

A guide to
archaeological
fieldwork in Devon

UNIVERSITY OF EXETER AND NATIONAL HERITAGE LOTTERY FUND

Exploring Archaeology Project



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Introduction

Since 2001, the Department of Archaeology at the University of Exeter (supported by Heritage Lottery Fund, University of Exeter and Devon County Council), has run a number of community archaeology projects in Devon, Somerset and Cornwall. One of the desired outcomes of these projects was to create the means in which local people could conduct their own research and fieldwork.

Thus the aim of this guide is to equip people with some of the methodologies used to research the past. The guide does not provide a definitive list of methods but ones that are commonly used by both academics and amateurs. It is intended to be used by anyone researching the archaeology/history of their parish or village. However, whilst taking a landscape focus, some of the methods will be useful for those whose research is not landscape orientated.

There is nothing difficult or mystifying about delving into the past of a village, or a parish, it just takes time, dedication

and a willingness to spend hours wading through documents and sometimes conducting fieldwork when the weather may not be at its best.

Before conducting any form of research, it is best to decide what it is that you want to research. Most groups would have already begun doing some form of research, perhaps a neighbour has heightened your interest, or you have a document that mentions something curious about the past of your village/parish, or a local folk story has roused your interest. Additionally, you may be curious about some lumps and bumps in a field or why pieces of flint/pottery are found in one particular field, but not in a neighbouring one. Once you start asking such questions, it is possible to begin to answer them through both documentary research and fieldwork.

However, it is important to remember that the past is not the preserve of one individual; it belongs to everyone. Therefore, when embarking on such an endeavour, you must always consider what you are going to do with the data when you have finished your research. Every time you conduct documentary analysis or fieldwork, record your findings and activities. Think about how you want to pass on your research, and who you want to be able to access it. Your records should at least be

deposited in the Historical Environment Record (HER) (previously the Sites and Monuments Record, SMR), but preferably they should also be published in a journal such as the Devon Archaeological Society Proceedings, Transactions of the Devonshire Association or the Devon Historian – where they will be more accessible to interested parties.

To help you with your research, this guide is divided into two sections: Documentary Sources and Fieldwork. Following each section is a comprehensive list of useful web sites, groups, resources and institutions that will be of use during your research.

Documentary Sources

Devon has three records offices located in Plymouth, Exeter and Barnstaple, and there are also several local studies libraries including the Westcountry Library (Exeter), Barnstaple Local Studies Library, Torquay Central Library and Plymouth's Local and Naval Studies Library, all of which provide access to documents relating to Devon's rich past. The records offices also contain most of the counties Tithe Maps, First Edition OS 6 inch maps, estate maps and other valuable documents. The Records Offices and the Libraries are good starting points for conducting any local research and it is worth spending time in them getting to know how to obtain the documents you need. The staff will not necessarily know anything about the area that you are researching, but they will be able to advise you as to how to get the most of out of the facilities.

Devon's Historical Environment Records (HER) are located at County Hall in Exeter, Plymouth City Council Offices



and Torbay Council Offices. The registers contain lists of archaeological sites, areas field walked, aerial photographs, site surveys, Sites and Monuments Records (SMR) and bibliographic information. It is worth consulting the SMR and HER records to make sure that you are not repeating work that has already been done and to discover work that has already been undertaken in the area of your study. All these documents are accessible to the public but by appointment only.

Useful addresses

Record Offices

Devon Record Offices

Great Moor House
Bittern Road
Sowton
Exeter
EX2 7NL

01392 384 253
www.devon.gov.uk/record_office
email: devrec@devon.gov.uk

North Devon Library and Record Office

Tuly Street
Barnstaple
EX31 1EL

01271 388607
www.devon.gov.uk/record_office
email: ndevrec@devon.gov.uk

Devon Record Office – Plymouth:

Unit 3
Clare Place
Plymouth
Devon
PL4 0JW

01752 305 940
www.plymouth.gov.uk/archives
email: pwdro@plymouth.gov.uk

Local Studies Libraries

Barnstaple Local Studies Library

Tuly Street
Barnstaple
Devon
EX31 1EL

01271 388607
Email: barnlocstudy.library@devon.gov.uk

Local and Naval Studies Library

Plymouth Central Library
Community Services
Drake Circus
Plymouth
PL4 8AL

01752 305909
Email: localstudies@plymouth.gov.uk
www.plymouth.gov.uk/localstudieslibrary

Torquay Central Library

Lymington Road
Torquay
TQ1 3DT

01803 208305
www.torbay.gov.uk/researchservice
email: tqreflib@torbay.gov.uk

Westcountry Library

Exeter Central Library
Castle Street
Exeter
EX4 3PQ

01392 38416
email: westcountry.library@devon.gov.uk

SMR and HER

Historic Environment Section (Archaeology)

Devon County Council
County Hall
Exeter
EX2 4QW

01392 382246
www.devon.gov.uk/archaeology
email: archaeol@devon.gov.uk

Planning Policy

Dept. of Development
Plymouth City Council
Plymouth
PL1 2AA

01752 304145
www.plymouth.gov.uk/homepage/creativityandculture/heritageandhistory/historicenvironment/archaeology.htm
email: planningpolicy@plymouth.gov.uk

Torbay Archaeological Service

Torbay Council
Roebuck House
Abbey Road
TQ2 5TF

01803 307788
www.torbay.gov.uk/index/environment-planning/archaeology.htm
email: planning@torbay.gov.uk

Maps

Once you have established the extent of your historical research, maps form one of the most important sources of information.

The early Ordnance Survey maps of the nineteenth century are very valuable; especially important are the First Edition OS 6 inch maps. These maps show in fine detail buildings, stream courses, hedges, boundaries, parishes and roads. The First Edition OS 6 inch maps are often used as a base for any landscape analysis.

Figure 1. Section of Bow parish tithe map showing the village of Nymet Tracey and some outlying fields



Also important are the nineteenth century Tithe maps. The Tithe Commutation Act of 1836 resulted in the survey of the majority of parishes in Britain; the tithe maps marked field boundaries, watercourses, roads and buildings. An Apportionment book accompanies each tithe map, giving details of land ownership and occupation, land use, field names and land value. The data held with the tithe map and apportionment book is very valuable to the study of any landscape and parish development and it is worth the effort of making detailed recordings of the tithe map (i.e. by tracing it) and creating a database of the information held within the apportionment book. Once this information is collected, it is then possible to reproduce the tithe map based on a number of themes, such as land use, ownership, tenancy and field names. Data from the Tithe maps and the First Edition OS 6 inch maps can be placed into a Geographic Information System (GIS) database and digitally stored. Using GIS also enables a quick reproduction of maps based on any of the above themes.

