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# Anatomy of an Iron Age Roundhouse

The Cnip Wheelhouse Excavations, Lewis

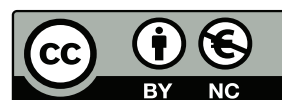
Ian Armit

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*The Cnip Wheelhouse Excavations, Lewis*

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# Contents

Summary	xi
Résumé: French summary	xiii
Zusammenfassung: German summary	xv
List of illustrations	xvii
List of tables	xxi
List of colour plates	xxiii
Acknowledgements	xxv
Notes	xxvii
List of contributors	xxix
Key to section and plan conventions	xxxi
1 INTRODUCTION	1
1.1 Background to the excavation	1
1.2 Aims and limitations	5
1.3 The Hebridean wheelhouse	8
1.4 The archaeology and environmental history of Bhaltois	10
1.4.1 <i>Landscape, location and topography</i>	10
1.4.2 <i>Research prior to the 1980s</i>	13
1.4.3 <i>Recent work</i>	13
1.4.4 <i>Environmental history and site visibility</i>	13
1.4.5 <i>Modern and early modern settlement</i>	14
1.4.6 <i>Prehistoric settlement</i>	17
1.5 The excavated site and its setting	17
1.6 Report structure	19
2 EXCAVATION RESULTS	21
2.1 Introduction	21
2.2 Notes on the recording system	21
2.2.1 <i>Contexts and blocks</i>	21
2.2.2 <i>Phasing</i>	23
2.2.3 <i>Other information</i>	23
2.3 Phase 1: The Wheelhouse Settlement	24
2.3.1 <i>Wheelhouse 1 (Blocks 5ai and 6)</i>	25
2.3.1.1 <i>Construction (Block 6)</i>	25
2.3.1.2 <i>Occupation deposits: Phase 1 (Block 5ai)</i>	28
2.3.1.3 <i>The entrance passage deposits</i>	29
2.3.1.4 <i>Interpretation</i>	29
2.3.2 <i>Wheelhouse 2 (Blocks 11, 12, 15, and 16)</i>	30
2.3.2.1 <i>Construction (Blocks 12 and 16)</i>	30

2.3.2.2	<i>Internal deposits (Blocks 11 and 15)</i>	34
2.3.3.3	<i>Interpretation</i>	38
2.4	Phase 2: The Cellular Structures	40
2.4.1	<i>Continuing occupation of Wheelhouse 1</i>	42
2.4.1.1	<i>The first reorganisation and subsequent occupation – Phase 2a (Block 5a)</i>	42
2.4.1.2	<i>The second reorganisation and subsequent occupation – Phase 2b (Block 5b)</i>	46
2.4.1.3	<i>The entrance bay deposits</i>	49
2.4.1.4	<i>The decay of the wheelhouse during Phase 2</i>	50
2.4.1.5	<i>Spatial patterning within the wheelhouse</i>	51
2.4.2	<i>Structure 3 (Blocks 17 and 19)</i>	54
2.4.2.1	<i>Construction (Block 17)</i>	54
2.4.2.2	<i>Internal deposits (Block 19)</i>	57
2.4.2.3	<i>Interpretation</i>	58
2.4.3	<i>Structure 4 (Blocks 8 and 9)</i>	60
2.4.3.1	<i>Construction (Block 9)</i>	61
2.4.3.2	<i>Occupation deposits (Block 8)</i>	62
2.4.3.3	<i>Entrance area deposits (Block 8b)</i>	65
2.4.3.4	<i>Interpretation</i>	65
2.4.4	<i>Structure 7 (Block 22)</i>	67
2.4.5	<i>Structure 5 (Blocks 13 and 14)</i>	68
2.4.5.1	<i>Construction features (Block 14)</i>	68
2.4.5.2	<i>Deposition summary (Block 13)</i>	68
2.4.5.3	<i>Interpretation</i>	69
2.4.6	<i>Structure 6 (Block 21)</i>	71
2.4.7	<i>Phase 2 soil erosion</i>	71
2.4.8	<i>Unassociated deposits of Phases 1 or 2</i>	71
2.4.8.1	<i>Negative features (Block 10)</i>	71
2.4.8.2	<i>Interpretation</i>	71
2.5	Phase 3: The Rectilinear Structure	72
2.5.1	<i>Structure 8 (Blocks 1–4 and 20)</i>	72
2.5.1.1	<i>Construction (Block 2)</i>	73
2.5.1.2	<i>Internal deposits (Block 1)</i>	77
2.5.1.3	<i>Entrance passage construction (Blocks 3, 4 and 20)</i>	78
2.5.1.4	<i>Interpretation</i>	80
2.5.2	<i>Structure 10 (Block 18)</i>	81
2.5.2.1	<i>Description</i>	81
2.5.2.2	<i>Interpretation</i>	81
2.5.3	<i>Phase 3 midden deposits (Block 18)</i>	82
2.5.3.1	<i>Characterizing the midden deposits</i>	82
2.5.3.2	<i>Midden formation</i>	82
2.6	Later activity	83
2.6.1	<i>Windblown sand accumulation (Block 7)</i>	83
2.6.2	<i>Recent disturbance (Block 7)</i>	83
2.6.3	<i>Interpretation</i>	83
3	MATERIAL CULTURE	85
3.1	Introduction	85
3.1.1	<i>General</i>	85
3.1.2	<i>Range of activities represented</i>	85

