

Ridge, Rocks and Springs Project Handbook 2015

A VOLUNTEERS GUIDE



INTRODUCTION

The volunteer handbook is aimed at existing and new volunteers to the Ridge, Rocks and Springs project which was initiated in July 2014 by the Sandstone Ridge Trust and funded by the Heritage Lottery Fund.

The project is a volunteer led survey of wells, springs, and **quarry's**, graffiti and rock art across some 40 parishes that border and traverse the Sandstone Ridge in Cheshire.

The Ridge, where Cheshire rises from the plain in a series of rolling hills and dramatic sandstone cliffs, boasts a wealth of historic and natural heritage, from Iron Age hillforts to important heathland, and the project aims to understand how the sandstone and water supplies have enabled settlers, farmers and industrialists through the ages to develop this environment.

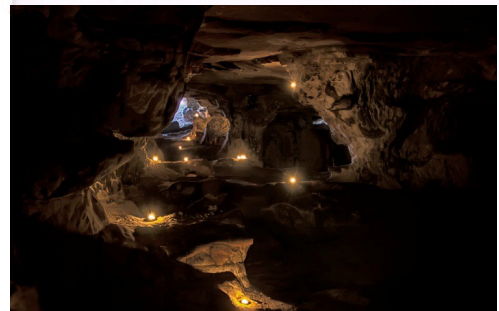
The focus is on quarries and methods of extraction, and on historic water supplies as well as springs with reputations for religious, magical or healing properties.

The discovery of a boulder with prehistoric carving from Eddisbury hill fort during recent excavations raised the tantalising possibility that other rock-carvings may exist locally and the project includes the examination of the rock faces for graffiti and other signs of human activity through the ages.

Much of this history is in danger: the rocks are eroding, quarries are being filled in, the wells are drying up and memories are fading.

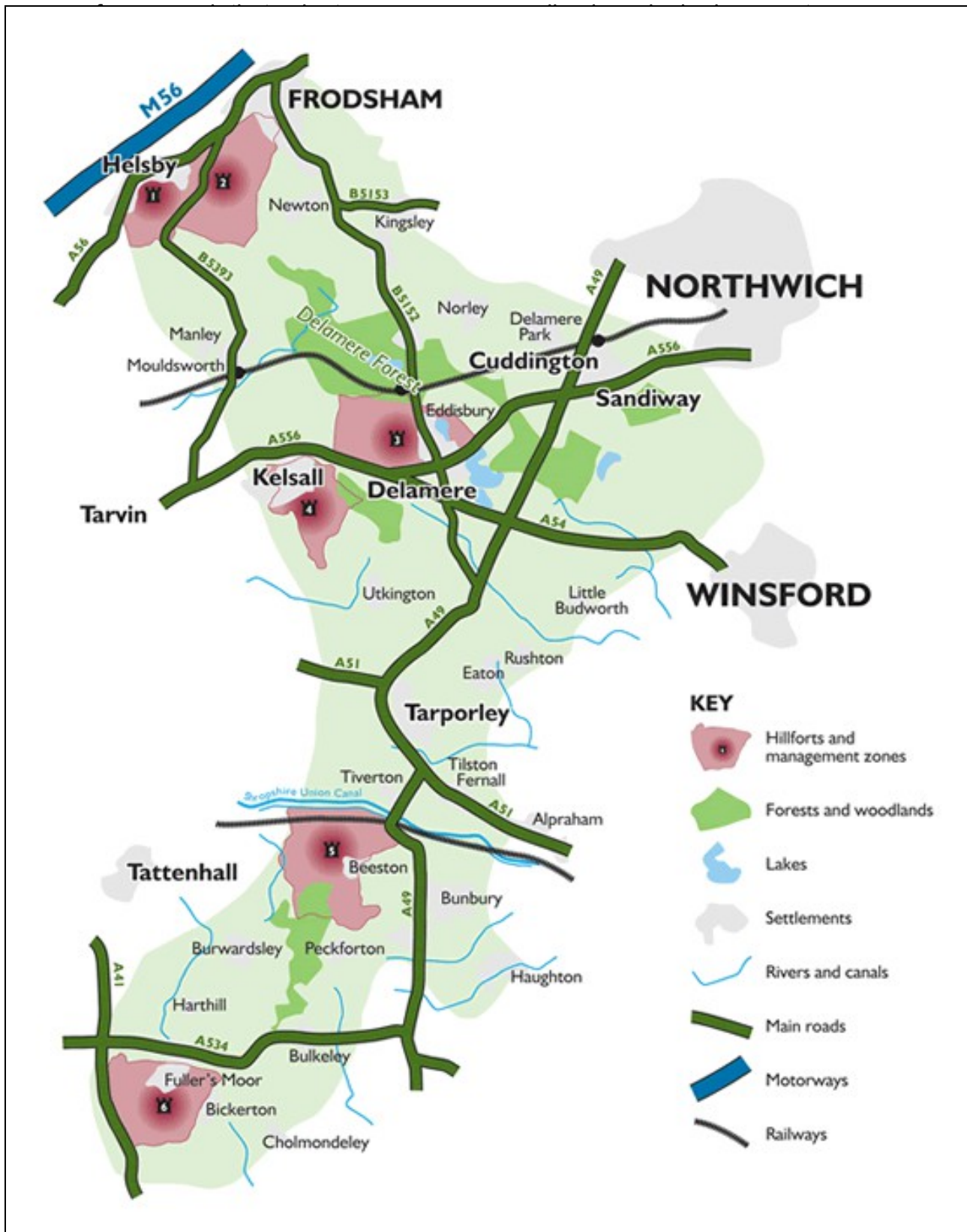
This is an important opportunity to rescue and record undervalued features of history.

