

# The End Game: As Scotland's Historic Land-Use Assessment Project Reaches Completion What Have We Learned?

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## Abstract:

*For over a decade the Historic Land-Use Assessment Project, a partnership between Historic Scotland and the Royal Commission on the Ancient and Historical Monuments of Scotland, has undertaken the challenge of mapping the character of Scotland's historic landscape. By 2015 the Project will have delivered 100% coverage and, for the first time, Scotland will have a map providing time-depth within the landscape; a map showing both current and relict landscape use. The final stages of this project provide a valuable opportunity for review and reflection. This paper will review where we have reached and will consider some possibilities for the future.*

## Keywords:

*Historic Land-Use Assessment, Landscape, Characterisation*

## 1. Introduction

The Historic Land-Use Assessment (HLA) Project (HLAmap 2014) is a partnership between Historic Scotland and the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS), and has been mapping Scotland's historic landscape character for over a decade. With completion due in 2015, Scotland will soon have a country-wide map illustrating time-depth within the landscape and giving users a powerful tool to help understand the way in which the landscape has been changed by people through time. With the completion of the map drawing near, this provides a valuable opportunity for review and reflection and to consider where the project has got to and opportunities for the future.

## 2. The Historic Land-Use Assessment: Theory and Method

HLA began with a pilot project in 1996 which led to the establishment of the HLA project proper a couple of years later (Dyson Bruce et al. 1999). Conceived in reaction to the inability of Landscape Character Assessments to deal adequately with the historic dimensions of landscapes, HLA was seen as a way of contributing to future discussions about the management of the landscape and was established with the aim of producing a digital map depicting

the historical complexity of the Scottish landscape (Dixon et al. 1999). Central to the concept behind HLA is the European Landscape Convention's definition of landscape as '...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 (Council of Europe 2000). In essence, the HLA project views the modern landscape as a historical resource that can be understood and evaluated, as something with inherent time-depth, the identification of which adds value to our understanding of the landscape. This time-depth can be assessed, interpreted and ultimately presented in a digital map.

HLA, therefore, essentially analyses the character and time-depth of the whole landscape and records any land-use that has left a mark on the landscape, whether that land-use is current or relict. It is compiled at a scale of 1:25000, which in practice means that the smallest recorded unit is 1 hectare. A wide range of sources are employed to assess the landscape, including maps, aerial photographs and existing historic environment databases (RCAHMS 2012). The current Ordnance Survey map and recent vertical aerial photography provide the starting point, and sources such as historic maps and historic vertical aerial photography provide information about the impact of changes since the maps were produced or photographs taken. RCAHMS' own database (RCAHMS 2014) and

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**Figure 1.** Aerial view of the medieval town of Culross, Fife, showing the medieval layout preserved in the current village. Crown copyright RCAHMS DP014181.



**Figure 2.** Aerial view of the township, field system and rig system at Learable, Sutherland, a relict landscape preserved in current moorland. Crown copyright RCAHMS DP080123.

resources as well as available Historic Environment Record (HER) datasets provide information about recorded archaeological sites, and finally, a variety of documentary sources are consulted to provide background information. Based upon the physical remains of land-use identified and interpreted from these sources, the whole of the landscape is divided up into a series of generic types (RCAHMS 2013). These types characterise landscape features by form and function, as well as period of origin. All areas are assigned a historic land-use type – this is the current land-use in that location and essentially records the origins of the current landscape, which could be a medieval town (Fig. 1), or 20th forestry plantation, for example. If any traces of past activity are still visible in that part of the landscape, that same area is assigned a relict land-use type, or if there is extant evidence for more past land-uses, up to three in total. Relict landscapes are essentially landscapes that are not now active, but enough remains to identify them. They can consist of landscape features such as fields or crofts, or archaeological landscapes like medieval or post medieval rig and furrow cultivation (Fig. 2) or prehistoric settlement.

