HILLFORTS OF THE CHESHIRE RIDGE

INVESTIGATIONS UNDERTAKEN BY THE HABITATS AND HILLFORTS LANDSCAPE PARTNERSHIP SCHEME 2009–2012

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It remains to dedicate my part in this work to my family, including those I lost whilst working on this Project: my father Peter Garner (d.2012), my grandmother Elizabeth Stubbs (d.2010), and my uncle Robert Stubbs (d.2011).

Dan Garner 2016.

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Abbreviations

CALS Cheshire Archives and Local Studies

CCC Cheshire County Council

CHER Cheshire Historic Environment Record

CWaC Cheshire West and Chester

DTM Digital Terrain Model

OAN Oxford Archaeology (North)

PRO Public Record Office

SREP Sandstone Ridge ECOnet Partnership

Chapter 1 Background to the Habitats and Hillforts Project

Jill Collens and Dan Garner

The Cheshire hillforts (Figure 1.1) are some of the most conspicuous features of the prehistoric landscape in Cheshire. Outside of archaeological circles, however, they have almost become 'lost' in the landscape and in the awareness of the wider community, due to land use changes in the centuries following their construction. Various studies have been undertaken on the hillforts of Cheshire (see Chapter 2), but even so, there is limited information about these sites in terms of chronology, function, occupation history, economy and status. Considering that these hillforts stand as such important elements of the prehistory of the region, the lack of information about them is a major gap in our understanding.

The Habitats and Hillforts of Cheshire's Sandstone Ridge Landscape Partnership Project was focused on six of the Cheshire hillforts and their surrounding habitats and landscapes. It aimed to develop understanding of the chronology and role of the hillforts, raise awareness of these special assets and the issues affecting them, improve their condition and their physical linkages with the surrounding landscape and encourage more people to enjoy them and to take an active role in their management.

The Habitats and Hillforts Project was funded by the Heritage Lottery Fund through the Landscape Partnership Scheme programme, which focuses on areas of distinctive landscape character. The Project was based on the Cheshire Sandstone Ridge, which runs north to south in Central Cheshire and has been identified as a distinct character area by the Countryside Character volume for the Northwest of England (Countryside

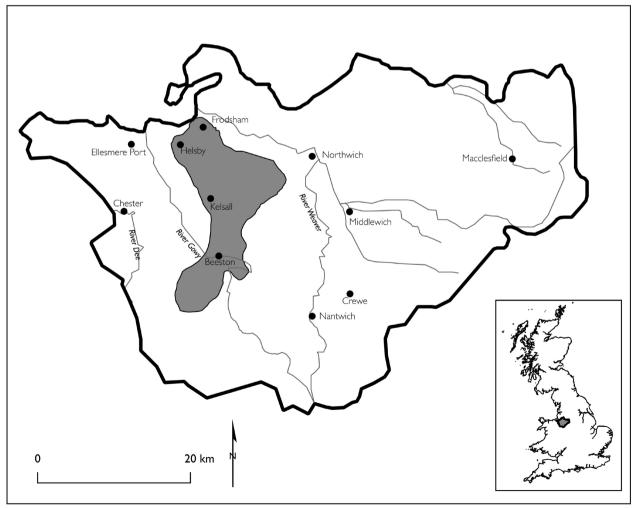


FIGURE 1.1 LOCATION OF THE STUDY AREA WITHIN CHESHIRE © CROWN COPYRIGHT. REPRODUCED BY PERMISSION OF THE CONTROLLER OF HMSO LICENCE NO. 100053067

