Historic Land-use Assessment

Guidance for using HLA data in decision-making contexts

HISTORIC SCOTLAND
ALBA AOSMHOR

Royal
Commission on the
Ancient and
Historical
Monuments of
Scotland

Project Title: Guidance for using Historic Land-use Assessment (HLA) data in decision-making contexts

Client: Historic Scotland

Version	Date	Version Details	Prepared by	Checked by	Approved by Principal
4	1/5/2012	Final	SMO/NJ/MJ	SMO	NJ

H:\1 Projects\53\5380 LIVE Historic Scotland guidance for using HLA\C Project Outputs\5380_HLA guidance_FINAL_print.docx

2

Historic Land-use Assessment

Guidance for using HLA data in decision-making contexts

Prepared for Historic Scotland by LUC
March 2012

Contents

Executive summary

Executive summary

What is Historic Land-use Assessment data?

Historic Land-use Assessment (HLA) is a powerful tool for understanding the history and development of Scotland's landscape.

HLA records the **whole landscape**, unpicking the time-depth fossilised in visible landscape features and illustrating how they relate to each other spatially and chronologically.   It can therefore illustrate the processes that have shaped the landscape and demonstrate how past events and decisions continue to resonate in the present. This understanding can help inform management decisions for the future.

Outputs?

The principal output of the HLA project is a Geographic Information System (GIS) dataset that is aiming to cover the whole of Scotland by 2015. The data produced by the HLA is not a single product; rather it is a resource to be explored, interrogated and adapted for use in a range of contexts.

It can be accessed:

- Via the full GIS dataset, which can be downloaded free of charge from the RCAHMS website

- Online, through HLAmap

What is it for?

HLA data is intended as a resource for understanding how the landscape has developed through time.

It allows users to:

- understand the chronology and history of the present-day landscapes;

- better understand the historic component of landscape character;

- identify areas of past (or 'relict') landscapes preserved within the mosaic of current land use;

- undertake quantitative and qualitative analysis to understand the potential importance of historic landscapes in their wider context; and,

- incorporate information on historic landscapes in design, assessment and spatial modelling work.

Filling knowledge gaps

Historic landscapes are currently under-recognised in policy frameworks, and are therefore potentially under-considered in decisions on the use, management and development of land. Effective conservation of this resource depends on consistent, good quality information being available to decision-makers – and HLA can contribute in a range of ways, including:

- bridging the gap between site-specific historic environment data and broad-brush Landscape Character Assessment (LCA);

- providing rigorous, detailed information on the historic landscape context of sites and monuments, settlements and other environmental assets;

- providing landscape-scale information on historic landscapes to inform management decisions relating to natural and cultural heritage, agriculture, forestry and development;

- facilitating rigorous spatial and statistical analysis of distribution, preservation and relative rarity of historic landscape types at the local, regional and national level;

- providing a baseline against which landscape change and impacts on the historic environment can be monitored;

- providing part of a robust historic environment evidence base for policy development, and

- providing a basis for more detailed investigation and analysis.

Who is it intended for?

HLA will be of use to anyone interest in Scotland's landscapes. It has considerable value in aiding informed decision making on the use, development and management of land. It complements other sources of information that operate at different scales, such as Historic Environment Record data and Landscape Character Assessment, and can provide important contextual detail for understanding natural and cultural heritage assets.

The more holistic view of the landscape and its development that use of HLA can provide creates important opportunities for better integrated planning and management that takes full account of the character and significance of our landscape resource.

What are the benefits of using HLA data?

In design and assessment

HLA data provides an accurate spatial representation of historic landscapes that can play a significant role in shaping the location and nature of change. It enables practitioners concerned with the use, development and management of land to:

- quickly and effectively understand the historic character of the landscape;

- identify what is important; and,

- develop proposals that take into account sensitivities that require protection and draw inspiration from the patterns of past land use in designing future change.

In landscape character assessment

HLA provides a key source of information for practitioners undertaking Landscape Character Assessment (LCA) that can add significant practical and evidential value to the outcomes of assessments – and contribute to a more consistent appreciation of the contribution of historic landscapes to wider character.

In decision-making

Better informed decisions should result in better outcomes for the historic environment, land managers and communities. Historic landscapes are an under-appreciated resource, and HLA data offers a means of ensuring practitioners and decision-makers alike are more aware of the historic origins of landscapes – and what their presence means for planned activities.

Historic landscapes need not be viewed as a constraint to development or economic land management. Instead, there are significant opportunities for well-planned and managed developments and land management activities to help secure a sustainable future for historic landscapes. Similarly, historic aspects of the landscape can influence design in positive ways that allow a resonance from the past to continue into the future.

1
Scotland's historic landscapes

1 Scotland's historic landscapes

Landscapes – concepts and issues

What is 'landscape'?

> '…an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.'
>
> **Article 1, European Landscape Convention**

1.1 The landscapes that we see in Scotland today are the product of some 10,000 years of human interaction with the environment. Ranging from the limited interventions of the first hunter-gatherer communities to the effects of intensive agriculture, industry and settlement, human communities have influenced the development and current appearance of virtually all of Scotland's landscape.

1.2 Historic landscapes are defined both by people's perceptions of the evidence of past human activity in the present-day landscape and the places where those activities can be understood in the landscape today.

Processes of change

1.3 Across a landscape, change occurs at a range of scales, rates and intensities and may be driven by natural or man-made processes. Landscapes are intrinsically dynamic systems and continue to evolve as settlements expand, patterns of land use and management change, new infrastructure is developed and the way we utilise or value our natural and cultural resources change. While the effects of change over time are what create diversity and character, managing ongoing and future change represents a significant challenge.

Seeing history in the landscape

1.4 Changes in the landscape rarely completely erase the existing patterns of land use and cover – as evidenced by the wealth of archaeological sites distributed throughout Scotland. Similarly, historic features may assume new uses, take on new meaning or have their general form subsumed within a different land use – fossilising their outlines in modern field patterns or within the urban grain of new development.

1.5 Sometimes historic features are clearly visible and make an obvious and important contribution to landscape character and the values communities attach to their local area. For instance the visual domination of Stirling castle over the surrounding area, the patterns established by crofting townships in the Western Isles or the influence of country houses and their associated policy woodlands, parkland, planned field systems and estate buildings on the countryside of East Lothian. In other cases, the impacts of human activities may be more subtle and less apparent to the untrained eye – where prehistoric settlement is preserved in moorland or where historical decisions relating to how land is managed has resulted in the preservation of significant areas of particular habitats, such as Argyll and Lochaber's Atlantic oakwoods that are now internationally important for their biodiversity value – but were intensively managed in the 18th century to produce charcoal to support the early stages of the industrial revolution.

1.6 Landscapes are therefore built up of layers of multiple histories – some recent, some modern; some widely understood, and others awaiting discovery.

Valuing historic landscapes

Why are historic landscapes important?

1.7 The time-depth visible in Scotland's landscapes has a significant influence on how we experience, understand and value our surroundings. This gives a sense of place in both space and time, contributing to distinctiveness and community identities.

1.8 For visitors to an area, this experience of time-depth adds significant value to the tourist experience of Scotland – and therefore has an important economic function. Similarly, a strong sense of place and distinctiveness provided by historic buildings and urban form plays an important role in the attractiveness and competitiveness of Scotland's cities, and the character and quality of the rural landscape as a resource for recreation.

1.9 Individual sites and monuments represent **events** in time and space; the results of someone's decision and action. Historic landscapes are intrinsically larger-scale, and often recall a different scale of history – that of broad **processes** resulting from environmental change and wider social, economic and political trends.

1.10 They represent the nation's collective memory, written in the fabric of our towns, cities and countryside. As such, they are an important communal resource and a repository of information about our past that can inform our collective future. Like all historic assets they can have a range of values attached to them which inform the overall significance of a place or landscape, including:

- **Communal value**: importance or meaning attached to a place or landscape derived from the ways people relate to it, mediated by their collective experience, memory, knowledge and identity.

- **Historical value**: derived from the ways in which past processes, events, actions and aspects of life can be connected, through a place or landscape, to the present. This may represent the potential of a place to illustrate the link between past and present, enabling appreciation and interpretation of the past; or, in relation to the association of a place or landscape with particular historical figures or events.

- **Evidential value**: the potential of a place or landscape to provide evidence of past human activities and to contribute to people's understanding and appreciation of the past

- **Aesthetic value**: the potential to provide intellectual and sensory stimulation from the appearance and experience of a place or landscape. This can relate to responses to deliberate design, for example in relation to structured views and ornamental planting in a designed landscape, or responses to the character of a landscape generated by the fortuitous interaction of natural and cultural elements.

- **Contextual value**: historic landscapes may also have wider value in forming or contributing to the setting of other historic assets.

How can decision-making affect historic landscapes?

1.11 Decisions on the use, management and development of land necessarily create change in the landscape. Where these decisions are not informed by an appropriate understanding of the character and significance of historic landscapes, adverse effects can occur.

1.12 Managing historic landscapes is not about preventing change, but instead managing the process to protect, conserve and enhance significant landscapes, influencing the design of development, and the type and intensity of land management to ensure that important features remain legible for future generations.

2
Introduction to HLA

2   Introduction to HLA

2.1   Since the pilot exercise in 1996-8, the Historic Land-use Assessment project, funded and administered by Historic Scotland and the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS), has been interpreting and recording the historic origins of the entire land surface of Scotland. Covering 80% of Scotland in 2012, this process has generated a dataset of unparalleled scale, quality and utility.

What is it?

Principles and process

2.2   The Historic Land-use Assessment (HLA) employs an archaeological approach to understanding the development and history of the landscape. It provides a systematic and rigorous means of 'reading' and recording features that survive from past activities that can be identified in patterns of current land use. Although it is an archaeological approach, its outputs have relevance and potential applications far beyond the realms of 'traditional' archaeology.

2.3   HLA records the **whole landscape**, regardless of its historic origin, value or significance in an objective manner, unpicking the time-depth fossilised in landscape features and illustrating how they interrelate spatially and chronologically.   It can therefore illustrate the processes that have shaped Scotland's landscape and demonstrate how past events and decisions continue to resonate in the present. This understanding can help inform management decisions for the future.

2.4   The dataset does not generally record historic landscape features under 1ha in area, although specific rules exist for capturing groups of archaeological sites below this threshold (specifically shieling-huts and hut-circles). Individual sites are not recorded as they are both too small to map effectively at 1:25,000 scale and duplicate information held in Historic Environment Records and RCAHMS Canmore.

Outputs

2.5   The principal output of the HLA project is a Geographic Information System (GIS) dataset that will cover the whole of Scotland by 2015.

2.6   The data produced by the HLA is a resource to be explored, interrogated and adapted for use in a range of contexts – it is not a finished 'product' that can provide ready-made answers to users' questions. This is equally true of the majority of publicly-available data relating to the historic environment, such as Historic Environment Record entries, which require appropriately informed interpretation to understand their relevance to user's interests and activities.

Quality

2.7   All the component parts of the HLA dataset have been interpreted, recorded, checked and edited by historic environment professionals using a comprehensive range of sources. While knowledge and understanding of the historic environment continues to evolve, the HLA data should be considered the authoritative resource for understanding Scotland's historic landscapes.

How does it work?

Data structure

2.8   HLA data is structured to reflect the time-depth in the landscape and records both current (termed 'historic') and relict land use. Each polygon in the dataset has the capacity to record the

current land use and up to three levels of relict land use – traces of past activity still visible in the landscape (including by aerial photography, in the case of cropmark archaeological types). Detailed information is available in existing technical guidance on the HLA website.

2.9   The attributes held in the dataset are structured as follows:

- **Type**: the basic building blocks of the dataset, recording the specific origin of recorded land use:

    - **Historic type**: the current use of land.
    - **Relict type**: past land use. Each polygon can accommodate up to three levels of relict land use, structured from the most recent to the earliest.

- **Category**: 14 overarching classes of broad historic land use within which types are nested (with the exception of the four relict categories solely related to archaeological types that have no current equivalent), enabling more generalised analysis and visualisation of the data.

- **Period**: each type is classified by its chronological period of origin, in addition to its form and function. HLA Periods are based on upon the historical and archaeological understanding of each type and, for pre-modern types, are defined by broad historical age (e.g. later prehistoric, medieval).

Manipulating the data

2.10   The dataset can be interrogated in a range of ways, which are set out in detail in the technical guidance available on the RCAHMS website. Broadly, these methods can be understood as follows:

- **Attribute-based**: extracting information from the dataset based on the text stored in the GIS attribute table. Query statements can be developed to return entries based on type, category or period fields – or any combination of the three.

- **Spatial**: data can be selected based on the spatial relationship of HLA polygons to features in any other dataset (for example, selecting all records within a proposed development footprint or within a given radius of a particular class of historic asset).

2.11   This level of interaction with the data is only possible using dedicated GIS software – although planned developments of RCAHMS CANMORE online mapping service is likely to provide more advanced functionality for web-based users than the existing HLAMap service.

Who and what is it for?

2.12   Broadly, HLA is for anyone with an interest in Scotland's landscapes. More specifically, it has considerable value in aiding informed decision making on the use, development and management of land.

2.13   Only tiny fragments of our landscape can be considered to be 'natural' and largely free from the direct influence of human action. The rest is the product of centuries of development, management decisions, shifting patterns of ownership and the influence of a host of social, cultural and political forces. Therefore any attempt to understand the character or significance of landscapes is incomplete without reference to this critical historic dimension.

2.14   HLA's core purpose is therefore to aid understanding of Scotland's landscapes and their historic development. It is intended to complement other sources of information that operate at different scales, such as Historic Environment Record data and Landscape Character Assessment (LCA), and can provide important contextual detail for understanding natural and cultural heritage assets.

2.15   The more holistic view of the landscape and its development that use of HLA can provide creates important opportunities for better integrated planning and management that takes full account of the character and significance of our landscape resource.

What need does it address?

2.16   Historic landscapes are currently under-recognised in policy and are therefore potentially under-considered in decisions on the use, management and development of land. Other than previously recorded archaeological landscapes and larger designed landscapes, they are rarely recorded in local HERs. Similarly, the subtlety and complexity of both historic and relict land use is such that it is often too fine-grained to be recognised and captured through Landscape Character Assessment.

2.17   An important aspect of national cultural heritage is therefore potentially vulnerable to one of the most intense periods of landscape change in recent history.

2.18   HLA data can be viewed as:

- filling the information gap on historic landscapes;

- bridging the gap between site-specific HER information and small-scale Landscape Character Assessment (LCA);

- providing rigorous, detailed information on the historic landscape context of sites and monuments, settlements and other environmental assets;

- providing landscape-scale information on the historic landscapes to inform management decisions relating to natural and cultural heritage, agriculture, forestry and development;

- facilitating rigorous spatial and statistical analysis of the distribution, preservation and relative rarity of historic landscape types at the local, regional and national level;

- providing a baseline against which landscape change and impacts on the historic environment can be monitored;

- providing a robust historic landscape evidence base for policy development;

- providing key information for local authority 'State of the Environment' reports and baselines for Strategic Environmental Assessment;

- providing a basis for more detailed investigation and analysis, for example:

    - detailed characterisation of the urban environment (e.g. to inform Conservation Area Assessments, Townscape Heritage Initiatives or proposed masterplans and regeneration projects);
    - analysis of the development, extent and phasing of designed landscapes;
    - as a 'first look' for scoping Environmental Impact Assessment;
    - in assessing the effects of development on historic landscapes and the setting of historic assets; and,
    - contributing to survey programmes by providing insights into patterns of preservation and addressing gaps in coverage of other data sources.

Approaches to the dataset

2.19   The power of the HLA dataset lies in its utility as both a quantitative and qualitative tool that can be used as a complete dataset, broken down into smaller units for analysis (e.g. by local authority or Landscape Character Areas) or queried to extract particular classes, periods or types of historic land use.
For more detailed information on interrogating the data, see the technical guidance note on the RCAHMS website.

HLA, heritage values and significance

2.20   Understanding and clearly expressing the values and significance attached to a place or landscape is necessary to inform choices about its future – including the appropriate level of protection in policy or regulatory decisions on use and management of land.

2.21 The HLA does not evaluate the significance of individual polygons within the dataset, or of historic landscapes as a whole. Understanding the significance of a place or landscape depends to a large degree on the context and, where assessing the impacts of a decision, on the scale, nature and duration of the change proposed.

2.22 Subsequent sections of this guidance illustrate a number of techniques that may be employed to understand the significance of historic landscapes to contribute to policy responses and decisions on land use and management. However, to provide the most comprehensive picture additional information sources should be consulted alongside HLA data, particularly:

- the relevant Landscape Character Assessment(s);

- RCAHMS Canmore data;

- the relevant Historic Environment Record (HER);

- where appropriate, detailed historical sources such as:

    - historic mapping, including online resources made available by the National Library of Scotland;
    - estate maps;
    - documentary sources such as the Statistical Accounts of Scotland, Agricultural Surveys and estate records held in the National Archives of Scotland;

- community consultation; and,

- advice from appropriately qualified and experienced landscape and historic environment specialists.