Earlier estate maps are also important, although great care must be taken when interpreting them. Before the eighteenth century, maps tended to be pictorial and lacked the detail that we are familiar with in later maps. However, they will indicate changes in field boundaries, land use and ownership.

Enclosure maps and accompanying awards again can be very useful. Nevertheless, not all enclosure maps have the same level of detail, some show ownership, hedges, woods and/or buildings, whereas others only show the area to be enclosed. In areas where enclosure maps are unavailable 'awards' describing the boundaries of the enclosed areas are useful.

It is also important to spend time actually looking at the maps in detail particularly the pattern of the field boundaries, course of small streams, and footpaths. Any footpath that appears to lead to an area for no apparent reason could suggest the location of a deserted settlement. Small streams that have right angle bends are suggestive of moats, mills or fishponds. Similarly, right angle bends in roads and footpaths could indicate the redirection of said path or roadway. Maps highlight the shape of boundaries giving some clues to their history.

As you can see, maps are a good starting point, but they do not tell the whole story. For example, field boundaries are drawn as a continuous line; they do not tell us which boundary abuts against another or the size of the boundaries. The only way to really understand the relationship between boundaries is to record them; we will return to this later.

When studying a map look carefully at the shape of the fields and take into consideration the topography. Fields that have irregular shape and are relatively small tend to suggest that they are old and can be dated back to pre-enclosure times, whereas large fields that have straight boundaries are probably the result of the parliamentary enclosure acts of the eighteenth and nineteenth century. Similarly, straight roads are younger than roads that bend and meander (straight Roman roads being an exception).

Parishscapes

For those who are researching in East Devon, the Parishscape Project is digitising all the tithe map data in the Area of Outstanding Beauty (AONB). The digitised tithe map data will be made available for public use (for more information see 'Useful addresses').

Useful addresses

Parishscape Project

Contact Phil Panel at

pplanel@eastdevon.gov.uk

or Telephone: 01424 46663

or www.eastdevonanob.org.uk

References and further reading

Aston, M. 1985 *Interpreting the landscape: Landscape archaeology and local history*. Routledge: London

Drewett, P.L. 1999 *Field Archaeology: an introduction*. UCL Press: London.

Liddle, P. 1985 *Community Archaeology: A fieldworkers Handbook of organisation and techniques*. Leicestershire Museums Art Galleries and Records Service: Leicester.

Muir, R. 2000 *The new reading the landscape: fieldwork in landscape history*; University of Exeter Press: Exeter

Written Documents

Alongside maps, other written documents can also be useful for your research. However, how useful they are depends upon the sort of questions you are asking and the nature of your research. You will find that some sources are more valuable than others. It might mean that you spend time sifting through lots of documents and only recording those that are relevant to your research.

Within the context of landscape studies, focus needs to be on documents that give topographical detail, such as, manorial court rolls, surveys and extents. These documents give details of land use, enclosure, settlements, fields, list of tenants, and the number of buildings within a manor. Title deeds, wills and lawsuits provide similar details. Likewise, enclosure awards are also valuable documents especially when accompanied by maps.

Other useful sources are the Victoria County History of Devon (1906), although this may appear to be out of date it still holds useful information. Going back further, some of the Saxon Charters also describe boundaries in detail often using a series of landmarks that can still be found today. The Domesday book, which lists villages, settlements, land use and ownership, is again, very useful.

However, as with all documents, the original reason for creating the document must be taken into consideration. For example, if a village or settlement is not mentioned in the Domesday book, it does not mean that it did not exist; it just might mean that its taxable value was included in another village's records.

References and further reading

Aston, M. 1985 *Interpreting the landscape: Landscape archaeology and local history*. Routledge: London

Liddle, P. 1985 *Community Archaeology: A fieldworkers Handbook of organisation and techniques*. Leicestershire Museums Art Galleries and Records Service: Leicester.

Muir, R. 2000 *The new reading the landscape: fieldwork in landscape history*; University of Exeter



Field and place names

Place and field names are another significantly important source of information, and along with maps, they make a good starting place for your research. The tithe maps and other earlier maps often recorded the names of fields and places and this can give us clues to the use of an area in the past and the location of prehistoric monuments or settlements as well as medieval activity. Places names are quite complex, they can refer to natural features, past land use, people, villages and house names. Some names can be dated back to the Saxon Charters and others are derived from Old English, Old Scandinavian or Roman.

Historically, fields were given names in order to avoid problems of identification. For those researching their local history and archaeology, field names can indicate a whole array of past activity. Some names may relate to field systems,

ownership, and present and past land use. For example, Lambs Park in Lustleigh indicates lambing fields. Field names can also relate to topography, soil, shape and size of fields such as, Long Strip in Axminster which refers to a narrow piece of land.

Care must be taken when interpreting both place and field names as some names and/or spellings are specific to a region and may have another meaning/spelling elsewhere. For names that are more unusual, it is best to refer to reference material that is specific to Devon.

Useful web addresses for information on Devon place & field names:

<http://.members.fortunecity.com/gerdewna/nsek/placenames.html>

<http://.myweb.tiscali.co.uk/terryleaman/1861-web-site/place-listing.html>

References

Field, John 1983 *A history of English field-names*. London: Longman

Gover, J.E.B. 1969 *The place names of Devon. Part 1*. Cambridge University Press

Gover, J.E.B. 1973 (1st print 1932) *The place names of Devon. Part 2*. Cambridge University Press

Liddle, P. 1985 *Community Archaeology: A fieldworkers Handbook of organisation and techniques*. Leicestershire Museums Art Galleries and Records Service: Leicester.

Mills, A.D. 1998 (second edition) *Oxford dictionary of English place-names*. Oxford: Oxford University Press

Muir. R. 2000 *The new reading the landscape: fieldwork in landscape history*; University of Exeter: Exeter



Aerial photographs

Another form of documentary evidence that is very helpful is of course, aerial photographs. After the Second World War most of England was photographed from the air and these images are available through the Cambridge University Collection of Air Photos (CUCAP), National Monument Record (NMR) in Swindon and/or at the HERs in Exeter, Torquay and Plymouth. There are two types of aerial photographs, vertical and oblique, both giving very different views of the landscape. Most of the photographs taken between 1944-1948 are vertical shots. In recent times, local authorities, the Ordnance Survey and companies supplying amenities such as gas, electricity and water as well as interested photographers, but not necessarily archaeologists, have taken vertical aerial photographs. Of course, these photographs have not been taken to identify archaeological sites, but if they are taken at the right time of the day and year, they can pick up soil, crop marks and other archaeological features (Figures 2 and 3).