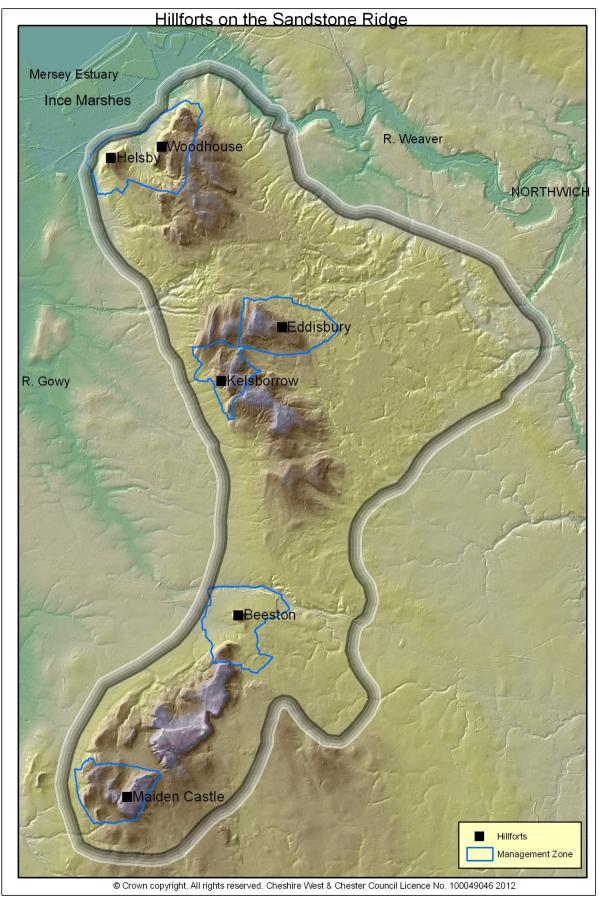


FIGURE 1.2 THE SANDSTONE RIDGE ECONET PARTNERSHIP (SREP) AREA AND THE HILLFORT MANAGEMENT ZONES OF THE HABITATS AND HILLFORTS PROJECT.

Commission 1998: 145–152). This area formed the limits for an EU LIFE ECOnet network which was given the title of the Sandstone Ridge ECOnet Partnership (SREP), formed as part of an initiative by Cheshire County Council (CCC) in 2005.

The SREP area (Figure 1.2) was used as the basis for the Habitats and Hillforts Project, which focussed on six hillfort management zones on the Ridge, rather than the entire SREP area. The Project was developed by specialist staff in the Natural and Historic Environment Team of the former Cheshire County Council and was granted Phase one funding in 2007. Following the award of Phase Two funding, it was launched as a three year project in October 2008. During the life of the project, local authorities in Cheshire were reorganised and so the Project was transferred to one of the new successor authorities, Cheshire West and Chester (CWaC), in 2009.

Towards the end of the initial three years it was agreed that a contingency sum within the original budget could be used to extend the project for an additional 12 months (ending October 2012).

The lead partner in the Project was CCC and then CWaC, and the partnership consisted of a range of organisations which came together to share approaches to managing environmental and heritage assets on the Sandstone Ridge. The partners were English Heritage (now Historic England), the National Trust, the Woodland Trust, the Forestry Commission and private landowners, all of whom owned, or had a management interest in, the six hillforts.

The project included six management zones, within which work would be focused (Figure 1.2). Each zone was centred on a prehistoric hillfort and running

Hillfort	Other names	NGR	National Heritage list for England name	National Heritage List for England number	Heritage category	Habitats & Hillforts Management Zone	Other prehistoric enclosure sites
Helsby hillfort		SJ 4926 7539	Promontory fort on Helsby Hill 250m northwest of Harmers Lake Farm	1013292	Scheduled monument	Frodsham	
Woodhouse hillfort	Woodhouses	SJ 5105 7572	Hillfort on Woodhouse Hill 500m west of Mickledale	1013297	Scheduled monument	Frodsham	
Eddisbury hillfort	Castle Ditch	SJ 5532 6933	Eddisbury hillfort east of Old Pale Farm	1013295	Scheduled monument	Delamere	Oakmere promontory
	Merrick's Hill						fort (No. 1013291 Scheduled monument)
Kelsborrow hillfort	Kelsborrow Castle	SJ 5315 6750	Kelsborrow Promontory Fort On Castle Hill 300m south west Of Castle Hill Farm	1013294	Scheduled monument	Willington	
Beeston Castle		SJ 5379 5919	Beeston Castle; Medieval Enclosure Castle and Site of Late Prehistoric Hillfort	1007900	Scheduled monument	Bickerton	Peckforton Mere promontory fort (No. 1013481 Scheduled monument)
Maiden Castle		SJ 4976 5289	Maiden Castle Promontory Fort on Bickerton Hill 700m west of Hill Farm	1013293	Scheduled monument	Bickerton	

FIGURE 1.3 THE HILLFORTS OF THE HABITATS AND HILLFORTS PROJECT.

from north to south these include: Helsby Hill; Woodhouse Hill; Eddisbury Hill; Kelsborrow Castle; Beeston Castle; and Maiden Castle. The management zone at Beeston Castle also included the suspected prehistoric enclosure on the edge of Peckforton Mere. All the hillforts have statutory protection as scheduled monuments (Figure 1.3).