How can HLA data add value to decision-making?

2.23 The HLA dataset is an important resource that can help inform decisions on the use, development and management of land and add significant value to the processes of policy development and decision making. However, it does require interpretation and manipulation to extract the most relevant information to the specific context under consideration; and it is intended to be used in parallel with other sources of information on the historic environment, particularly site-based information in historic environment records.

Policy development

2.24 HLA data can add considerable value to the evidence base used in land use policy development – particularly Local Development Plans, Forestry and Woodland Strategies and SRDP 'Rural Priorities'.

2.25 Local authorities and regulators have a duty to protect and enhance the cultural heritage. Ensuring proper account is taken of significant historic landscapes should be a key action in updating plans, policies and strategies.

2.26 Where historic landscapes – and the processes required to ensure that their sensitivities are properly assessed – are effectively incorporated within local policy frameworks, this can provide greater certainty for developers, land managers and regulators alike.

2.27 HLA can also contribute through **Strategic Environmental Assessment** (SEA) by providing a baseline against which the likely effects of proposed policy can be tested. This process can aid the refinement of spatial or policy recommendations to protect sensitive landscapes and direct appropriate uses and development that could help to secure a sustainable future for key assets and landscapes.

> It is recognised that incorporation of HLA within policy frameworks will be an incremental process, driven by statutory timetables and resource availability.
>
> However, given its importance in influencing the choices of land owners, managers and developers, it should be a priority.

Determination of applications

2.28 There is considerable potential for HLA data to contribute to better informed, consistent and effective decision-making.

2.29 Historic landscapes need not be viewed as a constraint to development or economic land management. Instead, there are significant opportunities for well-planned and managed developments and land management activities to help secure a sustainable future for historic landscapes. Similarly, historic aspects of the landscape can influence design in positive ways that allow a resonance from the past to continue into the future.

2.30 HLA can be used to positively influence the planning process at the following stages:

- **Pre-application consultation**:
  highlighting historic landscape sensitivities at the earliest opportunity, helping to ensure that:

  - developers and land managers understand the likely effects of such sensitivities on the outcomes of decisions – potentially reducing costs and delays;
  - appropriate protection for the most sensitive assets is delivered; and,
  - historic landscapes influence design.

- **Scheme design**:
  historic landscape structure and/or the presence of important relict features can positively influence the development of:

  - masterplans, development frameworks and briefs and landscape management plans; and,
  - conservation management planning for heritage assets and natural heritage sites.

- **Screening and Scoping Environmental Impact Assessment (EIA)**:
  for development, woodland creation and changes in land use that require Environmental Impact Assessment under the relevant regulations[1], HLA data can provide:

  - a 'first look' for understanding the composition of landscapes and the historic environment of the study area; and,
  - information to aid the assessment of the sensitivity of the historic environment at a landscape scale.

- **EIA**:
  forming the basis of assessments of the significance of historic landscapes, and the nature, scale and severity of impacts, providing:

  - baseline information to assist programmes of fieldwork;
  - contextual information on the environs and setting of individual assets; and,
  - a basis for interpretation of the significance of affected historic landscapes, and the effects and magnitude of proposed change.

---

[1] The Environmental Impact Assessment (Scotland) Regulations 1999, as amended; The Environmental Impact (Forestry) (Scotland) Regulations 1999, as amended; and, The Environmental Impact Assessment (Agriculture) (Scotland) Regulations 2006, as amended.

2.31   HLA data can also be used by decision-makers and regulators to identify where applications for development or changes in land use or management could affect potentially important historic landscapes – triggering the need for detailed assessment by applicants or their agents.

For optimum effect, HLA data – although not necessarily the whole dataset – could be incorporated within regulators' systems and processes to highlight this need at the earliest opportunity. Forestry Commission Scotland is already making use of the HLA in this way, through the corporate GIS browser available to officers involved in woodland creation casework.

> For decision-makers, what the HLA data actually depicts in a given location is – in the first instance – frequently less important than what the presence of potentially significant historic landscapes means for the **process and outcome** of their determinations.
>
> The key task is therefore providing appropriately interpreted information on historic landscapes to highlight sensitivities and trigger the necessary consultation and assessment processes. The outcomes of these activities will provide the necessary information on the importance of the affected landscape, the nature of the impacts and the need for mitigation.
>
> Creative solutions will be required to meet the needs of different land use sectors, and this guidance aims to demonstrate some ways in which this work can be taken forward within decision making authorities.

3
What can HLA tell you about historic landscapes?

3 What can HLA tell you about historic landscapes?

3.1 Although HLA was developed in the historic environment sector, it records information about Scotland's environment that is of far wider relevance, interest and utility. Used in parallel with other sources of information it provides a powerful resource for:

- understanding how Scotland's landscapes and environment has developed;

- understanding the relevance of historic landscapes in a range of contexts; and,

- planning for the future management of the landscape and environment.

Understanding the development of the landscape

Whether urban or rural, we live in a cultural landscape where the effects of human action and decisions have shaped almost every aspect of the environment – and continue to do so. Understanding the historical processes that have affected the ways in which people interact with the environment can provide critical information on the importance of features in today's landscape that may otherwise go unrecognised. It can also provide a more integrated and coherent understanding of natural heritage features, expand knowledge and appreciation of the historic environment and contribute to more effective landscape characterisation. In turn, this can add considerable value to decision-making.

> Getting to grips with the historic landscape as a whole is the first step in understanding what is there, and what is most important in your particular context.

Understanding the whole landscape

3.2 Developing an understanding of how landscapes have developed is critical in recognising what features could be important, how current and future activities may change them and how best to positively manage the processes of man-made change.

3.3 HLA data can provide an overview of the way land is used – either at the very broad category level, or as more specific historic land use types – illustrating the broad state of the environment at a local, regional and national level. This can help with understanding:

- current patterns of land use and development;

- the broad pressures acting on natural heritage and the historic environment; and,

- areas with more, or less, intensive uses that may be sensitive to particular types of change.

See **Section 2** of this guidance for more information.

3.4 Every area has developed in subtly different ways, contributing to the varied social, economic and environmental conditions that currently exist. Even where the landscape appears relatively 'natural', the HLA can reveal extensive patterns of past land use, or the subtle effects of modern management, that contradicts this view.

3.5 The history of an area's landscape is also the history of its people, therefore an understanding of the origins of landscape features, patterns of development and survivals from the past are important in understanding the 'sense of place' that locates people and things in space and time. This time-depth and connection to history is an important part of the experience of much of Scotland's landscape and townscape, and is often a key aspect of community, regional and national identity.
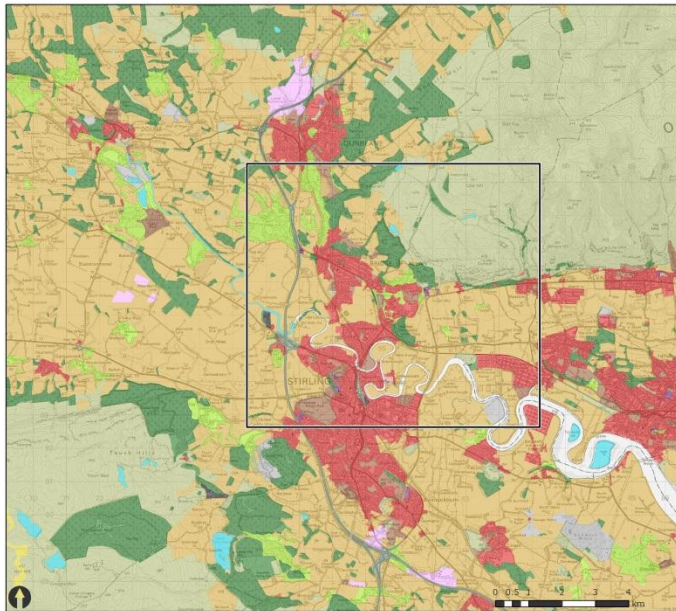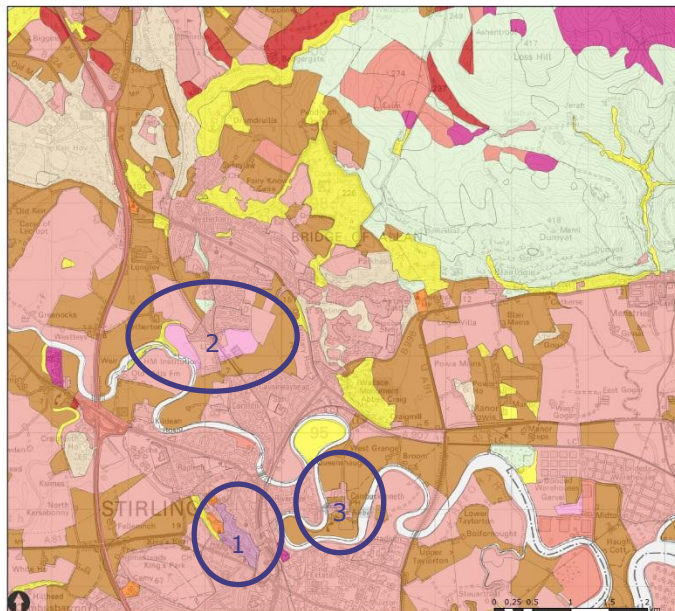
HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265

Category view of Stirling and its environs

Clearly illustrates the strategic importance of the Carse of Stirling as a 'bottleneck' between the uplands of the Touch and Ochil Hills.

In addition to the large urban areas, extensive designed landscapes (lime green) are key elements in defining the character and structure of the landscape. Areas of smallholdings (pink) are immediately apparent in the wider agricultural landscape, as are significant blocks of forest.

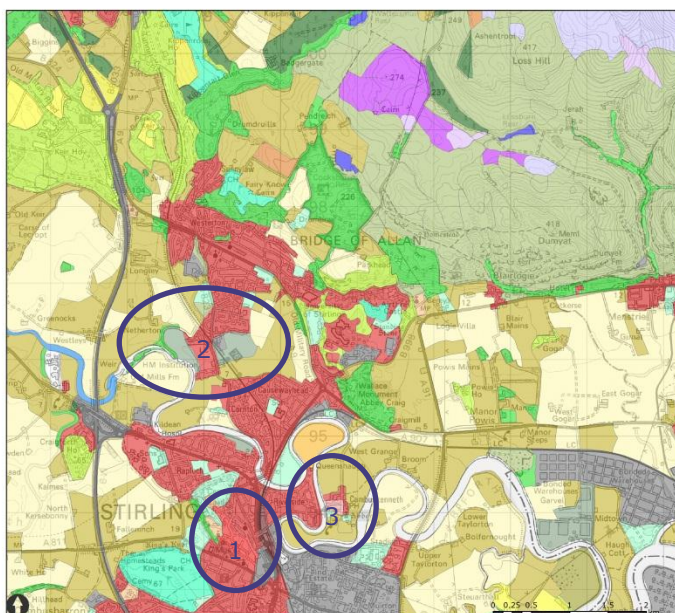*Peat and mineral extraction, and landfill (grey) are also readily apparent.*

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265

Period inset view of Stirling and Bridge of Allan

At first glance, the landscape has a predominantly 19th century-present origin – formed by the majority of urban Stirling, Bridge of Allan and the industrial areas to the south east of the city and in western Clackmannanshire (pink). The uplands of the Ochils are largely rough grazing, and therefore have no specific period of origin, but contain recent woodland plantations (red). Landscape elements picked out in yellow reveal an 18th century-present origin and relate to extensive managed woodlands.

The elements circled relate to much earlier influences still visible in the present-day landscape. These relate to the medieval cores of Stirling (1) and Cambuskenneth (3) and surviving medieval/post-medieval reverse-S field pattern at Cornton (2) – a rare survival in an intensively farmed landscape.

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265

Type inset view of Stirling and Bridge of Allan

Showing the same area as above, but displayed using HLA type attributes.

Designed landscapes (lime green) are a key influence in in the M9 corridor, with the yellow areas indicating where former parkland has been converted to agriculture.

The built up areas are disaggregated by type, with grey areas picking out industrial areas. Also visible (at 3), adjacent to the medieval village is an 18th-19th century planned agricultural village and modern development.
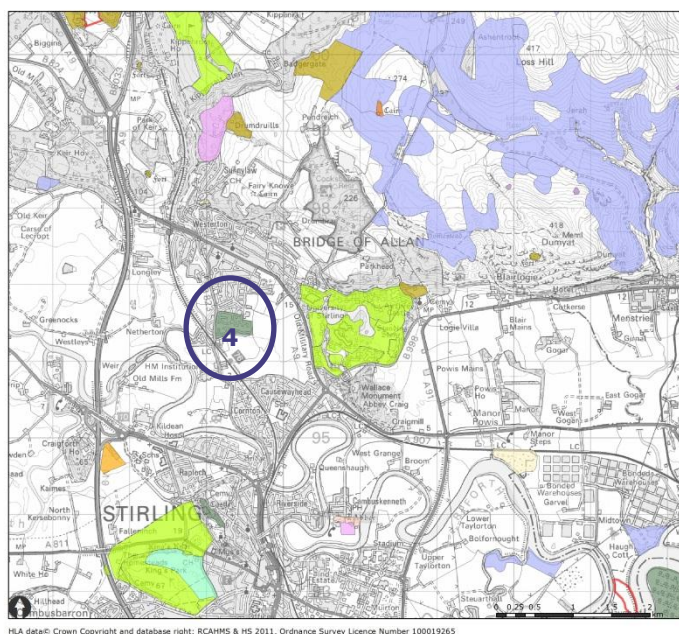
Relict inset view of Stirling and Bridge of Allan

As above, using the first level of relict type attributes. While much of the lowland landscape has no surviving relict element, the uplands 'come alive' when viewed in relation to relict land use. The light purple areas indicate the extensive medieval/post-medieval landscapes that survive in Menstrie Glen and around the western flanks of the Ochils.

Relict reverse-S field patterns (4) are visible in the boundaries of modern settlement (and immediately adjacent to the surviving fields at 3 (on the map above).The conversion of designed landscapes to other uses is indicated in lime green. In the case of King's Park to the west of Stirling, this has been to a golf course and arable agriculture – while the policies of Airthrey Castle now comprise the Stirling University Campus, housing and an industrial estate.

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265

Figure 3.1: different approaches to the same landscape through HLA

What can HLA tell you?

3.6   HLA data provides a descriptive evidence base that enables the history of the landscape to be understood in a range of ways, and at a scale appropriate for the end use.

3.7   It allows users to understand the history of whole landscapes, identifying the key processes that have shaped the area relatively quickly and easily. As HLA records the entire landscape, users can be confident of getting 'the whole story' rather than having to extrapolate from site-based information.

3.8   Regardless of the intended end use, understanding the wider landscape history and context of a site or area of interest is useful. This can provide a more balanced view of the importance of historic landscapes by enabling comparison with the regional and national picture, facilitating judgements on relative rarity, helping to identify locally characteristic historic landscapes and developing a fuller appreciation of the historic contribution to character.

Understanding landscape composition

3.9   The data can be examined at a range of scales and in a number of ways to develop an understanding of how the landscape has developed, what survives from the past and how it is used today.

3.10   HLA data enables users to unpick the component parts of the landscape using:

- **Category classification**: each historic landscape type, whether historic or relict, belongs to one of 14 broad categories that provide an overview of land use.

- **Period classification**: each historic and relict type has an associated time period and data can be queried or coloured to indicate the period to which current or relict land use relates.

- **Historic type classification**: provides a detailed description of the constituent parts of the present-day landscape.

- **Relict type classification**: drilling down through up to three layers of past land use.

3.11   Even a cursory examination of the data can reveal significant time depth in the landscape and provide an indication of the key processes that have shaped an area and the chronology of what can be seen today - as illustrated by the series of examples in Figure 3.1.

3.12 Making the connection from the 'raw' data to understanding the processes involved in the evolution of the landscape does require a broad appreciation of Scottish history and development of the landscape over time. However, a significant amount of useful information can be recovered without the need for specialist advice.

Users should refer to the online HLA glossary for guidance on land use typology

3.13 Quantitative approaches to the data – outlined below – provide a quick, robust and accessible means of understanding the composition of the historic landscape that potentially require less detailed specialist knowledge.