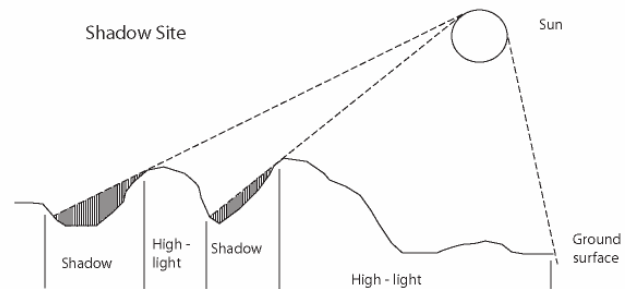


Figure 2. Earthworks, banks, ditches and other lumps and bumps will be highlighted by aerial photography during low sunlight. The sun must be low enough to cast a shadow therefore during the summer, sunset and sun rise are the best times to take aerial photographs. During the winter, the sun should be low enough but of course, the sun is not always visible (after Drewett 1999)

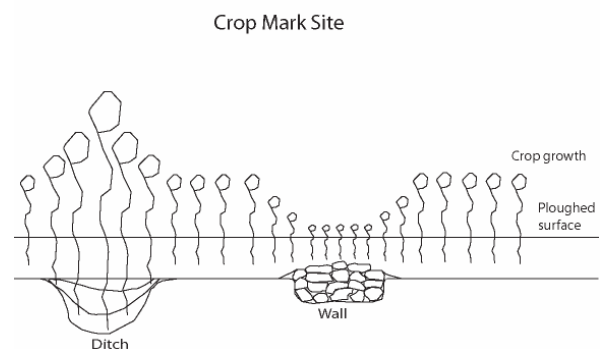


Figure 3. Crop marks normally appear in arable fields. They appear because of the uneven crop growth. Plants that are growing directly above a wall will not grow as tall as surrounding plants due to the lack of moisture caused by the presence of the wall. In contrast, plants growing in a silted up ditch will grow taller due to the extra amount of soil and therefore moisture caused by the ditch (after Drewett 1999)

Plymouth
PL1 2AA

01752 304145

www.plymouth.gov.uk/homepage/creativityandculture/heritageandhistory/historicenvironment/archaeology.htm
email: planningpolicy@plymouth.gov.uk

References and further reading

Aston, M. 1985 *Interpreting the landscape: Landscape archaeology and local history*. Routledge: London

Aston, M. 2002 *Interpreting the landscape from the air*. Tempus: Gloucestershire

Drewett, P.L. 1999 *Field Archaeology: an introduction*. UCL Press: London.

Liddle, P. 1985 *Community Archaeology: A fieldworkers Handbook of organisation and techniques*. Leicestershire Museums Art Galleries and Records Service: Leicester.

Useful address:

Cambridge University Collection of Air Photos:

venus.uflm.cam.ac.uk
email: library@uflm.cam.ac.uk

National Monument Record Centre (NMR) Swindon:

Enquiry & Research services
English Heritage
National Record Centre
Kemble Drive
Swindon
SN2 2GZ

Telephone number: 01793 414600
www.english-heritage.org.uk/server/show/nav.1540

Email: nmrinfo@english_heritage.org.uk

Historic Environment Section (Archaeology)

Devon County Council
County Hall
Exeter
EX2 4QW

01392 382246

<http://www.devon.gov.uk/archaeology>
email: archaeol@devon.gov.uk

Planning Policy

Dept. of Development
Plymouth City council

Torbay Archaeological Service

Torbay Council
Roebuck House
Abbey Road
TQ2 5TF

01803 307788

www.torbay.gov.uk/index/environment-planning/archaeology.htm
email: planning@torbay.gov.uk



Fieldwork

The documentary evidence should help in highlighting areas of specific interest that warrant a more detailed focus and there is no other simpler method than conducting fieldwork. There are many different methods which can be used including, field walking, field boundary survey, surveying, geophysical surveying, or even simply walking and just looking at the landscape feeling and noting the presence of lumps and bumps when walking across a field. All these methods are valuable and, apart from the geophysical surveying, all can be accomplished easily and cheaply. As most community groups or history societies do not have access to geophysical equipment, this section will concentrate on field work that can be accomplished using very basic equipment, such as field walking, boundary surveys, and earthwork surveys.

Before you begin any form of fieldwork, please make sure that you have permission from the landowner. Most landowners are more than happy to give

access to their land for non-destructive fieldwork and furthermore, the majority know their land really well and may be able to point out areas where they have found pottery, building debris or flint scatters. If the farms have been in the family for many generations they may have documents relating to land use or even old estate maps, it is worth talking to the landowners and encouraging them to become involved.

Field Walking

The best time to conduct field walking is during the winter and preferably on a dull day after rain but not immediately after ploughing. Consideration of soil colour, especially how this may mask certain objects such as pottery or flint, is important. However, even in perfect conditions there will be problems seeing every artefact on the ground. It is important that people have an idea of what they are looking for and that they do not collect only the larger more obvious objects. If in doubt, collect it and then discarded it at a later stage. Having at least one experienced field walker, as part of the team, will help with dealing with some of these issues.

Field walking is normally conducted by walking in rows or along a grid at a slow pace, with one's eyes fixed firmly on the ground. As a rule, the grids are aligned in a North-South direction and/or within the National Grid. Thus making it possible to relocate, and if necessary, re-walk the surveyed area. The size of the grids depends on the level of sampling



needed. Normally grids are 20-30 metre square, which are quick to set up but produce a less detailed survey than say, 5 square metre grids (Figure 4). Using a record sheet such as in Figure 6 will help with the recording of the event.

The method of survey does depend on the level of sampling required, but it is advisable to use the same measurements for each field walking session undertaken within your study area, unless one is returning to an area to focus on a particular find spot. This enables quick comparisons between field walked areas.

The results must be presented in a way that can be easily understood. Usually, this is through a series of plans or diagrams using proportional circles or squares. The size and shading of the squares/circles must be representative of the survey, otherwise the diagram, and in some respect the field walking, will be meaningless. Displaying the results in this manner enables quick reading and interpretation (Figure 5a.). Another method is to plan the areas in which particular artefact types were found, this enables a distribution map

to be produced and will highlight find spots (Figure 5b and 5c).

