey/surface finds retrieval	Lamb 1987, 25, no. 113
9	Taing of Beeman, Tankerness	Double House	Field survey only	Lamb 1987, 24, no. 109;
10	Site 5, Skail, Deerness	Double House	Excavation	Buteux 1997c
11	Round Howe, St Andrews	Possible enclosed roundhouse	Excavation (post-excavation)	Murray 2003
12	Braebuster, Hoy	Double House	Field survey only	Lee 2012
13	Whaness Burn, Hoy	Double Houses	Field survey only	Lamb 1989, 13, nos. 10 - 14 & 1996
14	Hesti Geo, S. Walls	Double House	Trial excavation (post-excavation)	Lee & Thomas 2012a, 27 - 30
15	Cantick Head, S. Walls	Double House	Field survey only	Lamb 1989, 19, no. 52
16	Rotten Loch, North Walls	?BA oval house	Field survey only	Lamb 1989, 14, no.17
17	Links of Noltland, Westray	Double Houses; Neolithic settlement	Excavation (post-excavation)	Moore & Wilson 2011a & 2013
18	St Boniface, Papa Westray	Multi-period BA – Norse	Excavation	Lowe 1998
19	Kraa-Tooies, Papa Westray	?BA oval house	Field survey only	Downes 1998c
20	Holm of Faray	Double House	Field survey only	Lamb 1984, 21, no.86
21	Berstness, Westray	Multi-period: Neolithic/BA/ Iron Age	Excavation (in post-excavation)	Moore & Wilson 2008a & 2009a
22	Shelly Knowe, Sanday	Double House	Field survey, geophysics	Dockrill, Gater & Simpson 2007
23	Tofts Ness, Sanday	Multi-period: Neolithic/BA/Iron Age	Excavation	Dockrill, Bond et al 2007

Table A12.1 Probable Bronze Age settlements in Orkney, shown on Figures A12.1 – A12.6 below				
Key: Post-excavation= site not yet fully published, interim reports and grey literature may be available; BA = Bronze Age; ? = some uncertainty as to date				
Site No.	Site Name	Site type	Archaeological Investigation Status	Reference
24	Cata Sands, Sanday	c.14 ?BA houses	Excavation (ongoing)	Cummings et al 2016
25	Linga Holm	Double House	Field survey only	Lamb 1984, 34, no. 215
26	Linga Holm	?BA oval house	Field survey only	Lamb 1984, 34, no. 212
27	Auskerry	Double House	Field survey only	Lamb 1984, 34, no.192
28	Peerie Hill, Sandwick	?BA roundhouse	Filed survey/geophysics	Moore 2013



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Figure A12.1 Bronze Age settlements in the West Mainland. Showing double houses, other Bronze Age settlements and multi-period settlement sites (i.e. directly located at the same settlement locus) with a Bronze Age phase. (No known multi-period settlement sites with double houses).



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Figure A12.2 Bronze Age settlements in the East Mainland, Burray and South Ronaldsay.

Showing double houses and other Bronze Age settlements sites. (No known multi-period settlement sites with a Bronze Age phase, but Nos. 10 and 11 located close to Iron Age activity).