Understanding landscape structure

3.14 Patterns of historic and relict land use can create distinctive structure within the landscape. This is often an important aspect of landscape character – but the historic origins of these features are often overlooked, and their potential importance under-appreciated.
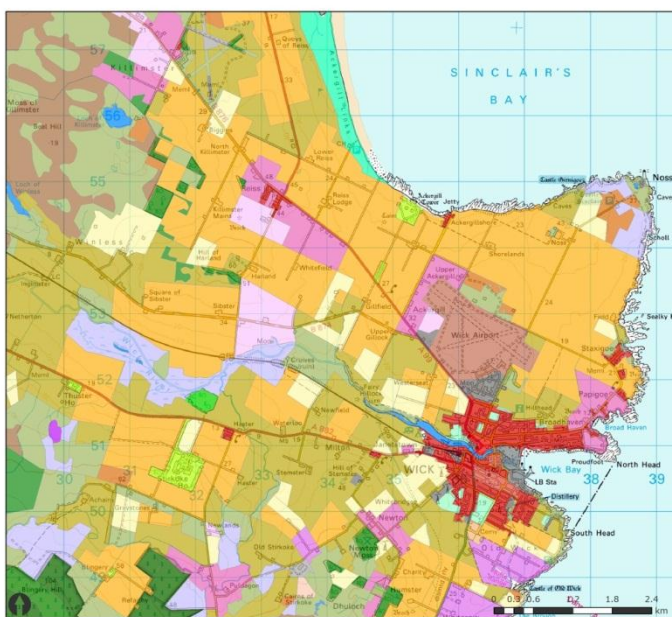
Displaying HLA 'type' data, this image illustrates the extremely strong planned character of the historic landscape around Wick, in Caithness.

Planned 18th-19th century fields (orange) illustrate the rigid approach to agricultural improvement taken by local land-owners – a distribution that is echoed across the better quality land in the region and mirrors the distribution of designed landscapes (lime green). These strongly coaxial fields and associated smallholdings (bright pink), coupled with the flat topography, combine to create a very open landscape punctuated by regular long, straight lines.

Early 20th century (Post WW1) Board of Agriculture holdings (pale pink) were inserted into this planned landscape. This creates particular opportunities to influence future patterns of land management and development to conserve this historic structure.

Figure 3.2: HLA 'type' data illustrating landscape structure
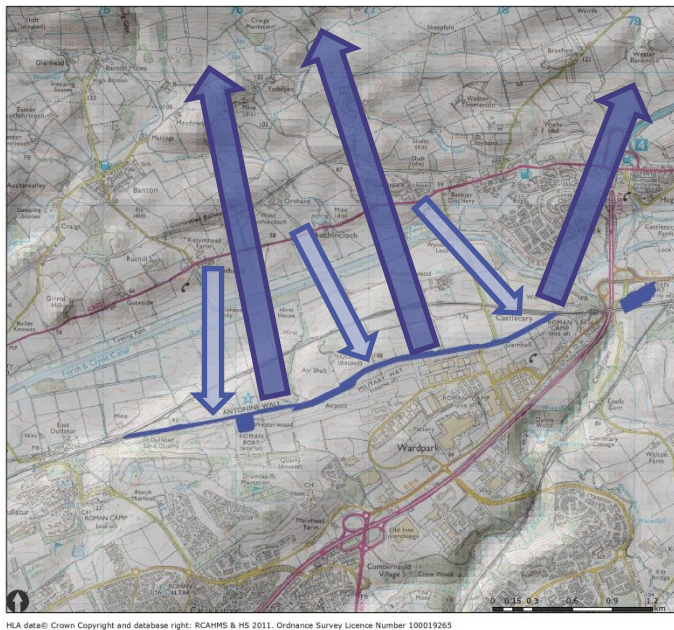
Roman military sites extracted by type

In landscape terms, the Antonine Wall (as depicted in the HLA data) forms a key visual barrier in views to the south of the Kelvin Valley (indicated by lighter arrows – and can be readily seen and experienced from the main Edinburgh-Glasgow train line. The Wall, which is upstanding at this point, is crowned by a line of large, mature trees that serve to underscore its position in the landscape and aid perception and appreciation.

The strategic position of the Wall is, in turn, best understood in landscape terms as its elevated position affords extensive views out to the Campsie Fells and over the Kelvin and Forth Valleys (indicated by the darker arrows).

Although people using the landscape may not be aware of the Wall itself, the intelligent choice of location by Roman engineers continues to influence how contemporary people experience the landscape.

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265

Figure 3.3: Antonine Wall as historic landscape structure

3.15 This can range from patterns of historic field boundaries, formed by dykes, hedgerows or field trees to features that control or limit views, or that are strongly related to topography as a key part of their form or historical function, as illustrated in Figure 3.3.

Key questions for users:

- What are the key historic structural elements that contribute to landscape character?

  - How do they fit with the regional / national picture?
  - Do they follow a typical distribution or are they configured differently in the study area?

Think about:

- Opportunities for quantitative analysis to aid understanding.

Quantifying historic landscapes

3.16   Quantitative information can provide useful and easily understood insights into the composition of historic landscapes and can help provide an insight into their potential importance. Where a particular historic landscape type can be shown to be nationally or regionally scarce, or even locally specific, this can play a role in defining the importance of individual landscape units (i.e. polygons in the dataset) or of a type as a whole.

How much...?

3.17   HLA data can be used to gather detailed information on:

- relative rarity of land use types, categories or periods;

    - Analysis of historic land use types is likely to be the most instructive;

- area / numbers of a given type (which can be subjected to further statistical analysis); and,

- distribution (e.g. co-incidence of particular current and relict types, and of historic landscape types with individual heritage assets).

3.18   Analysing the HLA dataset as a whole, or at a regional level, affords users insights into the wider historic landscape context of their area of interest.

3.19   The information derived from this process can highlight particular landscapes that are worthy of further consideration due to their rarity, or indeed their ubiquity as a key characteristic of the area (which may, in turn, be rare at a regional or national level).

Relative rarity

3.20   Quantitative analysis of the dataset can illustrate the number and area of particular historic and relict land use types, categories and periods both nationally and within a given study area. This enables users to make broad judgements on whether landscapes in their area could be important at the national, regional or local level.

Characteristic types and landscapes

3.21   Historic landscape types that can be considered to be typical of an area are likely to make a particularly important contribution to landscape character. For instance, crofting townships are very common in the Western Isles – but are a key aspect of the islands' distinctiveness and have wider cultural and historical importance. Similarly, as noted in the example below, apple and pear orchards are a key historic (and relict) land use in the Clyde Valley – but this represents the entire national distribution of the type[2].

Pie chart legend:
- Medieval/Post-medieval Settlement and Agriculture — 34%
- Rectilinear Fields — 30%
- Mining and Quarrying — 12%
- Plantation Enclosure — 4%
- Later Prehistoric Settlement and Agriculture — 3%
- Policies and Parkland — 3%
- Planned Rectilinear Fields — 2%
- Holdings — 1%
- Defence Site — 1%
- Orchard — 1%
- Other — 9%

In this example – highlighting the top 10 relict land use types for Glasgow and the Clyde Valley Strategic Development Plan area – a clear split between common and scarce types is visible. (NB. 1% of total area of relict land use still equates to more than 100ha; the 9% of 'other' relict land use comprises a further 28 types)

Given its upland fringe location, the substantial proportion of medieval/post-medieval relict follows the national pattern. Similarly, the large area of relict 18th-19th century fields is paralleled across western Scotland – in conversion to forestry and declining agriculture in more marginal areas.

However, relict (and current) orchards are a particularly scarce form of historic land use in the national context, and are restricted to a small area of the middle Clyde Valley – indicating a locally characteristic – nationally important – type.
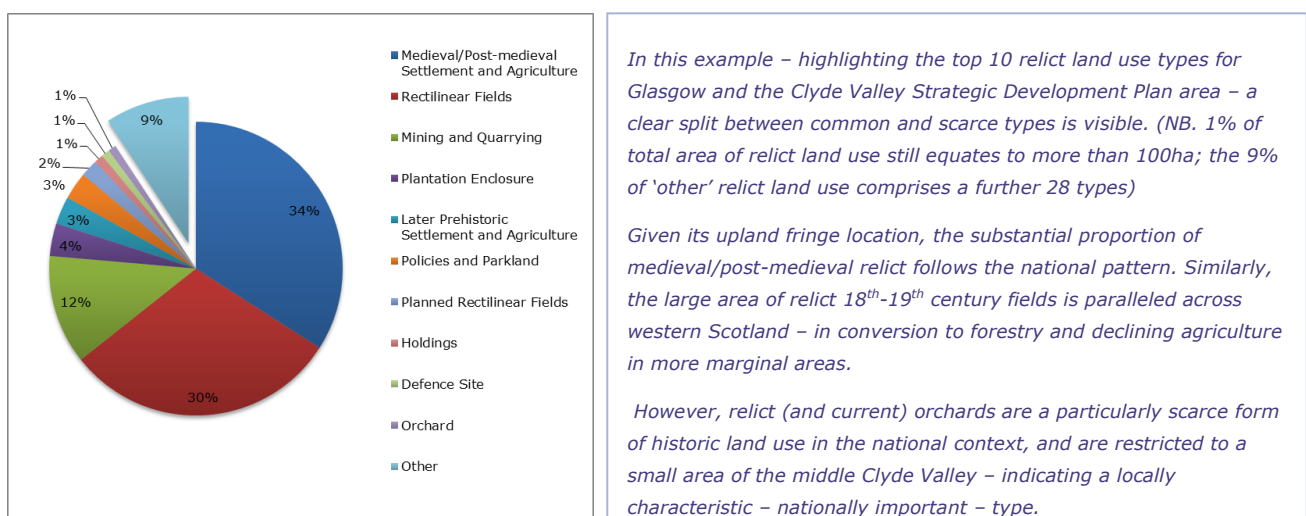
Figure 3.4: sample quantitative analysis

---

[2] This was correct for the HLA dataset at the time of writing. It is understood that other examples are known from the Carse of Gowrie, but are not yet included in the dataset.

3.22   Spatial statistics can also be a useful way to understand the HLA data – and to use it to understand the wider context of a particular site or area. It is possible to extract all, or selected, HLA records that coincide with features in any other dataset, providing a useful tool to understand either:

- the landscape context of small features – such as Scheduled Monuments; or,

- the composition of specific areas – such as Landscape Character Types/Area, 'Areas of Search' for particular land uses or Zones of Theoretical Visibility for wind turbines.

3.23   This provides an element of local subtlety when analysing the data, and can provide useful insights into the composition of the setting of individual assets (by analysing the contribution of particular historic landscape features) or the potential sensitivity of the landscapes within an area proposed for a particular type of change.

Making sense of the results

3.24   The results returned by quantitative analysis of the HLA data will be different in every case – however, some general principles are worth noting in understanding the results.

Users should consider:

- Whether historic or relict types are locally, regionally or nationally scarce?
  - Relative rarity is a reasonable indicator of importance
  - **Don't just focus on relict!** Historic types that remain in use, such as designed landscapes or planned fields, can be critical aspects of historic landscape character
- Whether there are relatively high proportions of pre-modern landscape types (both historic and relict)?
  - Given that early features survive less frequently, this is a reasonably indicator of potential importance
- Whether types are locally common, but nationally/regionally scarce?
  - Such types may be a key aspect of local character – in addition to having wider historic importance.
- Whether examples of a particular type are notably large, small or numerous?
  - Difference from the norm is a useful indicator

3.25   Using this broad approach, it should be possible to identify the historic and relict landscapes that are likely to be of wider importance – and should therefore be taken into account in policy development and decisions on land use and management.

3.26   Developing a shortlist of these potentially important landscapes is a key step in the process of understanding their relevance to planned change, and what steps may be required to protect significant landscapes and where key opportunities for enhancement might be.

Users should consult Section 5 of this guidance for advice on how to deal with the potentially important landscapes identified through this process

Qualitative analysis

3.27 While generating robust figures is a key aspect of HLA data's utility, they can only tell so much of the story – and can only take users part of the way to understanding the relevance of historic landscapes in relation to their activities.

3.28 A more detailed contextual understanding of **why** particular historic landscapes occur in certain areas, and what factors account for their rarity (or otherwise) as indicated by quantitative analysis will generally be required.

> For detailed guidance on how to query the HLA dataset to extract records – and when it is most appropriate to query by type, category or period – users should refer to the **Data Capture and Analysis** guidance on the HLAmap website

Understanding distributions

3.29 The spatial distribution of key historic landscape types can highlight potentially important relationships, aiding contextual of the landscapes themselves and related heritage assets, settlements or other environmental assets (for example, ancient woodland or remnant raised bog).

3.30 The distribution of key landscape types is also critical in understanding their wider historical and cultural importance and likely vulnerability to planned change.

3.31 Understanding where your area of interest fits within the regional and national picture is important in recognising the wider importance of 'shortlisted' historic landscape types. As noted above, quantitative analyses offers useful clues as to which types might be important – and looking at their spatial distribution provides additional subtlety.
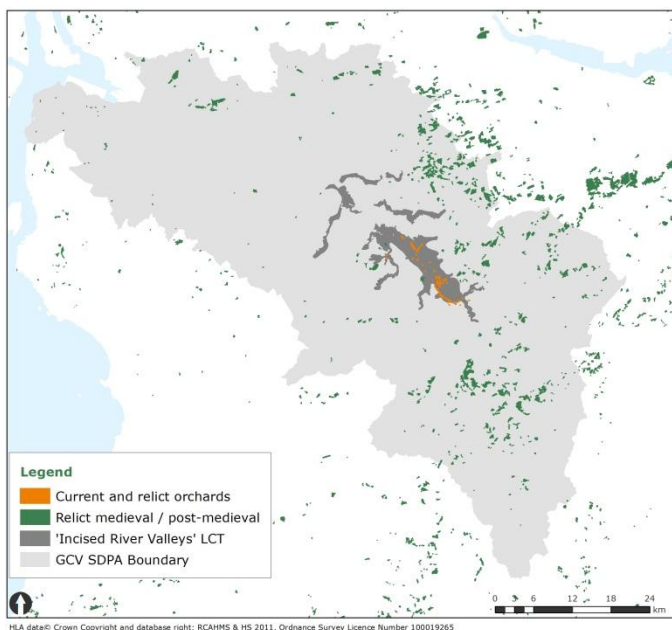
Example type distribution

This example looks at the relative distribution of two potentially important historic landscape types – selected from those contained within the 'Incised River Valleys' landscape character type – in relation to distributions within the wider Glasgow and Clyde Valley (GCV) Strategic Development Plan (SDP) area and southern Scotland.

It clearly illustrates that current and relict orchards (orange) only occur within the study area – reinforcing the local and national importance of the type – while relict medieval/post-medieval settlement and agriculture is very scarce within the study area, but relatively commonplace in the Glasgow and Clyde Valley area and southern Scotland more generally.

Legend
- Current and relict orchards
- Relict medieval / post-medieval
- 'Incised River Valleys' LCT
- GCV SDPA Boundary

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265

Figure 3.5: example type distribution map

3.32 Relationships between historic land use types may also provide clues as to the archaeological potential of similar historic landscapes elsewhere within a plan area. For example, land enclosed and planted with trees during the 18th and 19th centuries frequently preserves earlier features as a result of the land being protected from the effects of intensive cultivation during the 20th century. Equally, areas of relict opencast, landfill or restored agricultural land will have no archaeological potential as any deposits will have been destroyed in the process of opencast extraction.

Users should consider:

- Distribution of potentially important types

  - Are they located where you'd expect? (e.g. upstanding post-medieval settlement and agriculture in marginal rough grazing areas);
  - Or, are there rare outliers to the normal pattern? (e.g. upstanding post-medieval settlement and agriculture surviving in lowland intensive agricultural landscapes or peri-urban areas)
  - Are they dispersed or do they display clustering? (if so, why might this be?)
  - Are these areas subject to existing designations? (e.g. local landscape designations; Conservation Areas; natural heritage designations etc.)

- What are the reasons for this distribution?

  - Does the distribution confirm or contradict the history of the area as generally understood?
  - What factors may have influenced preservation, and could these add to the significance of the landscape?

- Are they associated with recognised heritage assets?

  - Could this point towards key considerations in understanding setting?

- Do particular relict types largely/entirely occur within specific current types?

  - Does this highlight any potential vulnerabilities or key types of change that could have an effect on them?

Getting to grips with the dataset

3.33 The HLA dataset is extremely flexible and can be approached and analysed in a range of ways and at different scales. The key to deciding on which approach to take is to consider:

- **Scale**: are you developing a plan or strategy that covers a large area – or are you concerned with a development or management proposal that deals with a relatively small site?

  - For activities and plans potentially affecting a large area, a smaller scale approach to the dataset is likely to be more appropriate.
  - Site-specific work will also benefit from an understanding of the wider context – but will require greater focus on local details.

- **The nature of change** resulting from your activity:

  - **Scale**: small or large; localised or dispersed?
  - **Nature**: single event or incremental?
  - **Intensity**: rapid/slow pace of change?; cumulative effects in the landscape?
  - **Duration**: will changes (and effects on historic landscapes) be short term, or permanent?
  - Broadly, the more significant the changes proposed, the more detailed understanding will be required.