All artefacts collected must be recorded and identified. If you are uncertain, it is advisable to contact the county's Finds Liaison Officer and/or a museum curator who might be able to identify them. Once you have completed your survey and identified the artefacts, it is important that a report is compiled, which includes a list of all finds and a diagram of the field walking results. The report can then be deposited in the HER in Exeter, Plymouth or Torbay. As the most desirable outcome of the collection of artefacts from field walking is depositing them in a museum, it is important to discuss with the landowner what is to happen to the finds before you begin field walking.

References

Liddle, P. 1985 *Community Archaeology: A fieldworkers Handbook of organisation and techniques*. Leicestershire Museums Art Galleries and Records Service: Leicester.

Finds Liaison Officer

Royal Albert Memorial Museum
Queen Street,
Exeter
Devon,
EX4 3RX

01392 665858

A Guide to Field Walking

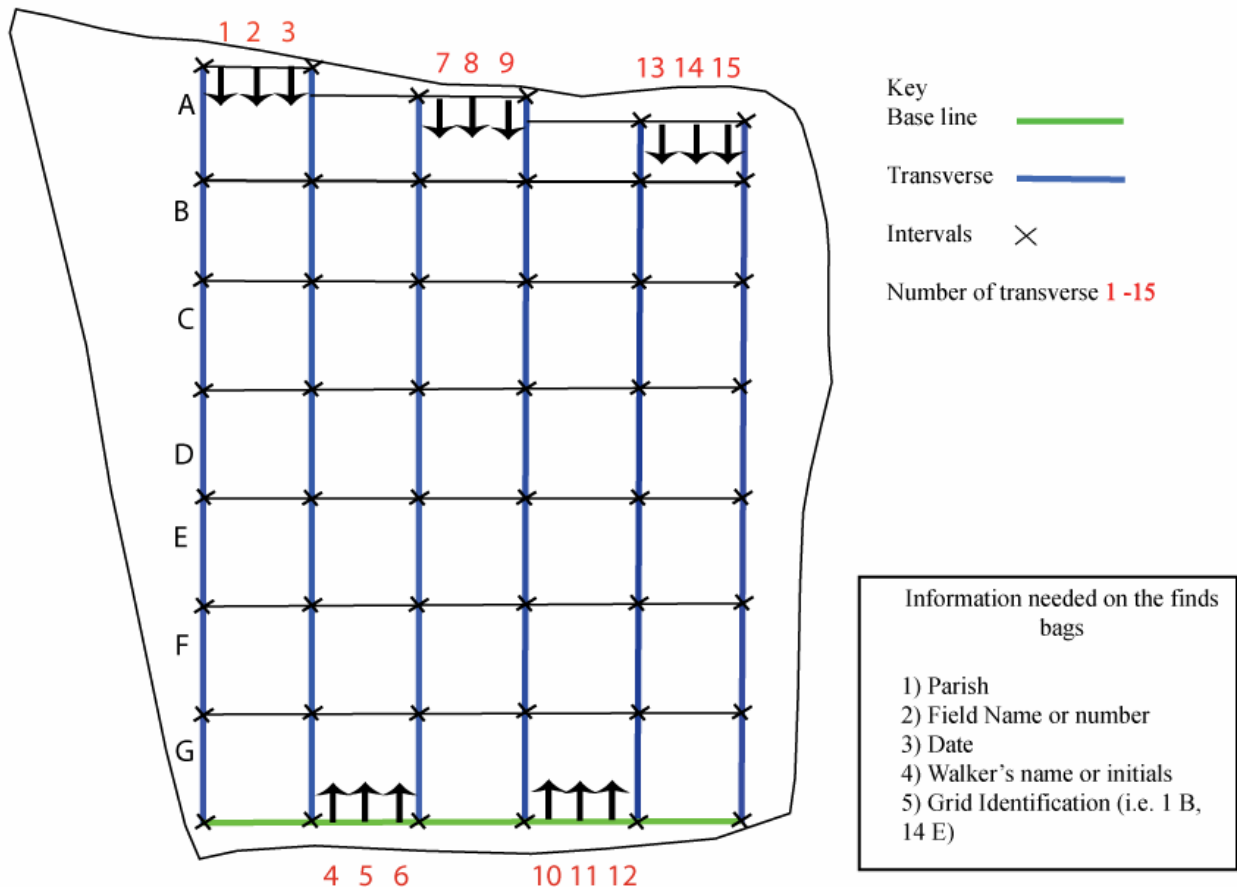


Figure 4: A guide to field walking

Equipment needed for field walking

Map, tapes, ranging rods or gardening sticks and plastic bags, compass, finds bags, pen suitable for writing on plastic and suitable clothing.

1) Using a map, create a base line, normally along a straight fielded boundary and tie this into fixed features and/or the National Grid.

2) Set out a series of transverse at a right angle from the base line (the blue lines, Figure 4). This can first be done with tapes, and according to the size of the individual grids, place ranging rods, or gardening sticks with carrier bags tied to them at regular intervals along the transverses (indicated by X, Figure 4)

3) Every field walker carries a plastic bag and walks steadily, scanning the ground in front and to a metre each side. Any artefacts are placed in plastic bags that are clearly labelled with the grid identification on it (Figure 4). Each time you pass one of the markers a new bag must be used.

4) The diagram shows how three people can systematically walk a grid (of course, the more people you have the quicker it will be). Each grid in the diagram is 10 metre square, but is walked along by three people.

5) For every field-walking event, it is important to keep a clear record of the activity. Information required is similar to those on the finds bag (Figure 4) including the National Grid Reference, weather condition, number of grids, number of walkers, date, geology, relief, soil conditions and map (Figure 6).

Field walking by squares: Graphic illustration of artefact densities.