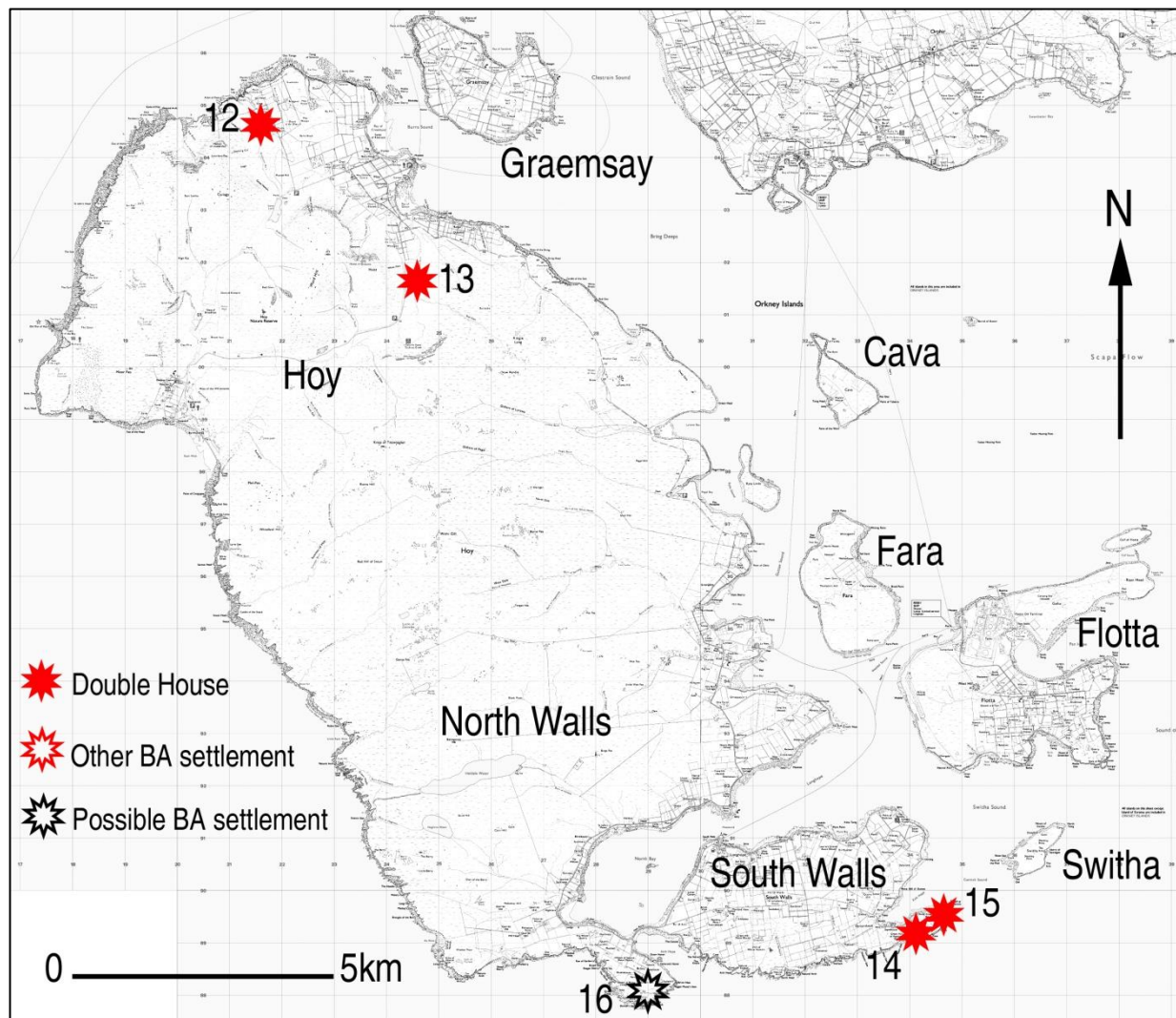
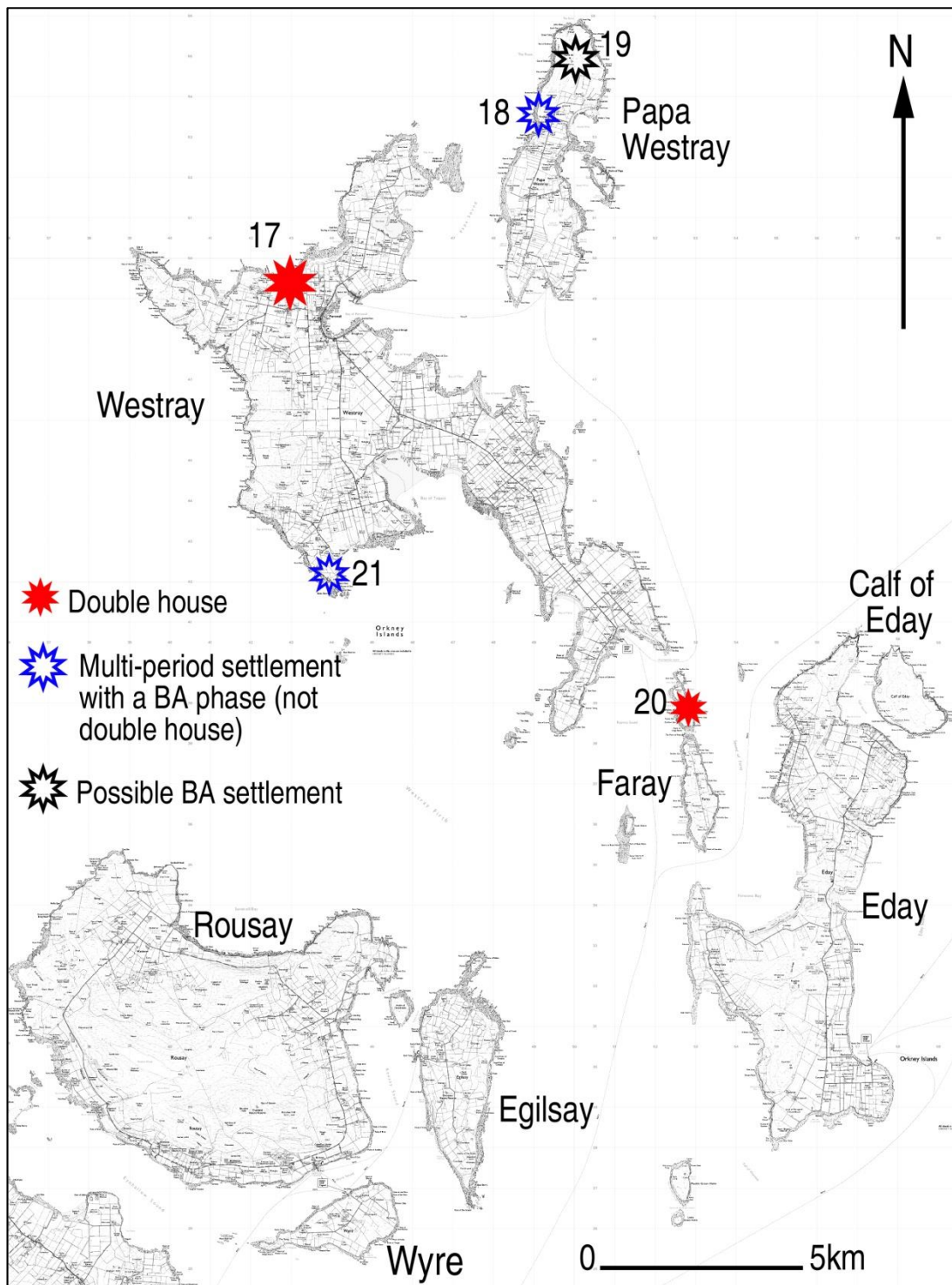


Figure A12.3 Bronze Age settlements in Hoy and South Walls. Showing double houses and other Bronze Age settlements.

(No known multi-period settlement sites with a Bronze Age phase).

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Figure A12.4 Bronze Age settlements in Rousay, Westray, Papa Westray and Eday.

Showing double houses, other Bronze Age settlements and multi-period settlement sites (i.e. directly located at the same settlement locus) with a Bronze Age phase. (No known multi-period settlement sites with double houses, although site No. 17 (The Links of Noltland) has Neolithic settlement nearby).