- Types of effect on your activities that the presence of potentially important historic landscapes could have?
    - Will historic landscapes (largely) represent a constraint or an opportunity?
    - Could planned operations / development / management occur without affecting historic landscapes?
    - Could change result in adverse impacts – and would assessment and mitigation be required?
    - Could historic landscapes help to guide change, or the design and location of proposals?

3.34   The answers to these questions will influence the most appropriate and efficient approach to making use of the HLA data. The following section suggests where different approaches to using the data may be appropriate.

When to…
Use the whole dataset

3.35   Using the whole HLA dataset is important in establishing the wider context of your area of interest and in quantitative analysis of types/categories etc. Where plans or proposed change are set at the national or supra-regional scale, it will be necessary to work with the whole dataset to understand the distribution of potentially important historic landscapes.

3.36   Broadly, the majority of uses of HLA should include at least a cursory examination of the wider context of landscape types, given that this is a key strength of the dataset and provides unequivocal evidence on the rarity and distribution of historic landscapes.

3.37   Understanding the significance of a particular landscape – or types more generally – also requires a detailed understanding of context.

Consider cutting it down

3.38   Regional and local-level plans and strategies, although set within their national context, require a more detailed understanding of historic landscapes at a level appropriate to the scale and potential effects of planned change.

3.39   This could involve 'clipping' the dataset to local authority boundaries, landscape character areas, land allocation boundaries, or the types of environment likely to be affected by proposed change. By reducing the overall size of the dataset, analysis can be accomplished more quickly and with a more specific focus.

3.40   Following quantitative analysis of the dataset, the landscape types identified as **not** being potentially important could be removed, resulting in a more focused and easily handled resource. Similarly, this immediately provides a strong indication of the area and distribution of landscapes that may require further study – and that could be affected by proposed change.

Consider pulling out specific historic landscapes

3.41   This may be advisable where management activities are likely to focus on specific landscapes or at the site-specific level – or where an individual historic landscape type is identified as being particularly sensitive to proposed change. Particular historic landscape types – for instance crofting townships or 20th century holdings – have a very specific character that can be easily eroded by poorly planned change. Where decision-makers identify such issues as important in relation to their activities, this could provide the springboard for landscape-specific policy protection.

3.42   Similarly, where HLA can provide accurate polygons for relict types not included in HERs, this data could be pulled out and used as a stand-alone resource. Aberdeenshire Archaeology Service has made extensive use of the HLA data in this way, notably in relation to non-Inventory designed landscapes.
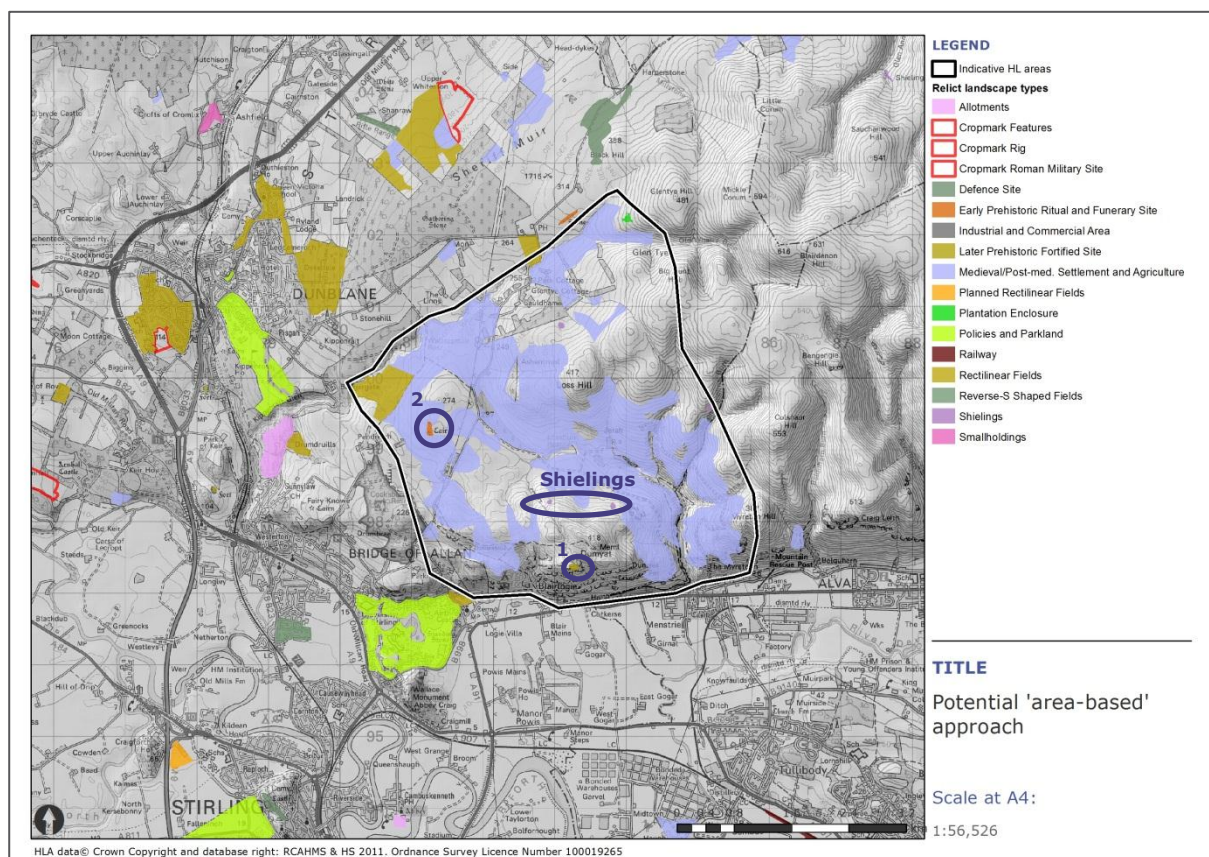
*The medieval/post-medieval relict landscapes of the western Ochils (light purple) stand out as being particularly extensive and forms a coherent, relatively unmodified landscape comprising settlement, fields, stock enclosures and, on higher ground, groups of shieling-huts (dark purple). Remains of other periods are also present, such as the later prehistoric fort on Castle Law (1) and a group of early prehistoric cairns (2) – demonstrating the time-depth visible in this area of landscape. This area could therefore be a suitable candidate for a **broad, area-based** approach to use in decision-making.*
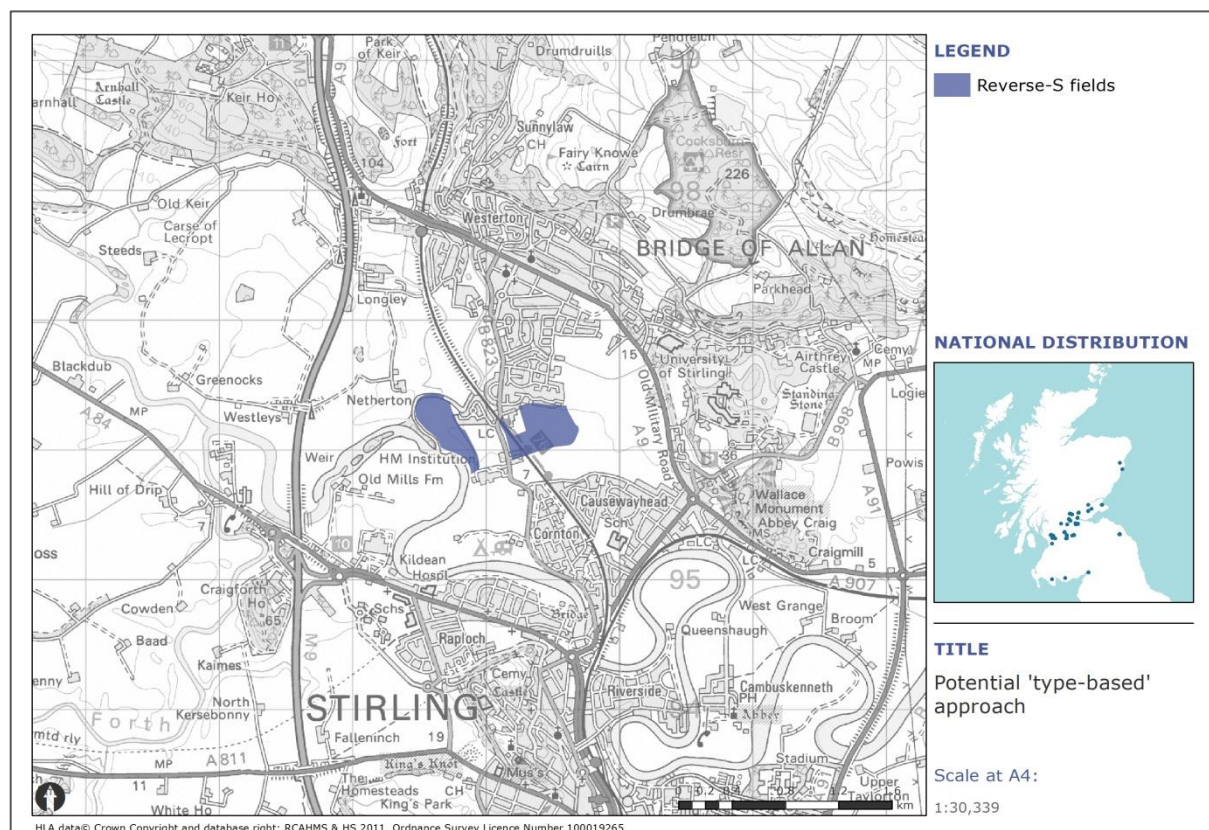
*Returning to an earlier example, the medieval/post-medieval reverse-S fields at Cornton, by Stirling, are examples of a nationally scarce historic landscape type – as illustrated on the inset map above (49 individual examples) – and therefore potentially suitable for an **attribute-based** (in this case, historic land use type) approach to selection and use in decision-making.*

Figure 3.6: alternative approaches to incorporating historic landscapes in policy

Applying the results

3.43   The advice outlined above should enable users to:

- Identify **broad areas** of potentially important historic landscape, for example:

  - based on areas with strong historic character, large amounts/extensive areas of relict land use or particularly interesting time-depth;
  - based on concentrations of characteristic or relatively rare landscape types, periods or categories; or,
  - based on coincidence with concentrations of individual assets (e.g. from HER data) where historic landscapes could be an important aspect of setting.

- Identify **potentially important historic and relict landscape types, periods and categories**, for example:

  - locally characteristic types or categories;
  - types that are rare in the wider context;
  - surviving early landscapes; or,
  - relict archaeological types.

Table 3.1: benefits of area-based and attribute-based approaches

Approach	Benefits
Broad areas	Captures relationships between individual landscape types
	Shapes can be simple and therefore easier to reproduce on large-scale plans (e.g. of a Strategic Development Plan area) where individual HLA polygons could 'get lost'
	Records areas with strong historic character more effectively, and with less complication, than extracting all the relevant types from the HLA data
	Boundaries can be 'fuzzy' to include the wider setting of landscapes
Attribute-based (type/relict type; period; category)	Picks out precise extent of areas of interest (e.g. relict archaeological landscapes)
	Can be used to augment other sources of spatial data in analysis
	Need not be restricted to a single attribute selections of HLA data – can be grouped to represent multi-period landscapes

Table 3.2: choosing a policy approach to HLA information

When to consider concentrating on:
There are no hard and fast rules, and users may wish to consider using a combination of the two approaches to deliver appropriate results

BROAD AREAS

Likely to be most useful in **larger-scale strategic** work, where detailed consideration of individual types or categories may be too detailed or unnecessarily restrictive;

Where the potential importance of historic landscapes lie in the close association of a range of types, relict types, categories and periods that could otherwise be lost through sole use of individual landscape units

POTENTIAL APPLICATIONS:

- Informing area-specific policies
- Informing local landscape designations
- Understanding the sensitivity of key local landscapes (as opposed to individual types etc.)

May be most appropriate for strategic policy decisions where important historic landscapes represent influences or broad opportunities for enhancement in relation to planned activities. (Could also be used for constraints where historic landscapes are particularly extensive, complex or multi-period – or for use in large-area mapping where more detailed depiction would be inappropriate.)

INDIVIDUAL TYPES, PERIODS AND CATEGORIES

Likely to be most useful in more **detailed policy and strategy** development, particularly where there could be an element of spatial modelling to help to direct change (for example local authority Forestry and Woodland Strategies and accurate spatial representations of landscape types that would potentially constrain planned change);

Where locally endemic, particularly scarce or strongly characteristic types are identified;

Where HLA is the only source of information on relict archaeological types (or the only available source of reliable polygon data)[3];

Where types or categories provide an appropriate depiction of areas with coherent historic character that may require protection;

Likely

POTENTIAL APPLICATIONS:

- Informing detailed historic environment policies
- Providing detail on non-statutory potential constraints in spatial modelling
- Contributing to 'alert' or 'trigger' mapping for HERs and use in corporate GIS, development management and ePlanning systems

Likely to be most appropriate where potentially important historic landscape represent a constraint to planned change.

---

[3] Substantial areas of medieval/post-medieval settlement and agriculture have been recorded from aerial photography across Scotland that are not currently included in other databases or datasets (e.g. HER data or Canmore)

What next?

3.44   Having defined a shortlist of potentially important landscape areas and/or detailed historic and relict land use types etc., the next step is applying the information to strategic decisions on policy or tactical decisions on site or area-specific change.

Section 5 of this guidance provides advice on understanding how historic landscapes are relevant to strategic and tactical decisions – and how the information gleaned from HLA can help to inform these judgements.

Specialist assistance and advice

3.45   Users of the HLA data will, in the main, be able to extract a significant amount of useful information without the need to seek advice from historic environment specialists.

3.46   Conducting quantitative and distribution analysis can readily be accomplished, with outputs providing a reasonable degree of certainty as to the potential importance of historic landscape types. However, where judgements as to the significance of historic landscapes, or the assessment of likely impacts are required, users should consult appropriately qualified professionals for advice.

3.47   The outcomes of initial analysis work can be used as a vehicle for discussion with historic environment advisers, and may be useful in scoping their level of involvement.

4
HLA and landscape character

4 HLA and landscape character

Introduction

4.1 Landscape character can be understood as '*the distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another*.' Clearly, how a landscape has developed through time plays a fundamental role in shaping how it is perceived and experienced today.

4.2 Like HLA, Landscape Character Assessment (LCA) is a descriptive technique for recording landscapes – capturing the full range of influences and perceptions that combine to turn land into *landscapes*. LCA is often used to take the next steps in assessing the quality of landscapes, the cultural values attached to them and identifying forces for change.

4.3 HLA provides a key source of information for practitioners undertaking LCA that can add significant practical and evidential value to the outcomes of assessments – and contribute to a more consistent appreciation of the contribution of historic landscapes to wider character.

4.4 This section of the guidance outlines the potential interactions between the concepts and techniques, and sets out advice for practitioners seeking to make use of HLA in this context.

4.5 In Scotland, although the national series of Landscape Assessments was completed more than a decade ago, local revisions and more detailed characterisation have been undertaken on behalf of a number of local authorities to inform:

- greenbelt and local landscape designation reviews;

- landscape capacity and sensitivity studies in relation to:

  - wind energy development;
  - minerals development; or,
  - housing; and,

- planning, forestry and land management policy.

Understanding historic character

Introduction

4.6 In essence, all landscapes are historic – but the time-depth that is perceptible therein varies significantly from place to place. This is dependent on the combination of influences that have acted on the area and the extent to which they have preserved, altered or erased legible traces of past use and management. Therefore, the extent to which a landscape can be considered to have 'historic character' is dependent on how the material remains of the past are understood and interpreted at a landscape scale.

4.7 Historic landscapes can influence character in a range of way, including:

- **Land use / cover**:

  - The perception that the same areas of land have been used for the same purpose over a long period of time can contribute to character – for instance, ancient managed woodlands used for coppice, or wood pasture are highly evocative.

- **Landscape structure**:

  - Field patterns and boundary treatments (dykes, banks, hedges, field trees, shelterbelts etc.) can create a sense of how intensively used a landscape is, or has been, a sense of order in rigidly planned field systems or antiquity through preserved ancient boundaries

(e.g. reverse-S open fields), species-rich hedges or veteran trees. Also informs the sense of openness or enclosure within a landscape.

- **Settlement**: morphology provides immediate clues as to the antiquity, function and origins of towns and villages – which generate particular cultural responses and character; pattern reflects underlying systems of land ownership and social/economic development of an area.

  - Morphology: e.g. classic medieval 'high street – backlands – back lane' layout; 'Miners' rows' of planned industrial villages; 18th century 'gridiron' planned New Towns; British Fisheries Society planned towns (e.g. Wick, Tobermory and Ullapool); and,
  - Pattern: E.g. distribution of medieval burghs partly reflecting power and influence of contemporary landowners.

- **Time depth**:

  - Presence of legible, though not always obvious, historical and archaeological sites and relict landscapes. Responses may be different where these are actively managed (e.g. as visitor attractions) or can be 'discovered' while experiencing the wider landscape.