The handbook aims to list the methods employed in the project , along with the useful links and



The Queens Parlour cave on Raw head.





The Project area covers 22,000 hectares or 10% of Cheshire

N1 Alvanley
 N2 Ashton Hayes
 N3 Crowton
 N4 Frodsham
 N5 Helsby
 N6 Kingsley
 N7 Manley
 N8 Mouldsworth
 N9 Norley
 C1 Clotton
 C2 Cuddington & Sandiway
 C3 Delamere
 C4 Iddingshall
 C5 Kelsall
 C6 Little Budworth
 C7 Oakmere
 C8 Rushton
 C9 Tarporley
 C10 Tiverton
 C11 Tilstone Fernell
 C12 Utkinton
 C13 Whitegate & Marton
 C14 Willington
 S1 Alpraham
 S2 Beeston
 S3 Bickerton
 S4 Broxton
 S5 Bulkeley
 S6 Bunbury
 S7 Burwardsley
 S8 Chowley
 S9 Duckington
 S10 Egerton
 S11 Harthill
 S12 Haughton
 S13 Larkton
 S14 Peckforton
 S15 Ridley
 S16 Spurstow
 S17 Tattenhall

RRS project – a Sandstone legacy

Although this a 'legacy' project from the previous Habitats and Hillforts scheme there is one major difference—you the volunteer! RRS is in 'contrast' 'volunteer led' and relies upon self motivated research either at the desk or on the Sandstone Ridge.

To facilitate this we have divided the project area into 3 sections, North, Central and South, each with a lead volunteer who is a point of contact and will help coordinate the work in their local parishes.

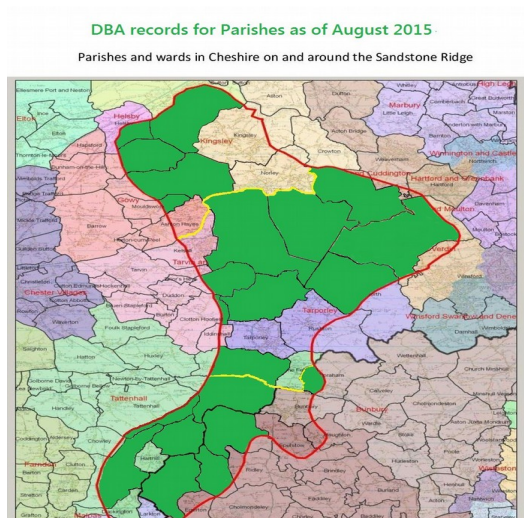
Northern Area: Volunteer contact: David Joyce
[mailto:david.joyce.associates@btinternet.com?subject=Volunteer Northern area RRS](mailto:david.joyce.associates@btinternet.com?subject=Volunteer%20Northern%20area%20RRS)