During the Development phase of the Project, various surveys were undertaken in order to develop the detail of the Delivery phase. Two archaeological surveys were commissioned and delivered by Oxford Archaeology (North) during this phase - an Archaeological Desk-Based Assessment and an Archaeological Condition Assessment (OAN 2008a; OAN 2008b).

The Delivery phase of the Habitats and Hillforts LPS was divided in to four programmes of work:

- Programme 1: Habitats of the Ridge
- Programme 2: Hillforts of the Ridge
- Programme 3: Access and interpretation
- Programme 4: Training and volunteering

Within Programme 2 (Hillforts of the Ridge) there were two main threads of work which were divided between *Understanding hillforts* and *Restoring hillfort heritage*. The understanding hillforts work included a series of non-invasive surveys and training excavations for members of the local community, whilst the restoring hillforts heritage involved management work to improve the condition of the earthworks.

The Habitats and Hillforts Project team included three dedicated staff: Ellie Morris (née Soper) the project manager; Colin Slater the ecological project officer, responsible for the 'Habitats' element of the Project, and Dan Garner the archaeological project officer, responsible for the 'Hillforts' programme of the Project. The core team was supported by other council officers as required and most notably Jill Collens (archaeology) and Alun Evans (natural environment) from the Natural and Historic Environment Team. The Project had a dedicated steering group under the chairmanship of the late Andrew Deadman, with representatives of the various land owning bodies associated with the project, including representatives from English Heritage, the National Trust, the Woodland Trust and the Forestry Commission, as well as private land owners and other key stake holders.

Over the four year life of the project, archaeological investigation and management was carried out at six hillforts under Programme 2. Much of this work was interlinked with work in the other programmes which delivered:

- 40 hectares of new/restored habitats
- 1300 metres of restored hedgerows

- 700 metres of sandstone walls restored
- 700 metres of footpath improvements
- 4.1 kms of permissive access
- A range of promotional material, including booklets, leaflets, and on-site interpretational panels and a dedicated website.
- A range of events and activities including a guided walk programme, reminiscence workshop and community workshop
- Over 350 training and education days

The Habitats and Hillforts Project came to an end in 2012, but its legacy and that of SREP has been passed to the Sandstone Ridge Trust, which was formed in 2011, to secure funding to protect and manage the special landscape of the Ridge. The work of the Trust is based on the themes of improved understanding of cultural heritage, landscape-scale improvements for wildlife and increased awareness and access.

Methodology

All six of the hillforts in the Habitats and Hillforts Project were on the English Heritage 'At Risk' register at the start of the work, due to issues regarding erosion and lack of effective management. A Condition Assessment carried out in 2007 (OAN 2008b) identified agricultural activity, predominantly ploughing, erosion through visitor pressure and vegetation encroachment, causing root damage to sub-surface deposits, as the principal threats. Management recommendations were proposed, including a reduction in ploughing, control of visitor movement, removal of scrub, bracken and trees and control of burrowing animals, as well as the implementation of management agreements. Areas and opportunities for further archaeological investigations were also identified to evaluate the surviving resource and the potential damage to sub-surface archaeological deposits.

A programme of archaeological and management work was developed from the findings of the Condition Assessment and Scheduled Monument Consent was granted for this work at the start of the Project. In addition, each individual excavation was accompanied by an approved Project Design setting out the justification for undertaking the work. It was accepted that the primary justification was linked to ongoing management issues, identified during the Condition Assessment (OAN 2008b), such as rampart destabilisation through agents such as plant growth or animal burrowing. There was also an agreement that re-excavation of previous archaeological trenches was an acceptable proposition. Exposing original sections and conducting targeted sampling for scientific analysis had the potential to answer some of the questions of chronology that have hampered discussion of the hillforts for the last century and would result in limited fresh damage to the monuments. For this reason, all of the campaigns of excavation reported in this volume rely heavily on reexcavation of earlier trenches.