- **Land ownership / tenure**:

  - Connections between particular landscapes and historical figures / families over time – for example designed landscapes.
  - Effect of tenure systems on landscapes, e.g. smallholdings and crofting systems resulting in characteristic patterns.
  - Strong cultural values associated with tenure.

HLA and 'character'

4.8   HLA does not record 'character' per se. Instead, it analyses and records the historic origins of individual land use units, including relict features that may not be immediately perceptible in the landscape (e.g. cropmark archaeology). While not all of these make a direct contribution to visual character, they often help explain that character and deepen its value by indicating its time-depth.

4.9   While the historic type data will often accurately reflect the historic character of an area, for instance a planned village or crofting township, this may not always be the case. Relict types, that may constitute small areas of a wider landscape, can also make an important contribution to character. For instance, the contribution of the historic environment to landscape character in the Cairngorms is encapsulated within the Cairngorms National Park 'Special Qualities'[4]. Although occupying a (relatively) very small part of the wider landscape, some aspects of the historic landscape form an integral part of current landscape character. However, the cultural values and perceptions attached to these settlements and the social, economic and political processes that resulted in their abandonment need to be captured and understood separately, so that their full range and contribution to the modern landscape is understood.

4.10   HLA data should therefore be considered as a valuable baseline information source when considering landscape character, providing a factual basis on which to base interpretations of

Source: LCA Guidance for England and Scotland, SNH and the Countryside Agency (LUC 1999)
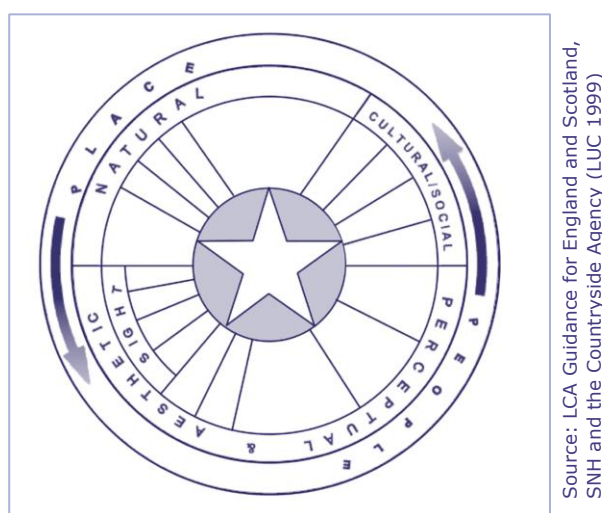
Figure 4.1: components of landscape character

---

[4] In particular, 'the wistfulness of abandoned settlements' can readily be represented by the extensive suite of post-medieval settlement and agriculture captured by the HLA.

perceptions of time-depth and character. This can be used in its own right and to inform the process of character assessment

HLA and Landscape Character Assessment

Introduction

4.11   The technique of Landscape Character Assessment (LCA) recognises the importance of historical influences on the landscape, and this is reflected in the relevant guidance on LCA and in a separate LCA Topic Paper on historic landscape character.

4.12   As the national series of Landscape Character Assessments for Scotland was complete before HLA had moved much beyond the pilot stage, a key opportunity exists for the data to be built into future revisions and use of LCA.

'The same but different?'

4.13   LCA and HLA are both techniques for understanding the landscape and share a range of common traits, including:

- interpreting the whole landscape – not just the 'special bits';

- a vision of landscape as material culture;

- employing a nested/cascading approach to landscape typology and description; and,

- extensive potential for GIS analysis.

4.14   However, the two techniques approach the landscape from different positions. LCA seeks to understand how landscapes are **perceived and experienced**, developing descriptions based on interpretations of the interactions between geology, landform, soils, vegetation, land use, field and settlement patterns that generate landscape character.

4.15   In contrast, HLA takes a typological approach to describing current (historic) and relict land use, based on an archaeological understanding of land use types and their morphology. From the outset, HLA was conceived with GIS outputs in mind – whereas the national series of LCAs were completed before widespread use of the technology (although GIS datasets are now a standard output from LCAs).

4.16   They are, however, entirely complementary techniques, and each can add considerably to the understanding and application of the other.

Making the links

4.17   LCA involves a systematic process of information-gathering to establish a robust baseline of the natural and cultural factors that inform landscape character.   HLA has a clear role in providing a landscape scale introduction to the historic environment of the study area, and can help to shape the delineation of landscape character Areas and Types. Similarly, by adding an extra dimension to the understanding of time depth, a more effective assessment of associations and experiential aspects of the landscape can be captured.

4.18   HLA is also a powerful reference tool, enabling LCA practitioners to check and understand the historical origins of a particular piece of landscape, and how it relates chronologically and spatially to other connected landscape types.

4.19   To get the most out of both techniques, it is important that they are used together at the outset of any new characterisation project.

Using HLA in landscape planning

Characterisation

4.20 Understanding the evolution of the landscape and the combination of cultural influences that shape current perceptions is a fundamental aspect of the process of landscape characterisation.
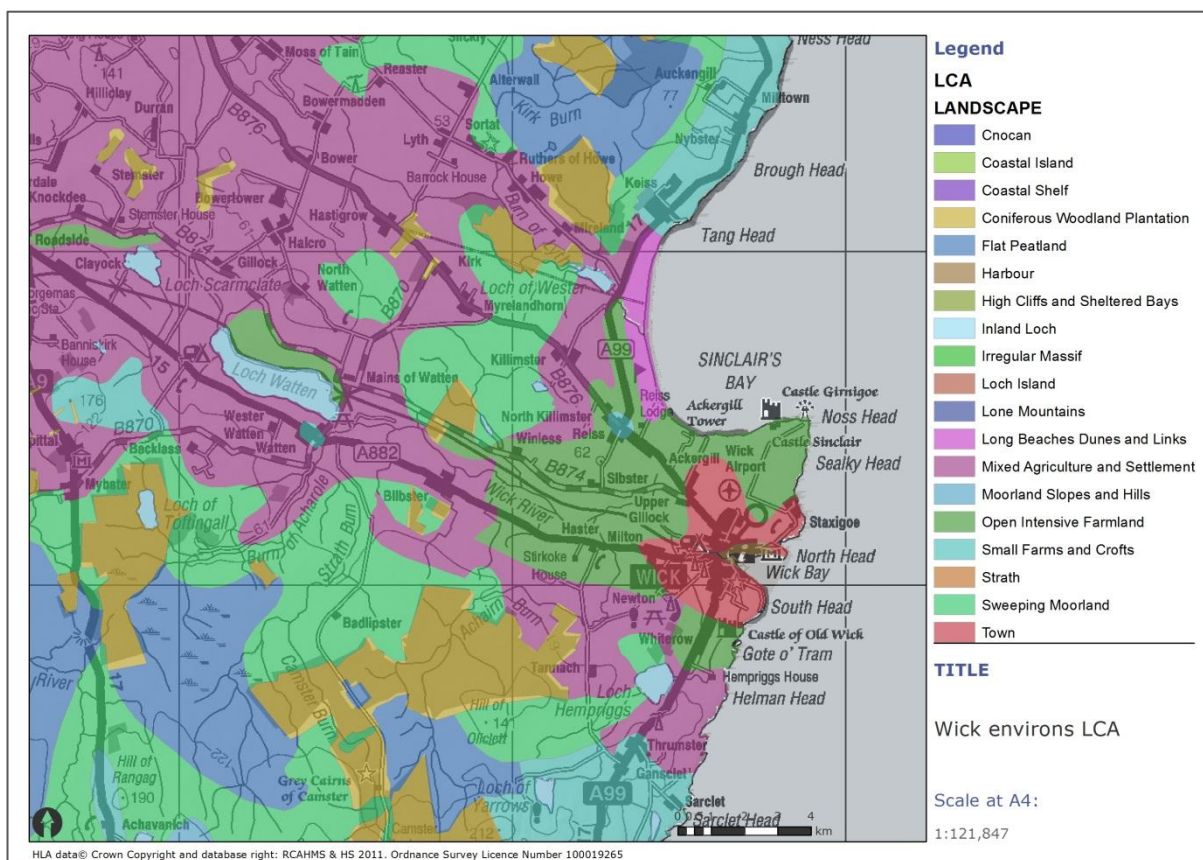
Historical influences

4.21 Section 3 of this guidance provides advice on suitable approaches to understanding landscape history as a whole. However, in the context of LCA, HLA data provides a major opportunity to better understand the historic environment of the study area at a truly landscape scale – rather than attempting to extrapolate a history of the landscape from site-based information. The whole landscape coverage of HLA also lends itself to a more integrated approach to describing the character of individual areas.

4.22 Using period and relict-based views, practitioners can also quickly understand the level of time depth in the landscape highlighting where additional effort to understand the wider cultural values attached to these places may be desirable.

Defining landscape character types and areas

4.23 Clearly, the extent to which HLA historic/relict landscape types can be translated into Landscape Character Types/Areas is dependent on the scale of the study and the level of detail required.

4.24 However, the potential applications are clear in that HLA data:

- records the present use of land, which plays a fundamental role in shaping character;

- assigns a historical and chronological origin to each landscape unit, providing information on time-depth and historic influences;

- provides a landscape scale record of archaeological and other relict landscapes; and

- provides a ready-made backdrop against which to digitise LC Areas.

4.25 The following example illustrates how HLA data could be used to refine and add value to information provided by the existing Landscape Character Assessment for Caithness and Sutherland[5].

---

[5] Stanton, C. 1999 '*SNH Commissioned Report, Review: Caithness and Sutherland Landscape Character Assessment*' SNH

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265

Existing Landscape Character Assessment

Around Wick itself, an area of 'Open Intensive Farmland' is identified, extending up the Wick River valley and around the coast of Sinclair's Bay – reflecting the distribution of better quality land on the coast. Along the coastal fringe, areas of 'Small Farms and Crofts' are depicted, at Keiss in the north and Sarclet in the south of the image, extending inland beyond the Loch of Yarrows. 'Moorland Slopes and Hills' and 'Sweeping Moorland', with plantation forests, make up the encircling hinterland – while the flatter interior of the county is composed largely of 'Mixed Agriculture and Settlement.'

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265
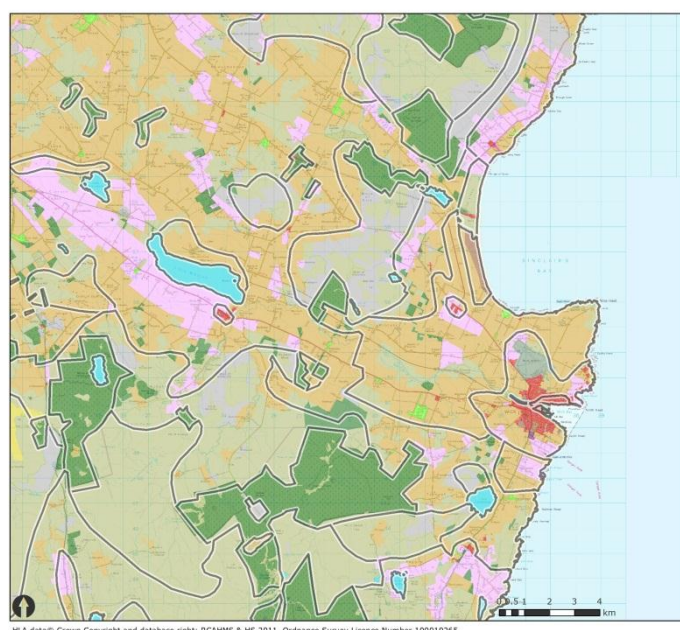
HLA 'Category' overlaid with LC areas

Starting with Wick, it is apparent that the area with an urban character is significantly smaller than indicated in the LCA (even excluding the airport). The 'Open Intensive Farmland' relatively accurately captures the best quality farmland around Wick – but looking inland at the 'Mixed Agriculture and Settlement' a significant area of smallholdings to the south of Lochs Watten and Scarmclate stands out as being potentially different (particularly given that other areas of crofting character are captured)

Category data provides a useful overview at this large scale – to which Type, Period and Relict data can add additional levels of understanding.

Figure 4.2: HLA and LCA - Caithness example

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265
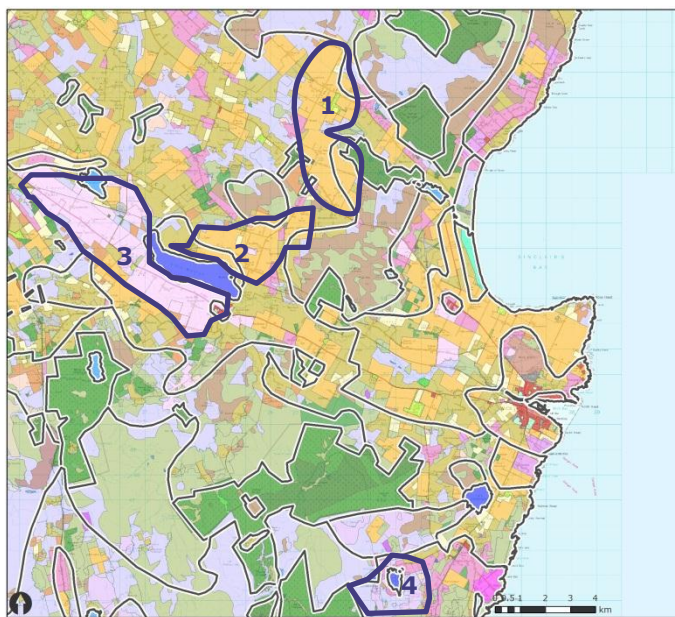
HLA 'Type' view

Drilling down to the next level of detail exposes more of the subtlety in the historic landscape structure. The strongly planned character of the Improvement-era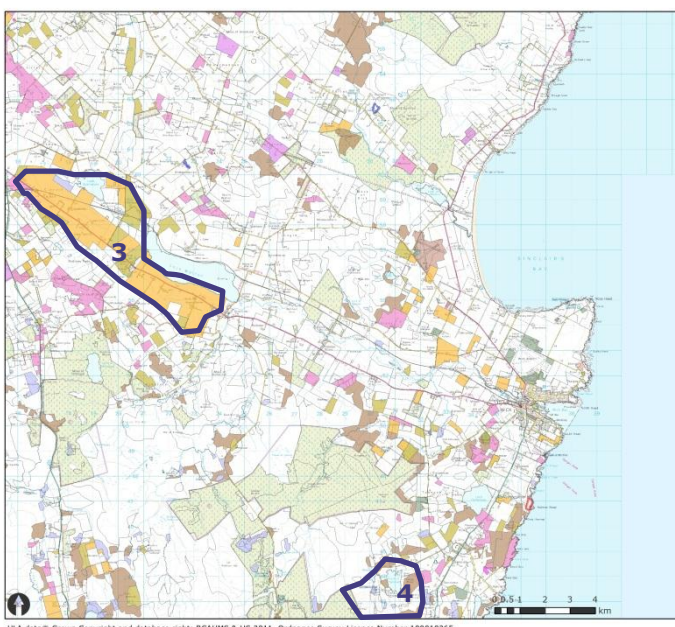 (18th-19th century) fields is apparent within the 'Open Intensive Farmland' character type – but also extends a significant distance inland around the Barrock House designed landscape (1) and north of Loch Watten (2). [These areas are at least as intensively farmed as the littoral zone – and share the same rigidly planned, coaxial field patterns emanating from the related estate centre – often with an attendant designed landscape.]
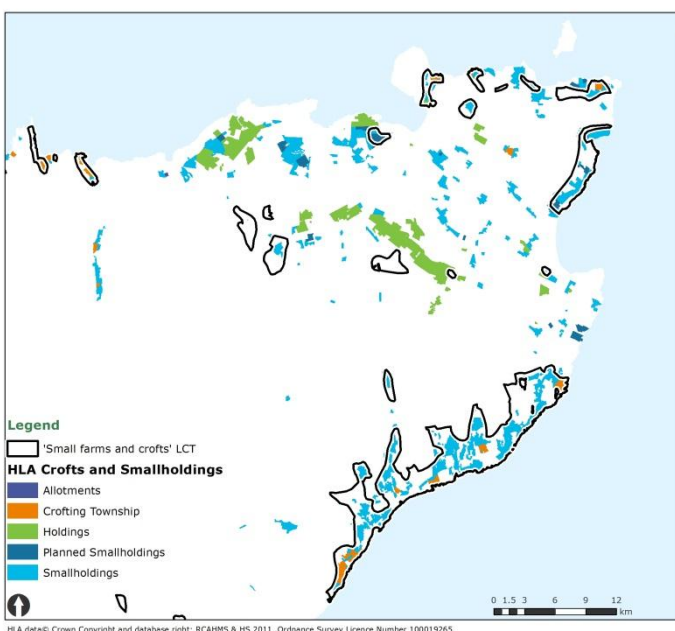
The area of holdings (3) south of Loch Watten is shown to be of early 20th century date and have a significantly different historic character to the majority of the 'Mixed Agriculture and Settlement' LCT – given the intricate field pattern, uniform house type and (for rural Caithness) a relatively dense settlement pattern. Around the Loch of Yarrows (4) in the 'Small Farms and Crofts' LCT is shown to contain a significant area of rough grazing.