3.2	Pottery (Ann MacSween)	88
	3.2.1 <i>Introduction</i>	88
	3.2.2 <i>Technology</i>	88
	3.2.3 <i>Morphology</i>	89
	3.2.4 <i>Decoration</i>	93
	3.2.4.1 <i>Applied decoration</i>	93
	3.2.4.2 <i>Incised decoration</i>	95
	3.2.4.3 <i>Impressed decoration</i>	98
	3.2.4.4 <i>Other forms of decoration</i>	100
	3.2.5 <i>Chronological change and comparative material</i>	100
	3.2.6 <i>Catalogue of illustrated sherds</i>	103
3.3	Ceramic artefacts (Fraser Hunter and Ann MacSween)	131
3.4	Human bone (Kath McSweeney)	133
3.5	Bone and antler (Fraser Hunter with Andrew Kitchener)	136
	3.5.1 <i>General</i>	136
	3.5.2 <i>Manufacturing evidence</i>	138
	3.5.2.1 <i>Antler-working debris</i>	138
	3.5.2.2 <i>Bone-working debris</i>	140
	3.5.2.3 <i>Roughouts</i>	140
	3.5.3 <i>Tools</i>	141
	3.5.3.1 <i>Agriculture/construction</i>	141
	3.5.3.2 <i>Hide working</i>	141
	3.5.3.3 <i>Textile working</i>	141
	3.5.3.4 <i>Pottery manufacture or bronze casting</i>	143
	3.5.3.5 <i>Unattributed – handles</i>	143
	3.5.3.6 <i>Unattributed – composite tool heads</i>	144
	3.5.3.7 <i>Unattributed – working surfaces/anvils</i>	144
	3.5.3.8 <i>Unattributed – miscellaneous</i>	145
	3.5.4 <i>Ornaments</i>	145
	3.5.4.1 <i>Pins</i>	145
	3.5.5 <i>Leisure</i>	147
	3.5.6 <i>Fittings</i>	150
	3.5.7 <i>Miniature objects</i>	150
	3.5.8 <i>Unidentified</i>	151
	3.5.9 <i>Missing items</i>	151
3.6	Coarse stone (Ann Clarke)	151
	3.6.1 <i>General</i>	151
	3.6.2 <i>Querns</i>	152
	3.6.3 <i>Hammerstones</i>	153
	3.6.4 <i>Stone disc</i>	153
3.7	Chipped stone (Bill Finlayson)	153
3.8	Pumice (Anthony Newton)	153
3.9	Copper alloy (Fraser Hunter)	154
3.10	Iron (Fraser Hunter)	154
3.11	The vitrified material (Dawn McLaren and Andrew Heald)	155
	3.11.1 <i>Overview</i>	155
	3.11.2 <i>Classification</i>	155
	3.11.2.1 <i>Plano-convex hearth bottoms and slag amalgams</i>	155
	3.11.2.2 <i>Unclassified slags – smithing?</i>	156



3.11.2.3	<i>Vitrified hearth or furnace lining</i>	156
3.11.2.4	<i>Other vitrified material</i>	156
3.11.2.5	<i>Fe conglomerate</i>	157
3.11.3	<i>Discussion</i>	157
3.12	Non-ferrous metalworking debris (Andrew Heald and Fraser Hunter)	158
3.12.1	<i>Moulds</i>	158
3.12.1.1	<i>Other</i>	159
3.12.2	<i>Discussion</i>	159
4	SUBSISTENCE AND ENVIRONMENT	161
4.1	Introduction	161
4.2	Animal bone (Finbar McCormick)	161
4.2.1	<i>Introduction</i>	161
4.2.2	<i>Cattle</i>	166
4.2.3	<i>Sheep</i>	168
4.2.3.1	<i>General</i>	168
4.2.3.2	<i>Sheep burials</i>	169
4.2.4	<i>Pig and dog</i>	169
4.2.5	<i>Red deer</i>	169
4.2.6	<i>Other wild animals</i>	171
4.3	Bird remains (Sheila Hamilton-Dyer)	172
4.4	The sieved fish remains (Ruby Cerón-Carrasco)	173
4.4.1	<i>Methods</i>	173
4.4.2	<i>Discussion by block</i>	175
4.4.3	<i>Discussion by phase</i>	177
4.4.4	<i>The hand-retrieved fish remains (Sheila Hamilton-Dyer)</i>	177
4.4.5	<i>Notes on the species identified</i>	178
4.4.6	<i>Discussion</i>	179
4.4.7	<i>Conclusion</i>	180
4.5	The marine molluscs, with notes on the echinoidea remains and terrestrial snails (Ruby Cerón-Carrasco)	180
4.5.1	<i>The marine molluscs</i>	180
4.5.1.1	<i>Methods</i>	180
4.5.1.2	<i>Results</i>	180
4.5.1.3	<i>Conclusion</i>	182
4.5.2	<i>A note on the echinoidea remains</i>	182
4.5.3	<i>A note on the terrestrial snails</i>	182
4.5.4	<i>Conclusion</i>	182
4.6	Carbonized plant macrofossils and charcoal (Mike Church and Mike Cressey)	182
4.6.1	<i>Summary</i>	182
4.6.2	<i>Sampling strategy</i>	184
4.6.3	<i>Methods</i>	184
4.6.3.1	<i>Carbonized plant microfossils</i>	184
4.6.3.2	<i>Charcoal</i>	184
4.6.4	<i>Results and discussion</i>	184
4.6.4.1	<i>Data presentation</i>	184
4.6.4.2	<i>Species represented</i>	184
4.6.4.3	<i>Distribution and origin of carbonized material</i>	191
4.6.4.4	<i>Other sites</i>	192

5	ANATOMY OF A WHEELHOUSE	195
5.1	The nature of the evidence	195
5.2	Reconstruction drawings	195
5.3	How to build a wheelhouse?	195
	5.3.1 Stage 1	195
	5.3.2 Stage 2	198
	5.3.3 Stage 3	199
	5.3.4 Stage 4	203
5.4	How typical is Cnip?	205
	5.4.1 Piers: bonded and unbonded	205
	5.4.2 Revetted versus free-standing construction	206
5.5	Material resources	206
5.6	Skill and labour requirements	207
5.7	The monumental home	207
6	CHRONOLOGY	209
6.1	Introduction	209
	6.1.1 Sample selection	209
	6.1.2 Problems	209
6.2	Calibration and analysis of radiocarbon dates (Magnar Dalland)	211
	6.2.1 Introduction	211
	6.2.2 Statistical analysis	211
	6.2.2.1 Contemporaneity of the dates from Phase 2	214
	6.2.2.2 Stratigraphical adjustment	214
	6.2.2.3 The duration of Phases 2 and 3	216
6.3	Interpreting the chronological evidence (Ian Armit)	219
	6.3.1 Dating Phases 2 and 3	219
	6.3.2 Dating Phase 1	220
	6.3.3 Conclusion	221
6.4	Cnip and the chronology of wheelhouses (Ian Armit)	221
7	LIVING IN IRON AGE LEWIS	225
7.1	Introduction	225
7.2	What happened at Cnip: a speculative summary	225
7.3	Cnip and the Hebridean wheelhouse tradition	227
7.4	Making a living: household, society and environment	233
	7.4.1 The neighbours	233
	7.4.2 Arable agriculture	236
	7.4.3 Animal husbandry	236
	7.4.4 Wild resources	237
	7.4.5 Craft-working	238
	7.4.6 Fuel	238
	7.4.7 Economy, environment and ideology	239
	7.4.8 Seasonal patterning and movement through the landscape	239
7.5	Life at Cnip	240
	7.5.1 Floor formation and the archaeology of the non-routine	240
	7.5.2 Zoning of activities	242