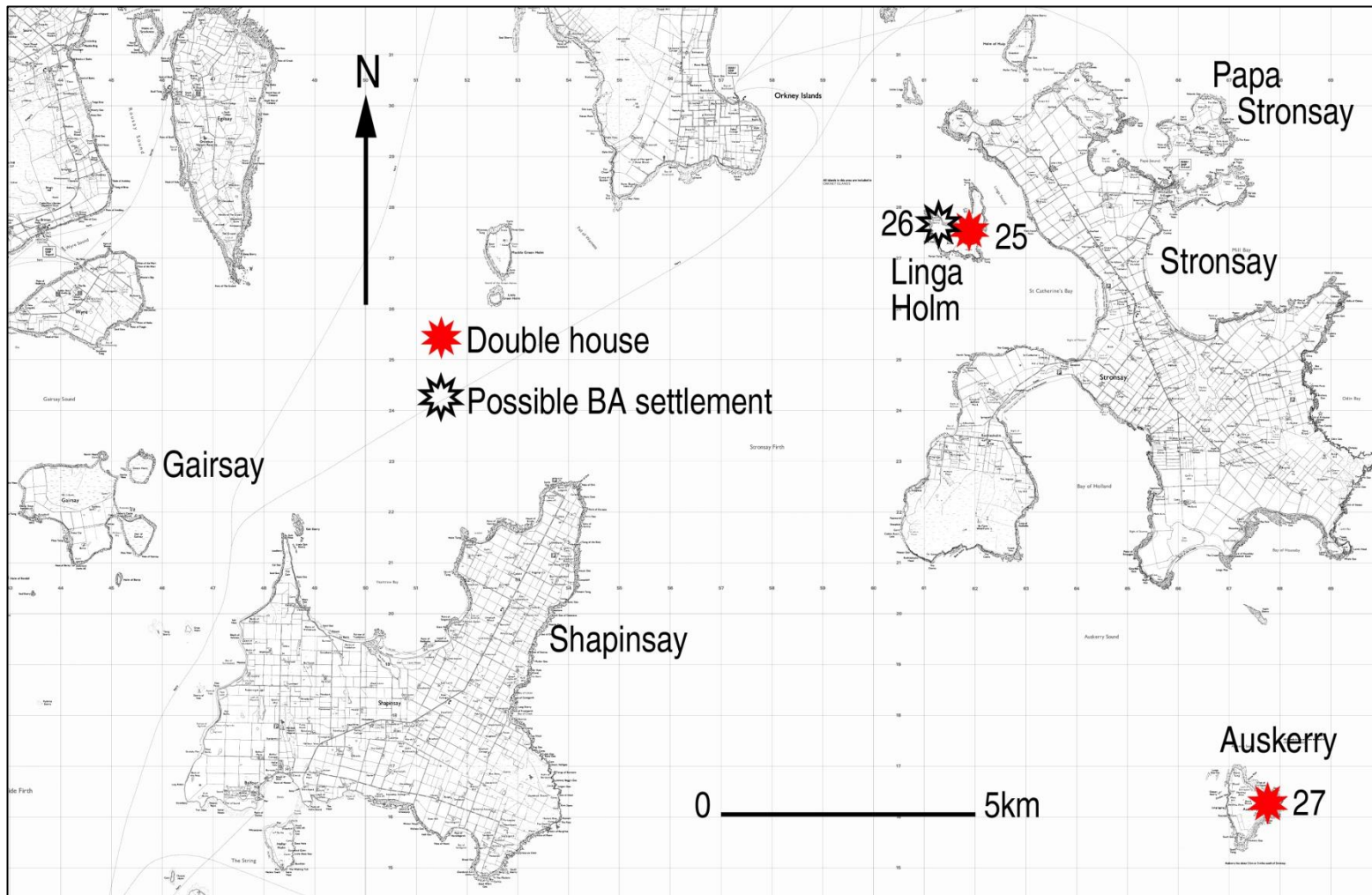


Figure A12.6
Bronze Age
settlements in
Shapinsay,
Stronsay and
Gairsay.

Showing
double houses
and other
Bronze Age
settlements.

(No known
multi-period
settlement
sites).

Appendix 13

Tables of distances between various Bronze Age sites.

Table A13.1 Distances from burnt mounds to barrows	1
Table A13.2 Distances from burnt mounds to unobtrusive cists	6
Table A13.3 Distances from burnt mounds to all probable prehistoric settlement sites.....	8
Table A13.4 Distances from burnt mounds to known Neolithic settlement sites.	15
Table A13.5 Distances from Bronze Age funerary sites to Bronze Age settlement sites.....	16

Table A13.1 Distances from burnt mounds to barrows

Table A13.1 Distances from burnt mounds to barrows: up to 100m; 101 – 250m and 251 – 500m.						
Map number refers to the burnt mound location maps in Appendix 8. Greyed out entries are those where a barrow is within 500m of multiple burnt mounds, for the purposes of the final tally only the closest burnt mound is counted.						
Map No	NMRS no.	Burnt mound name	100m	250m	500m	Barrow site details
1	HY20NE7	KNOWE OF BEA			450m	Barrow Howe of Tongue HY20NE2
2	HY21NE31	FAN KNOWE HYVAL COTT.	60m			Barrow Fan Howe HY31NW121
5	HY21SE20	WASBISTER	100m			Disc Barrow Bookan HY21SE3
				220m		Barrow Wasbister the Brecks HY21SE19
17	HY22SE6	KNOWE OF MAKERHOUSE			420m	Barrow Knowe of Smirrus HY22SE 17
					300m	Barrow Dounby House HY22SE 22
					420m	Barrow East House HY22SE 19
19	HY22SE11	ESGAR			360m	Barrow Dounby House HY22SE 22
20	HY22SE18	EAST HOUSE		180m		Barrow Dounby House HY22SE 22
					360m	Barrow East House HY22SE 19
21	HY22SE20	QUINNI MOAN			360m	Barrow Queena Moan HY22SE 30
22	HY22SE21	LOCH OF TRONSTON			360m	Barrows Gairsty HY22SE 27
25	HY22SE37	GREEN KNOWE BRAESIDE		180m		Barrow Black Knowe HY22SE 38
27	HY22SE49	KNOWE OF FORSAKELDA			360m	4 barrows Greeny, Nether Bigging HY22SE 44
28	HY22SE99	ESGAR			380m	Barrow Dounby House HY22SE 22
29	HY22SE100	ESGAR			400m	Barrow Dounby House HY22SE 22
30	HY22SE101	LOCH OF BANKS			330m	Barrow Loch Of Banks HY22SE 16
					480m	2 barrows Knowe Of Gairso HY22SW 2
43	HY31NE8	OYCE OF ISBISTER	10-50m			cists/barrows at same site no separate no