Central Area: Volunteer contact : Dr. Peter Winn
[mailto:peter@winnbrookcottage.freemove.co.uk?subject=Volunteer Central area RRS](mailto:peter@winnbrookcottage.freemove.co.uk?subject=Volunteer%20Central%20area%20RRS)

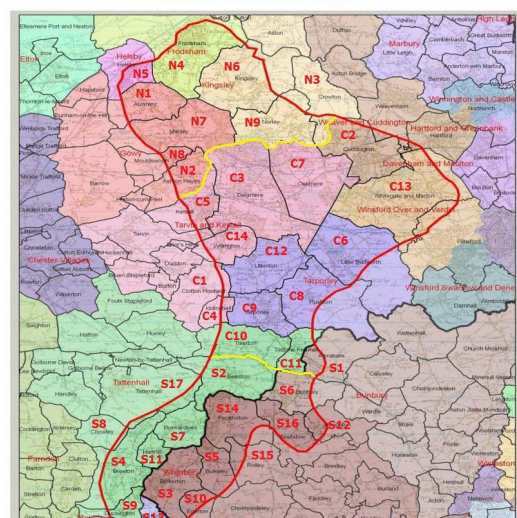
Southern Area : Volunteer contact: RRS project coordinator Gary Ball

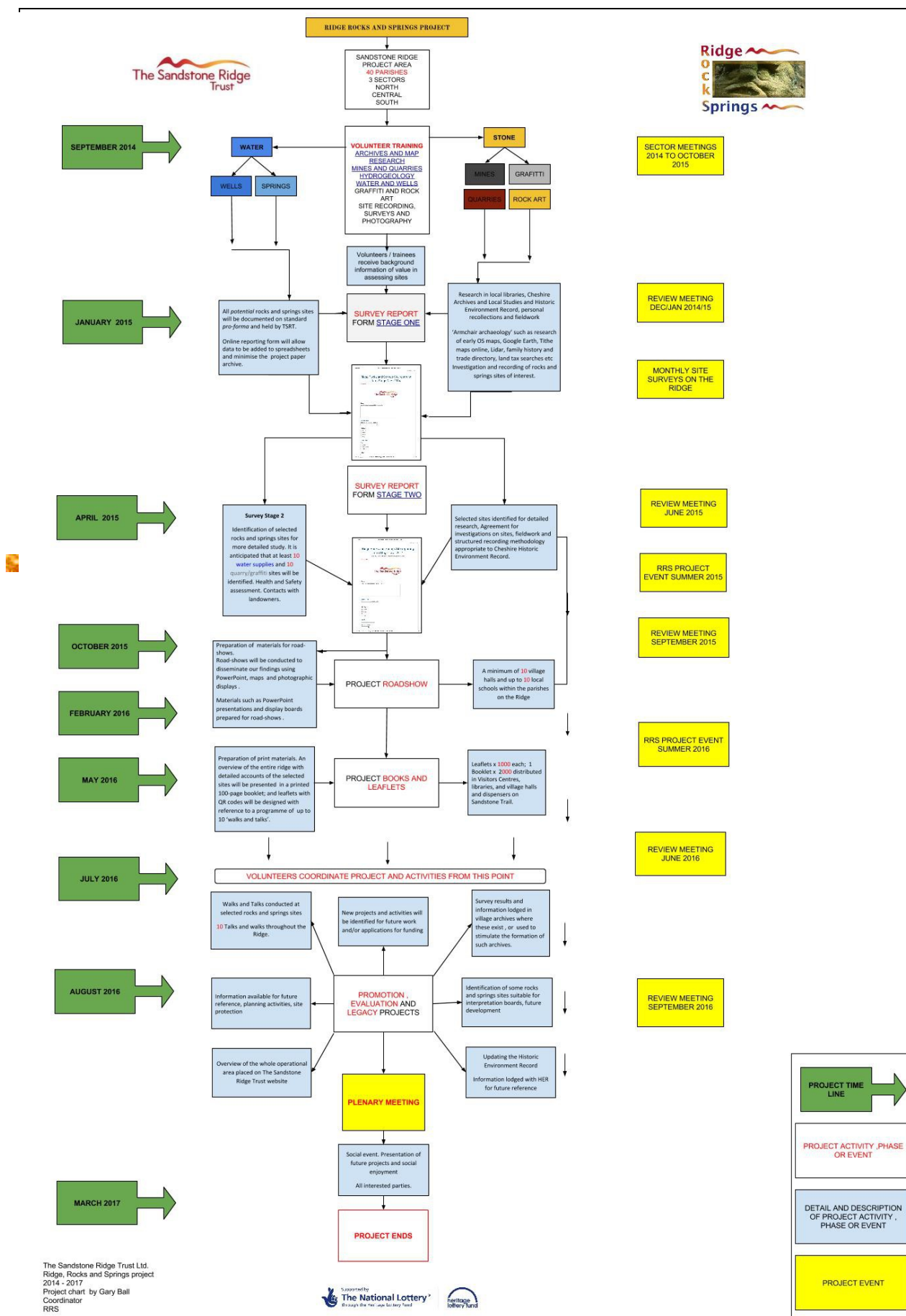
[mailto:srtcoordinator@gmail.com?subject=Volunteer Contact Southern area RRS](mailto:srtcoordinator@gmail.com?subject=Volunteer%20Contact%20Southern%20area%20RRS)