7.5.3	<i>Structured deposition and the treatment of human remains</i>	244
7.5.4	<i>Unstructured deposition? Questioning the querns</i>	248
7.5.5	<i>Iron Age cosmologies</i>	249
7.6	Why were wheelhouses built?	251
7.6.1	<i>Breaking with the past</i>	251
7.6.2	<i>Land, inheritance and power</i>	253
7.6.3	<i>Wider changes</i>	254
7.6.4	<i>Conclusion</i>	254
	REFERENCES	257
	INDEX	269

## Summary

The Cnip wheelhouse complex is a spectacularly well-preserved Iron Age settlement on the west coast of Lewis, in the Western Isles of Scotland. The site was revealed by coastal erosion on a small machair beach during 1988 and was subject to two short seasons of rescue excavation. Cnip forms part of the rich archaeological landscape of the Bhaltois peninsula, along with a range of other Iron Age monuments. The importance of the site lies in its exceptional degree of preservation, both structural and stratigraphic, which permitted the dissection and interpretation of the drystone buildings themselves and of the Iron Age occupation deposits within them.

The settlement when first built (Phase 1) comprised two wheelhouses of which one (Wheelhouse 2) was left incomplete with unused masonry stacked in parts of its entrance passage and interior. The other wheelhouse, Wheelhouse 1, survived with elements of its peripheral stone roofing intact. The partial dismantling of the unfinished wheelhouse and the recording of the standing sections of Wheelhouse 1 enabled a detailed reconstruction of the process of construction from the digging of foundations to the emplacement of the roof. This has shown that the quality of drystone construction demanded skill levels analogous to those required in the tallest broch towers. Although monumental in internal construction, the resultant structures were sunk into a sand dune, and all but hidden from the outside. During Phase 2, Wheelhouse 1 began to become structurally unstable and the settlement was progressively modified to create a cellular layout. Occupation continued inside the wheelhouse, although some of the bays were blocked and parts of the roofing propped up, altering the spatial arrangements. A second building, Structure 4, was built off the wheelhouse entrance passage, forming a separate focus for the settlement. In Phase 3 the cellular layout was replaced by a single, rectilinear domestic building, Structure 8, presently unique in Atlantic Scotland. Following the abandonment of this structure and subsequent small-scale re-use, the site was abandoned and engulfed by sand. There is no indication of any break in this sequence of occupation.

A series of radiocarbon dates, taken almost exclusively from mammal bone stratified within the house floors, provides reasonably secure dating for Phase 2 (*c.* AD 1–100) and Phase 3 (*c.* AD 100–250) but leaves problems of interpretation for Phase 1. It seems likely that the dates obtained from Phase 1 comprise a mixture of bone discarded during occupation and curated bone deriving from foundation deposits. Although it is impossible to date the construction of the wheelhouse with any confidence, there was clearly occupation during the first century BC and construction may have been a century or more earlier.

The excavations produced a rich artefactual assemblage including some 6,000 sherds of pottery, much of it highly decorated, forming a tightly stratified sequence. This material provides new insights into the chronology of Iron Age pottery in the region, and highlights the steady reduction in the quality and variety of ceramic production in the early centuries AD. Other artefactual material includes a wide range of bone and antler objects, mostly indicating the working of materials such as hides and textiles, but including more unusual and evocative objects such as a lyre tuning peg, a model sword and a gaming piece. There is also a small assemblage of rotary querns, all found in secondary contexts, and an absence of saddle querns. Copper alloy objects were very rare and could not have been common on the site, although there was some evidence for iron tools, including a remarkable iron spade shoe used for hand cultivation of the light machair soils. The distribution of finds gave some evidence for the zoning of activities, including the apparent segregation of metal-working and (more surprisingly) mammal-bone-working, from the houses themselves.

The faunal evidence is equally striking, indicating an economy with a significant reliance on red deer, which probably involved the active management of these 'wild' animals. There is also a considerable reliance on the raising of cattle which can be interpreted in two ways. It is possible that the kill-patterns in the cattle assemblage indicate a marginal economy where calves were slaughtered young to provide meat and avoid the need to maintain

them through the winter. An alternative is that the same patterns may indicate a dairying economy, where calves are killed to free up milk for human consumption. The arguments are detailed in the main text. There was a lesser reliance on sheep and a few pigs were kept on the site. As elsewhere during this period, there was little dependence on fishing although marine mammals were exploited on an opportunistic basis.

Throughout the deposits there is evidence for ritual activity including the deposition of human and animal body parts, as at other wheelhouse sites where they have been used to argue for a well-developed Iron Age cosmology. These deposits can be associated with key moments in the lives of the inhabitants and in the 'birth, life and death' of individual buildings on the site. There is a particularly marked incidence of human

skull fragments suggesting a special interest in the curation and display of the human head, which finds echoes elsewhere in the British and European Iron Age.

The final part of the report deals with some of the wider issues relating to Cnip and its place in the Atlantic Scottish Iron Age. The lives of the community at Cnip were closely inter-twined with those of their neighbours both in terms of their economic lives, especially transhumant pastoralism, and their social lives. The adoption of wheelhouse architecture in a region previously dominated by the more outwardly monumental Atlantic roundhouses clearly indicates major shifts in social relations. These are discussed in relation to shifting patterns of land-holding and the emergence of social inequalities at the end of the first millennium BC.

## Résumé

(translated by Kirsten Leask)

Le complexe de ‘wheelhouse’ de Cnip est un habitat spectaculairement bien préservé de l’âge du fer sur la côte occidentale de Lewis, dans les Iles Hebrides, en Ecosse. L’habitat a été découvert suite à l’érosion côtière d’une petite plage de *machair* en 1988 et a été le sujet de deux saisons courtes de fouilles de sauvetage. Cnip fait partie du riche paysage archéologique de la péninsule de Bhaltois, avec beaucoup d’autres monuments de l’âge de fer. L’importance de l’habitat se situe en son degré exceptionnel de conservation, structurale et stratigraphique, qui a permis la dissection et l’interprétation des bâtiments en mur de pierres sèches et des niveaux d’occupation de l’âge de fer associés.