Table A13.1 Distances from burnt mounds to barrows: up to 100m; 101 – 250m and 251 – 500m.						
Map number refers to the burnt mound location maps in Appendix 8. Greyed out entries are those where a barrow is within 500m of multiple burnt mounds, for the purposes of the final tally only the closest burnt mound is counted.						
Map No	NMRS no.	Burnt mound name	100m	250m	500m	Barrow site details
			50m			Barrow Isbister HY31NE 14
44	HY31NE11	REDLAND		150m		3 barrows Ward Of Redland HY31NE 10
46	HY31NW12	SETTER			280m	2 Barrows Setter, Syra Dale HY31NW 13
					280m	2 barrows Setter HY31NW 14
58	HY32 NE29	LITTLE KYARL			290m	Kerb cairn EHS50 Moore 2013
					290m	Kerb cairn EHS51 Moore 2013
61	HY32NW8	CHRISMO		240m		Barrow Costa Hill HY32NW 17
68	HY32SW15	BRETTA VALE KNARSTON			330m	Barrow/cist Newhouse, Knarston HY32SW 19
					360m	2 barrows/cist Knowe Of Yesko HY32SW 14
75	HY33SE7	ROUSAY LOWER QUANDALE			500m	Barrow Quendal HY33SE 32
					500m	Barrow Quendal HY33SE 34
76	HY33SE8	ROUSAY QUENDAL TAFTS		250m		Barrow Quendal, Tafts HY33SE 30
78	HY33SE15	QUANDALE KN OF DALE ROU		185m		Barrow Quendal HY33SE 32
					300m	Barrow Quandale HY33SE 21
					500m	Barrow Quendal, Tafts HY33SE 30
79	HY33SE25	ROUSAY NORTH HOWE		150m		Barrow Whoom HY33SE 27
					500m	Barrow Sandy Holes HY33SE 28
80	HY33SE42	ROUSAY NORTH HOWE			500m	Barrow Whoom HY33SE 27
					500m	Barrow Sandy Holes HY33SE 28
81	HY33SE96	ROUSAY QUENDALE	80m			Barrow Quendal HY33SE32

Table A13.1 Distances from burnt mounds to barrows: up to 100m; 101 – 250m and 251 – 500m.						
Map number refers to the burnt mound location maps in Appendix 8. Greyed out entries are those where a barrow is within 500m of multiple burnt mounds, for the purposes of the final tally only the closest burnt mound is counted.						
Map No	NMRS no.	Burnt mound name	100m	250m	500m	Barrow site details
					350m	Barrow Quandale HY33SE 21
					460m	Barrow Quendal, Tafts HY33SE 30
95	HY42SE1	GAIRSAW SWEYN'S CASTLE			360m	Cist mound Gairsay HY42SW 13
97	HY43NE1	WESTRAY BENZIECOTT			500m	Cist/Barrow Rapness HY53NW 9
					300m	Barrow? Craw Tua HY53NW 5
102	HY43SW37	ROUSAY SUSO BURN			330m	5 barrows/cists Mansie's Knowes, Curquoy HY43SW 17
120	HY50NE3	GREENTOFT		190m		Cists, barrow The Ward HY50NE 10
122	HY50NE41	GREENTOFT			300m	Cists, barrow The Ward HY50NE 10
149	HY53SW11	EDAY DALE	90m			Barrow Fersness HY53SW 10
175	HY63NW3	THE KNOWES SANDAY	same			3 or 4 barrows, cists & urns found here too
176	HY63NW6	SANDAY HOOSIE MOUND	70m			Cist/barrow Sanday, Warsetter HY63NW 32
179	HY63SW6	SANDAY SPURNESS			320m	Kerbed cairn/cists Spurness HY63SW9 Lamb 1980b, 24, 153; Sharman 2007a
198	HY75NE13	N RONALD DENNIS LOCH			300m	Cist/cairn Dennis Ness HY75NE 6
					460m	Cist/barrow Neven HY75NE 1
205	ND38NW4	HOY CANTICK				Barrow Cantick Head ND38NW5
217	ND48NW6	S RONALD NEWHOUSE		240m		cist, barrow Clouduhall ND48NW 3
221	ND48NW11	S RONALD GREENQUOY			360m	4 barrows Green Clivie, ND48NW 19
223	ND48NW13	S RONALD CLOUDUHALL		180m		cist, barrow Clouduhall ND48NW 3
227	ND48SW3	S RONALD BROUGH			300m	10 barrows Brough Ness ND48SW 8

Table A13.1 Distances from burnt mounds to barrows: up to 100m; 101 – 250m and 251 – 500m.						
Map number refers to the burnt mound location maps in Appendix 8. Greyed out entries are those where a barrow is within 500m of multiple burnt mounds, for the purposes of the final tally only the closest burnt mound is counted.						
Map No	NMRS no.	Burnt mound name	100m	250m	500m	Barrow site details
234	ND49SW16	S RON NEWBIGGING FARM		300m		Newbigging Farm cist/barrowND49SW 5
238	EHS10	BURGAR		120m		5 barrows Costa Mill, Urigar HY32NW 10
241	SITE 4	QUANDALE SURVEY		230m		Barrow Quendale HY33SE 21
				160m		Barrow Quendal HY33SE 26
					360m	Barrow Quendal HY33SE 31
					500m	Barrow Quendal HY33SE 32
242	SITE 5	QUANDALE SURVEY		240m		Barrow Quendale HY33SE 21
				170m		Barrow Quendal HY33SE 26
					310m	Barrow Quendal HY33SE 31
					500m	Barrow Quendal HY33SE 32
243	SITE 13	QUANDALE SURVEY		230m		Barrow Quendale HY33SE 21
				220m		Barrow Quendal HY33SE 26
					400m	Barrow Quendal HY33SE 31
					380m	Barrow Whoom HY33SE 27
					500m	Barrow Quendal HY33SE 32
				155m		Barrow Quendal HY33SE 34
249	HY41SE13	HOLLAND	50m			Barrows Holland HY41SE 13
252		BOCKAN			360m	Barrow Wasbister the Brecks HY21SE19
					500m	Disc Barrow Bookan HY21SE3

