Identifying Archaeological Features within Scotland’s Historic Landscapes

A Guide to Recognising the Past in Scotland’s Countryside
by

Jonathan Wordsworth

CSA Archaeological Adviser on Rural Land Use
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Introduction</td>
<td>4</td>
</tr>
<tr>
<td><em>What is a Historic Landscape?</em></td>
<td></td>
</tr>
<tr>
<td><em>Why is it Important?</em></td>
<td></td>
</tr>
<tr>
<td>2 How to use the Guide</td>
<td>5</td>
</tr>
<tr>
<td><em>What Monuments are the Most Important?</em></td>
<td>6</td>
</tr>
<tr>
<td>3 Identifying Archaeological Features in a Historic Landscape</td>
<td>7</td>
</tr>
<tr>
<td>Desk-based Study</td>
<td></td>
</tr>
<tr>
<td>Using Maps to Study the Landscape</td>
<td>8</td>
</tr>
<tr>
<td>Talking to Farmers and Other Local Residents</td>
<td>9</td>
</tr>
<tr>
<td>Field Survey</td>
<td>10</td>
</tr>
<tr>
<td>4 Where to find Historic Landscape Features</td>
<td>12</td>
</tr>
<tr>
<td>Arable</td>
<td>14</td>
</tr>
<tr>
<td>Pasture</td>
<td>15</td>
</tr>
<tr>
<td>Field Margins/Copses</td>
<td>16</td>
</tr>
<tr>
<td>Woodland</td>
<td>17</td>
</tr>
<tr>
<td>Wetland</td>
<td>18</td>
</tr>
<tr>
<td>Upland</td>
<td>19</td>
</tr>
<tr>
<td>5 The Bush Estate, Penicuik : A Case Study</td>
<td>20</td>
</tr>
<tr>
<td>6 Feature Types</td>
<td>23</td>
</tr>
<tr>
<td>Banks</td>
<td>24</td>
</tr>
<tr>
<td>Buried Remains and Find Scatters</td>
<td>26</td>
</tr>
<tr>
<td>Cairns</td>
<td>28</td>
</tr>
<tr>
<td>Cropmark and Low-relief Sites</td>
<td>30</td>
</tr>
<tr>
<td>Cultivation Lines (rigs and terraces)</td>
<td>32</td>
</tr>
<tr>
<td>Cultural Sites</td>
<td>34</td>
</tr>
<tr>
<td>Designed Features</td>
<td>36</td>
</tr>
<tr>
<td>Ditches</td>
<td>38</td>
</tr>
<tr>
<td>Dykes</td>
<td>40</td>
</tr>
<tr>
<td>Farm Buildings</td>
<td>42</td>
</tr>
<tr>
<td>Fields and Enclosures</td>
<td>44</td>
</tr>
<tr>
<td>Hedges and Trees</td>
<td>46</td>
</tr>
<tr>
<td>Hollows</td>
<td>48</td>
</tr>
<tr>
<td>Industrial Sites</td>
<td>50</td>
</tr>
<tr>
<td>Mounds</td>
<td>52</td>
</tr>
<tr>
<td>Roads and Tracks</td>
<td>54</td>
</tr>
<tr>
<td>Standing Monuments</td>
<td>56</td>
</tr>
<tr>
<td>Structures</td>
<td>60</td>
</tr>
<tr>
<td>Water Features</td>
<td>62</td>
</tr>
<tr>
<td>7 Working from Features to Landscapes</td>
<td>64</td>
</tr>
<tr>
<td>Bailiehill An Historic Landscape</td>
<td></td>
</tr>
<tr>
<td>Points to Remember</td>
<td>67</td>
</tr>
<tr>
<td>Further Reading</td>
<td></td>
</tr>
<tr>
<td>8 Where to Obtain More Information and Advice</td>
<td>68</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>70</td>
</tr>
</tbody>
</table>
1 INTRODUCTION

The landscape of the farming countryside includes many features that reflect the changing patterns of land use over the centuries. These features are important in giving character and value to the landscape and should be positively protected when considering environmental schemes in the countryside. This guide is intended to help those responsible for managing the countryside to identify these features during farm visits and explain why archaeologists consider them important. Measures to enhance these features are also suggested. It has been designed primarily as an aid to agricultural advisers considering management options under the agri-environment programme, but may also be of value to other countryside managers.