L’habitat initialement construit (phase 1) a comporté deux *wheelhouses* dont une (Wheelhouse 2) a été laissée inachevée, la maçonnerie inutilisée empiéée dans une partie de son passage d’entrée et de son intérieur. L’autre *wheelhouse* (Wheelhouse 1) a survécu avec des éléments de sa toiture périphérique en pierre intacts. Le démantèlement partiel de Wheelhouse 2, non finie, et l’étude des sections préservées de Wheelhouse 1 ont permis une reconstruction détaillée du processus de construction, du creusement des fondations à la mise en place du toit. Ceci a prouvé que la qualité de la construction des murs en pierres sèches a demandé des niveaux de compétence analogues à ceux exigés dans les tours des plus grands *brochs*. Bien que monumentales dans la construction interne, les structures résultantes ont été insérées dans une dune de sable, presque cachées de l’extérieur. Pendant la Phase 2, Wheelhouse 1 a commencé à devenir structurellement instable et l’habitat a été progressivement modifié pour créer un plan cellulaire. L’occupation a continué à l’intérieur de la *wheelhouse*, bien que certains des compartiments aient été bloqués et que certaines parties de la toiture aient été étayées vers le haut, changeant les arrangements spatiaux. Un deuxième bâtiment (Structure 4) a été construit en dehors du passage d’entrée de Wheelhouse 1, formant un différent point focal pour l’habitat. Dans la Phase 3, la disposition cellulaire a été remplacée par un bâtiment domestique simple et rectiligne (Structure 8), actuellement unique en Ecosse Atlantique. Après

l’abandon de cette structure et quelques réutilisations temporaires suivantes, l’habitat entier a été abandonné et englouti par le sable. Il n’y a aucune indication d’une quelconque coupure dans cette occupation.

Une série de dates radiocarbone, prise presque exclusivement sur des os mammifères stratifiés dans les sols de la maison, a permis de dater raisonnablement la Phase 2 (1–100 ap. J.-C.) et la Phase 3 (100–250 ap. J.-C.) mais il est difficile de dater la Phase 1. Il semble probable que les dates obtenues pour la Phase 1 comprennent un mélange d’os rejetés pendant l’occupation et d’os curés dérivant des dépôts de base. Bien qu’il soit jusqu’à maintenant impossible de dater la construction de la *wheelhouse* avec confiance, il y avait clairement une période d’occupation pendant le 1er siècle av. J.-C. et la construction elle-même a pu avoir été débutée un siècle ou plus auparavant.

Les fouilles ont produit une grande collection de mobilier, comprenant environ 6,000 tessons de céramique, en grande partie décorés, formant une étroite séquence stratigraphique. Ce matériel fournit de nouvelles informations sur la chronologie des céramiques de l’âge du fer dans la région, et met l’accent sur la régulière réduction de la qualité et de la variété de la production céramique dans les premiers siècles ap. J.-C. L’autre matériel mobilier inclut un éventail d’objets en os et en bois de cerfs, la plupart du temps témoignant du travail de matériaux comme peaux et textiles, mais aussi incluant des objets moins communs et plus évocateurs tels qu’une cheville d’accord de lyre, une épée modèle et une pièce de jeu. Il y a également un petit assemblage de meules rotatoires, toutes trouvées en contextes secondaires, et une absence de meules ‘en selle’. Les objets en alliage de cuivre étaient très rares et ne pouvaient pas avoir été communs à Cnip. En revanche, il y avait quelques outils en fer, y compris un remarquable fer de bêche utilisé pour la culture manuelle des sols légers de *machair*. La distribution du mobilier a démontré un zonage des activités, y compris la ségrégation apparente de la métallurgie et (plus étonnant) du travail des os mammifères, des maisons elles-mêmes.

Les données sur la faune sont également importantes, indiquant une économie dépendante fortement des

cerfs et impliquant probablement la gestion active de ces animaux 'sauvages'. Il y a également une dépendance considérable sur le bétail, ce qui peut être interprété de deux manières. Il est possible que les modes d'abattage indiqués dans l'assemblage du bétail indiquent une économie marginale où les veaux étaient abattus jeunes pour fournir de la viande et pour éviter la nécessité de les maintenir à travers l'hiver. Une alternative serait que les mêmes modes d'abattage indiquent une économie d'industrie laitière, où les veaux sont tués pour libérer le lait pour la consommation humaine. Les arguments sont détaillés dans le texte principal. Il y avait une moindre dépendance sur les moutons et quelques porcs ont été gardés sur l'habitat. Comme ailleurs à cette période, il y avait peu de dépendance à l'égard de la pêche bien que des mammifères marins aient été exploités opportunément.

Dans tous les dépôts, il y a des preuves d'activité rituelle comprenant la déposition de parties de corps humains et animaux, comme à d'autres *wheelhouses*, ce qui a provoqué la citation de ces monuments comme plaidoyer d'une cosmologie bien développée dans

l'âge du fer. Ces dépôts peuvent être associés aux principaux moments dans les vies des habitants et dans la naissance, vie et mort des différents bâtiments. Il y a une importance particulièrement marquée des fragments de crânes humains, suggérant un intérêt spécial pour la curation et l'affichage de têtes humaines, ce qui se retrouve ailleurs dans l'âge de fer Britannique et Européen.

La dernière partie du rapport traite des questions plus larges concernant Cnip et de sa place dans l'âge de fer Ecosais Atlantique. Les vies au sein de la communauté à Cnip étaient étroitement entrelacées avec ceux de leurs voisins en ce qui concerne leurs économies, en particuliers le pastoralisme transhumant, et leurs vies sociales. L'adoption de l'architecture *wheelhouse* dans une région précédemment dominée par les 'Atlantic roundhouses', beaucoup plus monumentales, indique clairement de profonds changements dans les relations sociales. Ces dernières sont discutées par rapport aux modèles changeants de propriété à la terre et de l'apparition des inégalités sociales à la fin du 1er millénaire av. J.-C.

## Zusammenfassung

(translated by Ulrike Wenzel)

Der Cnip ‘Wheelhouse’-Komplex ist eine beeindruckend gut erhaltene Siedlung aus der Eisenzeit, an der Westküste von Lewis, äussere Hebriden, Schottland. Die Stätte wurde 1988 durch Küstenerosion auf einem kleinen ‘Machair’-Strand freigelegt und wurde in zwei kurzen Ausgrabungsprojekten geborgen. Cnip, ebenso wie eine Anzahl weiterer Eisenzeit-Monumente, ist Bestandteil der reichen archaeologischen Landschaft der Bhaltois Halbinsel. Die Bedeutung dieser Stätte liegt in ihrem aussergewöhnlichen Erhaltungsgrad, sowohl strukturell als auch stratigraphisch, welcher eine Analyse und Interpretation der Trockensteingebäude an sich und der darin enthaltenen Eisenzeitgegenstände erlaubte.