Table A13.1 Distances from burnt mounds to barrows: up to 100m; 101 – 250m and 251 – 500m.						
Map number refers to the burnt mound location maps in Appendix 8. Greyed out entries are those where a barrow is within 500m of multiple burnt mounds, for the purposes of the final tally only the closest burnt mound is counted.						
Map No	NMRS no.	Burnt mound name	100m	250m	500m	Barrow site details
		Barrows within 0m -100m	8			
		Barrows 101m - 250m		13		
		Barrows within 251m - 500m			25	
		46 barrows within 500m				

Table A13.2 Distances from burnt mounds to unobtrusive cists

Table A13.2 Distances from burnt mounds to unobtrusive cists (i.e. without barrows): up to 100m; 101 – 250m and 251 – 500m. Map number refers to the burnt mound location maps in Appendix 8. Greyed out entries are those where a cist is within 500m of multiple burnt mounds, for the purposes of the final tally only the closest burnt mound is counted.						
Map No	NMRS no.	Burnt mound name	100m	250m	500m	Cist site details
21	HY22SE20	QUINNI MOAN	90m			Cist Queena MoanHY22SE 31
37	HY30NE11	SWANBISTER HOUSE			300m	cist Swanbister HY30NE 8
48	HY31NW22	BALLARAT HOUSE		210m		Cist Nistaben HY21NE 30
49	HY31NW26	BALLARAT HOUSE			390m	cist Nistaben HY21NE 31
50	HY31NW110	BOSQUOY			390m	Cist Loch Of Bosquoy HY31NW 47
85	HY40SE21	BURN OF GANGSTA		240m		2 cists Backakelday HY40SE 4
					400m	Cist Farrivald HY44NW 26
109	HY44NW33	LINKS OF NOLTLAND WESTRAY			300m	Cemetery
120	HY50NE3	GREENTOFT		180m		cist Greentoft HY50NE 6
122	HY50NE41	GREENTOFT		160m		cist Greentoft HY50NE 6
124	HY50NW10	HAWELL			425m	Cist Little Crofty HY50NW 16
125	HY50NW11	BRECK		180m		Cist Little Crofty HY50NW 17
168	HY62NW30	STRONSAY YEARNASETTER			360m	Cists + chambered cairn Hunton, Oram's Fancy HY62NW 1
				120m		Cist/crouched inhumation Knowes HY63NW 25
182	HY64SE4	SANDAY COLLIGARTH			330m	Cist Leavis Garth HY64SE 7
193	HY74SW4	SANDAY CLEAT			360m	Cist Cleat HY74SW 18

Table A13.2 Distances from burnt mounds to unobtrusive cists (i.e. without barrows): up to 100m; 101 – 250m and 251 – 500m.						
Map number refers to the burnt mound location maps in Appendix 8. Greyed out entries are those where a cist is within 500m of multiple burnt mounds, for the purposes of the final tally only the closest burnt mound is counted.						
Map No	NMRS no.	Burnt mound name	100m	250m	500m	Cist site details
194	HY74SW5	SANDAY CLEAT			360m	Cist Cleat HY74SW 18
					360m	Cist Leavis Garth HY64SE 7
199	HY75SE7	N RONALD ANCUM LOCH			390m	Cists +Inhumation Antabreck HY75SE 12
202	HY75SE14	N RONALD ANCUMTOUN			450m	Cist Neven HY75NE 7
		Cists within 0m -100m	1			
		Cists 101m - 250m		6		
		Cists within 251m - 500m			10	(excluding Noltland)
17 cists within 500m, plus Noltland cemetery of c.65 inhumations and cremations without barrows						

Table A13.3 Distances from burnt mounds to all probable prehistoric settlement sites

Excluding excavated Neolithic sites and known Bronze Age settlements

Table A13.3 Distances from burnt mounds to all probable prehistoric settlements excluding Bronze Age and Neolithic settlements.						
Distances: up to 100m; 101 – 250m and 251 – 500m. Map number refers to the burnt mound location maps in Appendix 8. Greyed out entries are those where a site is within 500m of multiple burnt mounds, for the purposes of the final tally only the closest burnt mound is counted.						
No	NMRS no.	Burnt mound name	100m	250m	500m	Settlement site details
7	HY21SE33	REDLAND		120m		Broch Knowe of Redland HY21SE32
10	HY21SW3	QUHOLM BURN OF UNA			400m	Broch? Castle Bloody HY21SE31
12	HY22NE12	KIRBISTER FARM			380m	Prehistoric Settlement Knowe of Nisthouse HY22NE6
18	HY22SE7	BRECKNESS			480m	Prehistoric settlement Dounby, Loch Of Sabiston HY22SE 10
24	HY22SE33	BRYAMEADOW FARM		130m		prehistoric settlement Byameadow HY22SE 53
26	HY22SE40	KN BRENDA DOWNTOWN			500m	Broch Knowe of Skogar HY22SE39
36	HY22SW26	KNOWE OF SCORN			360m	Prehistoric settlement Knowe Of Holland HY22SW 23
37	HY30NE11	SWANBISTER HOUSE		180m		Broch Hillock Of Breckna HY30NE 13
37	HY30NE11		90m			Lithics Swanbister House HY30NE 25
					300m	lithics Swanbister House HY30NE 26
39	HY30SW5	BU OF ORPHIR		210m		IA? Settlement Bu Of Orphir, Lavacroon HY30SW 4
40	HY30SW13.01	BU OF ORPHIR POND		210m		IA? Settlement Bu Of Orphir, Lavacroon HY30SW 4
41	HY30SW15	EARL'S BU		180m		IA? Settlement Bu Of Orphir, Lavacroon HY30SW 4
					360m	Broch Knowe Of Gullow HY31NW 1
50	HY31NW110	BOSQUOY		240m		Broch Loch Of Bosquoy HY31NW 46