The list of features is not definitive. Instead this guide aims to identify the main landscape forms that mark the presence of people in the past. This should then be used as a prompt when looking at the countryside.

WHAT IS A HISTORIC LANDSCAPE?

Historic landscapes are the reflection of human activity on the land in the past. Virtually all land in this country has been influenced by human activity at some point in its past, whether by farming or some other form of land management. The result of this is that the surviving landscapes of Scotland reflect not just a rich variety of natural habitats but also the broad spread of more than 5000 years of settlement. This human dimension, defined as a historic landscape, is dynamic, and as with natural landscapes, is subject to change.

Many elements contribute to the making of a historic landscape from individual archaeological sites such as cairns and buildings, to the dykes and fields both modern and old that mark the imprint of humans on the land.

WHY ARE HISTORIC LANDSCAPES IMPORTANT?

Some elements of these landscapes survive from earlier periods and are important both intrinsically for the archaeological information they contain and for the depth of character they give to a landscape as a whole. By being able to identify the elements that make up this landscape, the development of the land can be better understood. Knowing this history is important not just for understanding the individual archaeological features: it can also help explain why certain natural habitats are sited where they are and how they got there. The processes of human and natural development are entwined and should be recognised as being linked.

Many of these roots underpin the modern landscapes that are appreciated by both local communities and visitors. These people are interested in learning more about the past of the landscapes they see and by identifying the historic elements that make up the present landscape, you will be able to give them an extra dimension towards appreciating the Scottish countryside.
2 HOW TO USE THE GUIDE

This guide is designed to help identify those features in the countryside that form historic landscapes. With a bit of practical experience it soon becomes easy to recognise the forms that make up these landscapes.

The guide works by identifying the main shapes and forms of the archaeological sites that make up the cultural heritage of rural Scotland. It is not intended to give the precise importance of every possible archaeological feature; instead, by concentrating on form and location the guide shows where and how particular monuments influence the shape of the modern landscape. This is important for understanding the landscape character of different areas. Each area and each archaeological site are unique, but by recognising the different forms in the landscape it is possible to identify which features make a particular landscape distinctive.

Using this guide should help define the types of archaeological feature likely to be seen on the ground, how to recognise them and why they are important for giving character to the landscape.

When examining an individual farm or larger landscape, a surveyor should be constantly asking why a particular field, hedge, bank, habitat or mound is where it is. It may be the result of modern actions on the farm but it may also reflect the past history of land use.

Recognising the origin of a landscape will make it easier to demonstrate its value to the farmer and the wider community, thus helping to protect it in the future.

Many Scheduled Ancient Monuments, such as this prehistoric burial cairn at Camster are strong landscape features, being deliberately placed in positions where they could be easily seen. This particular monument also shows that this area has been farmed for over 5000 years and letting this feature disappear under scrub or trees would significantly alter the shape of this historic landscape.

A question of terms: In this publication ‘Historic Landscape’ has been chosen as the term to describe past monuments (or sites) in the countryside. ‘Historic Landscape’, ‘Historic Environment’, the ‘Built and Cultural Heritage’ are all terms used to describe the physical evidence of the human past. They each have their own emphasis.

Historic Landscapes, for example, might be seen as ignoring undocumented (eg prehistoric) landscapes whereas Cultural Heritage can be seen as dealing only with visual perceptions of the past as opposed to the physical evidence.

The different names are less important than the recognition that Scotland’s countryside has had millennia of human impact. People are a component of bio-diversity and decisions to reconstruct or ‘restore’ habitats must recognise this human dimension.

This roundhouse site is covered in species-rich grassland. Whether the house was sited on richer soils or the grassland has colonised an area of more fertile ground is uncertain. Clearly both elements are important in giving this landscape significant value.
**WHICH MONUMENTS ARE THE MOST IMPORTANT?**

Some sites are considered nationally important either because they are of a rare or unusual form or because they are good examples of a particular type of monument. These monuments, known as Scheduled Ancient Monuments (SAMs), are legally protected. About 7000 sites are recorded as SAMs and over 200 are added each year, out of a national total estimated at around 18,000 sites. The exact number of archaeological sites is uncertain depending on whether these are defined by point or area, but there are already over 130,000 separate entries recorded in databases across Scotland.