Die Siedlung, zum Zeitpunkt der ersten Bauphase (Phase 1), bestand aus zwei ‘Wheelhouses’. Eines der beiden Häuser wurde nicht fertiggestellt und enthielt Stapel ungenutzten Mauerwerks im Eingangs- und Innenbereich. Das andere ‘Wheelhouse’, Wheelhouse 1, blieb mit Elementen des peripheren Steindaches erhalten. Ein partieller Abbau des unfertigen ‘Wheelhouse’ und die Aufzeichnung der stehenden Bereiche von Wheelhouse 1 ermöglichten eine detaillierte Rekonstruktion des Bauprozesses, vom Aushub des Fundaments bis zum Einbau des Daches. Dieses zeigte, dass die Qualität der Konstruktionen aus Trockenstein eine Fertigkeit erforderte, die analog zu der ist, die beim Bau der höchsten Broch-Türme benötigt wurde. Obwohl imposant in der Innenkonstruktion, versanken die fertigen Bauwerke in einer Sanddüne und wurden somit vor der Aussenwelt verborgen. Im Laufe der Phase 2 begann das Wheelhouse 1 strukturell instabil zu werden und wurde schrittweise zu einem zellartigen Layout umgewandelt. Die Bewohnung des Hauses bestand fortlaufend, obwohl manche der Erker gesperrt und Teile des Daches abgestützt wurden und somit die räumliche Einteilung geändert wurde. Ein zweites Gebäude, Bauwerk 4, wurde neben der ‘Wheelhouse’-Eingangspassage errichtet und formte einen gesonderten Fokuspunkt in der Siedlung. In Phase 3 wurde der zellenförmige Grundriss durch ein einzelnes, geradliniges Wohngebäude, Bauwerk 8, ersetzt, welches zum heutigen Zeitpunkt einzigartig

im atlantischen Schottland ist. Im Anschluss an die Aufgabe dieses Bauwerks und die anschliessende Wiederverwendung in kleinerem Masstab wurde diese Stätte verlassen und von Sand eingehüllt. Es gibt keine Anzeichen auf jegliche Unterbrechung in dieser Abfolge der Besiedlung.

Eine Serie von Radiokarbon-Daten, ermittelt fast ausschliesslich aus in den Hausboden eingelagerten Säugetierknochen, gewährt eine relativ sichere Datierung von Phase 2 (zirka 1–100 n.Chr.) und Phase 3 (zirka 100–250 n.Chr.), birgt jedoch Probleme für die Auswertung von Phase 1. Es scheint wahrscheinlich, dass die von Phase 1 ermittelten Daten aus einer Mischung von Knochen aus Essensabfällen zu Zeiten der Bewohnung, sowie von aus den Fundamentablagerungen stammenden älteren Knochen bestehen. Obwohl es unmöglich ist den Bau des ‘Wheelhouse’ mit Sicherheit zu datieren, gab es eine nachweisbare Bewohnung des Gebäudes im 1. Jahrhundert v. Chr. Der Bau könnte möglicherweise im Jahrhundert zuvor oder noch eher erfolgt sein.

Die Ausgrabungen produzierten eine reiche Sammlung an Artefakten, einschliesslich 6,000 Tonscherben, welche zum grössten Teil stark dekoriert sind und eine dicht geschichtete Sequenz formten. Dieses Material bietet neue Einsichten in die Chronologie der Töpferwaren der Eisenzeit dieser Region und hebt die beständige Reduzierung in Qualität und Vielfalt in der Tonwarenproduktion in den ersten Jahrhunderten nach Christus hervor. Andere artefaktische Materialien beinhalten eine weite Reihe von Knochen- und Geweih-Objekten, welche zumeist zum Bearbeiten von Häuten oder Textilien benutzt wurden. Zudem gab es weitere ungewöhnliche und sinnträchtige Gegenstände, wie einen Stimmwirbel für eine Leier, ein Modellschwert und ein Spielstein. Des Weiteren gab es eine kleine Sammlung an Drehmühlen aus Stein, alle in sekundärem Zusammenhang, es fehlten die dazugehörigen Sattel-Steinmühlen. Kupferlegierte Objekte waren sehr selten und konnten nicht sehr gebräuchlich an dieser Stätte gewesen sein, obwohl einige Belege für Eisenwerkzeuge vorhanden waren, einschliesslich eines aussergewöhnlichen eisernen Spatenblatts, genutzt für die Handbestellung der leichten



‘Machair’-Böden. Die Verteilung der Funde brachte einige Beweise für die Zonierung der Aktivitäten, einschliesslich der offensichtlichen Ausgliederung der Metallbearbeitung und (überraschenderweise) Säugetierknochen-Bearbeitung aus den Häusern an sich.

Die faunistischen Belege sind gleichermassen eindrucksvoll und weisen auf eine Wirtschaft mit einer signifikanten Abhängigkeit auf Rotwild hin, welche wahrscheinlich das aktive Management dieser Wildart beinhaltete. Weiterhin gab es einen beachtlichen Verlass auf die Rinderzucht, welches in zweierlei Hinsicht interpretiert werden kann. Es ist möglich, dass das Schlachtmuster der Rinderherde auf eine marginale Wirtschaft hinweist, in der die Kälber jung getötet wurden, um Fleisch zu liefern und zudem nicht mehr durch den Winter gebracht werden mussten. Eine Alternative ist, dass der gleiche Ablauf auf eine Milchwirtschaft hinweist, in der die Kälber geschlachtet wurden, um die Milch für den menschlichen Gebrauch freizugeben. Diese Thesen sind im Haupttext näher beschrieben. Es gab eine geringere Abhängigkeit von Schafen, dazu wurden in der Siedlung ein paar Schweine gehalten. Wie anderswo zu dieser Zeit verliess man sich weniger auf die Fischerei, obwohl Meeressäuger auf opportunistischer Basis genutzt wurden.

In durchweg allen Schichten gibt es Belege für rituelle Aktivitäten, einschliesslich der Ablagerungen

von menschlichen und tierischen Körperteilen, welche, genau wie in anderen ‘Wheelhouse’-Siedlungen, zur Unterstützung der Argumentation zugunsten einer gut entwickelten Eisenzeit-Kosmologie verwendet wurden. Diese Ablagerungen können mit Schlüsselmomenten im Leben der Bewohner assoziiert werden, ebenso wie mit ‘Geburt, Leben und Sterben’ der einzelnen Gebäude der Stätte. Ein besonders hervortretendes Vorkommnis von Fragmenten menschlicher Schädel deutet auf ein spezielles Interesse an der Heilung und Darstellung des menschlichen Kopfes hin, welches sich ebenso in anderen Teilen Britischer und Europäischer Eisenzeit wiederfindet.