Table A13.3 Distances from burnt mounds to all probable prehistoric settlements excluding Bronze Age and Neolithic settlements.						
Distances: up to 100m; 101 – 250m and 251 – 500m. Map number refers to the burnt mound location maps in Appendix 8. Greyed out entries are those where a site is within 500m of multiple burnt mounds, for the purposes of the final tally only the closest burnt mound is counted.						
No	NMRS no.	Burnt mound name	100m	250m	500m	Settlement site details
51	HY31SE2	RENNIBISTER	30m			Prehistoric settlement Rennibister, 'mary Kirk' HY31SE 18
					280m	Souterrain Rennibister HY31SE 3
54	HY31SW28	KOKNA-CUMMING		240m		Broch Big Howe HY31SW 31
56	HY32NE20	ROUSAY CORSE	60m			?Broch Viera Lodge HY32NE 12
57	HY32NE21	ROBIE'S KNOWE		200m		Broch Knowe Of Stenso HY32NE 11
58	HY32 NE29	LITTLE KYARL	80m			Prehistoric settlement Little Kyarl HY32NE29
				150m		prehistoric settlement Monkerhouse HY32NE29
59	HY32NE36	ROUSAY, YORVILLE			270m	?Broch Viera Lodge HY32NE 12
60	HY31NW3	BURN OF POW			300m	substantial multi period settlement mound Outer Urrigar HY32NW 12
74	HY33SE6	WASBISTER BLEACHING KNO		150m		Crannog Bretta Ness HY33SE 12
				200m		Crannog Loch Of Wasbister, Burrian HY33SE 77
					270m	Prehistoric Settlement Saviskaill HY43SW 24
80	HY33SE42	NORTH HOWE		120m		Broch North Howe HY33SE 11
88	HY41SW6	SAVEROCK			500m	Souterrain Saverock HY41SW 5
					300m	Prehistoric Settlement Knarston HY42NW 12
92	HY42NW30	KNARSTON KN OF ORO ROU		120m		Flint scatter Knarston Farm HY42NW 49
93	HY42NW31	ROUSAY CRUAR			330m	Prehistoric Settlement Knarston HY42NW 12
94	HY42NW35	WYRE TESTAQUOY			360m	?Settlement Cavit HY42NW 97
98	HY43SW2	ROUSAY WOO			330m	Underground structure Hurtiso,

Table A13.3 Distances from burnt mounds to all probable prehistoric settlements excluding Bronze Age and Neolithic settlements.						
Distances: up to 100m; 101 – 250m and 251 – 500m. Map number refers to the burnt mound location maps in Appendix 8. Greyed out entries are those where a site is within 500m of multiple burnt mounds, for the purposes of the final tally only the closest burnt mound is counted.						
No	NMRS no.	Burnt mound name	100m	250m	500m	Settlement site details
						'taft Of Husaby' HY43SW 8
99	HY43SW3	ROUSAY LANGSKAILL		210m		Prehistoric Settlement Saviskaill HY43SW 24
103	HY44NE4	WESTRAY GARTH			450m	Broch Hodgalee HY44SE 3
104	HY44NE10	WESTRAY GILL PIER			330m	Prehistoric settlement 'knoll Of Skulzie' HY44NW 23
107	HY44NW19	WESTRAY LOCH OF BURNES		180m		?Prehistoric settlement Burness HY44NW 4
					300m	?Prehistoric settlement Burness HY44NW 4
112	HY44SE4	WESTRAY LOCH OF WASBIST			390m	Prehistoric settlement Taftend Farm HY44SE 45
113	HY44SW5	WESTRAY LANGSKAILL		240m		Prehistoric Settlement, souterrain Langskaill HY44SW 9
					500m	Broch Knowe Of Burristae HY44SW 1
114	HY45SE2	KNOWE OF BACKASKAILL	90m			Prehistoric settlement Between Backiskaill And Breckiskaill HY45SE 41
115	HY45SE6	PAPA WESTRAY HOLLAND			330m	Prehistoric settlement Between Backiskaill And Breckiskaill HY45SE 41
116	HY45SE7	PAPA WESTRAY NEWBIGGING		240m		?settlement Newbigging HY45SE 45
117	HY45SE8	NR KIRK OF HOWE PAPA WES	100m			?Prehistoric Settlement Westray, Kirk Of Howe HY45SE 15
123	HY50NE43	BRAEBUSTER			330m	Broch Eves Howe HY50NW 14
124	HY50NW10	HAWELL			425m	Nearhouse prehistoric settlement HY50NW 85
				180m		? Settlement Breck HY50NW 13
129	HY50NW35	NESS	90m			Prehistoric Settlement Ness HY50NW 36
132	HY50SE29	STONEHALL		180m		Prehistoric settlement Stonehall HY50SE 9

Table A13.3 Distances from burnt mounds to all probable prehistoric settlements excluding Bronze Age and Neolithic settlements.						
Distances: up to 100m; 101 – 250m and 251 – 500m. Map number refers to the burnt mound location maps in Appendix 8. Greyed out entries are those where a site is within 500m of multiple burnt mounds, for the purposes of the final tally only the closest burnt mound is counted.						
No	NMRS no.	Burnt mound name	100m	250m	500m	Settlement site details
133	HY50SW5	CAMPSTON			330m	Broch St Peter's Bay HY50SW 21
134	HY50SW8	ST PETER'S KIRK			270m	Broch St Peter's Bay HY50SW 21
136	HY50SW12	DINGYSHOWE BAY PEERIE HOWE	50m			Broch Dingieshowe HY50SW 7
140	HY51NW15	SKENSTOFT		210m		midden/settlement Sandsend HY51NW 37
145	HY53SE9	EDAY BAY OF DOOMY			270m	prehistoric settlement Doomy HY53SE 4
155	HY54SW4	WESTRAY PERTH			300m	Prehistoric settlement Sands Of Woo HY54SW 16
157	HY54SW30	WESTRAY SAND GEO		180m		?Prehistoric house? Weather Ness HY54SW 13
158	HY60SW2	COPINSAY FARM COPINSAY	90m			Prehistoric settle Copinsay Farm, HY60SW 3
					330m	Prom Fort? Castle Of Sand Geo, HY60SW 5
					330m	Souterrain Copinsay HY60SW 6
159	HY61NE2	AUSKERRY		120m		Prehistoric Settlement HY61NE20
				180m		Prehistoric Settlement HY61NE2
					380m	Prehistoric Settlement HY61NE18
					400m	Prehistoric Settlement HY61NE6
		2 sites with same NMRS no.			500m	Prehistoric Settlement HY61NE3 Lamb 1984, 33, no. 188
					500m	Prehistoric Settlement HY61NE3 Lamb 1984, 34, no. 191
160	HY62NE3	STRONSAY BLEACHING KN			420m	Broch Stronsay, Hunton HY62NE 6
161	HY62NE8	STRONSAY ODNESS		180m		Prehistoric settlement 'god Odina' HY62NE 9
				210m		souterrain Papa Stronsay HY62NE 56
163	HY62NE24	STRONSAY ODNESS			420m	Prehistoric settlement 'god Odina' HY62NE 9