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265

HLA 'Relict' view

The Loch Watten holdings (3) are shown to preserve the original layout of 18th-19th century planned fields and are still readily legible in the landscape.

Around the Loch of Yarrows (4), a significant archaeological landscape is revealed on the edges of the crofting area and in rough grazing. Although some of the key features (such as Yarrows broch) are too small to be mapped by HLA, early prehistoric ritual and funerary sites, later prehistoric settlements and defensive sites and medieval/post-medieval settlement and agriculture are highlighted. These sites and landscapes have a strong influence on the character of the area, through the effects of visible – and significant – time depth, in addition to being individually and collectively evocative of around 6,000 years of history.

Legend
☐ 'Small farms and crofts' LCT
HLA Crofts and Smallholdings
▮ Allotments
▮ Crofting Township
▮ Holdings
▮ Planned Smallholdings
▮ Smallholdings

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265

HLA 'Type' view, with 'Small Farms and Crofts' LC Type superimposed

When viewed against HLA type data, clear opportunities to refine the 'Small Farms and Crofts' LC Type become clear. Caithness has relatively few 'classic' crofting townships of narrow strip fields arranged perpendicular to a linear row of houses (orange). Instead, the majority of legally defined croft land comprises smallholdings of clustered rectilinear fields (light blue), generally formed through intake of former rough grazing land on the periphery of larger farms. In some areas, these echo the rigid approach of estates to planning the landscape, in the form of 'Planned smallholdings' (darker blue).

The 20th century holdings (picked out in green) – although a strong influence on character and a relatively significant land use – are not captured by any of the Landscape Character Type and potentially were not recognised for their historical interest. They were generally subdivided from existing planned fields, and embody a major process of state intervention and compulsory purchase and redistribution of better quality land.

Perceptual, experiential and aesthetic factors

4.26 A key part of the process of LCA is understanding the way in which landscapes are perceived and experienced. HLA can provide useful insights into how people may respond to areas of the landscape with specific historic origins and cultural associations, and help explain the reasons behind this. It can also help to create links between local cultural values – which may have become disassociated from their historical origins – and material remains of the past.

Informing judgements

4.27 Many LCAs use the baseline characterisation to inform judgements on:

- aesthetics;
- forces for change in the landscape;
- landscape sensitivity;
- landscape quality; and,
- landscape values.

HLA can inform these judgements where used in developing the character assessment or alongside an existing assessment.

> **Users should consider how HLA contributes to:**
>
> - Aesthetic judgements on:
>   - Sense of scale: e.g. very large planned field systems
>   - Sense of enclosure: e.g. highly sub-divided crofting landscapes; structured views in policy woodlands
>   - Landscape diversity: e.g. intricate patterns of relict land use
>   - Texture: e.g. upstanding rig-and-furrow
>   - Landscape form and grain: e.g. post-medieval head-dykes creating stark division between infield and rough grazing
>   - Providing a sense of time-depth in the landscae
>
> - Understanding the wider effects of forces for change:
>   - Could the value and understanding of historic landscapes be affected by key forces identified?
>
> - Landscape sensitivity:
>   - Presence of extensive relict landscapes (particularly archaeological types) will make landscapes inherently sensitive
>
> - Understanding the quality of landscapes:
>   - Few relict types could indicate a highly modified landscape; historic land use types can provide an indication of current and past management regimes and inform inferences on likely pressures and future management
>
> - Understanding wider values attached to landscapes:
>   - Identifying historic landscapes that may have wider local or regional cultural meaning that should be explored through the LCA consultation process

5
Using HLA to understand what is relevant to decision-making

5 Using HLA to understand what is relevant to decision-making

Introduction

5.1 Effective management of historic landscapes and decisions on change depend on an appropriate understanding of the importance of the landscapes likely to be affected.

5.2 This section of the guidance outlines how HLA can be used to understand the ways in which historic landscapes are relevant to strategic and tactical decisions and how HLA can help to inform these judgements

Section 3 of this guidance provides advice on how HLA can help users to identify potentially important areas of landscape at an appropriate scale – users should consult this first.

Effects of historic landscapes on decisions

5.3 In plan, policy and strategy development, and for site-specific work, historic landscapes can affect planned activities in three key ways:

- As a potential **constraint** to planned activities:

    - where change would adversely affect the character, values and/or significance of historic landscapes – and should therefore be avoided or substantially altered to mitigate impacts;
    - where area-specific policy or action may be required to safeguard particular landscapes; and,
    - where the importance of historic landscapes relates to their national scarcity, for instance if they are locally endemic or strongly representative of significant local history.

- As a potential **influence** on the type and scale of appropriate activities:

    - where historic landscapes should be considered in the process of designing and assessing proposals for change;
    - where broader policies, potentially requiring the use of HLA, may be appropriate to manage change; and,
    - where the importance of historic landscapes is mainly related to their contribution to landscape structure and character – rather than their individual historic value.

- As a potential **opportunity** where activities could be targeted:

    - by identifying landscapes of lower historic value that have greater capacity to accommodate planned change;
    - by identifying landscapes of high historic value that may be sensitive to change;
    - where specific policies direct efforts to conserve, enhance or promote historic landscapes and the wider historic environment (e.g. delivering Rural Priorities related to management of archaeological landscapes and historic features); and,
    - where historic landscapes will be conserved and enhanced by planned change – or where HLA data can be used to identify areas of lower sensitivity.

5.4 The nature of HLA data allows users to adopt a scaled approach to analysis that is both rigorous and appropriate to the effects their activities could have on historic landscapes, and to help make decisions on policy and action that reflect this.

Users should follow the guidance provided in Section 3 to develop a list of potentially important areas of historic landscape and/or potentially important types, categories or periods at a scale that is appropriate to their intended use.

Strategic contexts

Scale, impacts and level of detail

5.5   At the strategic level, understanding historic landscapes and their potential importance will often be related to the scale at which plans, policies or strategies are developed. Equally, the level of detail in analysis may be influenced by the type and potential severity of the impacts generated by planned change.

> **For example**, Local Development Plans would realistically require a proportionate understanding of the important historic landscapes of the whole local authority area – and information on their location.
>
> Local Biodiversity Action Plans may be expected to have relatively limited effects on historic landscapes – whereas Minerals Local Development Plans or strategic locational guidance for wind farms could be expected to generate more significant impacts. Therefore a greater level of detail may be required to understand the potential effects on historic landscapes (but as impacts would necessarily be confined to areas with mineral resources, and defined 'areas of search' this need not be onerous).

5.6   Following the advice provided in **Section 3**, users may wish to consider whether to adopt a broad area-based approach to incorporating historic landscapes in policy decisions; a more detailed approach making use of individual HLA attributes (types, categories or periods); or a combination of both.

Policy responses to historic landscapes

5.7   Consider whether historic landscapes will represent mainly a **constraint**, an **influence** or an **opportunity** for the change to be managed by your plan, policy or strategy? In practice, it is likely that examples of all three may occur within a single plan area – therefore understanding which approach is most applicable is vital.

Constraints

5.8   In general, relatively few historic landscapes will represent an absolute constraint on most types of change. However, where this is the case, the landscapes in question are likely to have high archaeological or historical value and significance that will require additional research and analysis to fully understand. However, HLA data can be a valuable starting point and can help to make links that might otherwise be overlooked.

Influencing change

5.9   Many historic landscapes can readily accommodate well-planned and executed change. However, their characteristics must be taken into account in order to conserve their historic character and their contribution to wider landscape character.
Section 6 provides additional guidance on using HLA as a design and assessment tool

Identifying opportunities

5.10   HLA has significant potential to identify **opportunities** for well-planned change – for example, helping to highligh landscapes of degraded character or of lower sensitivity; or improving recreational options.

5.11   Similarly, it could be an invaluable tool for helping to target conservation and enhancement of historic landscapes, for example as part of a Conservation Management Plan.

5.12   This potential use need not be confined to the historic environment sector. HLA as a 'snapshot' of land use has applications in wider environmental planning and management, as illustrated below.

Constraints on change
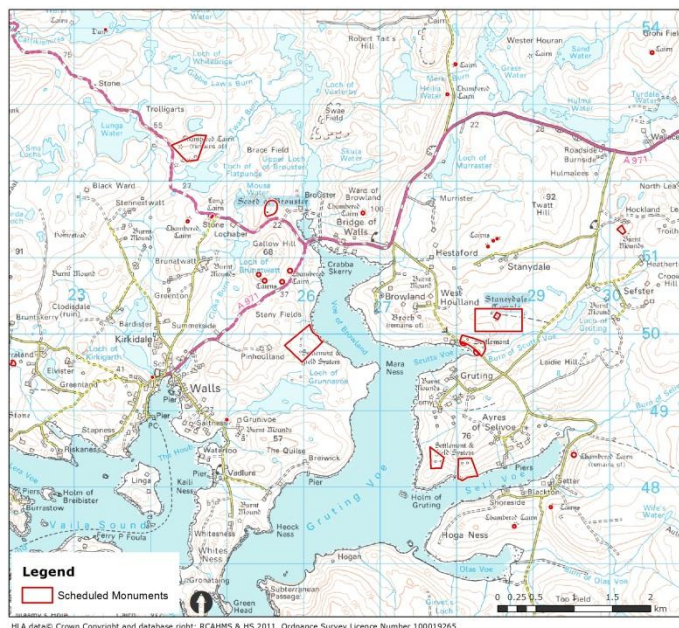
Walls, Shetland – Scheduled Monuments

This example illustrates the dense distribution of Scheduled Monuments around Gruting Voe, west Shetland.
Relating to some of Scotland's most important early prehistoric sites, the designation boundaries are relatively tightly drawn around the principal structures of each settlement.

Clearly, sites of this type of importance would represent a major **constraint** *to virtually any type of change.*
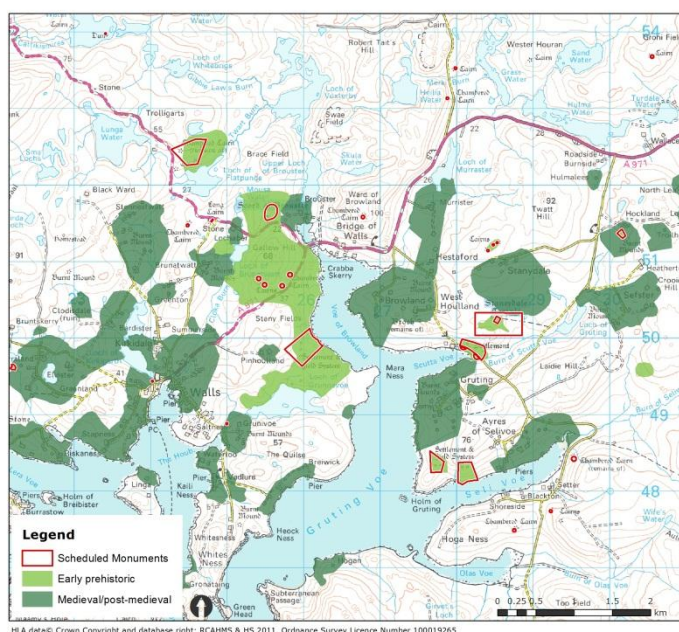
Walls, Shetland – Scheduled Monuments and HLA relict data extracted by *period*
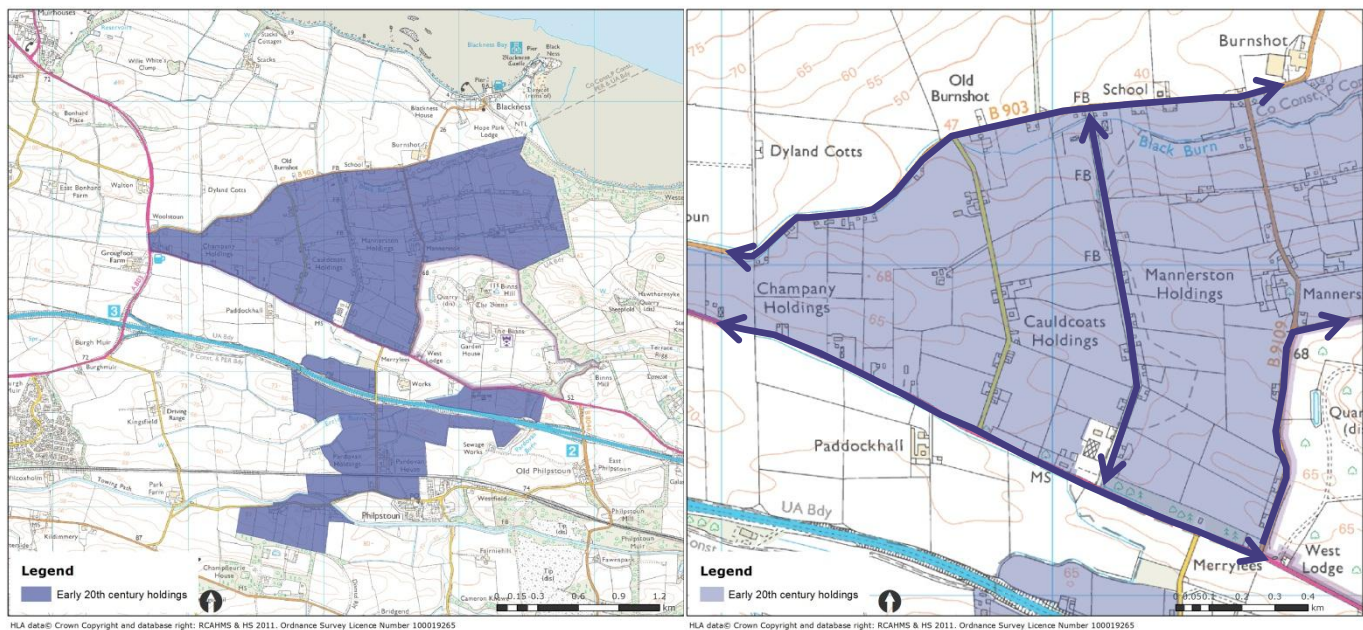
Applying the HLA data to the same map adds significant landscape-scale detail.

The lighter green areas depict the extent of early prehistoric settlement and agriculture in the area - significantly expanding the area that could be considered to be sensitive to change (including as important aspects of the context and setting of the Scheduled Monuments). These areas could readily be extracted and used to depict **constraints** *in policies, or added to the relevant Historic Environment Records.*

The dark green areas depict the extent of medieval/post-medieval settlement and agriculture. While potentially representing a less significant constraint on change – being quite common locally and nationally – these areas are important to the time-depth of the landscape and are therefore a key aspect of the area's character that should **influence** *proposed change – potentially by inclusion in consultation trigger maps. HLA data could also be used in highlighting additional* **opportunities** *for recreation / interpretation schemes.*

Figure 5.1: HLA data indicating potential constraints

Influencing change

Early 20th century holdings

Early 20th century holdings

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265
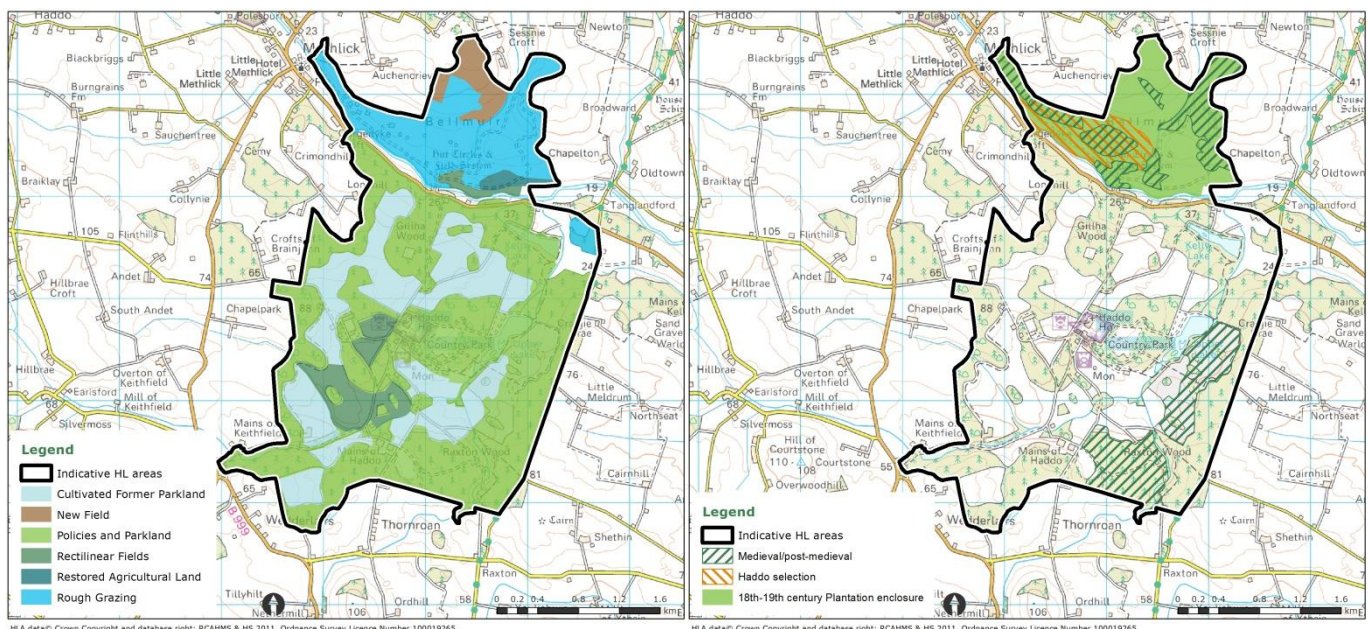
Early 20ᵗʰ century holdings, West Lothian / Falkirk

Created from high quality agricultural land, these smallholdings on the boundary between West Lothian and Falkirk create a distinctive open, but heavily subdivided landscape with regularly distributed houses of standard design, as shown on the left hand map. The historic character of the area could easily be compromised by development that was out of scale with the buildings or at odds with the structure and pattern of the landscape.