There are other designations such as monuments of regional or local importance. While these are not protected in law, they should be preserved by good environmental practice. Local authorities will consider their protection when examining planning and forestry applications and there is a presumption against causing damage to these sites, unless there are good reasons to do otherwise.

Most Scheduled sites are only protected as far as the edge of individual monuments. It is increasingly recognised by archaeologists and other cultural historians that protection should also include archaeological landscapes. Individual sites form part of a landscape and the whole setting of a monument may have value.

In the past, antiquarians concentrated on digging holes into only the most prominent sites. However, developments in environmental studies have shown that by analysing the soils and less obvious features in and around archaeological sites, it is possible to reconstruct past landscapes. Pollen analysts can tell what crops grew and when areas were abandoned, allowing peat or trees to grow on former fields. Soil scientists can tell from the structure of the soil, how the land was managed and whether it was enriched or impoverished. Botanists can examine carbonised or waterlogged seeds and plant remains to compare the species of plant and type of crops growing in the past. Entomologists can study the remains of insects to reconstruct the past social and environmental conditions. This data is important not just for archaeologists. Many environmentalists see archaeological sites as reservoirs of information on the past history of the land and climate change, informing us of trends and models for the future. Once destroyed, these reservoirs cannot be replaced.

Recent pollen studies in the west end of Glen Affric have shown that arable crops have been grown here since the Bronze Age, some 4,000 years ago. The landscape has remained largely treeless since this period, in contrast to the more familiar pinewood to the east. Neither landscape is more ‘natural’ than the other. While such detailed information is not available for most sites and nothing remains above ground from this early period of settlement, this data should inform future management of this area.
3 IDENTIFYING HISTORIC LANDSCAPE FEATURES

DESK-BASED STUDY

Before going out to look for archaeological remains on a farm it is necessary to do some initial background research. This will save you time and help put known sites in context. Further sources are detailed on pages 66–67.

- Obtain a 1:10,000 map of the farm and use this as the basis of your survey. 
  
  * Most archaeological surveys are initially carried out at this scale with detailed surveys being added at a later stage. Larger scale maps may contain additional information not recorded on less detailed maps.

- Use the internet to check CANMORE and other SMR sites at http://ads.ahds.ac.uk 
  This is based on 1 kilometre map squares tied into the OS 1:10,000 map sheets. Use the codes on the map to find which map sheet or sheets your farm plan is on.

- A search of either your local authority Site & Monuments Record (SMR – see page 69 for details) or the National Monuments Record for Scotland (NMRS) in Edinburgh will produce a map of recorded sites. 
  This will often be more comprehensive than CANMORE and SMR staff can help you assess the recorded information. They may well hold additional information to what is supplied for a basic SMR enquiry.

- Be critical of the information supplied either from CANMORE or an SMR enquiry. 
  The data may not have been recently updated and grid references can be wrongly transcribed.

- Check the current OS map to see if there are sites marked on it that have not been recorded. 
  Familiarise yourself with the field layout and see if it is reflecting an older pattern. 
  Remember that the present boundaries may not correspond to earlier farm boundaries and traces of these earlier boundaries may still be visible.

  * Remember that individual sites may have a wider significance, linking with other sites to form historic landscapes. 
  Indeed, some sites, such as dykes and banks, may in themselves seem insignificant and may not even be recorded as archaeological features. It is in combination that these elements become important, joining together to form historic landscapes and because they can explain how the land was managed in the past.
USING OLD MAPS TO STUDY THE LANDSCAPE

Old maps are one of the easiest ways of studying how a landscape has changed over time. If you can get access to these maps before going out onto a farm, it will make your study much easier. Further details on sourcing these maps are contained on page 68. Many public libraries have reference sections where these maps are available for study. Other earlier estate maps dating from the 18th or early 19th century may also be available.

ESTATE MAPS
As part of the agricultural revolution of the 18th and early 19th century, estate maps were drawn up of the land prior to reorganisation. Most of these maps are now held in the Scottish Record Office in Edinburgh, though some are still held in estate archives, and copies may be held in local libraries. The quality can be variable but at their best they are a vital source of information on how the land has changed over time.