Table A13.3 Distances from burnt mounds to all probable prehistoric settlements excluding Bronze Age and Neolithic settlements.						
Distances: up to 100m; 101 – 250m and 251 – 500m. Map number refers to the burnt mound location maps in Appendix 8. Greyed out entries are those where a site is within 500m of multiple burnt mounds, for the purposes of the final tally only the closest burnt mound is counted.						
No	NMRS no.	Burnt mound name	100m	250m	500m	Settlement site details
167	HY62NW15	STRONSAY THE HILLOCKS		150m		Broch Greenhill, North End HY63SW 1
173	HY62SW2	SANDS OF ROTHIESHOLM	50m			Prehistoric settlement Sand Of Rothiesholm HY62SW 4
					330m	Cross Broch HY63NE 34
179	HY63SW6	SANDAY SPURNESS		125m		Prehistoric settlement Spurness HY63SW8 Hunter & Dockrill 1991, 29; Lamb 1980b, 18, no. 89
				180m		Prehistoric Settlement SpurnessHY63SW7 Hunter & Dockrill 1991, 29; Lamb 1980b, 18, no. 90
				250m		Prehistoric settlement Spurness HY63SW34 McNichol 2012
184	HY64SE10	SANDAY NORTHSKAILL	60m			Prehistoric settlement Northskail HY64SE 43
				240m		Prehistoric settlement Northskail HY64SE 12
185	HY64SE11	SANDAY KNOWE			360m	Prehistoric settlement Northskail HY64SE 43
186	HY64SE34	SANDAY ANNABRAKE	90m			Prehistoric Settlement Hyndgreenie HY64SE 113
187	HY64SE35	SANDAY PINCOD		210m		Prehistoric Settlement Hyndgreenie HY64SE 113
188	HY64SE40	SANDAY QUIVALS LOCH		225m		Broch'icegarth Castle' HY64SE 16
189	HY74NW9	SANDAY MEUR			330m	Souterrain Midden HY74NW 3
					400m	Prehistoric Settlement How HY74NW 4
					400m	Prehistoric Settlement Tafts HY74NW 5
190	HY74SE1	SANDAY PARK		150m		Prehistoric Settlement Park HY74SE 36
				150m		Prehistoric Settlement Park HY74SE 3
					270m	Broch Buryan HY74SE 2

Table A13.3 Distances from burnt mounds to all probable prehistoric settlements excluding Bronze Age and Neolithic settlements.						
Distances: up to 100m; 101 – 250m and 251 – 500m. Map number refers to the burnt mound location maps in Appendix 8. Greyed out entries are those where a site is within 500m of multiple burnt mounds, for the purposes of the final tally only the closest burnt mound is counted.						
No	NMRS no.	Burnt mound name	100m	250m	500m	Settlement site details
193	HY74SW4	SANDAY CLEAT		150m		Prehistoric Settlement Cleat HY74SW 15
194	HY74SW5	SANDAY CLEAT		150m		Prehistoric Settlement Cleat HY74SW 15
195	HY74SW10	SANDAY IVAR'S KNOWE			400m	Prehistoric Settlement Knowe Of Scarton HY74SW 2
200	HY75SE8	N RO KNOWE O SAMILANDS			400m	prehistoric settlement Southness HY75SE 18
					320m	prehistoric settlement Hooking HY75SE 1
201	HY75NE9	N RONALD VIGGAY		240m		prehistoric settlement Brae Of Stennabreck HY75SE 4
				250m		prehistoric settlement Southness HY75SE 18
204	ND28NE20	HOY	80m			Broch Brims, The Skeo ND28NE 3
				150m		Midden/Settlement Grassy Clett ND28NE 12
					310m	Broch green Hill of Hestigeo ND38NW8
211	ND39SW3	SOUTH WALLS NEWBIGGING		240m		Broch Burrowstown ND38NW 10
215	ND39SW125	HOY LONGHOPE		210m		Broch Green Hill ND38NW 27
216	ND47NE3	THE KILN MUCKLE SKERRY	50m			Prehistoric Settlement The Kiln ND47NE 7
					330m	Prehistoric settlement Hunnigeo, ND47NE 9
219	ND48NW8	S RONALD MOSSETTER			?300m ?	souterrain Mossetter ND48NW 16
222	ND48NW12	S RONALD MUCKLEHOUSE			500m	Broch, Weems Castle ND48NW 2
					500m	Broch, Weems Castle ND48NW 2
224	ND48NW18	MUCKLEHOUSE THE CAIRNS		180m		Broch, Weems Castle ND48NW 2
227	ND48SW3	S RONALD BROUGH			420m	Broch Brough Farm ND48SW 1

Table A13.3 Distances from burnt mounds to all probable prehistoric settlements excluding Bronze Age and Neolithic settlements.						
Distances: up to 100m; 101 – 250m and 251 – 500m. Map number refers to the burnt mound location maps in Appendix 8. Greyed out entries are those where a site is within 500m of multiple burnt mounds, for the purposes of the final tally only the closest burnt mound is counted.						
No	NMRS no.	Burnt mound name	100m	250m	500m	Settlement site details
232	ND49SE15	S RONALD KIRKHOUSE		200m		Kirk Ness ND47SE7 Prehistoric settlement
234	ND49SW16	S RON NEWBIGGING FARM		200m		Newbigging Farm extensive settlement complex, IA pot recovered ND49SW 18
238	EHS10	BURGAR			360m	substantial MP settlement mound Outer Urrigar HY32NW 12
249	HY41SE13	HOLLAND		180m		Souterrain + Prehistoric settlement Holland HY41SE 24
250	ND28NE 10	Hoy, Kirk Geo		120m		Midden/Settlement Grassy Clett ND28NE 12
				240m		Broch Brims, The Skeo ND28NE 3
		TOTAL SITES 0 - 100m	14			
		TOTAL SITES 101m - 250m		44		
		TOTAL SITES 251m - 500m			42	
100 prehistoric settlements within 500m, including 27 brochs but excluding known Neolithic and Bronze Age sites						

Table A13.4 Distances from burnt mounds to known Neolithic settlement sites.