The parishes in the survey area , with their project parish reference number



Parishes and wards in Cheshire on and around the Sandstone Ridge
 RRS PROJECT PARISH REFERENCE NUMBERS





Project Plan and methodology



The project will identify, locate, investigate and record the water supplies and quarries on the Sandstone Ridge. The project will investigate sites in publicly accessible areas and also those on private land in cooperation with the landowners. Much of the work will be through desk studies but field investigation will also be undertaken. It can be described as a '*landscape survey*'.

Landscape survey is a research tool for furthering understanding of the historic environment through whatever means are most appropriate. It underpins conservation, protection and interpretation and usually combines two strands of investigation: field survey and desk-based research.



Field survey is usually, but not exclusively, directed at the rural landscape. It involves the study of a wide range of evidence that is visible on the ground surface. This includes man-made features, such as earthworks, buildings, ruined structures and managed vegetation but also natural geological and ecological phenomena.



Field survey has a broad chronological scope and requires an understanding of the potential Influence of ancient land-use on more recent developments and, conversely, of the impacts of recent land-use on earlier features.



It can be applied to large or small areas, and at different scales and levels of resolution, but always relies upon the principles of careful observation and analysis of field evidence of all types and periods. It is an especially powerful tool for understanding the development of a landscape when coupled with desk-based research into other information sources.

Aims :

1. To work with local communities in the process of investigation, recording and enjoyment of this unique environment.
2. To create new opportunities for volunteers and attract new people into an historic appreciation of the Sandstone Ridge.
3. To increase the knowledge of historical exploitation of the rocks and water of the Sandstone Ridge.
4. To increase wider public awareness of the value of these historic resources through traditional publication and electronic dissemination.

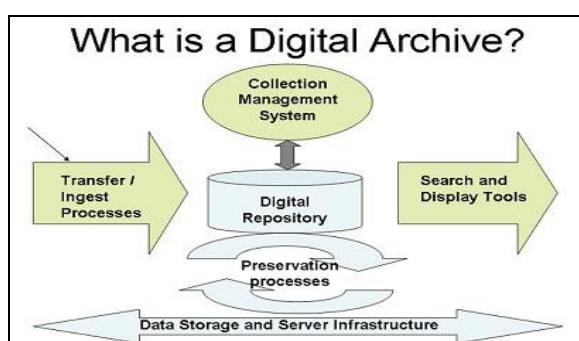
Workshops and Training in :



Recording techniques, including surveying, digital photography in archaeology, use of aerial photographs and maps and Lidar.

Documentary research, accessing the archive and records office, accessing museums collections, hydrology, geology and water and wells, quarry extraction techniques and digital archiving. All the slides from these and other project seminars are available on :

<http://www.slideshare.net/RRSproject>



Survey Stage 1

Research in local libraries, Cheshire Archives and Local Studies and Historic Environment Record, personal recollections and fieldwork.