Similarly, the area is likely to be sensitive to changes in land use that could result in loss of field boundaries or inappropriate tree planting that could affect the perception of scale and sense of openness.

However, the landscape has the potential to accommodate change that conforms to the scale and pattern of the landscape – for example tree-planting along the boundaries of the landscape (reinforcing existing planting which, in turn, follow former estate boundaries) as shown on the right hand map.


Legend
- Indicative HL areas
- Cultivated Former Parkland
- New Field
- Policies and Parkland
- Rectilinear Fields
- Restored Agricultural Land
- Rough Grazing

Legend
- Indicative HL areas
- Medieval/post-medieval
- Haddo selection
- 18th-19th century Plantation enclosure

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265

Haddo House policies, Aberdeenshire

The policies of Haddo House, in addition to being one of the finest designed landscapes of the northeast, contains substantial multi-period remains, as shown on the right hand. Beyond the core of the designed landscape (light green on the left map) is a substantial area of land enclosed during the 19ᵗʰ century as a woodland plantation – preserving extensive medieval/post-medieval settlement and agriculture (green hatching on right map) and later prehistoric settlement (orange hatching).

Future management of the designed landscape may need to take account of the relict features in the parkland – while the extensive prehistoric and post-medieval landscapes preserved within the former plantation enclosure are relatively rare in the wider area and may have a stronger influence on future use of the area.

Figure 5.2: HLA data indicating landscapes that should inform design

Opportunities for change
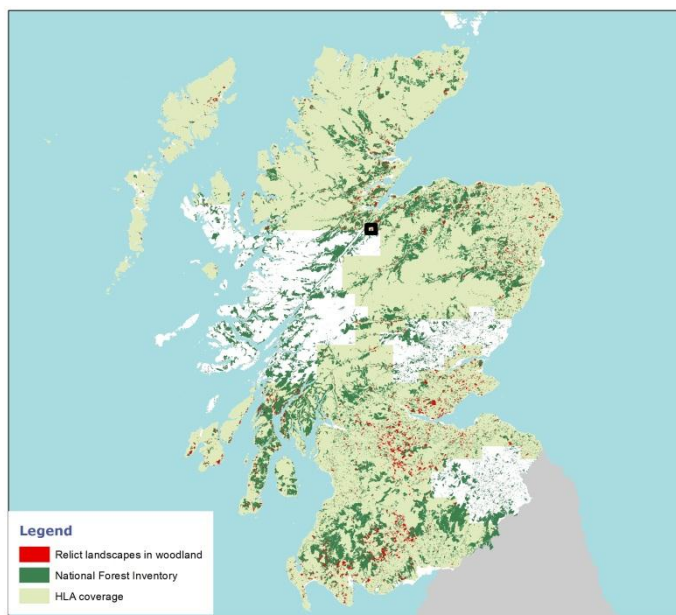
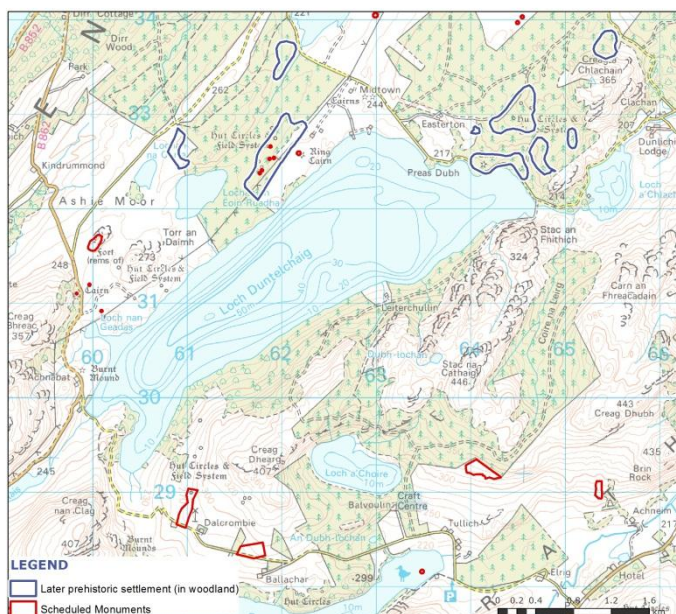HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265

Relict landscapes in woodland

The top map illustrates current woodland cover in Scotland (using the Forestry Commission 'National Forest Inventory' dataset). Woodlands overlying earlier relict land use are picked out in red – indicating that a significant proportion of Scotland's woodland resource contains relict landscapes, particularly in southern Scotland, the Central Belt and the Northeast.

Although the Scottish Government is seeking to expand national woodland cover from c.17% to 25% of land area, improving the quality of existing woodland and forests is also a key objective.

The lower map illustrates a possible way in which HLA data could contribute to this process.

Loch Duntelchaig, around 9km southwest of Inverness, is surrounded by extensive archaeological landscapes largely dating to later prehistory (fort, hut-circles and associated field systems) and the post-medieval period. For clarity, only later prehistoric settlement and agriculture is picked out in purple outline, with Scheduled Monuments shown in red.

Extensive relict landscapes are overlain with planted softwood forest (although the hut-circles themselves are not afforested). As the trees reach maturity and are harvested, decisions on restructuring and restocking could be informed by the HLA data to open up access to the assets and reconnect disassociated components of a wider archaeological landscape.

Figure 5.3: HLA data illustrating opportunities for conservation, enhancement and access

5.13   There may be significant merit in considering different approaches to policy integration, depending on the scale of the plan or policy and its potential impacts.
These could include:

- **General policies** highlighting the likely sensitivity of potentially important historic landscapes:

  - Highlighting the need for assessment using HLA as a source.
  - May be most appropriate for use in high level or lower impact situations.

- **Area-specific policies** responding to particular characteristics of historic landscapes (e.g. structure, pattern, time-depth)

  - Could be generic to all identified areas, or pick out specific issues for each area in more detailed plans (e.g. contributing to 'management objectives' in landscape character assessment, or guiding interventions through Conservation Management Plans).

- **Landscape unit-specific** policies:

  - 'trigger' or 'constraints' mapping to require detailed assessment (e.g. for high impact or detailed plans and incorporation in casework systems) and trigger the necessary consultation;
  - opportunity maps to target enhancement; or,
  - opportunity maps highlighting areas of least constraint.

Tactical contexts

5.14   Using HLA in a site-specific, operational context requires a more 'bottom-up' approach than strategic contexts. Rather than working from the whole landscape down to individual historic landscapes of interests, tactical usage starts from the site-specific and works back to understand the importance – and potential implications – of historic landscapes.

5.15   Ideally, as outlined above, historic landscapes will be effectively incorporated into relevant policy frameworks, ensuring that potentially important landscapes are appropriately acknowledged and incorporated in relevant 'constraints,' 'trigger' or opportunity maps.

Responding to historic landscapes at an operational level
What's there?

5.16   Users can examine the HLA dataset, overlaid with the site boundary of the proposed change – for example, a Local Development Plan land allocation or an afforestation proposal.

5.17   Depending on the scale of the proposal(s), users may be able to tell at a glance the potential importance of the landscapes within their site boundary, displaying the data by type, relict type, category and period.

5.18   For larger or multiple sites, users could consider extracting (e.g. using a 'clip' or selection process) the HLA polygons within the proposal boundaries – providing an instant inventory of the historic landscapes on site.

5.19   It can support and augment existing information on the historic environment – such as Scheduled Monument, RCAHMS Canmore HER data – providing accurate polygon records for landscape-scale archaeological features, relict and current land use.

Understanding what's important

5.20   Following the advice set out in **Section 3** users can then follow the process for understanding the wider context, including quantitative analysis at a relevant scale.

5.21   Users should also consider the potential for their proposal to have an impact on wider historic landscapes adjacent to or with visual relationships with the site.

5.22   As outlined in [Section 5.3](), users will need to decide whether the historic landscapes within their proposal area represent:

- Constraints to their planned activities, for example:

    - where the potential importance of historic landscapes is such that redesign of the proposal, or avoidance of key areas of landscape, may be required; or
    - where this cannot be satisfactorily achieved, more detailed assessment of the landscapes in question will be required to fully understand their significance – and the likely impacts of the planned change.

- A potential influence on planned change, for example:

    - where the form, pattern or structure of historic landscapes can be accommodated within scheme design – and potentially add value as a design cue.

- Opportunities to deliver enhancement or restore degraded features, for example:

    - where the planned change is compatible with the existing or past historic land use (e.g. restoring areas of lost policy woodland, redesigning softwood forests to open up post-medieval settlement or ensuring planned housing respects the grain created by historical land division, or enhancing the setting of a particular asset).

Further advice on using HLA as a design tool is provided in [Section 6]() of this guidance.

Highlighting the need for assessment

5.23   HLA data can highlight the need for more detailed assessment of proposals for change in the landscape – either by the presence of potentially important historic landscapes, or their potential association with significant assets.

Understanding significance

5.24   Decisions on managing change in historic landscapes must be informed by an appropriate understanding of their significance and sensitivity to the proposed change. Significance is context-specific and can change in line with improvements in our understanding of the historic environment, the availability of new evidence or the values attached to assets and landscapes.

5.25   Following the principles outlined in [Section 3](), users can gain an understanding of:

- the surviving fabric of the historic landscape; and,
- how the landscape has evolved over time.

5.26   However, to understand the significance of historic landscapes it will also be necessary to understand:

- who values the landscapes, and why; and,
- how heritage values relate to surviving historic landscapes and assets.

It is likely that the need to understand significance will generally be triggered by site-specific impacts – rather than strategic policy decisions. In this context, it would be appropriate for this process to be undertaken by archaeological professionals in the course of wider environmental assessments.

6
HLA as a design and assessment tool

6 HLA as a design and assessment tool

Introduction

6.1 HLA can help to deliver the best outcomes for historic landscapes, and the historic environment in general, when used from the outset to inform the location and design of proposals for change. In parallel with other sources of environmental information, HLA data can help to avoid delays in regulatory processes by enabling applicants to bring forward appropriate and well-designed schemes.

6.2 Similarly, HLA data has a potentially important role in informing assessment of impacts on historic landscapes – and to provide pointers towards appropriate mitigation.

6.3 This section of the guidance provides advice on approaches to using HLA to aid design, and in assessing the impacts of land use change on historic landscapes.

Benefits of using HLA in design and assessment

6.4 HLA data provides an accurate spatial representation of historic landscapes that can play a significant role in shaping the location and nature of change. It enables practitioners and users concerned with the use, development and management of land to:

- quickly and effectively understand the historic character of the landscape;

- identify what is important; and,

- develop proposals that both take into account sensitivities that require protection and draw inspiration from the patterns of past land use in designing future change.

Designing with HLA

Understanding the site

6.5 HLA should play a key role in the process of site assessment, complementing and augmenting other sources of environmental information. An upfront understanding of the potential sensitivity of a site can either highlight the necessary design cues to enable an appropriate scheme to be delivered or, where the level of sensitivity is high, for other options to be considered in good time.

6.6 The additional spatial detail that HLA data can add to point data from HERs or Canmore is invaluable in translating dots into meaningful extents – prior to commissioning potentially costly desk-based and field assessments.

6.7 Users should follow the advice provided in **Section 3** of this guidance, and expanded on in **Section 5** to:

- understand the nature of the historic landscapes on site and their relationship to individual assets (i.e. their potential contribution to setting);

- their likely importance at the site level and in their wider context; and,

- decide what type of response may be required in design solutions – in other words, will historic landscapes represent:
  - a constraint;
  - a design influence; or
  - an opportunity for enhancement?

Key questions:

- What is the extent and complexity of the historic landscape record on site?
- Do the historic landscapes on site coincide with, or lie adjacent to, designated assets?
    - Could they form part of the setting of assets or be important in understanding this?
- How much of the site includes potentially important historic landscapes?
- Could the type of change intended be designed to accommodate or take inspiration from the historic landscape?
- Will historic landscapes need to be avoided completely, or can they be incorporated within wider schemes?
- What are the wider implications of incorporating historic landscapes within scheme design?
    - Additional cost? (e.g. if solutions are already prepared, or increasing complexity over preferred options)
    - Loss of anticipated value (e.g. sensitive historic features reducing the area available for afforestation or house-building)?
    - Potential to add value to schemes? (e.g. habitat enhancement that could also deliver benefits through improving access to or understanding of historic environment features)
- What are the implications of NOT incorporating historic landscapes in scheme design?
    - Potential for rejection of proposals by regulators? (resulting in delays, costs of redesign etc.)
    - Costly requests for additional information
    - Incomplete understanding of context resulting in poor design
    - Adverse environmental effects

What's important in design terms?

6.8   HLA data can provide a range of information that allows designers to respond effectively to the key characteristics of historic landscapes.

6.9   All historic landscapes are different and will interact with different types of change in different ways. However, this section of the guidance aims to provide general principles that designers can draw upon to inform their decisions.

Interactions with key characteristics of the site

6.10   The impacts of change on historic landscapes depend upon the interactions between the key characteristics of the affected landscapes and the characteristics of the proposed change.

> **Consider:**
>
> - **Scale**: could proposed change…
>
>   - alter the perceived scale of the historic landscape?
>   - result in a reduction in physical extent of perceptible historic character?
>
> - **Structure / pattern**: could proposed change…
>
>   - cut across dominant axes established by field patterns etc.? Could this be avoided?
>   - erode landscape structure by removing boundaries or introducing irregular sub-division?
>   - result in loss of perceptible structure?
>
> - **Enclosure**: could proposed change…
>
>   - reduce, or increase, the sense of enclosure of historic landscapes?
>
> - **Legibility**: could proposed change…
>
>   - reduce the ability of historic landscapes to be understood and appreciated in the landscape
>   - provide opportunities to improve access to and understanding of historic landscape features?
>
> - **Diversity**: could proposed change…
>
>   - Reduce the richness of the landscape by reducing the diversity of historic influences that are perceptible?
>
> - **Time-depth**: could proposed change…
>
>   - alter the perception of antiquity in the landscape by obscuring features or relationships that enable understanding

6.11   Designers should consider undertaking a systematic assessment of their site and the affected historic landscapes to fully understand the potential for impacts – and to highlight opportunities for enhancement.