None excavated apart from Brae of Ha'Breck; possibility of Bronze Age components at others.

Table A13.4 Distances from burnt mounds possible Neolithic settlement sites: up to 100m; 101 – 250m and 251 – 500m. Map number refers to the burnt mound location maps in Appendix 8.						
No	NMRS no.	Burnt mound name	100m	250m	500m	Possible Neolithic site details
8	HY21SE35	SEATTER		120m		Seatter Farm flint scatters HY21SE38
9	HY21SE36	BURN OF UNA QUHOLM		150m		Seatter Farm flint scatters HY21SE57
94	HY42NW35	WYRE TESTAQUOY		140m		Braes Ha'Breck HY42NW 79 (Excavated: Beaker pottery in midden and late 3 rd millennium cal BC radiocarbon dates).
		TOTAL SITES 0 - 100m	0			
		TOTAL SITES 101m - 250m		3		
		TOTAL SITES 251m - 500m			0	
		3 Neolithic settlements within 500m				

Table A13.5 Distances from Bronze Age funerary sites to Bronze Age settlement sites.

Table A13.5 Showing distance to nearest Bronze Age funerary site from the 28 probable Bronze Age settlement sites in Orkney in ascending order of distance. Site number identifies each settlement in relation to Figures 8.2. Grey shaded sites are in the relict landscapes discussed in Chapter 5						
Site No.	Figure No.	Site Name	House type	Distance	Funerary type	Reference
15	9.19	Cantick Head, South Walls	DH	40m	Barrow	Lamb 1989, 19, no. 52
5	9.17	Brae of Muckquoy, Redland	Other	50-100m ¹	Cists?	Richards, Downes et al 2016
17	9.20	Links of Noltland, Westray	DH	25-150m	Cemetery ²	Moore & Wilson 2011a
26	9.22	Linga Holm	Oval	120m	Barrow	Lamb 1984, 34, no. 212
6	9.17	Crossiecrown, St. Ola	Other	125m	Barrow	Card et al 2016
4	9.17	Bookan Wasbister	DH	130m	Barrow	Card 2003 & 2005a, 61; Thomas 1852, 98
2	9.17	Linna Breck, Birsay	Oval	150m	Barrow	Øvrevik 1985, 146-9
11	9.18	Round Howe, St Andrews	R	175m	Barrow	Murray 2003
14	9.19	Hesti Geo, Cantick Head	DH	195m	Barrow	Lamb 1989, 19, no. 53; Lee & Thomas 2012
3	9.17	Nessbreck, Corrigall	Other	260m	Cist	Lee in prep
8	9.18	Loch of Tankerness	Oval	400m	Cist	Lamb 1987, 25, no. 113
22	9.21	Shelly Knowe, Sanday	DH	500m ³	Barrows?	Dockrill et al 2007
23	9.21	Tofts Ness, Sanday	R + Other	500m?	Barrows?	Dockrill et al 2007
25	9.22	Linga Holm	DH	670m	Barrow	Lamb 1984, 34, no. 215
Table 9.2 continued						

¹ Many cists containing cremated bone were found at the Brae of Muckquoy but no close location is recorded (Fraser 1927, 53).

² Inhumations and cremations, some in cists, no barrows.

³ An extensive relict landscape is recorded on the Tofts Ness peninsula and many probable funerary sites were opened in the 19th century but no details of exact location survives (Traill 1845).

Table A13.5 Showing distance to nearest Bronze Age funerary site from the 28 probable Bronze Age settlement sites in Orkney in ascending order of distance. Site number identifies each settlement in relation to Figures 8.2. Grey shaded sites are in the relict landscapes discussed in Chapter 5						
Site No.	Figure No.	Site Name	House type	Distance	Funerary type	Reference
19	9.20	Kraa-Tooies, Papa Westray	Oval	800m	Barrow	Downes 1998c
21	9.20	Berstness, Westray	R	800m	Cist	Moore & Wilson 2008a & 2009a
9	9.18	Taing of Beeman, Tankerness	DH	1,200m	Cist	Lamb 1987, 24, no. 109;
13	9.19	Whaness Burn, Hoy	DH	1,380m	Barrow	Lamb 1989, 13, nos. 10 - 14 & 1996
28	9.17	Peerie Hill, Sandwick	R	1,400m	Barrow	Moore 2013,150-5
1	9.17	Point of Buckquoy, Birsay	Other	1,600m	Cist	Morris 1989, 71-107
18	9.20	St Boniface, Papa Westray	Other	1,600m	Barrow	Lowe 1998
7	9.17	Smerquoy, St Ola	Other	1,800m	Cist	Gee et al 2016
10	9.18	Sites 5, Skail, Deerness	DH	2,200m	Cist	Buteux 1997
24	9.21	Cata Sands, Sanday	Other	2,700m	Cists? ⁴	Cummings et al 2016
16	9.19	Rotten Loch, Hoy	Oval	5,000m	Barrow	Lamb 1989, 14, no.17
12	9.19	Braebuster, Hoy	DH	6,750m	Barrow	Lee 2012
20	9.20	Holm of Faray	DH	None known	N/A	Lamb 1984, 21, no.86
27	9.22	Auskerry	DH	None known	N/A	Lamb 1984, 34, no.192

⁴ Antiquarian report of many cists (HY64SE44).