EARLIER EDITION ORDNANCE SURVEY MAPS
The 1st edition OS maps drawn at 1:10,560 (6” to the mile) are essential for studying how the landscape was organised in the past. This was the first detailed coverage of the country dating from 1847 in Stornoway to 1895 in Sutherland. The 2nd edition revision produced at the beginning of this century may also show significant changes and some areas have had further revisions prior to the current 1:10,000 OS map series.

- Use old maps to check for old buildings, deserted buildings and for dating plantations. Fragmentary boundaries and buildings will show up more clearly on earlier maps. Buildings now obscured may be more prominent.
- Remember that OS surveyors were recording what they saw and would not record slight archaeological remains. The quality of recording can also be quite variable. Just because something was not shown does not mean it was not extant at the time of the survey.

Loch Lurgainn, Inverpolly, Wester Ross as surveyed by the Ordnance Survey in 1875 with no trace of any earlier buildings or walls.

Peter May’s Map of Coigach, Wester Ross, drawn about 1752, showed a shieling stance to the south west of Loch Lurgan. The foundation of a building (heavily overgrown) can still be seen in this area.

This view, looking across to Loch Lurgainn and Stac Polly, shows an area of enriched grassland that formed part of the grazing for a summer shieling. It contrasts strongly with the coarser deer grasses behind.
TALKING TO FARMERS AND OTHER LOCAL RESIDENTS

- Check with farmers and/or farm workers before carrying out a survey. They may have noticed unusual features or have turned up archaeological remains during their work. Most farmers and farm workers are interested in the history of the land they work. Being on the farm everyday, they may notice things you will miss on your visit. For example, during ploughing they could have noticed areas of burning or spreads of pottery and flints that may mark abandoned settlements.

- Ask if there are other local residents who may know about unrecorded sites on the farm. Large areas of the Scottish countryside have never been visited by professional archaeologists and members of the public are discovering new sites every day.

This underground storage chamber in Skye, known as a souterrain, was first revealed when the farmer noticed soil slumping into a hole. Excavation has revealed that it was built some 2000 years ago. Note how thin the soil cover is above this monument and yet nothing was visible above ground.
FIELD SURVEY

• Look at the farm as a whole before deciding to look for individual features, working from the larger elements to the smaller using maps and the lines in the landscape as a guide. Try to decide which boundaries are old and which are new. Old boundaries may focus on areas and features that are no longer marked on the map.

• Look for the elements in this landscape that are distinctive. Are they man-made or natural? If the former, how extensive are the remains and are the present limits likely to correspond to the original boundaries? If the latter, would they have restricted the way the land could be used in the past? (for example, bogs, rock outcrops and cliffs would all restrict settlement and cultivation unless there were compelling reasons, such as defence, to do otherwise). Other natural features might have been significant to people in the past – sometimes this significance survives in existing place-names. Do not underestimate the extent of human settlement in the past.

• When walking over the farm, key areas to look for are patterns in the landscape, in particular straight or curving lines. These might be banks, ditches, stones, trees or tracks. Get a feel for the topography and consider whether you are looking at a natural feature or something that has been made.

• Look at unusual mounds or hummocks in the ground. Do these mark cairns or abandoned buildings?

• Check dumps of stone to see if they are recent. Old heaps may be burial cairns or mark the remains of early fields. They may also be hiding earlier features, such as walls or stone kerbing.

Many upland areas, such as this 250 year old settlement at Leataidh near Rogart, are no longer considered viable as farmland. In the past because the climate was better, because of extreme land hunger or because the upland soils were more easily worked, these areas were cleared for fields. They have survived because later farmers have not found it economic to cultivate these areas.

This roundhouse site can best be seen in winter when the bracken has died down. Birch scrub is beginning to obscure it.

Bracken almost completely masks this stone burial cairn. Spraying can help retain this as a feature in the landscape, still visible in summer.
• Are stones protruding in a line?
  They may mark the line of a dyke or the wall of a building.

• Examine all hollows, ditches and ponds.
  While many of these may be natural features, others may have been deliberately created.