‘Armchair archaeology’ such as research of early OS maps, [Google Earth](https://www.google.com/earth/), Tithe maps online, Lidar, family history and trade directory, land tax searches etc.

The project has a photographic reproduction license held at the library for volunteers to use.

Cheshire Archives



& Local Studies

Cheshire Record Office

Directions

Address: Duke St, Chester, Cheshire CH1 1RL

Phone: [01244 972574](tel:01244 972574)

Online Maps

The following links are useful starting points for working on historic maps online, at home and have been used extensively for the first stage of the project.



Magic

The MAGIC website provides authoritative geographic information about the natural environment from across government. The information covers rural, urban, coastal and marine environments across Great Britain. It is presented in an interactive map which can be explored using various mapping tools that are included. Natural England manages the service under the direction of a Steering Group who represent the [MAGIC partnership organisations](#).

[MAGIC online map data](#)

Cheshire West and Chester Council Interactive mapping

Click on Map Data and then take your pick of topics, particularly **Environment&Planning**, and Leisure & Culture and **designations**.

[CWAC Interactive mapping](#)



Cheshire Archives and local studies online Tithe maps and historic OS maps

Pick a township and you can compare two maps from different periods.

The Tithe maps are the oldest going back to the 1830s and if you haven't seen these twin maps before you may have some fun with them.

[Cheshire Tithe Maps online](#)

Revealing Cheshire's Past Database



This is the website for the Cheshire Historic Environment Record and will be a repository of the information that we hope to gather during our project, but it is worth going here to see what they might already have on-line (not a lot – that's why we're doing this!). You can enter as a guest but registering as a full user is free and well worth doing. The Historic Environment Record has other material that we can access in their offices and they will also answer queries by e-mail.

[Cheshire HER](#)

National Library of Scotland



Part of the interest and challenge in RRS is the volunteers input. Sharing resources and links to help in your research and the surveys is all part of the project. **Previously Pascale De Feyter, a central area** volunteer supplied a link to the digital maps available from the National Library of Scotland.

These are a higher resolution OS 6 inch maps than the Cheshire archives online resource and are easier to examine and print.

[National Library of Scotland](#)

OldMapsOnline- a search engine for historical maps



Developed out of a love of history and heritage of old maps. The project began as a collaboration between Klokan Technologies GmbH, Switzerland and The Great Britain Historical GIS Project based at the University of Portsmouth, UK thanks to funding from JISC. Since January 2013 is the project improved and maintained by volunteers and the team of Klokan Technologies GmbH in their free time.

You can contact the project team at:
info@oldmapsonline.org


[Old maps online](#)




All potential rocks and springs sites will be documented on standard pro-formae online survey form and held by TSRT , results are then used to create a data base. For this we used [Google forms](#) and a shared [Dropbox](#) (online cloud storage of digital photographs)




Welcome to the new Google Forms!




1. Create
Make forms quickly with keyboard shortcuts and auto-saved changes



2. Share
Work together to build forms with others in real-time



3. Send
Invite people to respond via email and social networks



4. Analyze
Send responses to a spreadsheet for powerful analysis

Ridge Rocks and Springs Site reporting form Stage One: 2014

The Sandstone Ridge Trust

Name:
[Text box]

Reporters name:
[Text box]

Site Type:
☐ Grotto
☐ Stone
☐ Water
☐ Other

If Water then:
☐ Well
☐ Spring
☐ Pumphouse
☐ Other

Parish:
[Dropdown menu]

RRS Site reporting form : S1TEST (Responses)

Timestamp	Name	Reporters name	Site Type	Parish
10/27/2014 16:47:35	Willington Mill farm	Peter Snape	Water	Willington
10/27/2014 16:48:56	Willington Mill farm	Peter Snape	Water	Willington



The online google form can be completed on a PC, laptop, mobile smart phone or tablet. The results are automatically added to the data set and the responses then analysed by the application to produce charts and graphs for interpretation.