Der abschliessende Teil dieses Berichtes behandelt einige weitere Themen bezüglich der Stätte Cnip und deren Stellung in der atlantisch-schottischen Eisenzeit. Das Leben in der Gemeinde von Cnip war eng mit dem der Nachbarn verflochten, im wirtschaftlichen Aspekt, insbesondere in Bezug auf die transhumane Weidewirtschaft, sowie im sozialen Aspekt. Die Aufnahme der ‘Wheelhouse’-Architektur in eine Region bislang beherrscht von den mehr äusserlich imposanten Atlantischen Rundhäusern, ist ein klarer Indikator für eine starke Veränderung sozialer Beziehungen. Diese werden in Bezug zu den sich wandelnden Modellen des Landbesitzes und den hervortretenden sozialen Ungleichheiten am Ende des 1. Jahrhunderts vor Christus diskutiert.

## List of illustrations

1.1	Location map.	1
1.2	The beach section, seen from the east during initial recording, Easter 1986.	2
1.3	Location of the excavations (showing 1986, 1987, and 1988 work).	3
1.4	Traigh Bhaltos, during the excavation: the site lies behind the mounds of dumped sand which project onto the beach.	4
1.5	The initial discovery of the corbelled cells after the machine removal of the upper blown sands. The voids of the empty cells can be seen towards the centre of the photograph, and the upper front of one bay is propped up with wooden stobs.	5
1.6	This photograph shows the cramped and rather precarious working conditions inside Wheelhouse 1 and gives some idea of the scale of the surviving stone elements.	6
1.7	This photograph, taken shortly after the machine clearance of the sand overburden, shows the process of cleaning back to reveal the tops of the stone structures.	7
1.8	Bhaltos, showing places mentioned in the report.	11
1.9	Traigh na Beirgh.	12
1.10	Bronze Age sites in Bhaltos.	15
1.11	Iron Age sites in Bhaltos.	16
1.12	Viking burials and settlement mounds in Bhaltos.	18
2.1	Site Matrix, showing the relationship of stratigraphic blocks to interpretative phases.	22
2.2	Phase 1 summary plan, showing numbering of bays and piers in Wheelhouse 1.	24
2.3	Wheelhouse 1, general view from north-west during the excavation.	27
2.4	Wheelhouse 1, Pier B.	28
2.5	Detail of upper corbelling of Bay 4, looking up from the front of the bay.	30
2.6	Wheelhouse 2, plan of internal features and entrance passage.	31
2.7	Wheelhouse 2, view of blocked entrance from interior.	32
2.8	Wheelhouse 2, unexcavated pier in section.	32
2.9	Wheelhouse 2, 'false entrance' leading off entrance passage cell.	33
2.10	Wheelhouse 2, view of central pit, excavated.	35
2.11	Wheelhouse 2, view of collapsed stone in western part of interior.	36
2.12	Wheelhouse 2, view of stacked stone in entrance passage.	37
2.13	Phase 2 summary plan No 1.	40
2.14	Phase 2 summary plan No 2.	41
2.15	Wheelhouse 1, Phase 2a floor.	43
2.16	Wheelhouse 1, the second Phase 2a hearth from the east.	44
2.17	View through connecting entrance from Wheelhouse 1 towards Wheelhouse 2, showing three courses of residual blocking wall.	44
2.18	Wheelhouse 1, second Phase 2 floor.	45
2.19	Wheelhouse 1, Phase 2b, the covered pit and entrance pier buttress from the east.	46
2.20	Section through Wheelhouses 1 and 2.	48–9
2.21	Wheelhouse 1, Pier A, showing the pronounced slumping of this pier.	50
2.22	Wheelhouse 1 and Structure 3, distribution of pottery.	52
2.23	Structure 3 plans.	55
2.24	Structure 3 roof.	56
2.25	Section, showing relationship of Structure 3 roof and walls to deposits within Wheelhouse 2.	57

2.26	Deposit of human skull and pottery below Structure 3.	58
2.27	Structure 3 excavated.	58
2.28	Structures 4, 7 and 9.	59
2.29	Structure 4: first full primary floor.	60
2.30	Structure 4: north wall slabs seen from entrance.	61
2.31	Section through Structure 4.	63
2.32	Structure 9, from the north-west.	64
2.33	Structure 7.	66
2.34	Structure 5 plan.	68
2.35	Structure 5 from south (fully excavated).	69
2.36	Phase 3 summary plan.	70
2.37	Structure 8, from north-west, showing primary floors and re-use of corbelled cells.	72
2.38	Structure 8, plan of primary floor.	73
2.39	Structure 8, sections through the interior, north wall and upper fill of Wheelhouse 1.	74
2.40	Photograph showing the section through the wall of Structure 8 and the upper fills of Wheelhouse 1.	75
2.41	Section across sump in the entrance to Structure 8.	78
3.1	Phase 1, Block 5AI, (a) V831, (b) V928, (c) V912, (d) V913; Block 6, (e) V1312, (f) V1315, (g) V1316, (h) V1342, (i) V1343, (j) V1345.	104
3.2	Phase 1, Block 6 continued, (a) V1302, (b) V1337, (c) V1328; Block 11, (d) V2137, (e) V2147, (f) V2148, (g) V2184, (h) V2173, (i) V2181, (j) V2182.	106
3.3	Phase 1 continued, Block 12, (a) V2202, (b) V2205; Block 15, (c) V2513, (d) V2454, (e) V2376, (f) V2382, (g) V2383.	108
3.4	Phase 1, Block 15 continued, (a) V2384, (b) V2385, (c) V2387, (d) V2411; Block 16, (e) V2531.	110
3.5	Phase 1, Block 16 continued, (a) V1366; Phase 2, Block 5, (b) V2787, (c) V570, (d) V597, (e) V601, (f) V611, (g) V301, (h) V302, (i) V304, (j) V325, (k) V793, (l) V786.	111
3.6a	Phase 2, Block 5 continued, (a) V38, (b) V39, (c) V48, (d) V53, (e) V62, (f) V63.	112
3.6b	Phase 2, Block 5 continued, (a) V87, (b) V89.	114
3.7	Phase 2, Block 5 continued, (a) V684, (b) V689, (c) V368, (d) V369, (e) V370, (f) V375, (g) V395, (h) V195, (i) V575, (j) V584.	115
3.8	Phase 2, Block 5 continued, (a) V514, (b) V515, (c) V516, (d) V519, (e) V520, (f) V521, (g) V523, (h) V176, (i) V177.	117
3.9	Phase 2, Block 5 continued, (a) V865, (b) V866, (c) V281, (d) V773, (e) V774; Block 8, (f) V1743, (g) V1751, (h) V1752, (i) V1753, (j) V1809.	119
3.10	Phase 2, Block 8 continued, (a) V1871, (b) V1884, (c) V1891, (d) V1892, (e) V1922, (f) V1989, (g) V1991, (h) V2044, (i) V2045.	121
3.11	Phase 2, Block 8 continued, (a) V1473, (b) V1474, (c) V1535, (d) V1633, (e) V1580, (f) V1581, (g) V1691.	123
3.12	Phase 2, Block 8 continued, (a) V1367, (b) V1368, (c) V1371, (d) V1373, (e) V1377, (f) V1378, (g) V1381, (h) V1382, (i) V1383, (j) V1398.	124
3.13	Phase 2 continued, Block 13, (a) V2235, (b) V2301, (c) V2302, (d) V2282; Block 14, (e) V2336, (f) V2346.	125
3.14	Phase 3, Block 1, (a) V979, (b) V991, (c) V993, (d) V1046, (e) V1077, (f) V1006.	127
3.15	Phase 3 continued, Block 2, (a) V1151, (b) V1153, (c) V1154, (d) V1206, (e) V1213, (f) V1134, (g) V1142; Block 4, (h) V1097, (i) V113; Block 6, (j) V1278, (k) V1280, (l) V1281, (m) V1282.	128
3.16	Phase 3 continued, Block 18, (a) V2573, (b) V2576, (c) V2577, (d) V2659, (e) V2660, (f) V2663, (g) V2667.	130
3.17	Phase 3, Block 18 continued, (a) V2761, (b) V2778, (c) V2779, (d) V2721, (e) V2723, (f) V2724; Phase uncertain, Block 7, (g) V1261, (h) V1250.	132
3.18	Ceramic artefacts, (a) SF98, (b) SF256, (c) SF278, (d) SF280, (e) SF284.	134
3.19	Roughouts, (a) SF25, (b) SF27, (c) SF71a and SF71b, (d) SF218, (e) SF294, (f) SF296.	142