• Try to decide if the landscape you are viewing has evolved or formed part of a unified design.
  Remember most designed landscapes are not recorded in the HS/SNH Inventories of Historic Gardens and Designed Landscapes. The 1st edition OS map should give a clearer idea as to whether a landscape was designed, even if it is not listed in the Inventory.
  On the ground look for parkland trees, especially of exotic species. Are there vistas to natural or man-made features?

• If possible, undertake archaeological survey in winter or early spring before the vegetation has grown up.
  Long grass, scrub, bracken and trees all obscure archaeological features.

• Examine areas of unusual vegetation.
  In the uplands, archaeological sites are often marked by areas of richer grassland and sometimes bracken because the soil has been enriched and disturbed in the past. Vigorous growth of nettles and other nutrient-rich vegetation in neglected corners of a farm may mark the site of abandoned buildings.
  Woodland areas, especially with veteran trees, may show evidence of past management.

• Do not neglect old tracks.
  Some of them may be very old or formerly important routes. Think why they were made. It may just be access to a peat moor but it could lead to an old house site or abandoned mine workings. Constructing a road involved heavy work and would only be done to a specific need.

   Much of the Scottish landscape has been deliberately created into its present form. However, only a small number of landscapes survive as examples of single unified designs.

   In summer this building at Sands, Gairloch, needed the bracken to be trampled down for it to become visible.

   The same site in winter is much easier to recognise. If it is possible to survey or revisit areas when the vegetation is low, you are more likely to recognise archaeological sites.

• Examine erosion scars, mole heaps and other exposures.
  Some archaeological sites, not otherwise visible on the surface, can be revealed by exposed deposits of bone, pottery, shells, charcoal or iron slag. They may well be significant features in their own right and may help explain variations in the topography or vegetation.
WHERE TO FIND HISTORIC LANDSCAPE FEATURES

- Banks marking former fields
- Lade feeding former mill
- Cultivation lines marking abandoned rigs
- Burial mound now topped with trees
- Deserted township
- Hillfort
- Stone dyke still in use
- Wetland area with potential for past environmental evidence
- Banks marking former fields
The drawing above shows a sample of the features that could be found on a farm. Archaeological features survive in many different areas across the farming landscape and the following broad zones can be identified, as described on the following pages.

Arable, Pasture, Field Margins/Copses, Woodland, Wetland and Upland

The list on page 23 suggests which individual features to look out for across the range of habitats and landscape over Scottish farmland.
ARABLE

Arable farmland is the most difficult area in which to spot archaeology because cultivation will have removed most of the upstanding features. Some features such as Standing Monuments, Cairns, Mounds and Farm Buildings may be left as islands within an area of cultivation. It is always worth checking field clearance dumps to see if they have been put on top of some structure too awkward to remove. Check with the farmer if he knows of any such sites before you survey his land.

Some archaeology can be inferred from standing monuments surviving in uncultivated areas. Hedgerow boundaries and banks may well preserve remains that do not survive in the cultivated areas.

After ploughing, spreads of charcoal, reddened soil, shells, stones or pottery may all mark archaeological sites. Speak to the farmer or tractorman to find out if they have noticed differences in the soil texture and colour when ploughing. Not all soil marks will be the result of former occupation. Acid soils, particularly in recently reclaimed ground, may have very distinct variations in soil colour caused by gleying and variable pan formation.

Cropmark archaeology is only obvious during particular crop and climatic conditions. However it is possible to work out where some sites are because of the local topography. Many sites such as forts, burial cairns and house sites were placed on raised ground because of better drainage. These knolls or ridges can still be seen even in cultivated fields. Other sites such as ditches, though largely silted up, will still survive as hollows.

Archaeological sites in arable areas are prone to damage either because the farmer is ignorant of their location or because the sites are vulnerable to the processes of arable cultivation. Subsoiling, deep ploughing and destoning are particularly harmful to cropmark sites, but even upstanding sites can be easily damaged in arable areas.

The Roman Fort at Strageath, near Crieff, survives under the plough as a series of light areas where roads once lay and darker areas where ditches were cut. Excavation has shown this was occupied on at least three separate periods and the photograph shows a composite view of the remains from these different periods of use.