Excavation was carried out at four of the hillforts, the exceptions being Beeston Castle which had already been the subject of a campaign of excavation between 1968 and 1985; and Maiden Castle, where conducting excavation during the final year of the project would have had major impacts on finance and post-excavation. All the work was carried out as training excavations and was directed by Dan Garner with supervision from professional archaeologists provided by an archaeological contractor (Earthworks Archaeology); the bulk of the labour was carried out by, in excess of, 200 volunteers with varying levels of previous archaeological experience. In addition excavations were carried out at Merrick's Hill, part of Eddisbury hillfort, by the University of Liverpool Archaeology Field School with eighty students taking part.

Non-invasive work in the form of topographic and geophysical survey was attempted, to a greater or lesser degree, at all six hillfort sites, as well as on two mere side enclosures at Peckforton and Oakmere. Topographic survey was carried out by archaeological contractors (Archaeological Services, WYAS) and Liverpool University. Geophysical survey was carried out by a specialist commercial geophysics contractor (Archaeophysica Ltd); as training sessions led by an archaeological contractor (Engineering Archaeological Services Ltd), and as student training exercises by Liverpool University's School of Archaeology, Classics and Egyptology and by the History and Archaeology Department at Chester University.

It was acknowledged at the start of the Project that full publication would probably have to be achieved outside the project, due to the timescales inherent in archaeological post-excavation and the HLF policy at the time, of not funding post-excavation. However, grey literature reports were produced for all the work carried out, as part of the conditions of Scheduled Monument Consent and these are housed in the Cheshire Historic Environment Record (CHER).

At the end of the Project in December 2012, a popular publication on the results of the archaeological work was produced, entitled *Hillforts of the Cheshire Sandstone Ridge* (Garner 2012). This contains many of the essential pieces of new dating evidence accumulated during the four years of the Project, along with a brief consideration of the implications for the synthetic study of these hillforts.

There was also a need to try and place the hillforts within their landscape setting as part of the Project; however, the earlier desk-based research had demonstrated how difficult this was going to be owing to the lack of demonstrable prehistoric features in the landscape. Cheshire has been heavily affected by agricultural improvement meaning that little in the way of extant earthworks survive in the landscape. The heavy clay soils which dominate the Cheshire Plain are also not conducive to revealing cropmarks of ploughed out archaeological features through aerial photography, nor are they well suited to large scale geophysical survey. Even with resources such as the Cheshire Historic Landscape Characterisation Project and a suite of aerial photographs spanning the 1940s to the early 21st century, much of the landscape remains a prehistoric blank. It was clear from the beginning that it would not be possible to achieve the sort of results seen on comparable projects such as the Wessex Hillforts Project (Payne, Corney and Cunliffe 2006), or the Hillforts of the Northumberland National Park (Oswald, Ainsworth and Pearson 2006). An alternative approach was therefore required.

Two possible avenues of enquiry were pursued by the Project to try and add new insights in to the landscape setting of the hillforts. The first was the acquisition of a lidar data set, but unfortunately large areas of the Ridge were not covered by existing surveys. As a result, in 2010 the Project commissioned a bespoke lidar survey for the entire SREP area (200 km²) at a resolution of 0.5m (Chapter 7, this volume). Secondly, some of the hillforts were very close to ancient mere sites which had not been fully studied from a palaeoenvironmental perspective; in particular there had been a lack of scientific dating to accompany previous palynological study. As a result, the Project worked in partnership with the Department of Geography at Liverpool University to extract and analyse fresh cores from both Peckforton Mere and Hatchmere (Chapter 14, this volume). To this was added some commercially funded palaeoenvironmental work undertaken on the Mersey estuary at Ince Marshes by RSK Environmental Ltd (Chapter 13, this volume), all of which has added to our understanding of the environment in the prehistoric period.

The papers presented within this monograph are all derived from the work undertaken as part of the *Understanding hillforts* thread within Programme 2 of the Habitats and Hillforts Project. As outlined above, this has involved a range of organisations and volunteers.