A guide to surveys on the Ridge

Before You Start

Undertaking a survey should be an enjoyable task. To begin with it is worth stating that, as you become more experienced in undertaking surveys, you will find that you develop your own styles and techniques. The notes contained in this handbook are designed as a guideline only - and represent the minimum level of information required to undertake a successful survey. Many volunteers provide far more information than is contained on the Stage One report forms. In addition, many people find that it is a far more rewarding experience to undertake surveys in small groups.



Choosing your site

Although we aim to survey many of the quarries, wells and graffiti locations in the parishes in the project area it is worth choosing your first sites with some care. The time of year will influence the amount of vegetation and visible remains, and the weather will influence the going underfoot. Check that the site you wish to survey has public access.

Preparation

Before carrying out a survey we recommend that you undertake some research upon your chosen site and examine the maps.

Equipment

We expect volunteers to consider their health and safety first before embarking on a survey in the field, including appropriate foot ware, clothing and carrying usable maps and a telephone in case of emergency.

To undertake a successful survey itself you will require a minimum level of equipment. This should include, but not be limited to, a digital camera, light source (torch, lamps, etc), photometric scale, copies of the report form or have it on a available device, tape measure, pen/pencil, bluetack, spare batteries.

For larger scale surveys it is also recommended that you have camera tripods and portable high-powered light sources.

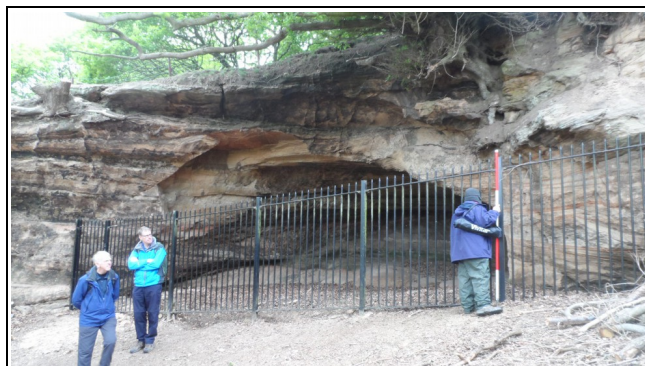
We supply volunteers with a project ID card if they so wish if they want confirmation to show private landowners.

Lighting

To identify existing graffiti for example it is usually necessary to shine a light source at an oblique angle across the surface (raking light). This will usually be sufficient to spot even the shallowest of marks. There are no set rules or guidelines about the light source that you use and everyone has their own favourite. In many cases the choice of light source will depend upon the surface you are examining. The very white light emitted by LED torches often works well on bare stone surfaces, whilst larger halogen lamps are found to be useful on rougher textured surfaces. The key is to experiment and discover what works best for both you and your chosen location.

Small torches and scales fit easily into a coat pocket and can be carried with you during any visit.

Scales It is essential that you try and include a scale in any photographs that you take. Small scales are available, or can be printed **form** the end of this guidebook for use.. These can usually be attached to bare surfaces by using a small piece of blue-tack or similar. However, if the surface of the stonework is friable, please do **NOT** use this method - as it may damage the surface. In these cases it is recommended that you simply hold the scale in place whilst the images are taken. We also recognise that, in some cases, particularly when working alone and in challenging conditions, it may not be possible to include a scale in every single photograph. We therefore recommend that a scale is included in at least one of the images of a particular location, site or feature, or a separate note is made of the dimensions.



Photographs

Taking photographs of graffiti especially can be challenging. It is well worth experimenting with a variety of light sources and angles to obtain the best results. If the images have too much light they can often look bleached and difficult to interpret. Too little light, or not enough contrast, can be just as frustrating. We recommend the use of digital cameras so that poor images may be easily deleted without cost. A simple 'point and press' camera will often give as good results as many thousands of pounds worth of camera equipment.

Documentation

The project relies on digital recording with report forms that are sent online. A photographic record sheet is also useful to match up to this and record the ID number of the photo. An example is provided at the end of this handbook.

Survey Stage 2

Identification of selected rocks and springs sites for more detailed study.



The source of 'Manley stone' as described for Roman grave slabs in the Grosvenor museums collection is one example of such a study being undertaken as part of Stage Two.

It is anticipated that at least 10 water supplies and 10 quarry and 10 graffiti sites will be identified.