The effect of ploughing can be seen in the alternating strips of ploughsoil and subsoil. Comparison with features excavated under the headland shows that surviving archaeological pits have been severely truncated. Arable cultivation remains one of the biggest threats to archaeological features.

This neolithic building in Perthshire, defined by a series of pits for the roof timbers, was first discovered by flint tools found from field walking and by aerial photography. Note the contrast between the subsoil and the pits cut into it. The richer fills of these pits helped produce cropmark features and also contained important archaeological evidence to date and interpret this site.
PASTURE

Many archaeological sites are preserved under pasture. In some areas of permanent pasture, the archaeological features may not have been disturbed since they were abandoned.

Archaeological features under pasture are generally considered to be well protected, unless it is proposed to reseed the area. Grazing makes sites more visible and prevents them being obscured by rank vegetation or scrub. Care must be taken to prevent poaching, placing feeding stances on archaeological sites or siting fence lines across large monuments.

All types of archaeological remains can be found in pasture and these sites are usually the easiest to spot because grazing has allowed a monument to stand out from the surrounding vegetation. Areas of rushes may grow out of abandoned structures or mark the line of largely silted up ditches. Stone heaps, perhaps marking cairns or house sites, should always be examined. They may only be the result of stone clearance but they could be marking a significant site.

Reseeded pasture is a more difficult area in which to spot sites. If the sites are substantial banks or mounds, they may survive repeated episodes of ploughing, whereas slighter features may disappear after the first pass of the plough.

Sometimes low light or shallow drifted snow can enhance features not otherwise visible, making them visible like cropmark sites.

In terms of management, features under permanent pasture are likely to remain stable, unless grazing pressure is causing poaching and erosion.
FIELD MARGINS AND COPSES

Often the corners of a farm may well not be cultivated because the surviving archaeological remains make them awkward to work.

These can include many types of site but are usually either substantial features or in awkward corners. In some cases, house sites were deliberately kept off the good agricultural land and so have survived, while the associated field systems have been ploughed out to form the modern fields. Many important archaeological sites survive in these marginal areas and can make an important contribution to understanding the history of these areas, as well as giving character to individual landscapes.

Earlier farms were mostly smaller than modern ones and the remains of several buildings and settlements may be found on one farm unit.

Field boundaries, such as Banks, Dykes and Hedges, can themselves be significant parts of cultural landscapes. These do not need to be part of formal Designed Landscapes to be important and may well not be listed on Sites and Monuments Records.

Sometimes copses have been deliberately planted on features, such as Cairns or Mounds. They should always be checked to see if they conceal archaeological features. These areas are also vulnerable to field widening or being used as dumps for clearance stones or farm rubbish.

Significant archaeological areas like this 18th-century farmtown are often preserved in uncultivated areas at the edge of fields.

Stone clearance heaps and the encroachment of trees on field margins may hide former field boundaries. The two buildings marked here have survived at the edge of the modern field, though the roots of the birch in the foreground will clearly be damaging any buried archaeological deposits.

Copse planted over a prehistoric burial mound in the centre of a field near Killiecrankie.
WOODLAND

Woods give strong form to landscapes but they should always be examined for their history. Old maps and fieldwork are vital for studying the location and extent of former woodland. The woods themselves may contain interesting information on the landscape history of an area.

Many of the oak woodlands on the west coast, now listed as SSSIs, were first preserved in the 18th century because charcoal burning and the use of the bark for tanning made them commercially valuable.

Deliberate planting of woodland is recorded from at least the 17th century and some landowners planted extensive tracts of country with trees. Check old maps, documentary accounts in your local library and the Inventory of Ancient Woodland at SNH for information on these former woodlands.

Equally, check within woodlands for areas of former settlement. Certain species, such as birch, may colonise open sites and can be distinguished from more established woodland by the age and species of trees present. Alternatively, trees may colonise features such as dykes and banks before establishing themselves in former fields. Mature trees such as oak and beech may have been planted deliberately along field boundaries and could be the first indication of a former boundary. A line of closely spaced trees may also mark a former hedge line and veteran trees may mark an area of former wood pasture. Ignorance of a woodland’s history may easily lead to significant features being removed, destroyed or obscured.