The papers are divided in to sections, according to type of work undertaken. They have largely been written or synthesised by Dan Garner, the Archaeological Project Officer, or by specialists and archaeologists working with the Project to bring an added dimension to the hillforts.

The introductory section contains a chapter on the previous archaeological work on the hillforts of the Sandstone Ridge (Chapter 2). Section 1 is a review of some of the main archive material relating to the Ridge, and includes a review of the large lithic collection from the area

around Woodhouse hillfort by Dr Ian Brooks (Chapter 3) and a re-assessment of the archive of the excavations carried out at Eddisbury hillfort in the 1930s by W. J. Varley, by Richard Mason and Dr Rachel Pope (Chapter 4). Section 2 presents the results of non-invasive survey carried out on the ridge, including earthwork surveys of three of the hillforts by Mitchell Pollington (Chapter 5). Ten geophysical surveys were carried out as part of the Project and these are summarised by Dan Garner in Chapter 6. The full reports of these surveys are included in the online appendix. The results of the lidar survey of the ridge, commissioned by the Project, is summarised by Dan Garner in Chapter 7. Section 3 contains reports on the excavations on four of the hillforts, carried out by the project between 2009 and 2011, by Dan Garner (Chapters 8–10 and 12). An interim statement on the excavations carried out at Merrick's Hill, part of Eddisbury hillfort, by Liverpool University is presented in Chapter 11, by Richard Mason and Dr Rachel Pope. Section 4 contains reports on palaeoenvironmental work carried out as part of the project, including work undertaken to investigate the palaeoenvironmental record at two meres located just off the Sandstone Ridge, by Professor Richard Chiverrell, Heather Davies and Pete Marshall (Chapter 13). The final chapter in this section by RSK Environmental Consultants, was carried out as developer-funded fieldwork and is included to provide a wider environmental context to the hillforts on the Ridge (Chapter 14). The final discussion section summarises all the work carried out as part of the Project and the implications for our understanding of the Cheshire hillforts.

The archaeological work carried out as part of the Project also provided data which has implications for the management of hillforts and this is summarised for individual sites in the chapters in Section 3.

Landscape setting and natural topography

The Cheshire Sandstone Ridge is a small irregular ridge of Triassic sandstone overlain by brown sands and podzols (Furness 1978) which is aligned north to south across the Cheshire Plain from Frodsham in the north to Malpas in the south. The Ridge reaches

heights of between 123m OD at Helsby in the north, and 227m OD at Raw Head in the Bickerton Hills to the south, but is still very prominent as it rises up sharply from the Plain. The Ridge is most dominant in the north but is discontinuous and becomes more broken to the south where it narrows to form small but abrupt ridges with gaps at Beeston and Bickerton. Glacial activity has had an effect by rounding off outcrops of sandstone and creating meltwater channels and lake beds; the northern part of the Ridge is flanked by fluvioglacial deposits of sands and gravels which have served to broaden and extend the elevated land to the east. These deposits are punctuated in places by a number of shallow meres and mosses which are prevalent in the Delamere area.

The modern landscape is largely pastoral and dominated by dairying which has encouraged a predominant land cover of grass with leys, improved grassland and permanent pasture offering grazing, silage and hay. Some arable and mixed farming is present on the more easily drained soils along the slopes of the Ridge where fodder crops are grown to provide winter feed as well as some commercial crops such as potatoes, cereals and rape. Hedges are predominantly of hawthorn and blackthorn with hedgerow trees being mainly mature oak with some ash and sycamore. Modern activity in the form of sandstone quarrying and the extraction by the aggregate industry of sands and gravels has substantially altered the land form of the Ridge in some places, most notably in creating new water bodies in the Delamere area.

Woodland cover is higher on the Ridge than the surrounding Plain, comprising ancient woodland and post medieval conifer plantations with broadleaved and mixed woodland on the steeper slopes or along the sides of watercourses. Around the central area of the Ridge, Delamere Forest contains extensive broadleaved and mixed woodland on the slopes and conifers on the gravelly soils to the east. Heaths and mosses are also common in this central area and are comprised of poorer quality pastures with woodlands of birch, oak, pine and alder and in places stretches of heath comprised of ling, gorse, bilberry and birch.