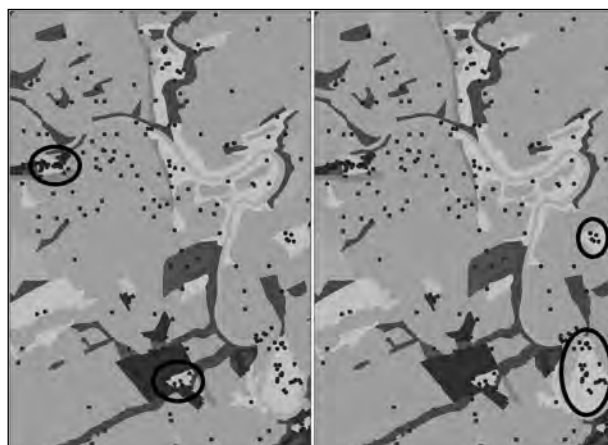
This information is transcribed into a GIS, at a scale of 1:25,000, thereby creating a digital map of the origins of the landscape. As a digital map, the data can be manipulated and analysed at a variety of scales and in many different ways. It can be broken down into discrete units, for example, or studied by particular attribute classes, such as period or type of land-use. It is therefore a flexible tool, with

potential uses in many different contexts. The map scale of 1:25000 was selected as the smallest scale that showed field boundaries, and places HLA between the broader brush Landscape Character Assessment (1:50,000) and the finer grained Historic Environment Record. From the outset HLA was recognised as an important addition to the suite of landscape-scale data, offering specialists a landscape-wide framework for site-specific data and giving non-specialists a fuller appreciation of time-depth than had previously been possible. As such, HLA data are potentially of greatest use when used in combination with other sources of landscape data (Dixon et al. 1999, 165).

HLA, therefore, is a powerful tool that can help us to understand how Scotland's landscape has been changed by people through time. It can help unravel the processes that have shaped the modern landscape and can demonstrate how past events and decisions continue to resonate in the present. This is clearly illustrated at an area called Bauds of Cullen in Aberdeenshire, in north-east Scotland (Fig. 3), where HLA analysis of the area identified an earlier landscape of crofting smallholdings, which had recently been converted to woodland. Rather than woodland planting removing any trace of the earlier land-use, the buildings and layout of the earlier landscape have been preserved within the woodland, the earlier land-use shaping the current use of the landscape.



**Figure 3.** Vertical aerial image of Bauds of Cullen, Aberdeenshire, showing the regular layout of crofting smallholdings preserved in a current forestry plantation. ©NextPerspectives 2013: Licensed to Royal Commission on the Ancient and Historical Monuments of Scotland for PGA, through NextPerspectives.



**Figure 4.** HLA data provides contextual information in relation to the much finer-grained historic environment data. Here archaeological records can be seen to cluster within two particular landscape types: medieval villages (left) and designed landscapes (right). Crown copyright RCAHMS.

### **3. The Historic Land-Use Assessment: Applications**

From the very beginning, HLA was envisaged as an important new tool in the understanding and management of the historic landscape, thereby ensuring that the inherited character of the Scottish landscape could be taken into account within decisions affecting its future. As the map nears completion, how far have we achieved this aim and what of the future?

There is no doubt that HLA provides a comprehensive overview of the historic landscape. By supplying information about the time-depth in the landscape, it provides a framework from which decisions can be made, and a starting point from which to consider issues and proposals. It does not make judgements on which areas or polygons are 'better' or more significant than others. Instead it provides the information base from which such judgements can be made. It cannot answer every question about the landscape, but rather focuses upon the assessment of the surviving time-depth within the present landscape, affording a landscape framework for site-specific information and a human dimension to other forms of environmental data. As a result, it is complementary to existing datasets, rather than simply a stand-alone resource. This can be clearly illustrated when HLA data are

viewed alongside the Historic Environment Record (Fig. 4). Here, the HLA data provide the landscape context in relation to the much finer-grained Historic Environment Record data and also helps to explain why the archaeological records cluster in the way that they do; in this case reflecting the presence of medieval villages and designed landscapes.

Overall, HLA demonstrates very clearly the complexity of the Scottish landscape and the varied processes and events that have influenced it and continue to shape it today. The map presents a tapestry of change and process in the landscape, showing both present land-use and archaeological landscapes in a single map, and clearly demonstrates the importance of considering the whole landscape, rather than just individual sites.

With more than 80% of Scotland now mapped by HLA, an increasing proportion of the country now has available data dealing with the historic landscape. At its inception, it was envisaged that HLA would contribute to the planning process by providing a better understanding of the impact of loss or change to the historic dimension of the landscape, but also more widely as a basis for land management decisions (Dyson Bruce et al. 1999, 19–20). Some progress has been made here. The data have been provided to Local Authority archaeologists and other users as it became available. As more

Local Authority areas are completed, HLA data are becoming more widely available for incorporation in the planning process. Examples include: Stirling and Aberdeenshire councils, who have created standard policies for developments in areas where particular HLA types exist (Dixon 2007, 79); the use of HLA to inform management strategies for National Scenic Areas (RCAHMS and Historic Scotland 2002; 2003); and the adoption of HLA by the Forestry Commission Scotland to inform forestry planting and design (Ritchie and Wordsworth 2010). Clearly these are very positive steps, yet this is by no means a universal pattern and in some areas take-up of the data have been slow. For some the data are seen as too complex and difficult to use, or too general to be of any specific use. In many cases, this is due to a lack of GIS knowledge. While some training and guidance can be supplied through the HLA project, it is difficult to see how to overcome this latter barrier, though ongoing developments in the online map and guidance provision are likely to go some way towards alleviating this.