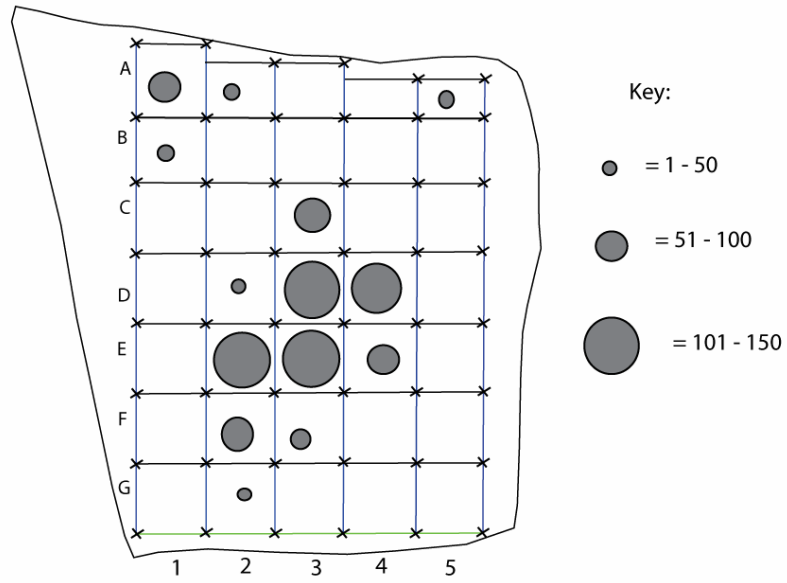


Figure 5a: Densities by quantity

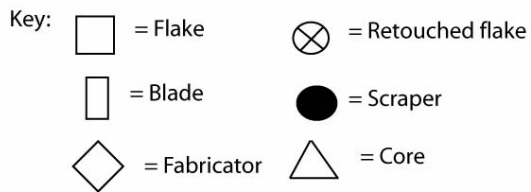
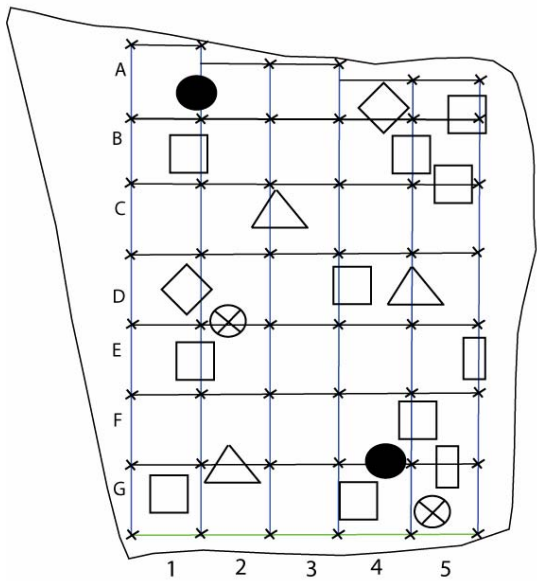


Figure 5b: Densities by artefact type-flint

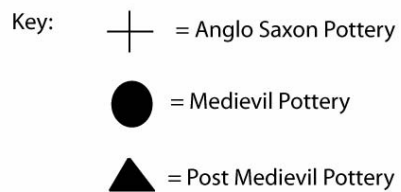
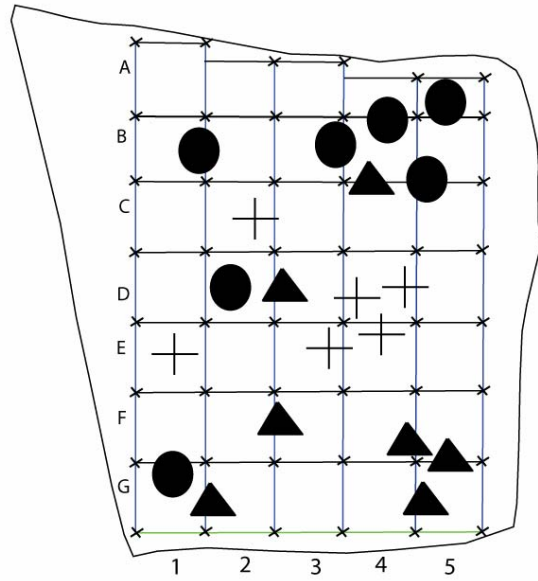


Figure 5c: Densities by artefact type and by period

FIELDWALKING DIARY SHEET

PARISH:		FIELD NAME:		GRID REFERENCE:	
OWNER/TENANT:		GEOLOGY:		RELIEF:	
DATE:	CROP:	SOIL CONDITION:		WEATHER:	
NUMBER OF PEOPLE:			GRIDS:		
FIELD NOTES:					
SUMMARY OF FINDS:					
MAP:					
SIGNED:			DATE:		

Figure 6: Field walking diary sheet



Boundary survey

There are at least two different boundary survey scales that are useful to landscapes and local history studies: parish boundary and field boundary.

Parish Boundaries

The first thing to do when looking at a parish boundary is to identify which elements follow natural features such as a stream/river or the route of former watercourses or an artificial boundary such as a road, track and field boundary. It is then possible to determine whether the artificial boundaries are a straight or smooth curving (sinuous) line or one that zigzags. Very straight boundaries indicate a planned boundary (except if following the line of a Roman road). Boundaries that twist and turn tend to suggest that it is following field boundaries unless, of course, they follow a natural feature.

There are several distinctive parish boundaries;

Detached portion An area of a parish is positioned like an island surrounded by other administrative territories. Such floating parcels of land were once connected to the rest of the parish and their presence preserves the memory of early rights of land in the form of outlying parts of an estate, or waste/pasture rights located at a distance from the main settlement. Alternatively, they may represent rights to tithes from land shared with other parishes.

Artificial straight lines: A boundary with a distinctive straight line and irrespective all topographical features, represents a deliberate act. Unless the boundary is associated with a Roman road, it probably results from parliamentary enclosure in the eighteenth and nineteenth century. Alternatively, such boundaries can represent earlier medieval enclosures of moorland or fifteenth–sixteenth century wasteland or even both.

Interlocking boundaries: Boundaries indicated by a distinctive zigzag shape. Such boundaries may indicate areas

where the rights were uncertain or disputed. However, this is not always the case as some zigzag boundaries that look like a series of steps are mentioned in Anglo-Saxon charters, whereas others clearly appear due to the division of fields determined by enclosures.

Converging boundaries: Here, a number of boundaries converge on a single point. Often this is due to the division of an area of grazing between communities around its edge.

Deviation from an obvious line: This is where a boundary that follows a feature for some distance suddenly changes direction for a short distance and then rejoins the previous course. This may indicate an area where there had been a lost feature within the landscape or the course of an ancient river, oxbow lake, earthworks, or the results of a boundary dispute.

Roads as boundaries: There are two distinctive type of road boundary; 1) local paths and roads that link settlements with field and/or neighbouring settlements and 2) long distance routes. These long distance routes may act as a boundary in a way similar to Roman roads. However, some minor roads that run along boundaries may have developed because of the boundary; these can be identified in

Devon by the presence of deep narrow lanes enclosed by a massive double hedge bank along parish boundaries.

Field Boundaries

The shape and size of fields reveal important aspects of a landscape/parish's past. A number of factors affect field patterns such as topography, farming system, population density, and land ownership. A field boundary is just one aspect of a field system and the character of a field boundary is partly determined by topography, field use and changes in field use. For example, long narrow fields with a reversed-S plan are derived from the piecemeal enclosure of arable open field and a change in land use from arable to pasture. However, the shape of a field boundary is not the only important aspect to record.