Selected sites identified for detailed research, Agreement for investigations on sites, fieldwork and structured recording methodology appropriate to Cheshire Historic Environment Records.

Volunteers suggestions as to which sites were to be included in the Stage Two research



A volunteer recorded this rare chance to photograph a well at Helsby that had been uncovered

- Volunteers asked as to their preferences for Stage 2 research topics and also to indicate who might be interested in writing copy for the book as well as creating walks with leaflets.
- Further research in the Cheshire Archives and Grosvenor Museum now possible and the workshops on quarrying have suggested further practical work.
- This will be conducted under the three generic headings that might be expected to form the structure of the book to be published in Stage 3.



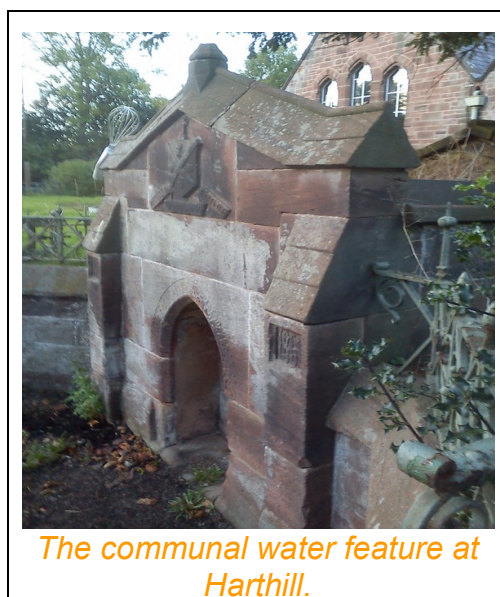
Beeston castle well, the deepest recorded in Cheshire.

Stage Three

The research and data is to be collated for inclusion in a community publication and expects to tell interesting and relevant stories attached to the sites selected. The chapter titles for the book are approximately as follows:

Water:

- 1) Community and industrial water supplies
- 2) Distinctive holy and healing wells or those with names
- 3) This chapter will have strong emphasis on the historic development of water supplies from earliest records to the introduction of the mains. We hope that we can produce a timeline of how this developed across the Ridge.

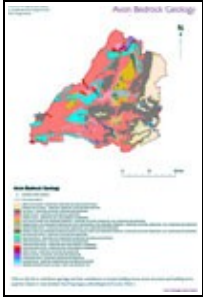


The communal water feature at Harthill.

Stone extraction:

This chapter will also seek to have a historic framework but further work should be attempted in the analysis of the stone and matching it to its destination in specific buildings.

Data for stone sources and buildings



For each listed county, including Cheshire, there are 3 spreadsheets that can be downloaded:

[Building Stones](#)

[Stone Buildings and Villages](#)

[Building Stone Quarries](#)

http://www.bgs.ac.uk/mineralsuk/buildingStones/StrategicStoneStudy/EH_atlases.html.

Each of these spread sheets **cross reference's** each other.

Quarrying Techniques

The following links include aspects of quarrying methods for (but not exclusively) sandstone.



The Art of Splitting Stone, Early Rock Quarrying in Pre-industrial New England, (Only first few pages downloadable free)

[1630-1825 by Mary and James Gage](#)

Quarry Scape's guide to ancient stone quarries Fact Sheet 5



An **informative and simplified** data sheet on Principles Of Stone Extraction in ancient times, covering the three principle methods used: levering, splitting and channelling. Most of which seem to have carried on into the 19th century.

<http://www.quarryscapes.no/text/Publications/factsheet5.pdf>

Peakscan: Millstone Images 5-Quarry features



http://www.peakscan.freeuk.com/millstone_quarry_features.htm

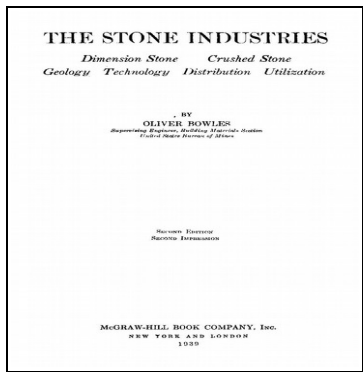
Australian Sandstone Quarry



Video commemorating the closure of an old quarry with some interesting glimpses of a pick being used and some marks on finished stone

<https://www.youtube.com/watchv=EmMxtRt3Suo&feature=youtu.be>

The Stone Industries by Oliver Bowles, 1939



Book considers all aspects of stone and quarrying in the US.