3.20	Tools, (a) SF72, (b) SF40, (c) SF297.	143
3.21	Tools continued, (a) SF42, (b) SF172, (c) SF204, (d) SF10, (e) SF91, (f) SF22, (g) SF250, (h) SF101, (i) SF181, (j) SF299.	145
3.22	Tools continued, (a) SF41, (b) SF149, (c) SF170, (d) SF301, (e) SF100, (f) SF302, (g) SF303.	146
3.23	Pins, (a) SF53, (b) SF73, (c) SF92, (d) SF96, (e) SF115, (f) SF187, (g) SF207, (h) SF251.	148
3.24	Various, (a) SF50, (b) SF145, (c) SF60, (d) SF20, (e) SF107, (f) SF118.	149
3.25	Coarse stone, (a) SF133, (b) SF116, (c) SF171, (d) SF189, (e) SF86, (f) SF188, (g) SF87.	152
3.26	Copper alloy, (a) SF31, Iron, (b) SF54, (c) SF23.	154
3.27	Moulds, (a) SF270, (b) SF271, (c) SF272, (d) SF212a, (e) SF212b, (f) SF273.	159
4.1	Red deer size ranges at Cnip compared with those from Edinburgh Castle, Oronsay and Iona.	170
4.2	Preservation classes for total grain from Cnip.	188
5.1	Wheelhouse construction: Drawings One and Two.	196–7
5.2	Section through the wall of Wheelhouse 2 ( <i>c.</i> 1.2m south of the main entrance).	198
5.3	The marker stone for the ‘missing pier’ in Wheelhouse 2, seen from the interior.	199
5.4	Wheelhouse construction: Drawings Three and Four.	200–1
5.5	Bays 4 and 5, Wheelhouse 1.	202
6.1	Probability distribution of the radiocarbon dates from Phases 1, 2 and 3.	210
6.2	C14 samples linked by a direct stratigraphic chain.	214
6.3	Cumulative effect on probability distribution by stratigraphical adjustments.	215
6.4	Probability distribution of the radiocarbon dates from Phases 2 and 3 adjusted for stratigraphy.	217
6.5	Cumulative probability distribution for the duration of Phase 2.	219
6.6	Cumulative probability distribution for the duration of Phase 3.	221
7.1	Simplified plans showing: (a) Cnip Phase 1; (b) Cnip Phase 2; (c) Sollas, North Uist; (d) A’ Cheardach Bheag, South Uist.	227
7.2	Foshigarry, North Uist (from Beveridge 1930, plate 2).	228
7.3	Simplified plans showing: (a) Cnip Phase 1; (b) Kilpheder, South Uist; (c) Usinish, South Uist.	228
7.4	Wheelhouses with evidence for structural failure and repair highlighted: (a) Clettraval, North Uist (after Scott 1948); (b) Allasdale, Barra (after Young 1952).	229
7.5	A selection of Erskine Beveridge’s wheelhouse plans: (a) Eilean Maleit (from Beveridge 1911, 200a); (b) Bac Mhic Connain (from Beveridge 1931, Fig. 1); (c) Garry Iochdrach (from Beveridge 1931, fig 2); (d) Cnoc a Comhdhalach (Beveridge 1911, 208a), all in North Uist.	230
7.6	Allasdale, Barra (from Young 1952, fig 3).	232
7.7	Rectilinear structures from the Late Iron Age in Atlantic Scotland: (a) Wag of Forse (after Curle 1946, fig 1); (b) Tungadale (after Miket 2002); (c) Cnip Structure 8; (d) Latheron, Caithness (after RCAHMS 1911, fig 13).	233
7.8	The broch tower of Loch na Beirgh seen from the shore.	234
7.9	The complex roundhouse of Dun Bharabhat, prior to excavation.	235
7.10	Comparative drawings of deer on pottery at: (a) Kilpheder, South Uist and (b) Dun Borbaidh, Coll (after Lethbridge 1952, 189), and on a wooden handle from Dun Bharabhat, Lewis (after Harding & Dixon 2000, fig. 34).	239
7.11	Distribution of Iron Age sites in Britain with evidence for trepanation, also indicating the location of Hebridean sites with evidence for obviously curated remains (data from Roberts and McKinley 2003, with additions).	246
7.12	The pit deposits at Sollas, North Uist (from Campbell 1991).	248
7.13	Entrance orientations of all Hebridean wheelhouses for which data is available.	250