The only way to really understand the relationship of field boundaries is a thorough a survey. Field boundary survey can be undertaken in a number of ways; one can simply examine the boundaries making brief notes, estimating the size, whether it has ditch, made of stone or earth etc. and the relationship between boundaries. Alternatively and far more commonly used, is the recording of boundaries on a standardised recording sheet. The

advantage of using a recording sheet is that it allows you to keep detailed records, which can be easily interpreted later and once you are familiar with using them they become quite quick to use (see figure 7).

Minimal equipment, including a recording sheet, pencil, camera, ranging rod (or a pole that has measured markers on it) and a detailed map of the boundaries to be surveyed, is needed to record a field boundary. It is not necessary to photograph field boundaries, but there is always the possibility that an interesting feature may appear that warrants a photograph and a sketch. Depending on the level of surveying required, measurements can be estimated using a ranging rod (or a pole with measurements on it).

An important aspect of conducting field boundary surveys is to understand the relationship between boundaries, in other words, whether they are continuous or abuts another. From conducting a survey it may be possible and desirable to estimate the dates of the field boundaries and their relationship with other, but these also have to be compared with the map data. There is a general school of thought that a narrow, boundary with mainly shrub plants, represents a modern boundary

and very wide boundaries with trees are older, but this is not always the case.

There is also the issue of the type of boundary. A large proportion of field boundaries in Devon are made up of hedgerows. A typical Devonshire hedgerow consists of an earthen mound at least eight feet wide at the base and slightly narrower at the top. Some hedges can be up to 2.4 metres in height. They tend to be covered in coppiced wood such as oak, beech, hazel, hawthorn, birch and willow. The earthen bank is faced with either turf or stone. It is always worth recording the plant species in a hedgerow, but care must be taken when using this information to date the age of the hedge. The greater number of plant species within a hedge does not automatically indicate that the boundary is older than one with less plants species.

References

Drewett, P.L. 1999 *Field Archaeology: an introduction*. UCL Press: London.

Liddle, P. 1985 *Community Archaeology: A fieldworkers handbook of organisation and techniques*. Leicestershire Museums Art Galleries and Records Service: Leicester.

Rippon, S. 2004 *Historic landscape analysis: deciphering the countryside*. Practical Handbook in archaeology 16. Councils for British Archaeology: York

Barnes, G. and Williamson, T. 2006 *Hedgerow history: ecology, history and landscape character*. Windgather: Macclesfield.

Field Boundary Survey recording sheet

Field name: _____ Parish: _____ Surveyors: _____
 Grid reference: _____ Date: _____ Photograph: Yes/No

Boundary Number:

Condition

Recordable () Decayed ()

Dimensions

Height <0.5m () 0.5-1.0m () 1.0-1.5m () >1.5m ()

Base width <0.5m () 0.5-1.0m () 1.0-1.5m () >1.5m ()

Fabric

Earth bank, unfaced () Earth bank, 2 stone faces () Earth bank, 1 stone face ()

Drystone wall () Post and wire fence ()

Facing style

Set horizontally () Set vertically () Herring-bone pattern ()

Set diagonally () Irregular ()

Stone used in facing

Slabs () Blocks () Worn field stone ()

Hedgerow

None () Mature trees present () Single species ()

Multi-species () Pollards () Coppice stools ()

Ditches

None () One side ()

Two sides () Gullying ()

Stratigraphic Relationships

Abutts: / / / / Abutted by: / / / /

Bonded with: / / / / Same as: / / / /

Unclear: / / / /

Sketch:

Notes:

Figure 7: Field boundary recording sheet



Earthwork Survey

The majority of earthworks survive as hollows, banks, ditches, lumps and bumps in the field and are important because they represent past land use in the form of occupation sites, field boundaries, ponds, hill forts etc. You may find that the earthworks you intend to survey are mentioned in the SMR/HER (see chapter 1), but the dimensions and shape may not be accurately recorded. This means that your survey will add to the existing body of knowledge. Furthermore, many earthworks are not protected in anyway and are being eroded or destroyed, therefore, your survey will enable a recording of these features before they are lost.

Surveying is an important element of archaeological fieldwork and can be conducted using minimal equipment. Most archaeological units and universities use Electronic Distance Measurements (EDM) (total stations) and Global Positioning System (GPS),

but earthwork surveys can be done using tapes, ranging rods, pegs, a compass, and a drawing board.

As most community groups do not have access to the digital equipment, I will only discuss surveying methods using simpler methods.

There are several survey methods that do not require the use of expensive equipment, but before conducting a survey it is important to familiarise yourself with the site so that you have an idea of the best location in which to set up your baseline or planning table. Additionally, it is important that the field boundary is also surveyed so that the location of the surveyed area can be precisely relocated. Once again, it is very important that you have permission from the landowner before you conduct any form of survey.

Crosshead Surveys

This very simple method and requires the use of a crosshead (cylindrical or octagonal that can be made relatively easily and cheaply), survey tapes (at least 30 m), ranging rods, drawing board, draughtsmen's paper, compass, pencils, rubber and at least three people.

Setting up a base line

Begin by locating your base line across the centre of the survey area using at least three ranging rods and tapes. One person stands with the first ranging rod while others take the other two, and walk along a baseline, placing a ranging rod at the other end and one (or more depending on the length of the baseline and number of ranging rods) in the middle. The ranging rods are inline and therefore form a straight line, when it is not possible to see the other ranging rods when sighting from the one you are stationed at. The distance between the ranging rods depends on the size of the area to be surveyed and the detail required in the survey, normally ranging rods are positioned about 30 m apart.

Surveying using a crosshead

1. Set up the crosshead in the position of the first ranging rod,

aligned to the baseline and mark using an x on the plan (mark all the ranging rods using this method using a scale of 1:1000, 30m=3cms).