6.12   Ideally, this process would be undertaken in parallel with consideration of other design constraints, including the potential for physical impacts on the historic environment and possible effects on setting.
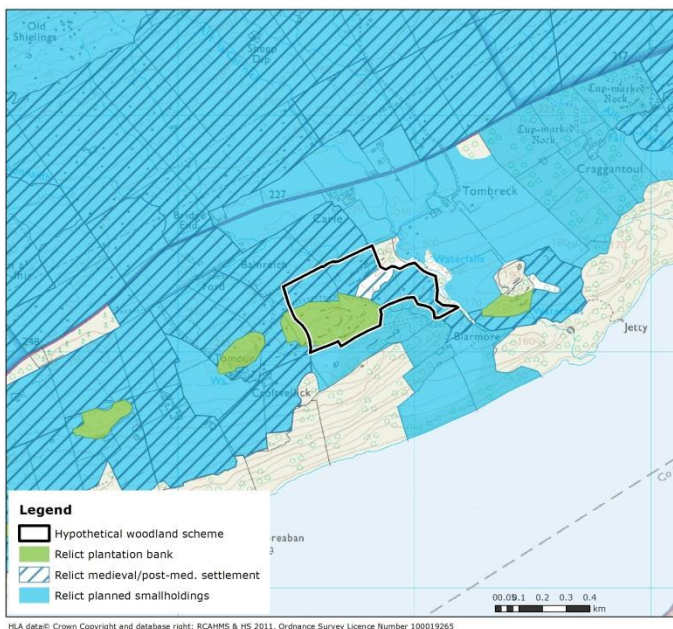
Outcomes

6.13   Ideally, the use of HLA data in the design of development and land management proposals should lead to better outcomes for the historic environment, developers and land managers and communities that value the landscapes in question.
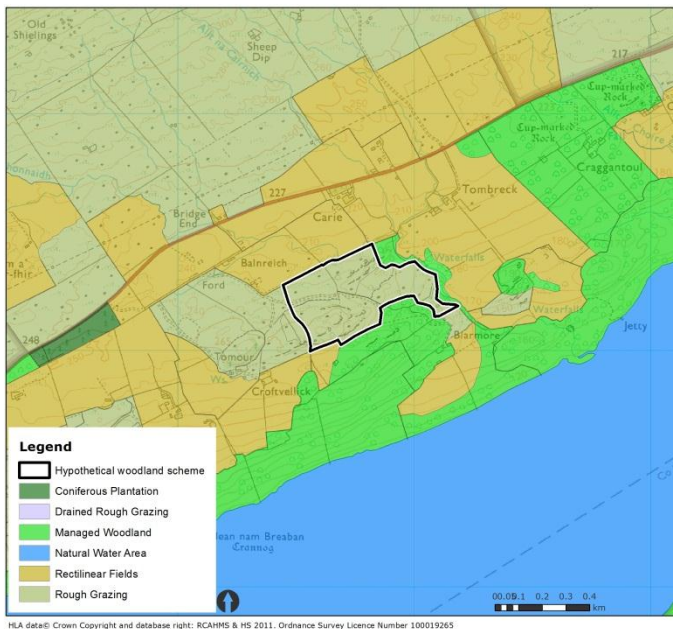
Blarmore, Loch Tay – hypothetical native woodland expansion (type view)

This example illustrates a potential approach to understanding the interactions between proposed change and historic landscapes.

HLA Type data indicates that the proposed area lies within an area of rough grazing, adjacent to existing woodland - potentially an ideal site for new woodland.

Legend
- Hypothetical woodland scheme
- Coniferous Plantation
- Drained Rough Grazing
- Managed Woodland
- Natural Water Area
- Rectilinear Fields
- Rough Grazing

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265

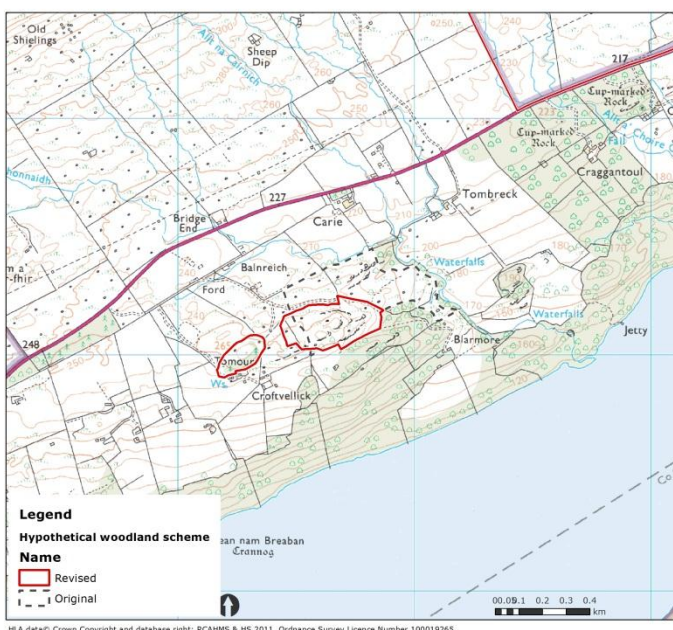**Blarmore, Loch Tay – hypothetical native woodland expansion (relict view)**

Looking at the HLA relict type data, the considerable time-depth in the landscape is revealed.

Underlying the current mosaic of agricultural land is an extensive pattern of 18th-19th century planned smallholdings (blue).
The hatched area illustrates the extent of medieval/post-medieval settlement and agriculture in the area – including within the proposed area.

The areas in green depict 18th-19th century plantation enclosures set within the smallholding pattern.

The proposed area, if planted, would reduce the ability to read the features in the landscape.

Legend
- Hypothetical woodland scheme
- Relict plantation bank
- Relict medieval/post-med. settlement
- Relict planned smallholdings

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265

Blarmore, Loch Tay – hypothetical native woodland expansion (alternative?)

Given the nature of the proposed change, a potential alternative would be to take cues from the historic landscape.
The plantation enclosures could readily be replanted, enhancing historic features and their setting in the process – and perhaps improving access to them as part of the design.
As the area is rich in archaeological remains, additional investigation may be required to mitigate other impacts.

Legend
Hypothetical woodland scheme
Name
- Revised
- Original

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265

Figure 6.1: using HLA in design and assessment

Using HLA in assessment

6.15   HLA has considerable potential as an assessment tool, helping users to understand the impacts of change on historic landscapes and the historic environment more generally – including through the process of Environmental Impact Assessment (EIA).

6.16   In the context of providing site-specific responses to proposed change, it is anticipated that HLA will provide an additional tool to assist the work of curatorial archaeologists and consultants undertaking assessments.

Screening and scoping

6.17   HLA data can provide key baseline information for users seeking to establish whether formal EIA is required for a project, or in defining the appropriate level of detail for understanding impacts on the historic environment.

6.18   It will be one source amongst many consulted, and can be used in GIS alongside designation, HER, Canmore and other datasets – in addition to any primary data generated through fieldwork.
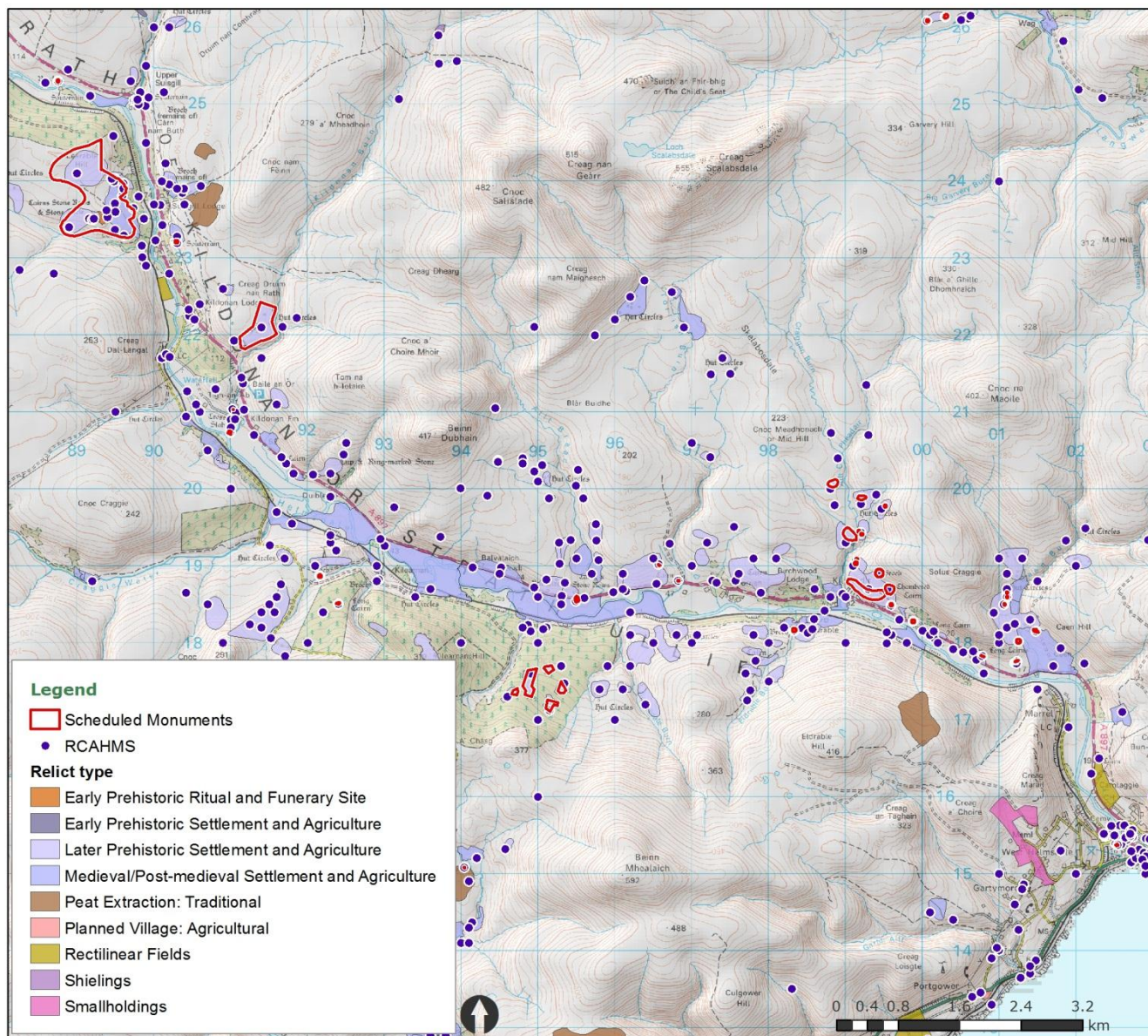
HLA as a 'first look' at the historic environment

6.19   The total landscape coverage provided by HLA data allows practitioners to quickly get to grips with their site and its environs. The data allows users to understand:

- **Current patterns of land use**

    - Useful for making inferences regarding the level of investigation required – for instance, identifying areas with lower archaeological potential (e.g. restored agricultural land) where invasive evaluation may not be required; or of higher potential which may repay further survey?
    - Providing an indication of intensity of land use through time and the likely impacts on archaeology.

- **Surviving extent of relict archaeological landscapes**

    - Supplementing point-based Canmore and HER data
    - At-a-glance distribution of landscapes of common function or date
    - Extents of landscapes requiring detailed investigation (e.g. where likely to be subject to direct impacts)
    - Where investigative effort should be concentrated, and the likely effort involved (more accurately than point-based data)

- **The dominant historical processes that have shaped the landscape**

- **Relationships between individual recorded assets (HER records and designated sites) and the wider landscape**

    - May aid understanding the setting of assets – for example, where extensive historic or relict landscapes that are contemporary with an asset, have become part of its history, or have visual relationships

6.20   This information can then provide part of the basis for judgements on whether EIA may be required, or the extent of required study.

Integration with other sources of information

6.21   In general, historic landscapes will be considered as part of the assessment of cultural heritage impacts. HLA should always be used in conjunction with other sources of information landscape or on the historic environment when attempting to assess the impacts of change to ensure that effects at all scales can be considered effectively.
See Section 4 for advice on using HLA in landscape planning.

Legend

☐	Scheduled Monuments
•	RCAHMS

Relict type

■	Early Prehistoric Ritual and Funerary Site
■	Early Prehistoric Settlement and Agriculture
■	Later Prehistoric Settlement and Agriculture
■	Medieval/Post-medieval Settlement and Agriculture
■	Peat Extraction: Traditional
■	Planned Village: Agricultural
■	Rectilinear Fields
■	Shielings
■	Smallholdings

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265
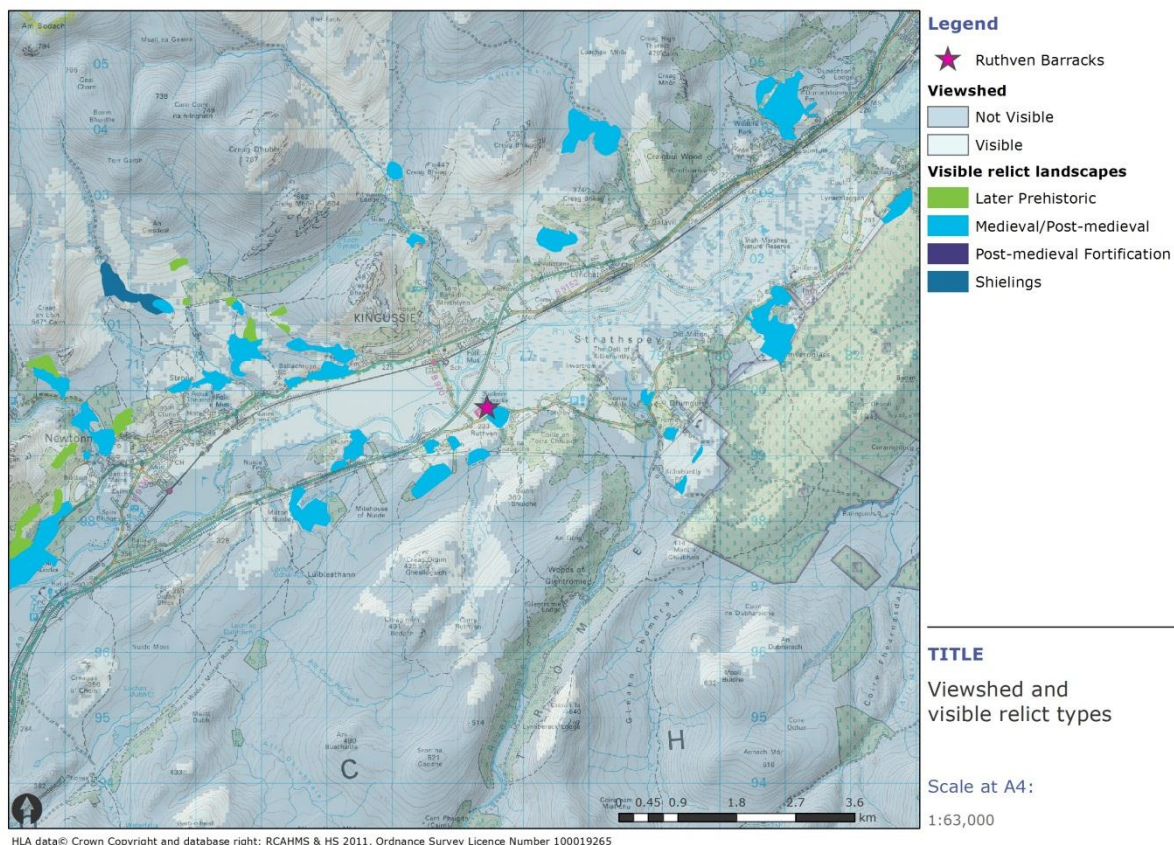
HLA and other historic environment data

HLA can provide useful contextual information in relation to finer-grained historic environment data. The right image adds spatial detail to RCAHMS point data, indicating the extent of prehistoric and medieval settlement (light purple) more effectively than points alone.
See Section 4 of this guidance for guidance on integrating HLA with information on landscape character

Figure 6.2: integrating HLA and other data sources in assessment

HLA and setting

6.22 'Setting' can be defined as the way in which the surroundings of a historic asset or place contribute to how it is experienced, understood and appreciated.

6.23 Current and historic landscape context can play an important role in understanding the setting of an asset. HLA can provide contextual information on:

- historic character;

- landscape structure and character; and,

- relationships between assets and historic landscapes, for example:

    - functional relationships;
    - potentially contemporary features;
    - historic contribution to aesthetic values;
    - visual relationships; or,
    - sense of place.

6.24 Guidance on understanding and assessing impacts on setting is provided in the Historic Scotland 'Managing Change' series.

Legend

⭑ Ruthven Barracks

Viewshed
- ☐ Not Visible
- ☐ Visible

Visible relict landscapes
- ☐ Later Prehistoric
- ☐ Medieval/Post-medieval
- ☐ Post-medieval Fortification
- ☐ Shielings

TITLE

Viewshed and
visible relict types

Scale at A4:

1:63,000

HLA data© Crown Copyright and database right: RCAHMS & HS 2011. Ordnance Survey Licence Number 100019265

Ruthven Barracks – setting study

One of four garrisons, with Bernera, Inversnaid and Kilwhimen (later Fort Augustus), constructed to house Government troops following the 1715 Jacobite uprising, Ruthven Barracks is an iconic structure that dominates the Spey valley by Kingussie. Standing on a mound above the Spey floodplain and the Insh Marshes, the barracks are highly visible in the landscape, particularly from the A9. (General Wade's road runs parallel, but in a smaller, drier, valley to the south). As a structure built to practically and symbolically dominate the local population, including vital communications routes, the way the asset is perceived in the landscape is a key aspect of its setting and significance.

HLA can add considerable value to understanding the barracks' setting. Using a 'viewshed' model from the site (GIS process based on a bare-ground terrain model, which calculates theoretical visibility) it is possible to extract HLA polygons for all relict landscapes with intervisibility of the site. The top figure on the facing page illustrates the historic landscapes within the 'viewshed' that are either contemporaneous or earlier than the barracks – with which provide an appreciation of the landscape into which the structure was inserted, and adds potential value to understanding the relationships between the asset and components of its setting.

Figure 6.3: using HLA to help understand setting