There are also examples of use of the data out-with the historic environment field. Perhaps most significant in this regard is the use of the data to help define the special qualities of the landscape within the Loch Lomond and the Trossachs National Park (Scottish Natural Heritage and Loch Lomond and The Trossachs National Park Authority 2010) and the landscape character assessment of the Cairngorms National Park, as part of its landscape framework (Cairngorms National Park 2014; Grant 2009; Scottish Natural Heritage and Cairngorms National Park Authority 2010). Both evaluations involved combining information on landscape character, historic land-use, biodiversity and the built environment to identify landscape qualities, character and sensitivities. These went beyond the description of the historic dimension of the landscape and began to look at the relative importance and sensitivity of these special landscapes to change. However, most significantly, HLA data were combined with quantitative and qualitative data concerned with other aspects of landscape, building a more holistic view of landscape, landscape character, change and the pressures and trends affecting the landscape. These combined data are being used to inform planners and decision makers, but it also has applications beyond this in terms of understanding the relationship of the

historic landscape to other aspects of the natural environment, and the values people place upon their landscapes and environment.

This begins to point to exciting future directions for the use of HLA data, notably within interdisciplinary studies. For example, it has been noted that the protection of historic landscapes may have positive impacts upon biodiversity and ecosystems (Loch Lomond and Trossachs National Park 2012, 36) and that an understanding of past landscapes can have significant environmental as well as cultural value (Clark et al. 2004, 42). Indeed there may be a link between areas rich in archaeological heritage and biodiversity (Fry 2003, 244). The benefits to people of engaging with the natural environment are well known, and indeed the Millennium Ecosystem Assessment defines cultural services, of which cultural heritage is one part, as one of the things in the 'natural' environment that benefit people (Millennium Ecosystem Assessment 2005, 120). Therefore, the HLA data and an understanding of the time-depth of the landscape can surely contribute to studies dealing with well-being and landscape engagement. Undoubtedly there are other interdisciplinary applications of which HLA has the potential to be a part; the historic environment is, of course, only one part of the landscape and environment (Clark et al. 2004; Porter 2004, 103–5). HLA, therefore, is strongly placed to contribute to such studies, particularly as the GIS structure of the data provides the flexibility to combine it with multiple sources of data.

Such interdisciplinary applications will help realise the original purpose of the HLA project, namely to inform landscape management about the extent and complexity of its historical dimension. This is easier than it was at the beginning of the project due to the wider availability of differing GIS datasets, providing more opportunities for more people to combine and analyse data, and possibly also due to a wider recognition of the intertwined nature of history, culture, landscape and the environment. Scotland's Environment Web (Scotland's Environment 2014), which aims to draw together all datasets related to the natural and cultural environment in Scotland, provides one such opportunity. Clearly, then, the potential of HLA to inform wider landscape applications may be more fully realised in the future. Allied fields include

geology, biodiversity, water management and landscape character, but are likely to also include other, as yet unrealised, applications. The challenge for us lies in promoting the availability and value of the HLA data to groups who have perhaps not considered it before or are unaware of its existence, and of demonstrating to them that a map showing landscape time-depth has much to add to the understanding and management of landscape.

#### **4. Conclusions**

The Historic Land-Use Assessment Project has been a massive undertaking, over a decade in the making, and is something that is unlikely to be undertaken again. The rapidly approaching end of the project presents interesting and exciting challenges for the use and application of the data. These include applications considered at the start of the project, predominantly those relating to planning and land management in Scotland, but there will be others that were not considered in 1996. In particular, HLA has the potential to inform multidisciplinary approaches to landscape, where a map of time-depth in the landscape can add value and insight to data dealing with other aspects of the landscape and environment. It has great potential for landscape monitoring, assessing changes against the data recorded between 1996 and 2015, complementing existing landscape monitoring indicators. These remain to be fully developed, yet the potential is there. The existence in the near future of a map displaying time-depth across the whole of the landscape of Scotland is set to bring an exciting new dimension to landscape studies and management.

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