2. When placing the first x on the plan take into consideration that measurements that will be taken from the front, back and sides of the crosshead and from the other ranging rods positioned along the baseline, therefore do not begin by positioning the crosshead on the edge of the plan try and position in the centre
 3. On the plan indicate magnetic North using a compass.
 4. Secure a measuring tape to the base of the crosshead, take a ranging rod to the end of the tape and line the rod to each of the 45° angles sighted through the crosshead and draw these on the plan. To make this process quicker, two tapes and rods can be used on either side of the base line.
 5. Whenever the tapes cross a feature, the distance is measured and added to the plan. It is important to record both the top and bottom of a feature, drawing a slope using a hachure.
-

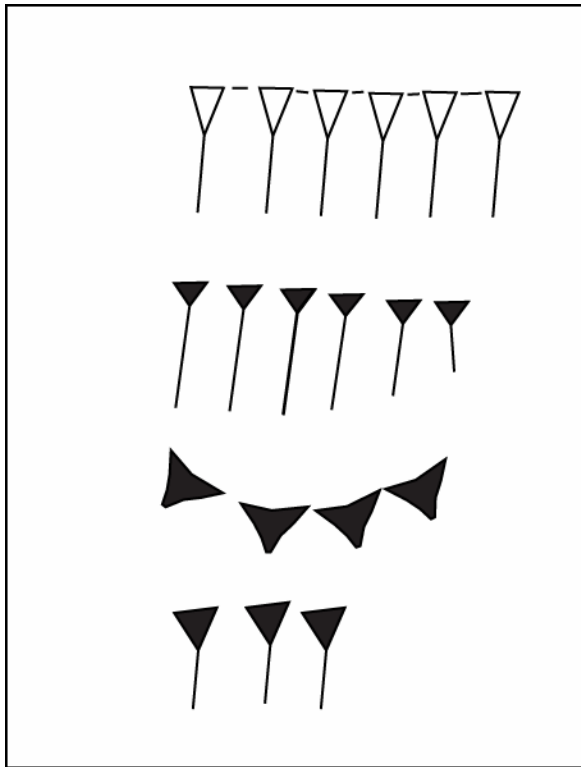


Figure 8: Different style hachure that are commonly used

Once you have recorded all the measurements and features, move the crosshead to the next ranging rod, start the process again, and then continue along the line of rods. This process does mean that some measurements are taken twice, but this does test the accuracy of the baseline and any adjustments that need to be made can be done with little disruption to the overall plan.

Optical squares can be used in a similar way, but with an optical square you can view along the right angles and the baseline at the same time, but not the 45° angle a crosshead can do.

Simple surveying using offsets

These are very simple methods and require minimal equipment, such as tapes (at least 30m), pegs, ranging rods, pencils, rubbers, drawing boards, compass, draughtsman's paper and possible a plum bob (depending on the site). When drawing the plan be aware of the location of the baseline in relation to the features you are recording, for example, do not place the baseline at either the top or bottom of the plan if you are taking recordings from both sides of the baseline. Finally, do not forget to mark where magnetic North is on your plan!

There are several different methods using offsets and all use a baseline as a starting point. Set up a baseline using at least two fixed points (such as the corner of a building or a permanent gatepost), again this can be done using ranging rods. The crosshead, along with optical squares, can be used to then set up a series of right angle offsets. However, a right angle can also be established by constructing a 3-4-5

triangle just with tapes, pegs and ranging rods (Figure 9a). Alternatively, put the end of the tape on point that you want to record and swing the tape over the baseline; the shortest distance on the baseline as the tape is swung over it, marks the right angle (Figure 9b).

A further method is triangulation, using a baseline and two tapes. Two points are selected along the baseline and using pegs to secure the tapes, one at each point. The other ends of the tapes are crossed over the point that needs locating. Thus, it is possible to record the point that you have found because you have the measurements for the three sides of the triangle (Figure 9c)

All these methods are reasonably accurate on level sites, but when there are slopes, a plum-bob is required to locate the positions on the ground, such as the base of a slope that needs recording.

Plane table and alidade survey

With this method, a drawing board is mounted on a tripod in the middle of the area to be surveyed (the plane table). The plane table is orientated north so that the top of the drawing board is pointing to north and a pin is placed on the plan to represent the plane table

(the board should not be moved after this has been done). The alidade is placed against the pin to sight the point being located (usually someone standing with a ranging rod). Once the point is located, a line is drawn along the side of the alidade on the plan. A tape is secured from the plane table to the area sighted and the distance measured and recorded on the plan usually using a scale of 1:500 (5m = 1cm). Each point is measured and recorded in the same way at the end of the survey the dots should all join to reveal the shape of the earthwork.

Plane table surveying works really works well on small sites (a radius of 30 m from the plane table), on larger sites more than one table can be used and should be located within the 30 m of each and be recorded on all the plans.

Once you have had several goes at these methods they become quicker to implement and they have proven to be accurate methods of surveying smaller earthworks.

References and further reading

Bettess, F. 1992 *Surveying for Archaeologists*. Department of Archaeology Durham: Durham.

Drewett, P.L. 1999 *Field Archaeology: an introduction*. UCL Press: London.

Liddle, P. 1985 *Community Archaeology: A fieldworkers Handbook of organisation and techniques*. Leicestershire Museums Art Galleries and Records Service: Leicester.

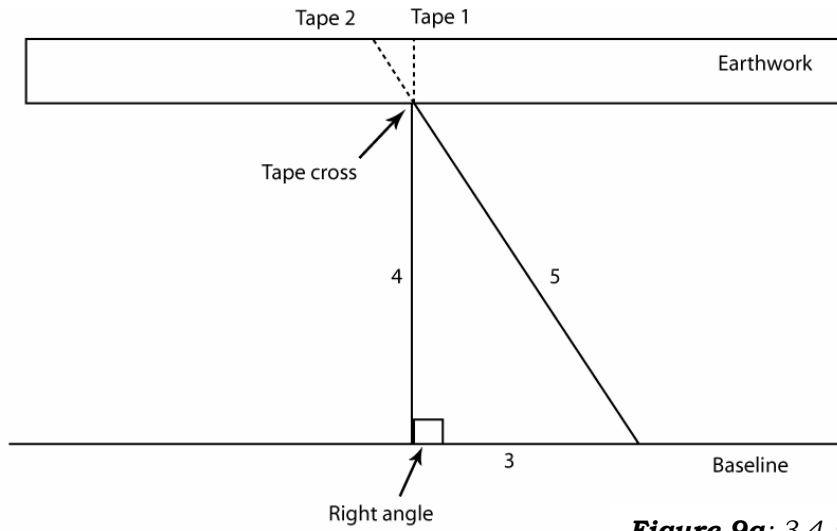


Figure 9a: 3-4-5 Triangulation (after Drewett 1999)