## List of tables

1.1	Hebridean wheelhouses: principal excavated sites (in chronological order of excavation).	9
2.1	Stratigraphic blocks: phasing and summary descriptions.	23
2.2	Finds (excluding pottery) from Wheelhouse 2 (Phase 1).	39
2.3	The distribution of Phase 2 finds (excluding pottery) from areas within Wheelhouse 1.	53
2.4	Finds (excluding pottery) from Structure 4 (Block 8, Phase 2).	66
2.5	Finds (excluding pottery) from Structure 8 (Phase 3).	76
3.1	Number of sherds and vessels by block: all phased contexts.	86
3.2	Number of sherds and vessels by block: key sequence.	87
3.3	Surface finish: all phased contexts.	87
3.4	Surface finish: key sequence.	88
3.5	Fabric by block: all phased contexts.	89
3.6	Fabric by block: key sequence. See Table 3.7 for key.	90
3.7	Sherd colour by block: all phased contexts.	90
3.8	Sherd colour by block: key sequence.	91
3.9	Rim types by block: all phased contexts.	91
3.10	Rim types by block: key sequence.	92
3.11	Sherd thickness by block: all phased contexts.	92
3.12	Sherd thickness by block: key sequence.	93
3.13	Decorative techniques: all phased contexts.	94
3.14	Decorative techniques: key sequence.	95
3.15	Decorative motifs: all phased contexts.	96
3.16	Decorative motifs: key sequence.	97
3.17	Incidence of sooting: all phased contexts.	98
3.18	Incidence of sooting: key sequence.	99
3.19	Incidence of sooting on decorated vessels: all phased contexts.	99
3.20	Incidence of sooting on decorated vessels: key sequence.	100
3.21	Composition of the bone and antler assemblage.	137
3.22	Raw material by phase.	137
3.23	Vitrified material classification.	156
3.24	Range and weight of vitrified material associated with structures.	156
4.1	Fragment distributions from different blocks.	161
4.2	Minimum numbers of individuals (MNI) values from different blocks.	162
4.3	Distribution of the fragments from main phases.	162
4.4	MNI distribution of main species from Phases 1–3.	163
4.5	Percentage distribution of fragments from Hebridean sites (after Finley forthcoming; Gilmour and Cook 1998; Halstead 2003; McCormick 1981; Mulville 1999, Tables 105, 10.6 and 10.33; Noddle 1974, 1980, 1981; Serjeantson forthcoming).	164
4.6	Relative proportions of carcass meat provided by mammals (all phases).	165
4.6a	MNI Distribution from Outer Hebridean sites after Finlay (1991) and Mulville (1999).	165
4.7	State of cattle manibular eruption and wear after Case (1967) and Grant (1982).	166
4.8	Cattle fusion data based on Silver (1969, 285–6).	166

4.9	State of sheep mandibular teeth eruption and wear after Higham (1967) and Grant (1982).	168
4.10	Sheep age slaughter patterns from Cnip, Udal and Dun Vulcan after Mulville (1999, 250) and Serjeantson (forthcoming).	168
4.11	Cattle bone measurements (mm) (abbreviations after von den Driesch 1974).	169
4.12	Red deer bone measurements (mm) (abbreviations after von den Driesch 1974).	170
4.13	Sheep bone measurements (mm) (abbreviations after von den Driesch 1974).	171
4.14	State of pig teeth eruption and wear after Higham (1967) and Grant (1982) and pig bone measurements (mm) (abbreviations after von den Driesch 1974).	172
4.15	Numbers of bird bones from each block, by species.	173
4.16	Block 1: NISP and fish bone concentration.	174
4.17	Block 2: NISP and fish bone concentration.	174
4.18	Block 5: NISP and fish bone concentration.	174
4.19	Block 7: NISP and fish bone concentration.	175
4.20	Block 8: NISP and fish bone concentration.	175
4.21	Block 9: NISP and fish bone concentration.	176
4.22	Block 11: NISP and fish bone concentration.	176
4.23	Block 13: NISP and fish bone concentration.	176
4.24	Block 15: NISP and fish bone concentration.	176
4.25	Block 18: NISP and fish bone concentration.	177
4.26	Block 19: NISP and fish bone concentration.	177
4.27	Block 20: NISP and fish bone concentration.	178
4.28	Phases 1, 2 and 3: Fish species representation by fragment count (NISP) and fish bone concentration.	178
4.29	Marine mollusc representation by context.	181
4.30	Terrestrial snail representation by context.	183
4.31	Charcoal species composition.	185
4.32	Carbonized plant macrofossils (samples by Blocks 1, 2 and 5).	186
4.33	Carbonized plant macrofossils (samples by Blocks 6, 7, 8 and 10).	187
4.34	Carbonized plant macrofossils (samples by Blocks 11, 13, 14, and 15).	189
4.35	Carbonized plant macrofossils (samples by Blocks 17, 18, 19 and 20).	190
4.36	Quantification criteria for carbonized plant macrofossils.	191
6.1	Cnip radiocarbon dates (uncalibrated).	209
6.2	Cnip calibrated radiocarbon dates.	211
6.3	Probabilities of dates to fall within centuries.	212–13
6.4	Cnip calibrated radiocarbon dates adjusted for stratigraphy.	216
6.5	Stratigraphically adjusted probabilities of dates to fall within centuries.	218
6.6	Duration of Phase 2.	220
6.7	Duration of Phase 3.	220

## List of colour plates

- 1 The excavations in progress
- 2 Wheelhouse 1 and Structure 4 under excavation
- 3 Wheelhouse 1; piers A and B, N of entrance
- 4 Wheelhouse 1; pier B
- 5 Wheelhouse 2 wall section
- 6 Iron spade shoe (SF23)
- 7 Model sword (SF20)
- 8 Pottery vessels (left, V1366; right, V62)
- 9 Gaming piece (SF145)
- 10 Mould fragments
- 11 Antler working debris





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## Notes

The excavated site lies at NB 0978 3659 and is recorded in the National Monuments Record for Scotland as NB 03 NE 17. The site archive has been deposited with the National Monuments Record of Scotland. Throughout this report, the Gaelic spellings of Bhaltos, Cnip, Calanais, Chàrlabhaigh,

Bostadh and Clibhe are used to accord with current road signs and forthcoming map editions. Older maps and previous archaeological publications often refer to these places by their anglicized spellings, Valtos, Kneep, Callanish, Carloway, Bosta and Cliff.



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





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










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## Key to section and plan conventions

Key to section conventions			
	Clean sand		Ash deposit
	Stained sand (light-medium)		Ashy midden
	Stained sand (medium-dark)		Ash inclusions
	Silty-sand		Peat lens
	Clay		Peat deposit
	Hearth stone setting		Shell deposit

Key to plan conventions			
	Disturbed deposits		Stained sand (light-medium)
	Unexcavated fill		Stained sand (medium-dark)
	Floor deposits		Ashy sand
	Paving		Midden
	Ash spread		Windblown sand
	Hearth		Sand dune