Downloaded with the 'Abbyz' option. Quarry methods p82, Quarry methods in softer sandstones. Quarry processes on p. 83 detail channelling methods and later on p. 88 Wedging.

<https://archive.org/details/stoneindustries032694mbp>

(Links provided by David George 01.12.2015)



American website with a clear description of techniques.
http://www.stonestructures.org/html/quarry_methods.html



Making a mark: shelters, faces and graffiti

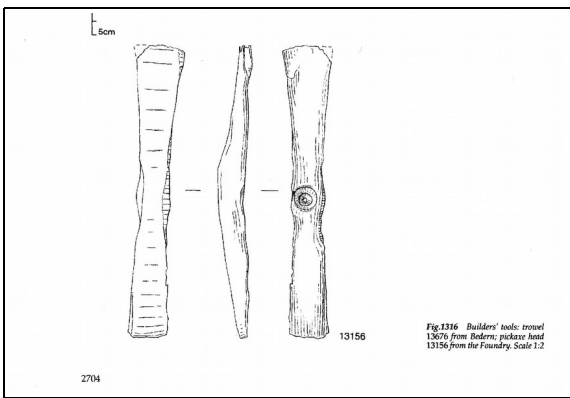


Beeston castle stone carving within caves, reproduced with digital enhancement as part of the project.



This chapter may include some speculation about historic rock art but have as its main aim the recording and discussion of existing features that are likely to be lost to weathering.

Several of these sites will need to be revisited for high resolution 3d imaging and detailed recording whilst there may also be opportunities to identify sites for future excavation, conservation and reproduction.



Traditional stone carver reproduces the Beeston crag stone head July 2015

Stone working Tools and Tool marks W. Wootton, B. Russell, and P. Rockwell



“Stone carving is generally a conservative craft. There are only a limited number of ways to shape stone and broad similarities in technique can be noted all around the world and throughout history.”

http://www.artofmaking.ac.uk/media/uploads/uploads/stoneworking_tools_and_toolmarks-wootton_russell_rockwell-v1.0.pdf



Heads and tales: Archaic heads and the oral tradition

".. the image of the human head appears to stand for a kind of gatekeeper of the threshold, or even a guide to, the otherworld regions. The motif therefore also offers a clue to the pagan and superstitious conception of where the otherworld may be contacted. At such points we may also expect to encounter, as we do, folklore relating to witches, fairies and other cross-boundary beings, hauntings or paranormal phenomena..

http://etheses.whiterose.ac.uk/3472/2/298881_vol2.pdf



[Six tools that are revolutionising archaeology by helping us find sites without digging](#)

Stage Three

The final, volunteer led stage of this project aims to produce guided walks and accompanying leaflets, a book based on the results of Stage Two and a series of road shows across the project area to share the discoveries to local communities and schools. This is planned for 2016 to 2017.

"The Ridge contains hidden clues as to the way our ancestors lived and how this part of Cheshire developed into what it is today. By delving into this history, volunteers will not only expand their knowledge and learn lots of new skills, but it will also provide a unique record of the area for others to learn, enjoy and be inspired by."

Sara Hilton, Head of the Heritage Lottery Fund North West:

Version 2.0 December 2015

Ridge, Rocks and Springs Project 2014-2017

The Sandstone Ridge Trust Ltd

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Gadbrook Park

Northwich

Cheshire

CW9 7UD

www.sandstoneridgetrust.co.uk

Company number 7673603

Charity number 114447

Ridge Rocks and Springs Project 2015.

Stage One field survey report form Recording Date :

Recorder:

FEATURE No.	G(Graffiti)	R(Rock art)	OS Map Ref	GPS	Photo number
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- 002
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FEATURE No.	G(Graffiti)	R(Rock art)	OS Map Ref	GPS	Photo number
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FEATURE No.	G(Graffiti)	R(Rock art)	OS Map Ref	GPS	Photo number
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- 038
- 039
- 040

Simple Timeline Of Human History