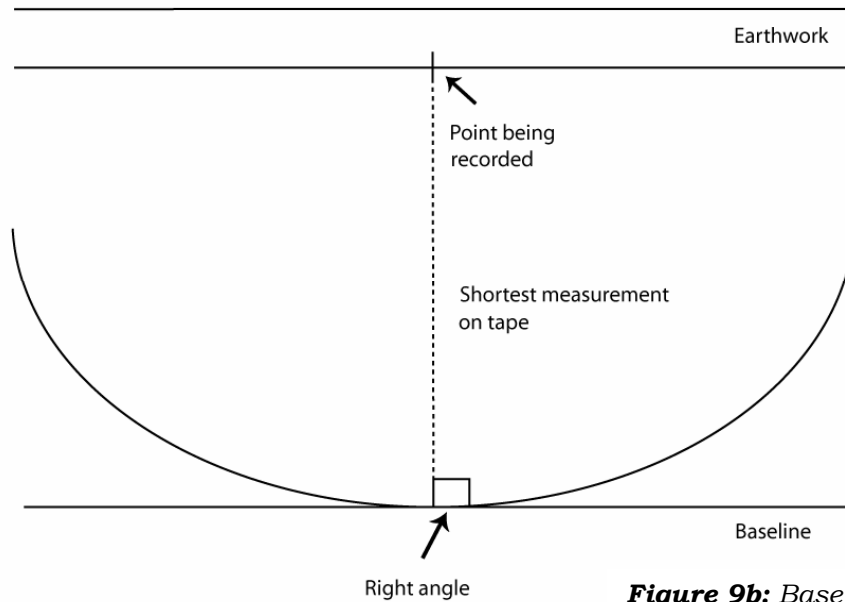


Figure 9b: Baseline right angle (after Drewett 1999)

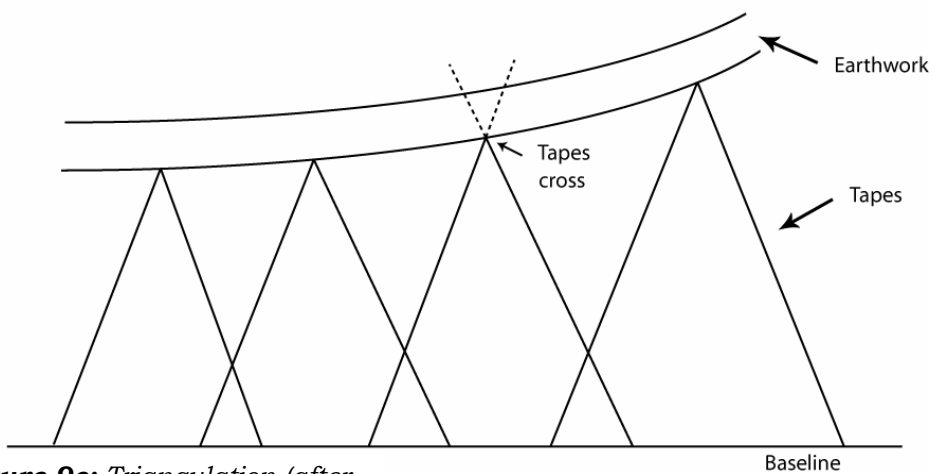


Figure 9c: Triangulation (after Drewett 1999)



Writing a report

Once your fieldwork is complete it is important to write a report. By completing a professional report you will be making a contribution to historical knowledge. Your report will also clearly demonstrate to others that you have conducted your work correctly and that your rationale is sound. However, your report will not just focus on the fieldwork but also the all-important documentary research that formed the background to your research. To help you formulate a conclusion it may be necessary to conduct more documentary research after the fieldwork element has finished.

Before writing your report you need to decide where you are going to publish. You may only want to produce a report for limited circulation, or as a paper for a magazine, or journal. In any of the latter cases it is advisable to contact the publisher to see if, in principle, they will be willing to publish your report. If they will, they normally send or tell you how

to access their 'notes to contributors'. It is important that you follow these notes and that you stick to all deadlines imposed. Finally, whether you publish your results or not, it is highly recommended that you send a copy of your report to your local SMR/HER.

A fieldwork report should contain the following items:

Title - giving a clear indication of the material the report covers and whether it is an interim or final report.

Date- the reports date not the date of the fieldwork

Author (s) names. If it is an edited volume containing reports written by several individuals, the editor name is the principle reference. Contributor's names should appear in the contents page ahead of their contribution. Otherwise just the authors name is suitable

A contents list. Only necessary if the report is divided into sections or chapters and/or has several authors contributing separate chapters or sections.

A list of illustrations, tables, graphs and photographs

A summary – outline of the work undertaken and brief conclusion

An introduction - should state your reason for carrying out the fieldwork, who carried it out and an acknowledgment that permission was gained from the landowner.

Site location and description - must contain an OS grid reference (preferably 8 figures), a location map, topographic and geological details.

Historical background - brief account of the history of the area that is relevant to your research.

Previous work on the site - undertaken either by yourself or by others written in chronological order.

Details of fieldwork - dates of fieldwork, aims, objectives and methodology (need to make clear

not only the methods used but the order each method was applied). Recording methods, problems encountered, finds retention policy (especially relevant to field walking) and a description of all findings. Keep this description as objective as possible and avoid interpretation at this stage.

Discussion- this is where you can bring all the strands of evidence together and try and make some sense of it. Explain how your site or feature fits into the relevant period and compare with other sites/features in the region, to support your interpretation. Comment on any anomalies and assess their significance.

Conclusion - summarise your findings briefly and coherently, drawing together all the evidence laid out in the previous section. State what you think the significance of the site/feature may have been in its period.

Recommendations - It may be appropriate to consider the future of the site/feature, especially whether any elements need preserving, by suggesting methods of managing its preservation.

Acknowledgements- You must give credit to everyone who has helped with the project including individuals, groups and organisations who gave advice, materials and funding. In addition, any copyrighted material that you had permission to reproduce.

Illustrations - can be included in the text or appear in their own section (but clearly referenced in the text). All illustrations should be produced at a scale that can clearly be read, have clear title, scale and where appropriate a north arrow. Photographs should also have a scale.

Reference/bibliography - you must list all material that you have referred to throughout the report. Follow the method used in this guide.

Appendices

Each specialist's report should form a separate appendix or, if very substantial, form a chapter/section (normally only used in the case of a large excavation report)

Finds catalogue - list of all finds



Conclusion

Throughout the work that the Department of Archaeology at Exeter University has been conducting with community groups numerous new archaeological sites have been found. Most of these sites would not have been found and recorded without the help of local community groups.

What is very clear from this guide is that all the techniques have their problems, but when they are applied in a single area the results from one technique will support the results from another giving a much more complete picture of the past. Furthermore, all the techniques outlined could be considered the grass roots of archaeology that enable ordinary people to contribute to our knowledge of the past.

This guide hopes to encourage and increase public participation in landscape archaeology and dispel the all-to-common myth that archaeology is

only about excavation and “finds”. Archaeology is also concerned with the ‘archaeology above ground’, the physical remains left as earthworks, field boundaries and track-ways, along with documentary evidence and maps.