Regeneration can lead to woodland spreading into areas of former settlement. Decisions on whether to remove trees to protect buildings or leave them because of other environmental benefits, such as rare lichens or bat roosts, will have to be decided on individual merit.

These woods at Novar have been planted to a set design as part of the policies around the house. This has taken many years to develop and is still changing.

This multi-stemmed oak at Rough Castle, Falkirk may have been coppiced. However it is more likely to be the result of a tree recovering from the grazing out of its original shoot.

Scrub can obscure strong landscape features such as this small fort near Loch Ashie in Stratherrick, masking not only the details of the fort’s ditches and banks but also its position commanding this valley. (See page 53 for further discussion of this site.)
WETLAND

Though wetlands might not be the most obvious places for archaeological sites, some important archaeological remains have been found in bogs. This could be because the bog has developed over previously dry land when the drainage has been impeded, or where a former island has been submerged. Some sites such as crannogs and hunting platforms were deliberately placed in wetland or even open water.

Archaeological sites in wetland are very difficult to spot unless the sites are revealed by cuttings or erosion. Sites overgrown with bog are often difficult to spot because the vegetation can regenerate very quickly. Sites, such as dykes, may appear to end in areas of blanket bog, though in fact excavation shows them to continue under the peat.

Archaeological sites in wetland are important because they often contain preserved organic material, such as wood, leather and pollen grains, that does not survive under normal soil conditions. This material is vital for better understanding how people lived in the past and is also important for interpreting previous environmental conditions.

Areas of wetland were often exploited as sources of peat by neighbouring settlements and extensive tracts of ground were cleared of their original vegetation. In effect, any peat source adjacent to a settlement has potentially been exploited and this should factor in any judgements on the nature conservation quality of a bog. Remains of peat cuttings can seen in wetland/boggy areas all over the country. Though many are now overgrown, the variation in soil levels and the peat banks can still be made out. While such sites do not generally need special protection, they are important for explaining how the land has been exploited in the past and will also have implications for local flora and fauna. Features like access tracks and storage areas defined by stony spreads or more grassy mounds at the edge of bogs may also mark former peat cuttings.

Areas of wetland may have developed from former ponds or water courses that have silted up. Look carefully at the local topography if you suspect this.

Many early industries were powered by water and sited in locations that could exploit this. Mill dams and lades may well have silted up, only remaining visible as banks, straight channels and cuttings. Earlier maps may help to confirm your suspicions.

Protection of archaeological sites in wetland is similar to those for nature conservation interests in maintaining existing water tables. Change of habitat such as drainage, tree planting or regeneration can cause harm to archaeological deposits.
UPLAND

Because upland areas are less prone to intensive agriculture, significant areas of archaeological sites of all periods survive in the uplands. Changes in climate and farming practice mean that areas once viable for agriculture and settlement have now been abandoned to pasture or moorland. Scotland, because of its topography, has large areas of upland and these are important reservoirs for historic landscape.

Complete prehistoric landscapes with fields, houses, forts and burial cairns are preserved in areas such as Caithness and Sutherland. No later settlement has occurred because blanket peat or political disturbance has led to whole areas being abandoned. The precise causes and details of these settlements would require detailed archaeological intervention to unravel, but these surviving landscapes are of international significance because the contemporary settlements in lowland Europe lie truncated under ploughed fields.

Archaeological sites may be easily recognised in uplands because the surviving remains may stand out from the natural land forms. However, where vegetation is dense, such as under long heather, bracken or areas of tree regeneration surviving archaeological sites may be obscured.

Lines of dykes, banks or ditches may mark former field systems. Mounds or cairns of stone, riggs and cultivation terraces can mark other forms of fields. Rectangular or circular banks of stone and earth may be the remains of individual buildings that together combine to form settlements. Often, former areas of settlement will be reflected in areas of enriched vegetation; this is most common in relict summer grazings, known as shielings, but can be seen on other sites. Dykes, for example, can be highlighted as lines of raised vegetation.

Former industrial sites such as mills and quarries can be found in areas that are no longer populated. Many farm buildings such as shepherds’ houses or hunting lodges may also survive. Roads and tracks to these sites can still be traced.

While most upland archaeological sites are relatively stable, their condition can be improved by altering grazing regimes, muirburn and bracken spraying. This can also make these sites more visible parts of the historic landscape.

A prehistoric landscape of roundhouses and low field walls preserved in moorland near Alyth. A light dusting of snow has made this site easier to see.

This previously recorded burial cairn in Strathnairn lies within a forestry plantation. Though the cairn itself is unplanted, it is now obscured by long heather and pine trees.
5  THE BUSH ESTATE, PENICUIK : A CASE STUDY

The Bush Estate has a considerable number of archaeological remains and shows clearly the difference between upstanding remains surviving in the uplands with cropmark sites in the lowlands. Some, such as Castle Law Fort and Souterrain, a Scheduled Ancient Monument, are obvious features in the landscape, but others are more difficult to find. Twenty nine sites were recorded on a conservation audit carried out under the Countryside Premium Scheme in 1997.

The previous Sites and Monuments Record (SMR) map of the farm (part of which is shown on the next page) recorded all the known archaeological features, including sites such as ‘Wallace’s Camp’ that are now no longer visible. As part of the SMR search, a series of aerial photographs taken over a number of seasons was examined.

Nothing shows above ground of the cropmark sites recorded. A fort of unknown date, two possible Roman temporary camps and a probable Roman road are some of the features so far recorded from the air. Other buried sites may also survive to be recorded in the future, though the underlying soil types are not conducive to producing good cropmarks. Not all sites can be revealed as cropmarks and stray finds such as a flint knife found near Rullion Green in 1979 may mark other archaeological features. While not upstanding elements of the historic landscape, these features give a chronological depth to the land and deserve protection.

This small memorial put up in 1738, marks the site of the Battle of Rullion Green where a band of Covenanters was slaughtered by government troops.

This aerial photograph revealed the line of an earlier road lying to the north of the A702 at Rullion Green. It shows as a dark grey line above the existing road.

Castle Law Fort shows up as a strong landscape feature both on ground and as here from the air.
These rigs, lying outside the enclosures at Woodhouselee as marked on the SMR plan, were almost certainly constructed to produce corn around 1800 when the price was high during the Napoleonic wars. They are not marked on the map above. They form a distinctive landscape feature and add to the history of this area.

East Lothian was one of the areas in Scotland where the agricultural improvements that formed the modern farming landscape were first introduced. While the landscape has changed considerably, the forms of this 18th-century landscape can still be traced and are the basis of the modern landscape.

Lines of dykes and trees mark field boundaries and though some have disappeared, the remaining features contribute strongly to the farming landscape. The Countryside Premium Scheme was used to fund repairs to the dyke below Castle Law. This has been restored as a significant landscape feature.

These rigs, lying outside the enclosures at Woodhouselee as marked on the SMR plan, were almost certainly constructed to produce corn around 1800 when the price was high during the Napoleonic wars. They are not marked on the map above. They form a distinctive landscape feature and add to the history of this area.
Future management of the historic landscape features on the Bush Estate has been made easier by having a conservation audit done on the farm. However, this was drawn up for a specific limited purpose and should not be seen as definitive report for all time. A more detailed survey would have been required, beyond the scope of the SMR audit, to record all the archaeological features on this farm. This is not to deny the value of the audit in identifying the known historic landscape features, and by identifying them enable the farm manager to protect them.

As has been shown, additional features of archaeological interest can be recovered both from the records and on the ground. Any information is useful but remember to use your own judgement and experience to record additional features and to note new details on existing sites. Use all information critically and if in doubt, or if the evidence is contradictory, seek professional help.

At the south west boundary of the Bush Estate is a hillfort bisected by the march dyke with the neighbouring property. Note that at least one roundhouse survives within the fort boundaries and how the banks have been ploughed down on the adjoining property.

Ideally the dyke should be adjusted with a suitable buffer to allow this site to be managed as a single unit. However, because this is a boundary feature between two properties and itself of landscape value this option is not available.

Serious erosion to the archaeological deposits is being caused by a badger sett. Rehoming of these animals, in cooperation with SNH, would be desirable, but measures would have to be taken to prevent reoccupation from a neighbouring sett. Whins are also seeding onto this monument, both obscuring it as a landscape feature and potentially causing damage to the surviving archaeological deposits.